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Volume XV.]
Systems of Wheat Growing
Although there ean be no discount on the advantage of thorough culture as a conserver of moisture, if practiced at a proper season, there requirements of the wheat plant, abstractly considered, are concerned, there is any good effect from working the soil into a loose and mellow condition. It is plain from experience frequently cited that in certain locations sum mer fallow, deep plowing, etc., are of grea advantage in storing up moisture and prevent ing surface evaporation and in restoring a worn
surface by briuging up a rich layer from below. surface by briuging up a rich layer from below. As these are facts, the abundant preaching of
more thorough culture is desirable and the pre cepts are applicable iu such a prepouderance of loealities that the ge sable. As a matter, sable. As a matter, we note the fact that some wheat growers
in England are taking ground that the best condition of sorl for wheat is not produced by the syg. In fact, ation which some of them advocatc, the stubble burning aud scratching in process, which has this State, with this hat they believe in restoring fertility by top dressing anil surour growers while omitted this item allogether. It is true and in England are almost diametrically opposed, as their greatest trouble of late has been an ex
cess of water and ours the reverse. It is somewhat singular then that they into somethiug lifting a system of growing which we
stroying the produc
tive power of our fields, while we are graduall which England system of thorough culture theory and practicc. This we advance as an interesting fact, whether
practical bearings or not.
The experience upon which we base the above remarks we find in the latest issue of th Agricultural Economist of London. Mr. Mechi ers, because of his tendency to experiment an expound, states that from long observatiou and experience, he is more and more convinced tha that compression or solidity is assential to the well-doing and non-root falling of the crop he quotes that of Mr. Piper, of Colne, who "'neve plowed or dug his field, which grew his thick set wheat year after year, and still he grew marvelous crops, as I frequently witnessed hoed up and burned and the wheat was then dibbled in. I said, 'Piper, you should try get even a better plowed, for you probably then and the result was a very inferior crop, hoth of grain and straw, on the cultivated portion
This was instructive and He used to top-dress his land with soot and profitable one, despite the amount of a very

the "champion" mill of the sibrra flume and lumber company

## stooting" is one which is also gaining the and door

adherence of some of our workers of high
priced land. We have heard them freely assert priced land. We have heard them freely assert highly valned land near the bay to advantage by growing wheat something after the usua cultivating during growth. This system las won adherents in some other parts of our State as we have described in former issucs. W should like to see some of our farmers who have time and money to experimeut give this system a thorongh trial for the benefit of those who cannot afford to indulge in the luxury of experi ments, and see how great yi
acro and at how grcat cost.

Telephone and Deafness.-The Amprican Manufacturer, of Pittsburg, Pa., says: A new discovery in relation to the telephone has jus leaf in the left ear, so that he cannot hea through it ordinary speech, finds that on apply hear even a whispler with perfect distinctness We may soon see deaf persons with telephones fastened to their heads, instead of carrying ear trumpets.

Tine five eent fare system was inaugurated on our street car lines on Now Year's day
labor employed." Mr. Mechi also goes in
strongly for thin sowing." I will venture to trongly for thin sowing- I win venture to sound wheat kernel having room for development, so sinall a return as even a single ear, ne. When I dibbled my one peck per acre of wheat (one kernel in every dibble-hole at about four and a half or five inches intervals), there were usually several ears from each ker-
nel, often 10 to 25 , and I know of a case recently in Kelvedon, where a single kernel produced 108 stems and heads, but then it had no com petitors. It grew on a parsley bed plant is another proximate wheat plant. From what I hear, the thin sowing light is dawning fhall no longer be told 'We always sow three bushels of wheat per acre." "
This testimony in favor of thin seeding and

The Sierra Flume and Lumber Company We have on several different occasions pre sented views of the works and mills of the with give one of their Champion mill, whic has a capacity of sawing 40,000 feet per day We have previously given our readers a prett full account of this company and the work it i accomplishing. The undertaking is the largest men in the various departments. They cut last year upwards of $0,000,000$ feet of lumber and brought it to their yards for salc. The property which came from their earnings. There are over 150 miles of fllme operated by the com-
pany, 157 miles of telegraph lines, and 11 miles pany, 157 miles of telegraph lines, and 11 miles
of tramways for logs. There are 10 fully equip

Notes on Califormia Raisins.
We have seen several samples of California raisins during the week which justify our pre would show a quality which would do much to win a way for our fruit in the market every where. The aggregate productiou will proba bly show a falling off because of the drouth but those grapes which matured were unusually fine, and progress has been made in curing and packing so that the general quality will rank much higher than heretofore.
ember 15 th, our Sacra visit to the vineyard of Mr. James length hi Florin. Since then we have receivel Rample of Mr. Rutter's raisins both from the producer
 firms of fruit leading in our State. Theso raisins are strictly
first-class, the berries are large and even,
the color excellent, the skin tender and
the flavor full and yet delicate and
aromatic. The style
of packing is of packing is unex per being neatl somely ornamented residence of the prr
ducer. Thereis als an inset of a neatly
printed shoet bearing the name M1. T
Brewer \& Co., a wholesale dealers
This hies beneath the This lies beneath the
folds of the wrapper and serves as an ad the fruit. We un Brewer \& Co. have a these raisins to place upon the market this
year and we dould not that their push and enterprise will markcts for Califor
nian raisins where.
We also receiv
and water
This company have probally the best system of flumes in California, everything being ner. They have tapped the numerous springs and crceks in the vicinity of the flumes, and collected all the available water to furnish as large a supply as possihle to the flumes. The these flumes are even greater than on railroads, and when it is recollected that they are all in monitaino

Thorovonbred Bees. - A piarian literaturc is becoming fervil. We notice that one write queen herd book be cstablished, and anothe writer declares that the author of snch a proposition should be hived in a Iunatie asylum. This comment upon the proposition may seem rather severe, but it is to the point.

Personal. - Au honor has becu bestowed upon our correspondent H. J. Smith, of Phila Americans, namely, an clection to membershi the Toyal Agricultural Society of Sweder This distinction will join with H. J's. other po culiar honors to raise him above the monotony culiar honors to raise him above the monotony
of a somewhat gencric name. He descrves it.
packages in pasteboard, filles of then-10nnd raisins, and they are just the thing for smal latter raisins are the product of the Natoma Water Company, of Folsom, and are of ver satisfactory quality.
making with ale of what can be done in raisin pleased to notice the product of Mr. George Clark, of "wvile the "product of noma county. The mass of Mr. Clark's grapes go to the wine press, bat he turns a few of his without special treatment or appliances.
It scems that our friends in the southern part of the State are "keeping up thicir cnd" well in Bernardino county, sends us the following clip ping from a local paper: "On Noveniber 10th, when the Pacivic Rubal Press quoted Califor nia raisins at $\$ 1$ to $\$ 2$ per box, some raisins from Riverside were in the hands of San Franciseo commission merchants, who have since made returns of salcs avcraging $\$ 1.91$ per box, being
considerably above the average pricc, it will be sccu, and pretty near the highest price, show ing, as far as the sales referred to arc concerned the production of raisins,
This is good. Wc shall be glad to know that all parts of our State arc steppin
this most commondable industry.

## Gorrespondence.

## 



Report of the Entomological Commission. Editors Press:-The U. S. Entomological Commission, which was organized and placed ander the auspices of Prof. Hayden's Geological Survey, for the purpose of investigating and reporting the entire subject of insect ravages
throughout the western regions of our contithroughout the western regions of our conti-
nent have completed their ficld labors for the present season.
The menlhers of the Commission bave been busily engaged in the preparation of the several parts of their annual Report, and will soon meet
in Washingtou, where they will have a protracted sitting to get everything ready for the printer. This Report is looked for with much
interest by the farmers of the West, and the interest by the farmers of the West, and the
character of the Commissioners is a guarantee that it will be creditable from the scientific, and valuable from the practical standpoint. The Report will contain 16 chapters, under the
following heads: Introduction, Riley; Chronofollowing heads: Introduction, Riley; Chrono-
logical History, Packard; Statistics of Losses, Thomas; Classifieatiou and Nomenclature, Thomas; Geographical Distribution, Thomas and Packard; Migrations and Meteorology, Packard and Thomas; Original lermanent Breeding Grounds, Riley, Packard and Thomas; Habits and Natural History, Riley; Embryology, Packard; Metamorphoses, Riley and
Packard; Invertebrate Enenies, Riley; VertePackard; Invertebrate Enemies, Riley; Verte-
brate Euemies, Thomas; Remedies and Devices for Destruction, Riley; l'rairie Fires vs. Locust Injury, Riley; Agricultural Bearings of the Subject, Thomas; Ravages of other Locusts,
Parkard and Riley; Locust Ravages in other Parkard a
Countries.
These cluapters will embrace many sub-chap. ters, and the Rcport will be as exhaustive as the limited time for its preparation will permit. In chapter four, the western extension and range are fully given.
In chapter five the laws governing locust migrations are for the first time definined. A
very large number of data have been collected very large number of data have been collected
in reference to the subjects of this chapter. Not
only are the general laws governing the moveonly are the general laws governing the move-
ments of the insect now defined, showing a regments of the insect now detined, showing a reg-
ular migration south ward and return migration
northward northward, which iuay be counted on and fore-
seen; but many inportant and highly enterestseen; but many inportant and highy enterest-
ing facts iu reference to their local tlights are brought to light, which will henceforward form a part of the listory of the insect.
In chapter seven, several other ing the species are also adduced; and governportance of the discovery of the laws which regulate the doings and movernents of the pest,
cannot be overestimated. In said chapter cannot be overestimated. In said chapter
seven many new facts will for the first time ap. seven many new facts will for the first time ap-
pear, and all that is definite and accurate be pear, and all that is definite and
made known.
Locust Destroyers.
Iu chapter 10 many new discoverics will be recorded, somo of them of great scientiticic iuter-
est and importance. Of these may be menest and importance, Of these may be men-
tioned the transformation of the silky mite (Trombidium sericeum). This is an eight.
legged creature, which preys on the locust ggg.
lt is proved to be the mature form of the little it is proved to be the mature form of the little
six-legged mite (Astoma Iryllaria), which is
parasitig on the locust. Insects described unparasitig on the locust. Insects decsribed un.
der different geuera are thus proved to be der difierent geuera. are thus proved to be
specificially identical. The life history of the
blister beetles will also be given, their larye blister beetles will also be given, their larvee
feding upon locust oggs and uudergoing sinn-
ilar changes called hypernetamorphoses. The ilar changes called hylernetamorphoses. The
interest attachiug to this discovery amoug eutomologists as well as among farmors, is best ap-
preciated wheu it is considered that absolutely nothing has herctofore been known of the larnothing has heretofore been known of the lar-
val hatist of these blister beetles, notwith-
standing the fact that for half a century much standing the fact that for half a century much
attcntion has beeu given to the sulject by sci-
entificie men, on account of the connmercial value entific men, on account of the counmercial value
of cantharis or Spanish tly, and of the great inof cantharis or Spanish fly, and of the great in-
jury to potatoes and other plants committed by
aeveral of our Anericau species. several of our Americau species.
In chapter 11 are given the locust fceding
habits of many wcstern aninals not heretofore habits of many western animals not heretofore
known to have that havit, and the good offiees
of birds are especially made mauifest, examinaof birls are especially made mauifest, exaniuns--
tions of the stomachs of over 90 species and $6: 30$ specimens having been made writh spececial refer-
ence to their locust eating habits. The record ence to their locust eating habits. The record
in reference to these examinations is very full, giving the date, the locality, the eommon and
scientific names of the species, and the number of locusts and other insects found in each. The
value heretofore placed on these aids by entovalue heretufore placed on these aids by ento-
mologists is fully sustaiued by this record.
ln cliapter In clapter 12, which will be oue of the inost
oxtended and most important practicaly, it is
elearly shown that the young locusts may be
controlled, aud by what means; while the way
is pointed out how to better control the winged
ind is pointed out how to bettcr centrol the winged
insects. Many valuablo devices for destruction will be illustrated, among them one invented by
lrof. Riley, which gave great satisfactiou and lrof. Riley, which gave great satisfactiou and
will, it is believed, supersede all others as a
cleap and practicable remedy, alpplicable at any
season, wletler the pints cheap and practicable remedy, applicable at any
season, whenther the plauts or the insects be
small sinall or large. Losses by Locusts.
In chapters two and four are given statistics westeru agriculturists by the locust. Theso chapters also show what crops are most liable to injury, and what are most easily protected-
also the best methods of cropping in order to reduce the injury to a miuimum. A A chemical
analysis of the dead locusts has been made and analysis of the dead locusts has been made and is unusually interesting. The insects furnish a,
new oil, which will be christencel "caloptine," and a very largo percentage of pure formic acid. Though this acid exists in the ant and some other insects, it is with difficulty obtained in
large quantities, whereas by the action of sulphuric acid upon the locust juices it passes of with great readiness and in remarkable quantity
and gravity. The various uses of this acid, and gravity. The various uses of this acid
whether as a thcrapeutic agent or as a labora
tory reagents, etc., are capable of great ani tory reagents, etc., are capable of great and
valualle extension, wheu it once ean be obtaiued so readily and in such quantity.
The Report is expected to make about 500
pages, and will, it is hoved, be pullishod in February or Mlarch. Although the Commis. sioners have divided the lator among them, the Report will form one complete whole, as the
work of each will be discussed and revised by The annual Cisman aste.
The anuual Report, which is inteuded more particularly for the practical farming pubinc,
will be followed by memoirs of a more purely
scieutific nature scieutitic nature-one by Dr. Packard on Anat
omy and Embryology; one ly Prof. Fitey on th Natural History of other Lochsts; and one by Pron. Th
ridide
While it has been the object of the Com mission to cover as much ground as possible, so
as to make the annual lieport as full and valu ahle as the time would permit, there yet re-
mains scyeral important subjects that it lias so far been impossible to properly and exhaustively study. The territory affected is so vast, emof it was imperfectly explored, especially in the
northwest. Mr. Riley had to cut short his northwest. Ms. Kiley had to cut short has
investigations in British America, both for want of time and want of funds. Fors similar reasons,
and on account of India: troulles, Montana, and on account of Indiaal trouhles, Montana,
Wyoming and Dakota have been but superficially explored.

Items of the Work.
The year 1887 was an au alnornnal year, i. e., the
nsect had, the previous year, overruu a large insect had, the previous year, overruu a large
section of country in which it is not indigenous, hatched in such eouutry in the spring. This
was most fortunate for many reasons, enabled the Conmission to carefully study the insects in this their unnatural condition, and to carry on experiments with a view of learning Commission was with these young insects. The losses sustained tlirough the devastation of the pest by young and struggling frontier popula-
tions, ill able to bear them, was immense; and there was so much discouragement that hundreds and thousands of persous were on the
point of abandouing their new homes last spring. At this juncture the Commission went into the were all verified) and recommendations imbued were all vere with hope and connididence, and drew
thestward again the emigration that had almost
west westward again the emigration that had almost
stopped. All this work, however, interfered with needed investigations into the proper range,
the native home and breeding grounds, the the native home and breaing grounds, tha questions which can only be properly studied
during a normal year. It is, therefore very important that the investigations be continued important that the investitations be continued
until every question is settlerl that human in -estigatiou can settle.
For the proper settlement of some of the
questions, the co-operation of the Dominiou fovernment is desirable, and has been promised
by the Canadiau authorities, if the work of the Cominissiou should continue
It will be unwise to stop, the work of the
Commission lefore completed. The work shonld Commission lefore completed. The work shonld
be made so thorongh as to olviate any necessity
in future years of creating another Commission or the same purpose. After careful estinates, it is concluded that the work can be satisfac investigation and experinent. The Commission thercfore ask for a continuance of the appropri ation of $\$ 2 \overline{3}, 000$ asked for a year ago.
There aro various other injurious national importance of which mach has yet to be learned, and in addition to conppleting the
locust investigation, the Commission contem plate, during tho coming two years, studying
and reporting on some of these worst encnies to our agriculture.
Much has yet to be done in giving practical
form to the conclusious arrived at and plan proposect hy the Conmission to euable the work alrealy done to bear proper fruit. To loring
about the needed co-operation of the two gov-
are ernments, to cause proper laws to be euactedl in
all the States interested, truths that alone will make man master of the situation, is largely the work of the future. S

Valuable Plants Worth Testing in Cal ifornia.
Firrors Press:-There are so many plants aluable for the dycs extracted from them tha are not cuitivated in California, and yet which
might prove profitable, that I venture to call attention to some of them, copying freely from
"Carpenter's Vegetable Physiology." The "Carpenter's Vegetable Physiology." The
eoloring sccretion most universally diffused through plants is that termed Chromule, on which the color of all green parts depends. It is found in little grains, which adhere to the inside of the cells beneath the cuticle, and the Cormation of it is due to the influence of light
in fixing earbon from the atmosphcre. The brightness of this green color soon disappear atter the death of yelloat and enc huc is some-
times altered to yellow, red, etc. This alteration is due to an inereased absorption of oxy gen, it is to this longer given out by day. Pernap the leafy parts of which have the same general rom them. The coloring matter of rapidly growing parts has seldom sufficient permanence to render it raluable, and the substances used are chiefly obtained from the heart-wood, roots
or bark, though sometimes from the leaves and ruit.
Indigo used to be grown in the Carolinas. It species of plants, raised from secd, and whici species of piants, raised rom seca, and which
are of very rapid growth, being ready for cut-
ting at the cud of two months. A suseequent growth from the same roots is again ready fo the sickle in six or eight weeks and more may
be subsequently obtained. For further de be subsequently obtained. (For further de.
scription see "Carlenter's $V$ 'cgetable 1'hysiolWoad is a dye known to the ancient Briton, and was the principal blue dye till the introdue tion of blue indigo and is now commonly use Isatio sativa) is cullivated in many parts of
Europe, and is ground iuto a paste and aftervards subjected to several processes.
The principal red dye obtained from the veg.
etable kingdom is " madder," the produce of the Subia tinctoria, a plant which grows with suc cess in the south of Liurope
"Well," "or " wwoll"
any parts of England, on cultivated wastes nany parts of England, on cultivated wastes,
aud is a very hardy plant. From it is produced a yellow dye, which is said to be the most imis nearly allied to the mignonette, comes to maturity in two years and is gathered whilst
the seed is ripening. The plants are dried and the seed is ripening. The plants are dried and he color is extracted by boiling
Fustic is extracted from the
erry the the mpecies of mul West Indies.
reddish yellow, or arnotained from the the crimer dye or ying letween the husk aud seeds of the annott ree (Bicn Orellanna), which
both the East and West Indies,
"Saftron" is the 1 1roduce of a kind of crocus, Which is cultivated in England, as well as in
France and spain. The tlowers, which bloon in Octoler, are gathered even before they are
full blown. The stigmata, or points of the pisfull blown. The stigmata, or points of the pis
tils of these flowers, are then picked off, and these little bories, constituting the saffron, are paper. "Tumeric" produces a very bright color. 1 is procured from the roots of tho Curcuma longa,
an East Indian plant, which has been cultivated an East Indian plant, which has
with suceess in the West Indies.
"Citric acid" has many important uses, being largely employed by calico printers, and prepara-
tion should be made in the southern couuties of the State for its production from the unsalal) ruit of the numerous lemon orclards. Orange
marmalade, too, may prove to be a valuable resource for putting the
" " Gum to export.
" is obtained from a species acacia, which flourishes in almost every part Arabia and middle Africa. Gum senegal tind of acacia differing very little from tha quality. These plants prepare no inore of their quatity. These plants prelare no nore of thei
valuable gums iu cold climates than they reguire vor their own support aud only possess a super
fluity and perhaps it is ouly in the hottest regions "Guun tragacanth," which is obtained from a low, prickly shrul, growing in the l.evaut, is i
some respects different from the foregoing. some resplects different from the foregong. hick mucilage with a certain defiuite proplor fourish in your statc. Such enterprising col nitys as Rould iverside and our friends at National experimental gardcus, and these, if under State
sulpervisiou, should have state aid. The imporant results which may flow to the state from such efforts cau hardly he estimated and the agriculturists are certainly as much cntitled to
such recognition as other classes. 1 Iowever, self-help is the leest resouree and the most nat ural and suitalle for an American, who should not seek, as do the Europeans to a much larger extent than we, to he coldled and sucklicd by
the state. Yet the advantages procured to the state. Yet the advantages 1 lrocured t
Europe by the protective policy adopted by

Napoleon, when he desired to prevent England from selling her sugar, are a grand illustration
of the merit of that system, for the culturo of
beet sugar has been an inestimable boon to the griculturists of France. Horace J. Smith.
Gcotres Hill, Phila., Dee. 5th , S.

## The Stock Yaro.

## Hornless Cattle.

Ebrtors Press:-Several wecks ago I received a copy of the Pacific Rural Press containing cut representing Taber's mulley cattle, and au article in relation to hornlcss eattle, referring, I suppose, in one paragraph, to myself. Indulge ne in a few words in relation to hornless cattle. I am of the opinion that the time is coming when cattle will be generally bred without horns. Not that any new lreed will be introall the various breeds. The hord bred by me was bred from horucd cows and hornless bults. The supcrior milking qualities and general character of the cows were preserved in their progeny, but the horns were left off.
1 expect domestic cattle will, at some future time all be reared without horns, for the reason rcar them. That it is for their interests is shown by the following statements, viz.

1. Horns were given to cattle to be uscd in fighting - to cnable them to defcnd themselves they are of value upon wild cattle. Jemestic cattle have no valuable use for them.
2. The borns upon domestic cattle are used mostly in goring and injuring cach other. All injuries to animals are paid for in their dimin-
ished growth, or diminished flesh, or increased anount of food consumcd.
3. Tho expense of growing the horns is equal
the expense of a like weight in meat, and they are good for nothing.
4. Horns are a mere dead neight upon the ing them about, and warming and supplying their waste, is paid for in the food consumed or he diminished weight of the animal.
5. lujuries are continually inflicted by cattle by the use of their horns upon
well as upon the human race.
l'ersons who desire the food consumed by cattle to be appropriated to putting on flesh, or producing milk, will dcsire that they shall be o be employed in tighting each other, and es-
pecially those who enjoy a "bull fight," will hold the horns in high estcem.
Some claim that cattle arc made to appear
more beautiful by the horns. T'bis ariscs entirely from habit. To those who are in the appear more beautiful than horucd eattle
Pit is claimed that hornless cows are better something in this, but not much. If a portion of the food of the animal which would have
done to the production of milk is appropriated gone to the production of milk is appropriated
to the support of the horns, the cow, of course, produces as much less milk. WM.
Denver, Colorado, December 21st.
[lt was Mr. Clark to whom we alluded as building up a herd of hornless cattle in Wayne this expression of his views on a subjcet which is certaiuly worthy of consideration. Since our publication of the engraving to which Mr. Clark alludes several readers have told us of
their interost in hornless cattle, and this expotheir interost in hornless cattle, and this expo-
sition of their claims will be gladly read. We shall be pleased to hear from Mr. Clark again on this
Press.]
Olive Oil in Spain-The British Vice
Consul at Malaga gives the following reason Why Spanish olive oil ranks low in the market: Very large tracts are dedicated to tho
cultivatiou of the olive tree. Its produce is a source of material wealth to spain, aud constitutes one of her prineipal exports. This
item alone, however, serves to denionstrate tho legree of iulifference and short sighteduess of his trees vield, wheu properly treated, bears advautageous comparison with the best Lucca in foreigu markets at the bottom of the list, and at the lowest rates, condemned and suecred at as green and ramk; whist a ine energy, aided mitht raise its character and price to its proper position, to say nothing of its improvement for though, perhapis, such improvement would not might deem it tame and iusipid were it deprived of the sting and smack which so invaricarelessly. They are beatel off the trees they are allowed to heat and ferment for months, so that when they are ground and pressed they more resemble masses of manure than any other substance. Then the alphea
tion of scalding water to the paste whilst pressnd putrid in the extracting of all the foul and putrid essences.

## THE $D_{\text {AIRY. }}$

Ensilage, Corn Fodder, Mangolds and Comfrey.
Editors Press:--During the last 12 months the ensilage system of preserving corn fodder by fermentation has been deseribed and urged in most of the United States, and I was glad to see the subject brought forward in the Press of Nov. 17th. I am not going to deny that as you say: "There are points in the system which may be of particular value in this State," but I would like to show you and "the large dairy farmer" Who spoke of trying ensilage, that there are
other ways of keepiug up the flow of milk when the pastures become dry, and while the grass is making its early growth equally as good and
less expensive thau the laborious system of pesseserving food by fermentation.
The system is very valuable to those who have the rigors of a real winter to contend practice it here would be to ignore at least one of the ma
climate.
Iu this part of California it can hardly be
said that we have any genuine winter weather to contend against; at any rate our acquaint
ance with Jack Frost is so slight, that during a residence of 16 years in these parts I have neve known him to injure the feeding qualities of for the use of our cattle "while the grass is making its early growth.'
tate where dairy farming if any parts of the State where dairy farming is carried ou to any will not thrive and do well under a judicious system of cultivation, notwithstanding our long dry season, provided the ground gets thoroughwould suggest to those who are so favorably situated iu regard to both soil and climate as to be able to grow corn fodder to advantage, to upplemented by a crop of mangolds, grown to use after the corn has been used.
will be advisable to find out how late system be sowed in order to produce a remunerative crop for fodder, and thus by successive sowings carry it as far into the dry season as possible. are the best crops we can grow for the purpose
of using as green fodder for dairy cows, not only for the immense bulk of fodder they, yield per acre, but also for its superior quality.
I have called ensilage a laborious syste course I mean comparatively. Labor cost rying out the system than is really necessary in the handling of food for cattle in this State The corn must be-hauled to the feed cutter, the horse power or the steam engine must be used
to cut it up into short lengths, after which it is stored away and covered up in pits or trenches especially prepared for the purpose, and finally,
when the time comes for feeding it out, it will be at least as much work as it would be to feed it direct from the field.
If corn fodder is cut whilst young and juicy
the cattle will eat it all without the labor of putting it through the feed cutter. In October and November last I used thrce acres, scattered and there was not a stump or a stalk wasted. In the same way I use my mangolds, hardly ever finding it necessary to store any, beyond a
few days' supply occasionally in an unusually wet time.
But I have heard some people argue that
good butter could not be made from cows fed with mangolds; if they cannot it is only becanse they feed them too exclusively of other food.
Perhaps the men who argue thus would not care about sitting down every day to a dinner o potatoes without either meat or gravy; to sa nothing of the pudding, and it is pretty much
the same with the cows. The mangolds, o other roots, supply the same place in their bill of fare as vegetables are expected to do in our had one load of that per day, and one of mangolds. Since the fod per was all used, they
have had two loads of pangolds per day-one
in the morning and the other at night-being milk I sell I have been naking nearly the pounds of butter per week, concerning which will let the price speak for the quality: both dates), 60 cents per poumd; Novemb, 45 eents; 12 th, 40 cents.
for all I had to sell-free from from one man those who look dubiously upon the butter mak ing qualitics of mangolds compare the abov Cathbage is also an exccllent thing for cows if
Ced before there are any decayed leaves about it It has this advantage, that it can be grown t plenty of manure and moisture, can be hal t a crop can be grown fit for use in less than fou
months from the time of setting out the plants

There is another fodder plant which has a
tracted a good deal of attention latterly;

## Prickly Comfrey

Of which I have had some growing for the last
niue months, not long enough, however, for me niue months, not long enough, however, for me
to speak positively as to its adaptahility to this to speak positively as to its adaptahility to this
climate. As I am in frequent reccipt of letters of inquiry about it, perhaps it may not be out of of inquiry about it, perhaps it may not be out of
place to state briefly my ideas about it: I would say, first of all, to those who feel enchanted by the reports of the enormous yields per acre we
have heard about it, try it for yourselves by all means, but don't give it a half trial by planting aud then neglecting it, for a plant that is a large producer must of necessity be a large feeder, consequently the proper plant food must always be abundantly supplied in the shape of good stable manure. This, coupled with thorough cultiva-
tion, aud a fair amount of moisture in the soil will, I have no doubt make the poist in the soil will, I have no doubt, make the plant yield large amount of fodder, for, like all broad-leave plants, it obtains a large portion of nourish
ment from the air. I think the plants ought be four feet apart eacl way the plants ought to each way, as I have seen it stated they should
However, the sum of the whole matter appears to me something like this: Use green fodder corn if you prefer it to anything else, as
long and as far into the dry season as you can long and as far into the dry season as you can
use it green. Then use mangolds for the remainder of the season, till the young grass has and mitim

Robert Ashburner.

## Авводісаит TURE.

Cultivation and Rainfall.-No. 3
Editors Press:-Iu this article I propose to consider the grounds on which is based the as.
sumption that the few trees which man takes off the carth or man restores materially affects our annual rainfall. In the previous article I rapidly than the cereals and root crops; that nothing is like the ridged and furrowed field to catch the raiufall, and nothing will hold the water so long as fine agricultural tilth, and a blanket of pulverized soil; that great rain clouds come from afar and distribute moisture
on a scale which makes utterly insignificant the moiety of vapor given off by our trees at the period when the autumnal rains commence. But it is said: "The facts are against you." Let us see:
It is said: " When primeval man dwelt in the primeval forest, long before the historic period, there were no dcluges and no drouths," etc.
Indeed, who knows that? If geology don't show, if the strata dou't reveal far greater and more rapidly occurring changes and variations in raiufall in those early days than now, then "glacial period" in France and a tropical climate in northern Russia, hard on toward the Polar circle, where the tropical elephant could five and thrive. Does that look as if all been wonderfully quiet until man rudely broke up her slumbers? Bosh! The world knew of
drouth and deluge long before man began to hew down her forests.
It is alleged that Persia, Armenia, Arabia, Asia Minor and North Africa have all been nearly ruined and turncd into deserts through forests. To this I reply: 1. Oppression ruins any forests. To this I reply: ©ppression ruins any derness. If oppression can ruin any country it ays taking from the soil and returning noth ing, will do the same. That has been done in those countries for 5,000 years. 3. Armenia is yet quite a fertile country, considering its short summer and long winter. Arabia always had a joor soil, and deserts of salt sands which the
continually blowing winds have spread over a large part of the country, yet it to-day sus North Africa always had a vast desert of move ing sands on the south, which has been yearly crowding the area of arable land nearcr and nearer to the Mediterranean, In the case of diminished its fertility, but bad culture, bad government, and the eternally eneroaching sands of the great southern desert. Palestine and Asia Minor are still rich in spots, and sustain able laziness, and the all-devouring tax-gath-
But stop now, let us consider some facts on place of man. Hindostan, with a population every forest, whero a grain of wheat or rico can be grown. Yct, to this day, it supports a
population of 125 to the squaro milc, and has an

On from India our race went to China and
peopled its vast area, mowing lown the forest
everywhere as thcy went. Did this vandalism produce sterility? Far from it. For 4,000 years they have cnjoyed a fair average rainfall, and now
that vast and almost trecless empire, oxtend-
ing from north to south 2,000 miles, and twice as gig as the United States, contains an averag
of 250 persons to the square mile. Where is of 250 persons to
the theory here?
the theory here? have long since been denuded of their ancient forests, which once covered nearly all thes a much smaller number than in any part of the United States. Are their rivers drying The vast oaken forests rainfalls diminishing land have long since disappeared, but the rai still falls and the average production per acr yearly increases.
"" I dispute it. Prove rainfall is decreas ing." I dispute it. Prove it if you can. and bred. That its naturally very poor soil is growing poorer I admit. Ditching the swamps and draining natural ponds lets the water pas off at once instead of taking all summer to do midsummer than formerly, and the people rais less bullfrogs and more grass. But the rainfal is not perceptibly diminished. If you say it is Dive me the statistics.
Drouths and famines have been in all ages, and quite as frequently among the ancieuts a est when the call for timber or land requireslet iu the light, plow deep, cultivate carefully, raise grain and fruits, and don't fear that for s
doing the rains will be withheld or the earth \%isimin

the flowers are from three quarters to an incl
In color tho flowers are the richest earmine with a brilliant yellow center. They are borne
in long racemes of 10 to 50 florets each. This in long racemes of 10 to 50 florets each. This
variety is found in San Diego and Los Angeles in great ahundance.
from one to two feet high; the flowers are from one to two feet high; the flowers are a
light searlet color, from one to one and a quarter inches in length, and about three quarters in dianceter.
1n. Catijornicum grows two feet and upwards rom one-lialf to one and a quarter inehecs iu di ameter. Fiowers in iong close raeemess
$D$. Varigatumt is the finest of oll the blue arkspurs, it grows two fect highh, the flowers them they have a metallic tinge, one inch in di. thene they lave a metalii tinge, one inch in id.
ameter. Borne on long pedico racemes, have
often We C. Din whel they EI Dorado, Cal.

## Rose Culture

Entors Press:-I presume many readers of he Priss who have not had much experience in rose culture would be glad to know the very
best varieties to get, for constant blooming, fine color and haudsome buds. I would have beon very happy three years ago to kuow what I now do, as it would have saved me much anxiety time and money. For white buds, I find
"Niphetos" the loveliest of all, theu "Madamo Bravy," "Eliza Savage" and "Devoniensis" all low.growing, compact platat. There is none
letter than "Lamarque" for a climbing white leter althon Lamarque for a climbing white
rose, although it is not a steall bloomer. I wish people would use the Lamarque in cemo. teries for adorning the last resting place of dear ones. Instead of a marble slal), a slender shaft of glosy gren leaves and lovely half-open white
buds would be sometling far better thau a soulless, staring marble.
You will find that
then
Ou will find that florists disagree as to names

 the finest climbers of "all the Noisettes roses
"Mareschal Ne il" and "Chromatella," or "Cloth

 For bush roses of gold color, "SSarano", and
one that some florists on this coast call "Eliza
 ine Leboute," others call it "Duchess de Bra.
baut." I have plants of each name, differing in baut." I have plants of each name, differing in
color , but of sane size and slape and botl
lovely; bnt the one we call Pauline is the bes
 qere,", Triumph de Luxemburg" "'smperor
Russia," and "Bon Sileve," are all extra fine for buds. "Compte de Ur" and "Aggrippina"
are the only mood red roses I have, but there are may very tine ones to bo ol tained now.
As I have not tested them, I will not praiso Sometines the best of plants will produco
poor colored flowers if not fed well. They are poor colored flowers if not fed well. They are
as puictual for their meals as a a laboring man as punctual for their meals as a $a$ laboring man
and will
not do do any better without them. feed mine liquid hen unanure every threc months
and water them thorongly every month in dry weather, and prune out the old hard wood as fast as it shows poor flowers. Thus I always
have high-colored, firm, fincly formed buds every month in the year.
One beatiful clilinging red rose $I$ neglected to name amount the Noisettes, and that tcemsto
be little kuown, is of very fine form and fra. grance. It is "Sour cuir de A Asclue,", If any
one knows of other desirable roses, let us hear
fro the from them.
santa Barlara, California. Mes, Culubs.

Tresting tue influreser of Forlests.-To. wards tho close of last month, says the Londou Farmer, a serics of preliminary experiments upon tho meteorological influcnecs of foresti wero conumencel at tho Botanical Cardens at.
tachod to the late School of Forestry at Nariabrunn, a special form of apparatus contrived for this purpose by Prof. Schwacklofer being cmployed in conducting them. Tho apparatus
consists of $a$ cepptive thalthon furruishell
with an
 tion of tho watery vapor present in the atmos-
phere, which lalloon cail be fulickly inllated when its aseent is desired, ly means of a eompaet portahle apparatis tor makng hydrogen balloon is mado to earry up) a eontrivance for manner material will be oltainol, and in thi the crowns of forest ble places. Tho preliminary experiments havo given every satisfaction as to the feasibility of
the schemo, and in tho spring of next ycar a
regularly organized system of observations will be undertakon at v

We have no interest to serve save the deter mination of the truth, either iu our own writing
or that of our corrcspondents, and welcome houest criticisn. A writer in the Alta think
Mr. Purnell has writtcn beyond the prof cerning the cutting of forests and drying of
streams in southern California. He says: "N
 was no 'tropieal life and lixurianee for hun
dreds of miles,' now occupied by at parched aud wretched region, '110 aboundiding perennial streaun have disappeared anywhere, save in the e imagin-
ation of a writer who is in more liberal with his assertions than his authorities. It is a matter
of notoriety that the Indians and Spaniards did not fell forests, aud that when the American
took California there were no forests near Sant Barbara to be felled.
"Nobody knows what the average conditio was 50 years ago, and the opinion of any living
witness who rode through there about 1830 , in what was perhaps an exceptional season, if it
were obtainable, and we do not snppose it is, would be worth nothing; and there is no reason for presuming that there was then more grass
water there than now. "So far as the tree question is concerned, there is no cause for alarm; the State is gaining struction of old trees is rapid iu NLendocino
Humboldt, Santa Cruz, western Sonoma, and the shores of Lake Tahoe, but the young trees are growing up, and the forests are in no dan ger of decreasing in area, unless in santa balley the planting of fruit, timber and ornamental gation ditches and reclamation dykes are cx tending every year, and trees will go with them and we expect that in 50 years the economy o
water will have made such advances that the Sacramento, San Joaquin and Salinas valley
will be as thickly settled with dwellings em bowered among trees as are Napa, Sonoma and Petaluma now, and the changes made for th better there within the last quarter
tury are little short of the marvclous."

## FLoriculture.

## California Delphiniums

Editors Press:-The delphinium class of plants have long enjoyed great popularity
among floral peoplle, and not without reason, for they are of easy culture, prolific in blooming, and of many slaades of color; the color in all varieties being soft and gentle, in no wis gaudy or overpowering tints, which character To our own State, which has given to the the pleasure of presenting to Flora's devotec the finest and richest of the Detphmum. varietics have been introduced into lhastern gar dens, without a single exception they at onc
lore tho palm away from all other varieties, over which years of toil had been spent in im
proving.
So far as explored there havo been found in So far as explored there havo been found in various shades of carmine, blue, purple, viole and whitc. Time and space formd at present
a conplete description of all the varieties
The four varieties which I belicve will be found the most worthy of eultivation are as follows
Delphinium cardinale, a handsome and strik ing variety, which grows to the hight of two to
four fcet. The flowers are from one and a quarter to one and thee quarter inches in
leugth, includiug the straight spur, in cliameto

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$=$


## Co-operation

Edrtors Press:-"Of what use is it?" "How will it benefit me?" and similar expressions are ased hy the majority of human beings when any
thing new is presented. The thing under consideration, giving no eucouragment to the ad vancement of me or mine, is discarded as some thing not worthy of thought, until, at least, nothing to do makes room for charitahle work selfish motives, are at least on the high road to that couutry whose despotic ruler is me. But we are all governed to a certain extent by selfishness, and from that standpoint I propose to show that we may all be benefited by co-operation in the Grange, in the State aud nation, and in our social affairs.
A man cast away upon an island with none but the lower animals for companions, sees but little enjoyment. True, he may have moun-
tains of iron and gold, broad forests of trees bearing all the fruits known to man, food and raiment sufficient for a hundred years; all the beautiful flowers of the tropics in broad expanse before him; all, everything we seek for,
as contributing towards our happincss, except one thing, a fellow equal, and haviug it not will always and must, nccessarily, be not satisfied. Place the same man among his fellow-men, and he seeks not to regain his former
wealth at the expense of associates. We all need and must have fricuds, ncighbors
and companions. Give a man all the wealth and companions. Give a me the world, despotic and life-long, make him know assuredy that the life of every
heing, man and beast, is in his hands, give him
what Cesar Napoleon and what Crsar, Napoleon and others sought for, fied and lonely he must
And so it must always be. The more com.
pletcly selfish we are so much the less are we capahle of enjoying what we have. Our good thoughts must not he kept to ourselves, must thinking apparatus, must not be started forth itself, strangliug not only its own life but de-
stroving the desire and power of many like future thoughts.
Take a sweet-smelling rose, envelop its life
power within itself, canse it on power within itself, cause it to drink up its own
sweet perfume, inhale that which it has exhaled, and a more pitiful death could be scarcely yim.
agined, agined, killed by what was intended for life and
beauty.
The very conditions upon which that we give life, health and happiness to others. Without a desire on our part to please others,
we cannot utilize the cfforts of our friends to do us good, Without his feelings are reciprocatcd, a lover's love is a consuming fire to soul and
body. If we would be henefited truly and nobly, it must be that we throw off a part of
our being, that we may be enahlcd to gather in the experiences and thoughts of others. Unless
we are willing that our fellow-men should enjoy the experience we gain through life, we are in a
sorry plight to ask that our friends kuowledge sorry pight to ask that our rriends kuowledge
he given us frea and without price. In orler
to be thoroughly contented, we must be williug to be thoroughly contented, we must be winikg
to return an equivalent for everything gaincd.
Nay, that is only justice, we must he desirous Nay, that is only justice, we must he desirous
of fultilling all the laws of nature to be thoroughly satisfied, and her laws are that we give of our store, and by thus giving are we
the better euabled to receive. Those who are struggling to gain the neces
sities of life find a fellow-feeling in his neigh sities of life find a fellow-feeling in his neigh-
bors of like circumstances. To then we can say, work together for the intercst of all. As you
advance your neighbor so arc you assistcd in the work. By co-operation are you much
stronger, and the battle is not often to the weak. By working toget her you can help each
other without lesseuiug your home work. It the peoplle of the Grange to-day were resolved
to act together for the good of the whole people how soon many of the ahuses of power, state
and national, would be checked. If the people of the nation were deterninined to work together for the good of all, how happy we all might be.
No one's happiness lessened, and thousauds increased.
Sespe, Cal.

Personal.-In the list of those who have lately received "lifo diplomas," as puhlished
in tho seveuth biennial report" of the Superintendent of Public Instruction, we notice the name of Vital E. Bangs, our correspondent at distinctiou is well placed in this case.

Election of Officers.*
Bisgitampon Grasge, No, 174 , Solayo Co.
-Electiou Dec. 1st, 1877 A. A. Bennett, M.; J. Tuck, O.i B. V. L. Bennett, L.; ; Chas, Mlumer, S. A. Mangers, A. S; Shernan Brown, C.
G. A. Brown, T.; Wm. Gay, Secey; J. B.
Jameson, G. K.; Mrs. M. Gay, Ceres; Mrs. B. Jameson, G. K.; Mrs. M. Gay, Ceres; Mrs. E.
Tuck, Flora; Mrs. E. I. Brown, Pomona; Mrs.
Plummer, L. A. S. J. J. F. Brown, Trustee; A. Plummer, L. A. S.; J. F. Brown, Trustee; A.
Bennett, J. Tuck, Delegates to Pomona Grange. Elups Gracge, Stavislate Co.-M. B. Kit-
trellc, M1. : R. K. Whitmore, O. U. G. Munger
 Mrs. R. Whitmore, C.; E. Hatch, I.; Mrs. L
Brouse, S. M. M. Williams, G. K.; Mrs. U.
Munger, Ceres; Mrs. George Reich, Pomona M. Munger, Ceres; Mrs. George Reich, Pomona;
Mrs. E. Hatch, Flopa; Mrs. John Servie, L.
A.S. Mrs. D, Whitmore, Trustee, for three A. S.; Mrs. D. Whitmore, Trustee, for three
years. Installation the fourth Saturday in January.
Danville Gravge, No. 85, Contra Costa
Co.-Election Dec. 15: Chas. Wood, M.; J. Stone, O.; D. N. Shuhurn, L.; M. W. Hall, S.
L. Wood, A. S.; W. Hown, C.; R. O. Bald win, T.; C. E. Wloward, Sec'y; G. Wood, G. K.
Mrs. Fanny Wood, Ceres; Miss M. Mreston,
Pomoua, Pomoua; Miss N. Glass, Flora; Miss Olive
Labaree, L. A. S.
 ; E. H. Elkins, O.; G. W. Richards, L.;
W. Irwin, S. F. H. Rainey, A. S. Jolin-
C.; B. Summers, T.; A. Lausdeli, Secy.; ger, C; B. Summers, T; A. Lausdell, Sec'y.
M. Nicohles, G. K.; Mrs. C. Pierce, Ceres
Mrs. M. Summers, Pomona; Mrs. Heacock, Mrs. M. Summers, Pomona; Mrs. Heacock,
Flora; Susa Parker, L. A. S.; H. W. Fabing, Trustec.
Musse.
Mussel Slough Grange, No. 243, Tulare M.; Sanford Underwood, 0 ; ; Wesley Under F. Wilson, C.; Thos, Stortin, T.; $\quad$ H Mrs, T. W. Standart, Ceres; Mrs. F. H. Wi. Wil
son, Pomana; Mrs. Wesley Underwood, Flora Mrs. Sanford Underwood, L. A. S. Intallation on the fourth Saturday in January, with a Grange feast.
Natronal Rasch Grange, San Die:o Co-
Elcection, Dec. 26th: Flora M. Kimball, M. F. A. Kimhall, O.; E. T. Blackmer, L.; Theo Parsons, S. . N. P. Ronland, A. S.; J. Todd, C.
W. C. Kimball, T.; Sarah C. Kimball, Sec'y L. Roberts, G. K; ; Mrs. A. M. Field, Ceres Mrs. Lonise Boyd, Ponona; Mrs. L. Roberts,
Flora; Mrs. Josephine Walker, L. A. S. In Flora; Mrs. Josephine Naiker,
Newcastle Grange, No. 241, Placer Co.
Election, Dec. Sth: E2ection, Dec. Sth: R. M. Nixon, M.. J. T. T.
W.
Wods, O.; B. P. Tabor, L; I. F. Tahor, S. Threlkel T, fr. S. . . Mitchell, C, Perkins G. K.; Mrs. Grififith, Cores; Mrs. Threlkel, Po mona; Maggie A. Greeley, Flora; Isahell
Boggs, L. A. S. Installation, January 12th. Plumas Grange, Nu. 245, Plumas County.Elroy, L.; A. J. Spoon, S. ; M1. C. Bringham, A
S. ; J. L. Crow, T.; T. Black, Sccy; G. W Cramer, G. K. Mrs. G. W. Mapes, Ceres;
Mrs. M. C. Hinds. Pomona; Miss R. Sigler,
Flora; Mrs. M. E. Bringlan, Ms. Plimpoutit Grange, No. 232, Amador Co. Hection, Dec. Sth: Reuhen M. Ford, M.; Jas,
F. Greg, O.; saac W. Whitacre, L.; Jonathan aillee, S.; John Sharp, A. S.; Eleazer S. Pot er, T.; stephen C. Wheeler, Sec'y; Sinpson
Sister Ford, Ceres; Sister Pottcr, Ponona; Sis
ter Whitacre, Flora; Sister Forbes, L. A. S. ter Whitacre, Flora; Sist
Installation, January lst.

Oficers of Granges ree requested to sens list of offit cers elect, date of
this ottice direct.
Resolutions of American River Grange At a regnlar meeting of Anerican River
Grange, held December 22d, 1877, the following preanble and resolution was adopted with out a dissenting vote:


 WuRREAS, There is a spirititabroad ammorig a certain elass




Routiers, Dec. 22d, 7\%
We reccived, too late for publication thi eek, a letter from Bro. Wright upon the action of Stock ton Grange with refereuce to his Sacra -
Installation Noticf,-The installation o rancisco is her in Golden Gate Grange, San Tuesday in January, the 0 ed until the fourth Tuesday in January, the 22 d inst., at which requested.
vited. - isiting. J. R. Read, Sec'y.

By request of the Committee on Installation he officers of the Temescal Grange will be in alled on Saturday, Jan. 12th, instead of the day first proposed. This will enable members o accept the invitation to attend the join neeting and iustallatiou at Walnut Creek (Sat irday, Jan. 5th), of the Granges of that place lress the farmers and their wives (at Walnu will he foll A. M. Harvest Feast at 12:30 onducted hy Worthy Past State Mlaster, J. V Webster. All Grangers should be on hand as an in
Worthy Sccretary Adams, of the State Grange, has heen invited to install tho officers
of Temescal Grange. Worthy Deputy Master ather Cew Year's Harvest Festival of The at th Grange. The meeting will commence at one 'clock. All Patrons are urged to be prosent

## Selling Wheat C. O. D

Editors Press:-By order of the Danville Grange, No. S.J. P. of H., I forward you a copy
of resolutions adopted Decemher 15th, 1877 : Wurrass, The custom of selling produce, cspecially tho
chicf production, wheat, to dealers whose responsibility is unknown to the farmlng community, and waiting payeniently called steamer or collection day, often resultsin
erious loss to the farmerg; and
Wneres From the nature of the business of Whereas, From the nature of the business of sa Whenever fallures or suspensions occur amone them, it
never tbe farmer creditors but usually the city creditor
whu are partially or wholly secured; therefore, being com Wha are partially or wholly secured; therefore, being com
pelled thereta for sclf protection, and feeling onseious
that there can be no infusticc or hardship to anyone in he adoption of the resolution, be it
Resolved, That the members of the Danvile Grang win, in every instance of sale of their productions, de
nand payment thrcefor on delivery, and hereby bind and
pledgc thenselves to adhcre strictly to the rule, even, if narket rates.
Resolved, That the co-operation of sister Granges be


## In Memoriam.

SAN JOSE GRANGE, Santa Clara County, December
Wth, IS77. aove from our Grange circle our beloved and worthy Le
urer, Sister E. P. BicksELL, to rest from hor earthly la Resolved, That in the death of Sistcr Bickuell the be
paved fannily lose a kind and loving wife and mother, the reaved fanily lose a kind and loving wife and mother, th
community a valuablc and esteemcd friend, and thi Grange one of its most active and trust worthy members her intercourse-leaving a blank in our broken column
liffeult to fill
Rexolved. That wo extend to the fanily of our deceased Rexolved, That wo extend to the fanily of our d
Sister our heartelt sympathy in their bereavemcut. Resolved. That our charter be diapled in mourning; that
thesc rcosoutions be prend uppon the minutcs of the
Grange, and R coly sent to the San Jose Mercury and to he RuRal Press for publication- - Committee: Mrs. W
Manly, Mrs. H. M. McClay, Wm. Erk son, H. G. Kee
Hing, Josie Settle. Elmira grange, No. 15, P. of II., Elmira, Cal Whereas, it has pleased the Grcat Master of the uni-
versc to remove fron our midst our beloved sister, MRs. Recolved. That we offer our sinere reare be it to the hus
hand and family of Sister Black, and condole with then

## Resolved That we cause our chartcr to be draned in

mourning for the slace of so days.
Resolved, That these resolutions he sent to the Paciyc
RURAL Press, to tho fanily of our dcceased sister and b Wread on the minutes of this Giranke.-1Committee: 0 ENTERPRISE GRANGE, No. 129, Sacramento county, Wherass, hi has pleascd the Gireat Ruler of the uni
ersc to call from our midst our beloved and respected istcr, Lucy A. Firch, therefore be it
Resolved, That in the death of Sister Fitch, our Grange
has lost a quiet, peaceful member, one ever williug to do her part in an, unpretentious manner, and her hubband a Rezolved, That while we bow with humble submission
Hoeven's high will, we deeply mourn the lobs of one Who four years has met with us with a kind, gentle fach
which nacmory will cver keep in mind. hich micmory will cver kcep in mind.
leesolved, That tho Grange ender the borcft husb
nd relatives our earnest and heartfelt sympatlices. liexolved, That our charter be draped int mourning
0 days, that a eopy of these resolutions be sent bereaved husband, also that thcy appear on the minutes Press and California Poiron for 1 publication.--COmu
mittec: Mrs. M. C. Nordjke, Mrs. M. W. Parker, S. A.
Grcen.

Aerlal Telfarapily.-The scheme for tele graphing without wires, by means of aerial
currents of electricity, has beeu revived hy prof. Loomis. He has met with success in sing kites for this purpose, a copper wire bein were trausmitted thus between kites 10 miles apart. His new experiments are made in the nountainous regions of West Virginia, hetween
lofty pcaks. Continuous aerial currents are found at these altitudes, which will serve the urposes of the telegraph, except when rarel aterrupted by violent disturbancos of the at merits of acrial telegraphy in the Alps. The cheapness of the apparatus, as no wire is rc f the method, and may counterhalance its lia hility to occasional interruption.
A movenest is on foot in Oakland to estah lish an Mcchanic Arts' school where boys may eussion.

The Indian Prize for a Ramie Machine.
Inasmuch as several Pacific coast inventors are now practically engaged in the honorable ing mach the Indian award for a ramie clan nlar which has been issued from the lndia office in London, on the suhject.

hich shall average in value not less than $£ 45$ per ton in the Engli narket, at a total cost, including all processes ear and tear, of not more than $£ 15$ per ton, laid and $£ 30$ in England, after payment of all th charges usual in trade bcfore goons reach the preparation are to he understood to include all bsequent to the cut until the fiher is in a condition fit to be packed or conveyance to the market. The machinery employed must be simple, strong, durable and he must be adapted for treatroent of the fresh of dried stems offers certain difficultitseatment fiber prepared for them must, moreover, always rom green stems. It is, therefore desirabl that the attention of inventors should be given to the discovery of a process for the treatment of the green stems.
The trials will be held at Saharanpur, in the Orthwestern Provinces, in the months of August and September, 1810. Hachines entere ater than Augist 15 th the col frial no nencing the next day. The judges will be watch the whole of the trials. But the ma chines are to be worked and adjusted hy the provide accommodation and motive power a aharanpur for all competing machimes, and coast to Say imit of one ton each, the freight on exces wner or owners of the succesful machine machines shall not be entitled to receive the reward offered, except on the following condi tions, viz. That a complete technical descrip tion of the machine, illustrated hy plans draw to scale, shall be prepared and published (gov crnment paying the cost) for the information of hree years from date of award, the public hachines, on right of manufacturing simila of $10 \%$ on the cost of each machine so nanufac ured All persons desiring to compte are requested to make known their intentions not ater than Decemher, 18/8, giving their name, each machiue entcred for competition. They must also declare themselves hound to conform judges appointed to conduct the trials. All notices of intention to compete and application for information should be addressed to the Secf Revenue, Agriculture and Commerce, $\mathrm{C}_{3}$ cutta.
Illumnated Numbers. - The Telegraphic Journal says that a contrivance for rendering oming geueral in Paris. It consists of a hol low triangular prism ninc inches long, two wose side are formed of panes of hlue glass, in white. This prism-shaped lanip-glass rests gainst the front of the house, so that the two seen by the passers-by. In the interior of the prism is a gas jet, fed by a pipe from the house.
Householders on the Avenue de l'Opera have been obliged to supply this mode of numhering at their own expense on the houses they are ntroduce it on some 450 of the mulicipl tablishments, schools, police offices, fire brigad ffices, etc.

New Sewing Nlachine Motor.- We read
in Eastern exchanges of a new sewing machine notor, which is said to be "so cheap and so come into very general use. The motor con in cahiuet work through which stean is engen dered by a small parlor lamp being placed un derncath it. The apparatus which connects it With the sewing machine is very simple, and
onsists of only three pieces. It takes only ew minutes to get up steam, and the speed is regulated by a little spring. The invention is
compact, neat and clean, a great savior of health compact, neat and clean, a great savior of health
and strength, and in appearance resembles a litand strength, and in appearance resembles a litinventor of the machine
Wood, of Newark, N. J."

Straigitenng Tools.-The Polytechnic says: It is not generally known that steel tools sprnng Hardening can be straightened in tempering, color to straw color or purple, is about as pliawarped in hardening can, while hot, be straight press, without danger of breaking.

## Agpicultural Notes.

## California.

BUTTE.
Equptian Corn Meal.-Record, Dec. 29 : We are indebted to Cen. Bidwell for a package of Lgyptian corn meal from the Chico mills, the wheat it makes an excellent article of diet. heat, and will, we think, soon to buck general use. Those desiring an excellent hot

## give it a trial.

Rain and Snow.-Republican, Dec. 27: We had a glorious rain on Sunday, and at the same time a good fall of snow higher in the moun-
tains, reaching down almost to the city limits. FRESNO

## FRESNO

Rain and Irrigation--Expositor, Dec. 26:
On last Sunday this valley received a holiday On last Sunday this valley received a holiday
present in the shape of a splendid rain storm. During Saturday night a strong south wind sprang up, and early Sunday morning the preEmigrant Ditch company are now clearing out and improving the company's canal. As soon as the repairs are completed the water will be gin irrigating and cultivating their land. LAKE.
OUR Poor Lands.-Democrat, Dec. 22 Lake county has a good deal of hil land, some to be susceptible of the highest cultivation if treated at the right season and understand-
ingly. We are certain that grapes can be ingly. We are certain that grapes can be
grown on these lands at a profit and also that grown on these lands at a profit and also that
fruit trees will flourish and bear promptly thereon. During the week Mr. James Martin, who owns a farm near the hills back of town,
brought us in some cotton balls raised on the so-ealled "poor lands." The specimen was the Sea island variety, had matured perfectly and the staple was strong and long. In fact, we Mr. Martin also informs us that on the same laud he has Spanish radishes growing, some of and were just as fine and solid inside as spring radishes, and are so brittle that they have to be dug with a spad
A California Scenf. - Bee, Dec. 29: The
view that greeted the people of Lakeport Monview that greeted the people of Lakeport Mon-
day morning after the sun had risen above the mountain tops toward the east, was charming
indeed. The hills aud valleys for miles around, clad in richest verdure, looked greener and the recent rain, and the mountains beyond the lake and far as the vision could reach were covered with a heavy mantle of snow. Spring
was with us with newly-grown grass, its blooming flowers and its feathered songsters chirping from every tree top, and yet winter, clad in view. It was a vision of rare beauty and such
a one as our friends in the East can hardly realize.

## LOS ANGELES.

Los Nietos.-Editors Press :-Some time since I penned for the Roral a communication concerning the situation of affairs in general in
this "New Italy," and the fact was too doleful to go to print. So I concluded to desist until Providence should favor us with a change. The
change is here. Raiu has come, but, just as usual, more rain has fallen near our lo editor's sanctum window than on the land I plow. The
mortality amongst the sheep folds was great during our rain, which, by the way, was quite that are now alive are all O. K. Business has tried to revive since the rain, but it hao called for cash, and the man cash don't respond. Cash fat hogs that I have been trying to sell for six weeks, and cannot sell enough to pay my taxes. Well, this is business, action-then a reaction.
Who ever saw the exception to an infallible that three years since would have brought $\$ 150$ readily, and paid for them (not cash), 850 pounds
of pig, live weight-equivalent to $\$ 35$. My word for it, 'tis the making of this over-advertised country. Men and business will finally this equilibrium is brought about, and when learn how to manage this irrigating facility that they are possessed of, this country will be all
O. K. But, my kindly reader of the Rural, don't forget the advice I gave three years since,
on my arrival in Los Nietos, "if you have a home, and are making a living, dig in. Stay there."-Geo. Kay Miller.

## water to-day, informs us that it rained very

 hard at that place last evening. In coming ailroad track was covered with morning, the or three miles. The snow is very low down on he mountains this season, even the ArrowThe farmers from the country report that the rass is grARIN.
Rain.-San Rafael Journal, Dec. 27: Since
a total fall this season, to date, of 5.83 inches, The public anxiety is entirely dissipated rela-
tive to drouth. The ground is in good condition for all purposes, and feed and crops are usually good.
Castroville. - Argus, Dec. 29: A consider able parcel of land in the southern part of cleared of tules, plowed, sowed and harrowed People are just opening their eyes to the value
of tule land. Those of our farmers who had not their grain sowed prior to the storm of the first of the week, are now busy as bees plowing
and seeding, having given up all ideas of a dry and seed
season.

The Season.-Democrat, Dec. 29: Since our last issue, rain has fallen in abundance upon the farming and grazing lands of this county. lowed lands are covered by the sprouting grain, will have no difficulty now in plowing and seed ing reserved lands to whatever extent their cir cumstances make advisable. As to the temper of the community, confidence takes the place of despondency previously existing and all regard
the coming season as full of promise. We have good coming season as full of promise. We have
geports from stock-growers. Charley Romie tells us there is plenty of grass for sheep
on the Arroyo Seco. John Cook, of San Antenia country, is making his way homewards, large band of shep which dry season without loss. From one of the Tularcitos rancho, we hear that sheep on the on their range and, altogether, the understand ing is that the stock interest is now in as promafter such a season as it has passed through. SACRAMENTO.
The Valley Crops.-Record-Union, Dee. 25 Steamboatmen, ranchmen and others who have had opportunity of observing the condition of
things along the upper Saeramento, report that crops never looked better in that seetion, and all the residents are sanguine that the coming
season will be unusually prosperous. In the vicinity of Sacramento everything looks very interested, and the prospects could scarcely be improved upon.
Rain and Effects. - News, Dec. 22: The
good effects of the rains are seen and heard rain has been much heavier than here on the coast, farmers are busy preparing to put in more grain as fast as possible. The grain that is up
is reported as looking elegantly well. In town the alfalfa and other grasses are making their appearance rapidly, and on the sidehills a little green begins to be seen. In the Cajon,
they claim over two and one-half inches; and at Campo, one and three-fourths inches. A note from San Luis Rey advises us that the people of that valley are in joyous spirits over the
rains that have visited our county so generously. Our correspondent, writing on the
18th, says: "Hardest rain last night we had for years."
SAN MATEO.
The Season. - Times and Gazette, Dec. 29: During the last week a remarkable change has come over the face of nature by the growth of
grain. Fields that a week ago showed nothing green. Bee keepers hereabouts report that and many hives are dying during the past yea Reports from the mountains in the neighbor hood of Ischenbacker's, Langley's and Hamm's, represent prospects for farmers there as very
fine. The rain has been all that is necessary thus far in the season. Volunteer has attained a good growth and is doing well, while new
grain is being rapidy sown, the earlier fields already coming up. Grass also is still growing considerable feed for stock.
SANTA BARBARA.
Items.-Lompoc Recorl, Dec. 22: There is no further doubt about a sufficient rainfall. To date, more than the average has fallen for a
good year, and the warm weather will soon bring grass forth in abundance. The Santa Rita settlers are making every effort to get in a large amount of wheat and barley this year. It is scarce. The summer crops will be varied and the high price of small grain.
SANTA CLARA.
Tie Rains,-San Jose Mercury, Dec. 28: dition for plowing and sowing and the farmer generally have begun in earnest. But little
doubt of the outcome is felt, the prevailing opinion being that the season will be a prosperous one and that plenty of rain will fall during
the spring months to answer all requirement the spring months to answer all requirements. Tains in the early part of the season have been rains in the early part of the season have been
followed by light and insufficient showers in the spring. It is during the latter lperiod that the greater moisture is needed. Therefore i
the expcriences of the past are any criterion, A few heavy showers in February and March
arl right.
ORANOE.-An orange measuring $19 \frac{1}{2}$ inches in

## ounces, is one of the semi-tropical monstrosities

 on exhibition at Billy Owens' fruit store in SanJose. It is from Dr. Beach's orchard, Loa An-
geles. geles.
OUr Welcome Visitor.-Dixon Trihune,
Dec. 29: The rain came at last on Saturday Dec. 29: The rain came at last on Saturday
night, the 22 d , in a heavy but not violent shower. The following night there was antwo gentle shower, total for the season of 2.65 inehes. The ground is now in a condition to make plowing possible though a little more soaking would do no harm depth of pour inches on pasture land and to inches on summer-fallowed ground, by Mouday
morning, and afterwards it soaked another inch deep. Wednesday morning a good many farm there had been more rain, though it all fell in October and
SONOMA.
PONOMA.
Prune Drying.-Russian River Flag, Dee sor, who has had a considerable experience in his former home on the Rhine (one of the best prune districts in Germany), that there th one foot in width, about four in length and thre or four in depth, and set in the oven (the brick oven, which is universal in that country) afte
bread-baking, that is, when there is moderat
heat. They are generally left over night, and then aken out and paced in the sun for two o three days. After being again subjected to
few hours of moderate heat of the oven are ready to pack for market. Over-heating is
carefully avoided, as it over-dries the fruit and spoils it. They are never pitted. Boxes with spoits it. They are never pitted. Boxes with would be an item of considerable expense. I is customary to make only one layer, although
Mr. Barth states that he has frequently placed them in two with no appreciable difference in
the result. But, above all, they must be dried slowly. An oven which should be especiall ests for a large number of trays, and can be Fuilt at a slight expense
Fatal Result of Close Pruning.-Russian
River Flag: From E. Catlin we learn River Flag: From E. Catlin we learn that nea yards, containing many aeres, have either been and upon examination he found that the death of the vines was caused by to close pruning. had closed in growiug trunk of the main stal ing insects and debris until it had become
wormy and diseased. One of the vineyards now being grubbed out contains not less tha 160 arres. Mr. Catlin is an experienced vin-
iculturist. culturist.
Alfalfa. - A prominent farmer near Healds burg advises the late pasturing of alfalfa, in order that the dead stalks may not interfer
with the new shoots in the spring. When the first sowing fails to catch well, he feeds the
grass off short in the fall and harrows the grass of short in the faller to mellow the surface and low the new seeds to take root. In this way
a good stand is secured the second year, an the harrow does uot injure the grass in the least.
STANISLAUS.
Iain in the Foothills.-News, Dec. 27
Our foothill friends, east of this place, were no lighted during the last of this place, were not the amount of rainfall at Knight's Ferry wa double what it was at this point. The ground
in that section is said to be thoroughly saturated.
The Rain.-Delta, Dec. 29: The storm last Saturday night measured little less than half an feet in starting vegetation. Should it be succeeded by another within a week or two, fol lowed by occasional showers in the spring hear that some parts of the county got less rain than Visalia, and other parts morc.
TUOLUMNE.
Editors Press:-Crops are good so far. We very large supply this winter. Stock of all might say thousand. It is pitiful to see the dumb brutcs tottering on their fect, and when they fall few cver rise to renew a lease of life. A few more weeks and feed will have strength to keep those left alive.-John Taylor. YOLO.
Ramie Experiment. - Yolo Mail, Dec. of the Jennings has sceured a number of roots ground near Woodland. It is not yet known to what degree the soil of this locality is adaptce thought that it will grow and do well. Sut it is thought that it will grow and do well. Should
this prove to be the case the present number of roots will serve to produce plants for a larger area of ground, and $1 n$ time, win produce sufli fine fabrics. It is said to be a better fabric than cotton and a eheaper one than silk, and mall capital required to cultivate the ramie
and the few expenses incurred during its growth, its little need ai labor and its larg
gleld, the certainty of the crop, the beauty o
the European markets are strong inducements to planters. Mr. Jennings has planted his near
the irrigating ditch, and it has already sprouted and is growing finely. The plants now in the
ground will produce a supply for planting 100 acres next year, which will make a good start for a nice little crop two years hence. It is harvested three times each year, and will aver-
age yearly about one tou of fiber to the acre. n preparing the fiber for market it loses about rom two to three dollars acquires a value of when prepared for the spinner, is beautifully glossy, closely resembling silk best flax, and readily receives the most difficult dyes without injury to its strength or luster. In our valley it should be irrigated immediately quently should be planted where it cansereached by the water through the ditches

## Arizona.

Raln.-Miner, Dee. 21: Much to the satis faction of the farmer and miner, as well as the
rest of mankind, the long "dry spell" has at last rainfall of something over an iuch and a quarter within the last week. Sufficient rain has aldecidedly muddy in places. Among the therence
dots make the dying results following the recent showers may be noted a "rise" in green wheat and barley throughout our valley, and a mild
the volume of water in the Gila.

## Oregon.

STrock AT THE Dallas,-Mountainer, Dec.
20: The weather so far this witter
has exceedingly mild-the thermometer during the
day on Monday and Tuesday last indicated 46 degrees in the shade. Our stock inen are de-
lighted and likewise everybody else, for upon the mildness of our climate this wise for upor ung much
tepends. Should the depends. Should the winter prove mild we
may expect a very larre immirration next year, may expect a very large immigration next year;
is severe, and destructive of live stock, the in sease of our poppulation will be light. How.
ceve, the outlook at present is very promsing; ever, the outlook at present is very promising;
yet, it is hard to tell what a day may bring
forth, and especially is this so in regard to the fortr, and especially is this so in regard to the
weather. We hope for the best and prepare for

## Washington.

Convonsed Poratoes. Seatile Intelligencer: We inspected the display or core
 state of preservation, but treettly redueed in
bulk. The greatest profit, however, is derived
 on the bark Dovenyy, last year, and sold for $£ 40$, the eharges against which were $£ 7$, the
net profit was $£ 32,19 \mathrm{l}$. 11 d. e equal to $\$ 159.18$ on the entire shipment. This is the most prontable way of working up the drycrs so far,
and would, if entered into by White river fl per bushel

Porson in Enameled Clotil.-It seems that he shiny covering of our baby wagons is some-
imes a means of lead poisoning. The Journal of Materia Medica says. In Giernany, whero
this enameled or "leather-cloth" is laryely used, his suspicion has been confirmed by the occur rence of numerous cases of sickness among chil.
dreu who have been carried about in children's dreu who have been carried alont in children
wagons which are covered with this cloth. The ymptoms were invariably those of lead-poisonng. An investigation was recently undertaken
at the instance of the 1 mperial licalth office, at the instance of the 1 mperial hicalth, office,
and the German and foreign make, the enormous quanformed; from a piece of cloth weighiug 10 grammes, a mass of lead weighing 4.25 gram.
mes lcoutd be obtained. The eloth burned readily, and drops of lead reduced to the meonly a small piece of it was ignited. When exposed to dircct sun-light, the varnish cracked consequently, earnestly warns the public to beware of this wagon-covering, "in the sanitary

| Tattoonge a Contabious Disease,-One of the most curious eases of spreading a disease of offensive and contagious character has lately been brought to light ly Dr. Maury, of the Philadelphia hospital. The Polyteclinic Review says: Attention was attracted to the case some time ago by the large number of persons who were admitted to the hospital suffering from this disease, and who had been inoculated with it through the proccss of tattooing. Shortly thercafter it was ascertained that at Reading, Pa., some 200 or 300 persons had been similarly inoculated, and that it was the work of a notorious vagabond, who practiced tattooing as a trade. Through the efforts of the police authorities this person was shortly thereafter arrested at the instance of the health oflicers of the two eitics. Medical examination revealed the fact that he was afllicted with the disease, and it transpircd that in performiug the operatiou of tattooing, he was in the habit of moistening his ncedles, before charging with paint, |
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The Honest Farmer.
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Book Clubs for Rural Readers. [Writcn for the Pakss by Mary A. Suldoox.]
To persons fond of reading a country life has ample and they ean afford to buy new books and subscribe for the best books and magazines. A good library in the country, especially among farmers, is almost a thing unknown. There is no greater luxury to an intelligent person than
reading the productions of the great minds of the age, keeping one's sclf posted in all thc
great diseoveries of science, in all the events that are daily transpiring in every part of the
globe, for steann and the telegraph have brought within our grasp and laid open to our inspection regions that were terra incognita to our
grandparents and made
ns neighbors to thoose autipodean to us. Independent of the pleasure
we lave while reading and thus communing we have white reading and thus communing ourselves, we are laying up stores of knowledge
that umay yield us in the future more solid
enjoyment than many of our lard-earned dol. enjoyment than many of our hard-earned dol-
lars, that are often more difficule to keep than to get. I have long hal the idea that what I
stored away in my braius was a better investstored away in my braus was a better invest-
ment than bank, rairroad or mining stocks. In
these investmeuts my earnings are in the kcepthese investmeuts my earnings are in the keep-
ing of men whose lonesty and integrity of claractcr have not been proved, aud who, when the
hour of trial comes, are "weighed in the bal.
ance and found wanting," and they the ance and found wanting," and they slope to
foreign countries and leave their creditors and defrauded neighbors to look in vain for their
mouey. How many curse the day they trnsted a smonth-tongued rascal of a broker and put
their dollars in a hole in the ground they never save and probably had uo bottom to it, as they
are never recovered. are never recoverel.
A mind well stored with useful knowledge is a well-spring of pleasure that never "goes dry "
It's a bank whose e tividends are paid promptit
and never dishours wour drafts, and as you are It's a bank whose divitends are paid prompttly
and never dishours your drafts, and as you are
president and eashier, there is no fear of being presicient and cashier, there is no fear of being
forced into liqniidation. It's a railroal in which yon are the "first mortgage bondholdcr," over
which you ride free as loug as you live. It's a
mine that is well developed, not suljeete to the mine that is well developed, not suljeet to the tendent, and whose lodes, dips, angles, iuclines
and developments you are perfectly familiar and developments you are perfectly familiar
with, and, if well worked, "will pay dividends
right right along."
There is no
reading fcels so ill at ease as in the the ompany of reading feels so ill at ease as in the company of
those who are convcrannt with all the topics of
the day, with the latest discoveries in all the the day, with the latest discoveries in all the
sciences and conversation takes a turn where you fecl yourself de trop, as the French would
say. You are not interested, for you do not more than half eomprehend what they are talk
ing about, they are beyond your depth and yon ing about, they are beyond your depth and yon
fect as uncomfortable as a solitary frog in lake
Erie Next to a well ordcred, pleasant home, I
believe intellectual eulture is of vital importance in building up good society, in traiuing
boys to towe horse racing, billiards or ball playing, cards
and dice, and the money that nine-tenths of and dice, and the money that nine-tenths of
yong men waste in tobacco and treating in
those dirty saloons, would keep thein well supplied with the best of reading thatter and goo a
plong ways towarils startiug them in and Mong ways towaris startiug them in a lucrative They will pay less attention to foolish fashions, novel reading, gossip andid the number of beaux
they succeed in drawing into their nets and they succeed in drawing into their nets and
make better wives and mothers, more useful members of society.
It's few farmers (

1877,) who can afford to buy many new books, or sunscribe for more than two or three papers,
but they really enjoy reading or heariug their
chilluen real fter the chilhten real after the hours of toil are over,
and they gather arouud the fireside the news. papers or some good book and talk over with
their family thc information they have gleaned in this way; and there is no estimating the a.lvantage to children, who tind home the pleas antest spot, in keeping them from contracting
bad habits, and storing their minds with something that will ele vate and not degrade them. I am making a lcugthy introduction to a subealers of the RUR.aL Press, as my plan for
neighborhood libraries. While living in
nes. neighborhood libraries. While living in
a small village in New York, I belouged for two years to a literary society called a "book
club." This club represented 26 families, who club." This club represented 26 families, who
sulscribed each two dollars yearly. With this money wc purchased 26 books, the best selec
tions a committee selccted from the members could make, and they were bought at nearly could make, and they were bought at nearly
wholesale priees. In the front of each book
was pasted a slip of payer with the name and Was pasted a slip of paper with the name and
number of each book, and underneath the
names of all the members, also numbered, and names of all the members, also numbered, anc
the books were all covered with strong paper The first meeting after the books were ready each nember took the hook with his numbe
on it, and could keep the book two weeks. A on it, and could keep the book two weeks. A
the next meeting each passed his book to the
member whose name was next on the list, the last oure passing his book to the one at the stantly in circulation, and during the year you stantly in circulation, and during the year you
had an opportunity of reading all those 2
books - more books than one farmer in a thou sand thinks of buying in a year. At the meet ings, after exchangiug books, we had literary
excrecises, sometimes one thing, sometimes excrcises, sometimes one thing, sometimes
another. Some of the meetings were not very
literary fiterary, but calculatel to inspire good feeling
and make all anxions to cone again-somethin and make all anxious to come again-something
to cheer their heart and leave it glowing with pleasure. We met once in two weeks at seven
oclock, and all were requested to par-
ticipate in the literary exercises in some way, and there were many pleasant surprises
during the long winter evenilgs. Some would repeag short poems, others anecrotes or some
paragraph culled from the papers, or some his. Lorical fact; another would be prepared with and
essayy, Good singers would contribute their share loy giving ns their newest sougs, aud the
sharing
evining passed so pleasantly that uine oclock caming before we were aware of it. The club, of
cane which I was a memher, was composed exclu-
sively of ladies, but the husbands or brothers of the memblers came in at eight o'clock and remained till the close; they seemed to think the
ladies' clnb was rather an agrecable iustitution to patronize; certaiuly its influence was bette than most of the amusements men seek after in
country places, where a billiard room, nine-pin country places, where a billiard room, mine-pin
alley, or something of that order, are the only
places yonng men find open for their ainnse places young men find open for their amuse dilections man, no me matter what their private pre similar club to the one I have already described,
is a wuch better place for a yonidg manl to be duced to atter place than a yontig mand to be beud their time be hind the blinds of a dirty saloon, throwing dice
for drinks or sitting around a card table with a for drinks or sitting around a card table with a
chiar in their mouth.
A similar elub to the one I have alrcaly deA simiar elub to the one have alrcaty de.
seribel, might be organized in allust every
neighborhood. At the eud of the year let theml at the annual meeting to elect new officers, to the highest hidder, the money to be added to the new year's money and buy, if wished,
more expensive books, or it could be used in subscribing for some of the best magazines or
I bethink me now of few books which would covered novels of "Yemale Pirate Captain" stripe, or Bealle's dime novels should be dis
carded. I will nention "A Farnmer's I acation," by Col. Waring; "Farm Yarl Club of Ciotham,",
by loring; "Adirondack Tales," by Rev. W. H. H. Murray; "llomes Wittout Nands;", by
Rer. J. Wood; and an intercting work on Turkey by an laglishman, whose name I cannot recall. I could enlarge this list consider
ably, but if the farmers 'wives woult take hold of this matter, appoint a committee to select
the books, they could doultless be purchased the wholesale dealer in large orders at two-
the wirds the retail price. The women would
thin thirls the retail price. The women would
doubtless want a sprinkling of romance and although I do not pretend to be posted in this de" "Sartment of literature, 1 wnd "Nicholas Aliuturn" by Holland, originally published as serials in the
Scribner, as having a good moral tone and cal culater, to to please old aud young. "Daniel De ronda is also highly recommended; but by
realing history, travels, liographies realing history, travels, biographies, essays and
scientific works for years I havc lost that ralid love of fiction 1 lial in my yonthful days, and confess I am not competent to say what nooccls
are the best. Taste differ so much in these matters.
I know an old lady in my native town who
said she "loved to reall the Chenango Union, be
 of the horrible?
much more, as 1 read a better class of books,
mand
nil 1 reeollect more of what I read than whe racing through an excitiug novel, eager to know how the story "came out," "s we used to say.
1 wonld find it difficult now to squeeze out a
tear over a love-lorn heroine or heart-broken
lackadaisical damsel, or the frost-litten aftec lackadaisical dameel, or the frost-bitten affec tions of some interesting young man; but from
12 to 18 years of age, I think my nose was a
conductor for at least a mucket fin of tears that conductor for at least a bucketful of tears that
met the pages of such novels as "Alonzo and Melissa," "Chihlren of the Abbey," "Sicottish Chief,"' "Thaddens
I got my first taste for good reading at about 1ar, when my father was appointed librarian attend to his duties in loaning the books. There were over 200 volumes. They wer nearly all standard works. I was anc omnirorous realer, nothing came amiss, but if I hai
ceal more slowly and made notes 1 would have derived ten times the benefit. I do not despis all novel reading, for many times when bod mind, up to the mark, and follow closely an author if it a work of some depth, and then a well resting, and a fine poem will woo sleep to wake ful eyelids. Sancho lanza said, "blessed be the man that inventcd slecp
Blessed be the man that invented printing type! Blessed be those who write good books Blessed be those who edit gool papers! Blesseil
be those means of every kind that be those means of every kind that help ('as with
tivate our intellects, for without them out charity") we are nothing.

Evils of Gossip. - We have known a country society which withered away to nothing under he try rot of gossip only. Frientlships, once
as firm as granite, dissolved to jelly, and the ran away to water only, because of this; love that promised a future as enduring and as sta.
ble as truth, evaporated into a mist that turned o a day's long tears, only because of this; fither and a son were set foot to foot with the arain between theng; and a husband never con wife, each strainiulg at the hated lash which i the beginuing had bect the promise of a Giod sessed love, sat mournfully by the side of
rrave where all their love and all their joy lay
uried, and all because of this. We buried, and all because of this. We have seen
aith transformed to mean doult, joy give plat faith transformed to mean doult, joy give place
to grim despair, and charity take on itself the catures of black malevolence, all because of the ell words of scandal and the magic muttering and the deeper tragedies of human lifc spring rom the largest passions; but woeful and mos issue from gossip and detraction; mournful the shippreck often made of noble creatures and
ovely lives by the bitter winds and dead salt aters of So easy to say, yet so har o disprove-throwing on the innotent all the burden and the strain of demonstrating thei hnocence, and punishing them as guilty if nua
be to pluck out the strange stings they never ee, and to silence words they never hearweapons man has ewer forged for his brother weapons man has evcr forged
heart.-All the Year Round.

Beatit of Natcre, -I am never more con
inged of the progress of mankind than when hinced of the progress of mankind than when
thiuk of the sentiment developed in us by our in ercourse with nature, and mark how it angments although this is not so generally admitted) wit ur scientitic knowledge. We lcarn from age to age to see the beauty of the worli; or wha
comes to the same thing, this beautifnl creation of the sentinent of beauty is developing itsel dise there are over all Asia and Europe, and in auve there are orer all Asia and wrope, and the conscious creature. The men who are now living thcre do not see the Eden that surrounds
them. They lack the moral and intellectua) rision. It is not too bold a thing to say that the mind of man once oultivateil he will sce
around him the paradise he laments that he ha around him the paradise he Laments that he ha
lost. For one "Paradise Lost," he will sing of thousand he has gained. How cvery tender as well as every grand sentiment comes reflecte
back to us from the beantiful objects of nature Therein lies their very power to enchantus Nature is full of our own human heart. That eft the reflection of her uwn blush upon the
lentle leaves and Howers? To the old man there is hat it gathers with the flower more and othe beauty thau what the dews of
ished in it. - William Smith.

Tue Blessing of a Cheerytl Wife. - Wha blessing to a household is a merry, cheerfu
voman-one whose spirits are not affected by wet days, or little disappointments, or whose unshine of prosperity. Such a woman in the darkest hours brightens the house like a little pieee of sunshiny weather. The magnetism of
her siniles and electrical brightuess of her look and movements infect every oue. The children yo to school with a sense of something great to
be achieved; her husband goes into the world in a conqueror's spirit. No matter how pople an
noy and worry him all day, far off her prescuce shines, and he whispers to himself, "At home shall find rest.
know a man with a beaming face, a kind hear and a prosperous business, in nine cases out

## Domestic Love,

Michelet, in his work on "Love," gives this peneil Every man of letters must have experienced its fidelity to what has occurred under his own roo. It is a charming bit of domesticity $-a$ iew it. But it has all the truth of beauty, and the beauty of truth
A charming thing to observe, which I have studious friends, is the infinite delicacy of the young wife, who in a restricted space comes and goes, and moves round the student, without in would have put him out; but "she" he says, "is nobody." In fact, she is himsclf, his second
She holds her lireath, and steps on tip-toe. pect for work! ln this you can see whata tle and quick-sighted creature woman is; above all things affectionate, and fceling in constant need of the beloved olject. If he allows her, she will remaiu in the room, sewing or embroidsand necessities will occur to her as pretexts to come into the room. "What is he doing now? How far has he got? Perhaps he is working too
hard. He will make himself sick!" All this Ther mind.
There are many studies to which unwittingly she imparts more than she can take away. Do municates in passing you, lightly touching you aud the dress, goes for nothing with the artist genial work is opportunely mingled that perume of the lower of love which revives every thing? So in old Italian pictures do we see in cleath's head a hundred-leaved rose, and death And how hapuy bey
And how happy he is to feel thatshe is there. over his work, as if absorbed in it. Bnt his heart gains the upper hand, and he exclaims: "My darling do not muftle your steps. Your novements are harmony, your voice a melody which enchants my ear. Your presence sheds
its influence upon iny work; it will be adorned with your grace, and glow with the flame of my palpitating heart.
here, by the increased ardor of my work, by the ight which overspread my spirit
A thousand years from now they will say "His is yet a live book, all warmth and affecyou when you wrote it.
A Load from her Heart. - A lovely kiud of beatific happiness played for a moment like sun shine on her lips and then she whispered: "Oh, a diamond lock to me. . and rings that an angel might wear outside her gloves and not be ashamed: and if I thought these nice things, and want them back again, I should break my heart!" He held her gently
against his manly breast, and answered with against his manly breast, and answered with
quivering voice: "Oh, my darling, there is nothing on earth that can happen that would make ne repent giving you a few tokens of my love, sprang from his arms like a joyons deer, she poem in her hazel eycs, exclaimed: "Oh, George, ou've taken a load from my heart! I've come I have seen somehorly I like letter, and I thought you'd want your presents back again.
Nuble Illustration.-LLod Canarvon, in
addreasing the people of Birmingham, used the addressing the people of Birmingham, used the
following illustration: "Travelers tell us that in some of the Fastern seas, where those wonlerful coral islands exist, the inseets that form ler the shelter of protecting rocks, out of the reach of wind and wave, work quicker, and
their work is apparently sound and good. But their work is apparently sound and good. But work outside those reefs, in the foain and dash of waves, are fortificd and hardenell, and thei believe it is with men. The inore their minds orming opinions upon difficult subjects, the better they will be qualified to go through the hard wear and tear of the world, the better lict of opinion which after all it is man's duty

Removing a Wreck with Hercules Pow. DER. - A Cleveland paper tells of the renture steamer Great Republic, from the river at St Lonis. The steru hes in about 40 feet of water and the bow on shore. Divers go down into
the holl and scrape the mud from off the bot om planks and then place a row of cartridge Hercules powder entirely "across the insic ham with an electric battery. The result of this is to cut off a section entirely across the and disposed of About 12 feet-sections are bc taken at a time, and by the valuable services mains of the once grand steamer are quickly, mains of the once grand steamer are quing
but not quietly, disappearing from sight.

Ice Water at the Bottom of the Sea. At the last meeting of the Liverpool Geologi-
cal Society, Mr. T. Mellard Reade, read a paeal Society, Mr. T. Mellard Reade, read a pa-
per in which he pointed out the geological bearper in which he pointed out the geological bear-
ings of the information gathered by the Claal-
lenger expedition dredgings. As is well known from these physical observations, the basins of the great oceans cold water extending over the whole northern and southern latitudes, and consequently under a remarkable physical feade considered to be secular cooling of the earth must be exceedingly slow, as the heat of the earth, apparently, ocean tracks, which are fed with cold wast from the poles. It was also pointed out that the temperature of the ocean, decreasing with the depth, was the opposite to that of the solid earth, in which observations in mines and wells prove a general but varying increase of temperature downwards, so that at a zone 3,000 the water is at freezing point; while on the land, in cases where the increase is $1^{\circ}$ per 60 beet, on the same zone the temperature would Not the least above that of boiling water. nounced is that of the ocean bottoms below 2,000 fathoms being occupied generally-nay,
almost universally-with a deposit of almost universally-with a deposit of red clay peroxide of manganese, together with sharks' teeth and ear and other bones of whales; while the depths not exceeding 2,000 fathoms are largely oecupied with foraminiferal ooze. very great age for the present oceans as, from
calculation which cannot be detailed here, Mr Reade considers it will take a minimum of 20 ,000 years for a deposit of foraminiferal ooze of
an average depth of one foot to accumulate an average depth of one foot to accumulate over the the whole of the area oceupied by it while the red elay, the result of the decompo-
sition of volcanic products, must be an exceedingly slow accumulation, mobly an exceedingly slow accumulation, probably not at the rate is at present difficult to caleulate.

How to Dress.-It is idle to assert in the presence of girls that the way in which they dress is of no consequence. It is really of great consequence. A woman's dress is the outward vulgar, fond of display and bent on low, material ends, her dress, though extravagant, will be an unconscious revelation of her character. If she be modest, self-reliant and cultivated in the best direction, the style of her ordinary
apparel will befit her as the leaves befit the flower. But in America young girls are too often overdressed. The rounded cheeks, the bright eyes, the waving hair of a girl in her teens need only the simplest setting. Rieh the matron, her dress gaining in ample fold and the matron, her dress gaining in ample fold and if we go to nature for an object lesson. How different her charm from the deep, maturing summer, when the hues are decided and the air is loaded with perfume from a thousand censers. The school girl is only on the threshold of summer. She has not crossed it yet. Let her copy the sw

The Book of Job,-I call the book of Job, apart from all theories about it, one of the grandest things ever written with a pen. One
feels, indeed, as if it were not Hebrew--such a feels, indeed, as if it were not Hebrew-such a
noole universality, different from noble patriotnoole universality, different from noble patriot-
ism or sectaranism, reigns in it. A noble book! All men's book! It is our first, oldest statement of the never-ending problem, man' destiny and God's ways with him heri on this
earth. And all in such free, flowing outlines; grand in its simplicity, and its epic melody, and repose of reconcilement. There is the see ing eye, the mildy understanding heart. true every way; true eyesight and vision for all things, material things no less than spiritnal; the horse-" "hast thou clothed his neck with thunder?" Such living likenesses were never drawn. Sublime sorrow, sublime reconcilation; oldest choral melody as of the heart of mankind; so soft and great; as the summer night as nothing written, I think, in the Bible or out o nothing written, I think, in the Bible or out

Mr. Cheerybles asked his wife, the othe morning: "What is the difference, dear, between bribing a man with a ten-dollar bill to meal aud water?" He almost took her breath away when he answered: "Why, you see one

A man, praising porter, said it was so excel quantities, it always made him fat. "I lave you lean." "When, I should like to know?" inquired the enlogist. "Why, no longer ago
than last night-against a wall."

A Western man has invented something that beats the telephone. He proposes to station a news to the first as a sccret. No doubt a very musical instrument.


## Gooo HEALTH.

## A Food for Infants.

Suitable food for infants which are deprived of their natural pabulum is an important matter and has received the attentiou of the most em-
inent physicians. The German ehemist Liebig devised a soup or pap for this purpose, being led to the task from the fact that one of his grandehildren could not be nursed by its
mother. The folowing is Liebig's reeipe and his deseription of the ingredients employed: Half an ounce of wheaten meal, half an ounce of malt flour, and seven aud a half grains of
bicarbonate of potash, are weighed, mixed first bicarbonate of potash, are weighed, mixed first
with one another, and afterwards with an ounce of water, and lastly with five ounces of milk. The mixture is then heated with eonstant stirring, over a very gentle fire, until it begins to
grow thickish; the vessels are now removerl from the fire, and its contents are stirred for five minutes; these are then heated once more and again removed, when a new thickening ocAfter the separation of the bran from the milk through a fine sieve the soup is ready for use. is chosen, not the finest or the first shot meal which is richer in starch than the whole mea Malt.-Barley malt can easily be procured
from any brewer. In Germany or rather in Munich, the malt is so much dried that the starch of many grains appears to be half-roasted to the latter a taste of bread, which is not unpleasant; usually the malt contains an admixture of many seeds of weeds, which must be picked out with the haud. An ordinary coffeemill answers for preparing the malt flour, the latter must likewise be separated by means of a hair sieve, not too fine. from the chaff. Malt
prepared from barley is to be preferred to that from oats, wheat, or rye.
Carbonate of Potash.-For the preparation of the solution the ordiuary alkali salt, earbonas depurata of the pharmacies, answers very well two ounces of the salt are dissolved in 16 water. If spring water be used, there is gen erally a precipitate of some carhonate of hane bright. The carbouate of potasli inust not be greasy or damp. The bicarbonate of potash the ordinary crystallized salt,
In order to avoid the rather troublesome weighing of the flonr, we may observe that heaped tablespoonful of wheaten meal weigh nearly half an onnce; a hcaped tablespoonful of malt Hour, wiped off at one-half with a card likewise weighs half an onnce. For measuring the solution of potash an ordinary thimble an mes ( 45 grains a .8 cubie centimeters) of sol tion of potash.
For the milk and the water two ounces are
weighed in an ordinary tumbler, then five onnees of water, and the lights at which both quantities of flnid stand are marked on the out side of the glass by attaching picees of paper. When the soup is prepared it is sweet as milk and the further aldition of sugar is unnecessary it possessed double the concentration of woman milk, and can, which is not mmimportant fo suck been heated to tho boiling point, it keeps good for 24 hours; if this has not been done turns sour and coagulates like mink; if the ad
dition of potash be neglceted, it cannot, in gen eral, be heated to the boiling point without coagulating. In the absence of the potash the soup
pap.

## Domestic Economy.

Bread from Potato Sponge.
Clara Francis gives the Prairie Farmer her She mod of the making bread with potatoes. jnst enough Peel four potatoes; boil them in mash them through the colander, adding the water in which they were boiled, and a tablespoonful of lard. l"ut in enough cold milk or water to make a quart in all, then procced as
for plain sponge. This amount will for plain sponge. For a family of six the a large pan of rolls. doubled-unless they bake oftener then semi weekly. The length of time the sponge should stand depends on the kind of yeast used and the temperature of the weather. If the batter begins to fall it has stood too long, and 2 little soda mixed with warm water must be added, or the bread will be sour. Care should be
taken to avoid this necessity. When the taken to avoid this necessity. When the
sponge is increased to at least donble its orig sponge is increased to at least donble its orig
inal quautity, and looks very light and bubbly do not let is stand a moment longer. Do not stir the sponge down, but just loosen it with sift a couple of quarts of dour-or less, according to the stiffness of the sponge-over the top;
on this sprinkle a tablespoonful of salt, and half as much white sugar, both of salt, and half lumps. With both hands work in the flour tossing it up instead of working in down; in this manner the dough is more easily got into
shape for kneading. This should be thoroughly done, and Hour added by degrees until the dough will stick to neither the hands nor the molding board; if worked too stiff the bread will be hard and dry, and take longer to rise;
if too soft the bread will be gummy, and the if too sort the bread will be gummy, and the
loaves run out of shape in baking. It is impossible to give the proper amount of flour, as dif ferent brands vary in strength, and one's judg When the dongh is worked into tic ball, place it in the bowl, and rub the elas face lightly with a little lard, which will pre vent a crust from forming. Pnt a cloth over
the bowl and set it in a warm place; let no cold draughts or blasts of heated air blow on it its original bulk, it will be ready to make into its original bulk, it will be ready to make into ons, but need oecupy much less time than the
first. Use as little flour as possible; take out a portion for rolls, and divide the balance out as many parts as you wish to make luaves We would especially advise the making of small loaves; they bake better, are more con
veniently handled, and it is just as easy to put
two small Kneall loaves in a pan, as one largc one Knead each loaf separately and form it into a pieecs; roll each one into a long three equal one into a long roll and braid fit the pan; lay the loaves close together prick the tops with a fork, and set the pans in quarters of warm place to rise. In three quarters of au hour, or an hour at farthest,
they will be ready for the oven. If there is more bread than can be baked at once, set portion of the dough aside, and when the first batch is put in the oven, mold the secoud and place it in the pans.
To make the erust very crisp and delicious,
brush the loaves when half done, with a littlo brush the loaves when half done, with a littlo swect milk, or better still, with a beaten egg
mixed with a little milk; this gives a lovely color, and satiny smoothness to the crust, and mproves it wonderfully.

## Rolls

Work a piece of butter into the dough reserved for rolls, and set in a cool place, until time to of eggs will make them very delicato or, a whole egg ean be added instead of two whites. jnst as good as tho whites alone. If the rolls are to be for breakfast make them out at bedtime; prick each one with a fork and put the pan in a place not actually warm, or positivoly colld, but " middlin just;" in the morning the rolls will be ready for the oven, as soon as it is
ready for them. Brush them over when partly ready for them. Brush them ov
done with beaten egg aud milk.
Poison in the Mile Pall.-A (ieorgia cor respondent of the New York Tribune eitos a lase of poisoning, from drinking bnttermisk, ing ocenr every now and then, not only. from the uso of buttermilk, but milk itself, and also the butter and cheese made from it. These cases all have a similar origin, namely: poisonous ferments takell into the milk through the or water. They are developed in bittermilk by the agitation in churning, and they are inteusihed by concentration in crean, butter and cessity for watehfulness in guarding against de caying food and bad water for mileh cows. ting shallow so it will beroro setting, and set such ocenrrenee by killing the forment.
To Wasi Rei, Table Linen.-Use tepid serves to set the color; wash the linen scpaserves to sct and quiekly, nsing very little soap; rinso starch; hang to dry in the shade, and iron

# PACICTHPABL <br> PAC M, Mat 

$\overline{\text { A. T. DEWEY, }}$ Publishers. W. B. EWER,





## HEWEX \& \& COM

 Our hatest forms yo :o press Wednesday evenng No Quack Advertisements inserted in these

## SAN FRANCISCO

Saturday, January 5, i878.

## table of contents.

GENERAL EDITRORALS -System of . What













 NEWS IN BRIEF on 12 and other mages.

## NEW ADVERTISEMENTS.

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## The Week

As we write, on New Year's Day, the strects fronts, instead of their usual varied display of merchandise, exhibits nothing lut iron doors tightly closed, and their threshoks are un-
crossed by busy traders. The rumble of the heavy drays beneath our windows has ceased and the weary pavements give no sound save when the gay carriage, with brightly colored
robes and well-dressed occupants, is whirled along by well groomed horses on the way to the
New' Year's calling. It is a peerless day, and though the air is cooler than its wont, the sun shincs brightly and where its heat is confined
by converging walls, which leads the resting by converging walls, which leads the resting
idter to exclaim: Aha! I an warmed! it is just such a day as one could most desire for a
holiday. As we rush along in life's liurried arocations there is but a passing thorght bestowed upon the forms and moods which na-
ture dons from day to day. It is only when comes tha holiday and its surcease of carc and labor that most men think of their natural en.
vironment. Therefore, a bright holiday lightens pleasure and doubly bestows rest and recreation by winning from us new appreciation of
the beautiful world in whieh our lives are cast the beautiful world in whineh our lives are cast
and new thanks to the Creator. Although it is
unusual for us to tind ourselves inprisonel in
 borly that recognizes the bonds. Our thoughts
are amid blessed country scenes, the cheery gatherings in rural homes, the braeing rideen aud
drives along roadways ellged with green, the jounteous feast and the evcring's social gatherings, and, to crown the day, the speeding
lomeward in tho refulgent starlight.

Pacific Rural Press-Subscription Terms For 1878.
Annual subscriptions, 84.
When paid fully one year in alvance, fiftr cestr will be iteducted.
Xo new stb bscriptions will be taken without eash in adsance. Alla
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Suhs 18.50 in ad lanace.
puired to pay the furceroing motes unless they ronew dub with strictly advance pay ments.
journal sh valuazbe on fauily circle.

## Sapping Life and Strength.

In our opinion nearly all schemes to defraud people of their surplus savings become comparatively inuocent beside the insidious crime of tion of human food. Swindling schemes to steal surpluses may produce almost indescriba ble disappointment, and in some cases actual
bodily suffering, but the cvil is small compared with that of day by day, and homr by hour, sapping the life and strength of the community by lesseuing the mitritive power of the foods upon which we rely to arm and nerve us for the
burdens of lifc. Ifc who in the place of bread sclls us something as worthless as a stono ani perhaps as dangerous as a scorpion, deserves a degree of punishment far weightier than he who steals our purse. It is an absolute need that the public should protect itself ayainst the practices of rascally alulterators of food sup-
plies whose work is becoming so general and so bold. We have urged beforc our convictions on this point and we can but reassert them,
with increased force, now that the Legislature will soon have ineasures for the protection of We are squarely and fully on the side of the people iu this matter. The need seems apparent enough. Other eountries and other states fools offered for sale, and the exaniuations which have been made by competent inspectors
show that the extent of adulteration and the range of substauces assailed by the debaser are
tar beyond anything which had been imagined. The methods of examination are plain enough, thanks to the progress of science. Tho test
tubes of the chemist and the mieroscope, when tubes of the chemist and the mieroscope, when
in competeut hands, give evideuce such as the competent and penalties severe, thic remedy We notice that there is now lefore the Legis. lature a proposition for the appoiutment of a
salaried milk inspectorship in this city. The dea is an excellent one, providing it is honestly arged and the office is not created merely to give our own examination and analysis of the milk we have found many samples in which one-quarter was worthless foreign material. The yearly cxpense of maintaining an inspector
could be saved each week at least, if he were a competeut mau whose testimony the courts would recognize: and an active man, whose presence in every place would strike terror to
the hearts of the debasers. If thesc can be assure forthwith, not only for ereation of the office forthwith, not only for the strength
the city's meu aud womeu, but also to save th lives of thousauds of children from the wretches who furnish them innutricious or unhealthy
But not alone to the dweller in the city are safeguards against the adulteration of food
material requisite. The tons of supplies which arc taken to the country and form a part of o the frauds of evil minded manufacturers There should be ene minde manufacturers between the evil and the good, of punishin the cvil and transferring patronage to the good.
We are glarl to see that the State Board of Health has brought up this topic anew iu this year's report, and we trust thcir recommendatious will be heeded by the law makers. In
the report we find an article by Dr. J. F. Montgomery, of sacramento. Among other things the writer makes the following note of articles in which adulterations is practieed:
mentioned ands, some of the artieles recently ated, are tea with sind, powlered quartz, Prussian blue, exhausted and decayed tea leaves, as well as other leaves or husks, and various other substances, many of them injurious to health;
colfice, to the extent of from 30 , colice, to the extent of from bea/o to $50 \%$ of other ingredients; boread, with alum, to conceal the bad quality of flour to an extent to
damage hcalth, aud also, in some instances, with marble dust and othcr impurities, to cheapeu its production or mauufacture; butter,
with foreign fats, some of them of vegetable with foreign fats, some of them of vegetable
origin, from $50 \%$ to $\$ 5 \%$, and some samples
without any butter at all, and milk with water
from $20 \%$ to $50 \%$ and deficient besides, in crean
The condiments, too, as a general rule, ar more or less allulterated. inustard, for instance, is very frequenty adulteratcd, mainly
with corn, wheat and rye flour, and turmeric, with corn, wheat and rye flour, and turmeric,
sometimes to the extent, in the aggregate, of sometimes to the
$90 \%$ of impurities.
Of drinks, the alcoholic, vinous, and fcrmented are all very much adulterated, or tampered
with in some way. Some specimens of whisk with in some way. Some specimens of whisky quantity of fusel oil to render it liable to proIuce insanity, among other injurious effects. Then, again, some specimens, besides other poisonous ingredients, coutain sufficient quantities of sulphuric acid to cause serious damage to
the stomach and to the system generally. Some the stomach and to the system generally
of these specimens, indeed, had barely of these specimens, indeed, had barely a trace
of real whisky. Wines are notorionsly aululter of real whisky. Wines are notorionsly auluter of enriching the manufacturer or dealer, with pouuds may have on the health of those who may partake of them.
 o polluting touch and the vile manipulation their purity and efficacy the life of the siek and suffering often depends, and without the purest fiten th warted in his efforts to minister to the needs of the aftlicted, and is thus rendered

## All Aboard for Another Volume.

This is the first issue of a new volume of the RURAL, and it is a good time for all our frieud give the journal, which they tell us they find so useful, another push forward. Do us the ror to speak the good words, whieh you fee rue, to your neighbors who do not real the Rural, and let us draw them to our circle of support and communication. We want each man's subscription to carry on the concern and we want each man's and cach woman's experi ence in order that the truth of agricultural sucess may be fully expounded in our columns The beginning of the year is just the time for a step forward, and if eaeh friend will take a step for us, our progress will he measured by many now. We want to extend our sphere of useful ncss and improve the guality of it to each one
at the same time. Both these can lee attained by the help of all our fricuds. We have often described our idea of the nsefulness of our paper and how it may be increased. Our readers have the same idea, as is witnessed by the fol-
lowing paragraph, which we receive this week lowing paragraph, which we receive this
in a letter from 12. 11. Cheney, of Podega:
periences through the columns of the I'rexs periences through the columns of the Press apron all the raried and diversified phases of agricultural life, we ean benetit oursclves as in
no wher way. Thousands of readers of the Press, with homes all over the State, and some of them with little experience in California agriculture, draw from the practical information which its columns contain and gain success in their operatious. I have been enlightened and greatly benefited by the many contributors
to the I'RESS aud render ny to the Press aud rendor my grateful acknowl edgemeuts.
week. 11 go forward enlarging our circle each witl a word fitly spoken, which is often equiva. lent to a new subscription for the Reral.

Puochess at Sas liafafl. - The opening of the Donahue narrow gauge roal connecting Sonoma county with san Francisco by way of
san lafael is awaited with much interest by the residents of that place and by those along the train was run over the new road on New Year's lay, and one of the main topics of couversation anong the people of San llafael was the great advantage which would accrue to their town from its position upon such all important ronte. The result will be the plying of two lines of steaners between San Francisco and San lafat instead of one, as heretofore, and the route wili be a favorite one becanse of the lessened time necessary to reach the prosperous the P'ress is indebted to iv J. Miller, of Sau lafael, for opportunity to visit the new line and for the points of its prospective influence nipon the prosperity and development of this important

Yerba Sanfa. - We notice by the last issue the Physician and Pharmaceutiot that the ornitum), is coming into high favor as a remedy for lung diseases. An essay on the subject by Dr. C. (:. Polk, late Professor in the Penn syiled arcounts of cases in which the remedy
taine was employed by hin, concludes as follows: The yerba, by its splendid bleuding of touic, astringent, balsamic and alterative powers, ar* From the above cases it would seem that the yerba santa, as yet, has no equal in the
management of chronic catarrhal diseases, exerting a peculiarly salutary intluence upon the lungs, bronehi, or hemornoids. I would ex
peet most excellent rcsults in dyspepsia, and in
both chronic diarrhooa and chronic dysentery."

## Queries ano Repliss.

## An Alfalfa Plant.

Entors Press:-Plcase accept by express one crown or
rout of alfulfi, grown from a single seed sown on the new
 in ap rearance, i almit, but it goest to show the wonderful
fize it will rrow, whend it has a fair clanee. You will see it has been attacked two or threc timce by the gophers,
but, Pheninatlike, it arose anind all its difllculties, and was
qual to any emergency, by throwins out inore roots equal to any emerfency, by throwink out more roots,
when its main rout was nacary destroyed.
Why cannot we murtals take a valuable lcsson from this
umb Why eannot we murtals take a valuable lcsson from this
humble plant, anlif when adversity coanes upon ur, Instead
of giving up in despair, call on some of our reserved forees of giving up in despair, call on some of our reserved forees
to help us out. This rout shown another inportant fact,
and that is, it is not an exhauster of the soil like some draw their substance far down in the soil, it having no Thatlow and is irrigated -D.D.iviL 'instr, Sacramento.
The plant to which our correspondent alludes was duly received in a large sack, which whe opened disclosed sonnething likc an old fashioned rusil pile. In fact, as we straighteued and laid hat a hatchet would be not help thinking main a hatche the be an assistant. into a thick crown of matted roots, was six and half inches in circumfcrence, or a little more than two inches in diameter. From this point this tap root extended four and a half feet, tapering down to the point where it was broken off.
At this point it was still more than half an iuch At this point it was still more than half an iuch
in diameter, so that there was more farther down. This main root, as our correspondent notes, was devoid of laterals, and was a straight hrust down into tho lower soil. At the to a bunch of roots which would fill and cover square yard of soil, and some of the twisted hets were threc-quarters of au iuch thick. he iere apparently thrown out because of evered, probably by gophers, as stated above The specimen is very interesting as showin what an cnduriug hold this plant takes upon a favoring soil,
all who desire.

## Guano on Wheat

lumns of the RCMAL l'kess when to sow and hough the yuano to sow per acre on wheat land 1 have just pur-
bhased a tom, and want to apply it at ihe proper time and

EDHORS Press:- Guano should in ceneral be used at the time when the plant is making leaf preparatory to sending up, the stem. In the ould in verace seasens be some time in Jan nary, depending on season, latitude, and the ime the seed was sown. It inust in any case therwed in time to catch a good rain, siuce face. The farmer must usc his private judgment herein. Wherever praeticable, guan 1 quantity used roadeast; when drilled in with the seed, even 00 pounds sometimes produce a remarkable freet. For even distribution as well as to preent loss from evaporation, it is best, and a very ommon practice, to mix the guano thoroughly wice its hult) of well pulserized earth anout boadcasting T. S. will benetit a gooul many and the cause of progressive agriculture gen rally; by obscrving closely and reporting fully the results of his experiment, both as to quantity and quality of product, and tinancial profitable.

## ornia.

## Acorns as Hog Feed.

That acorn-fed pork is not altogether desira he is generally known, but we believe the dis ke of it has resulted from the rank flavor and objectionable color which are generally characteristic of it. We are not aware that the exact position of the acorn as a food material has been determined by chemical analysis until now. We read in the London Farmer that on the subject of the amount of nutriment contain od in acorns as food for pigs, Dr. E. von Rodiczy points out that they are of very little value unless liberally supplemented by nitrogenous substances. The proportion of nutritious mat in 18 a in chell acorns it a 1 erases 1 13.4. Dr. Peters aualyzed fresh and kiln-dried acorns, the latter both in the shell and un shelled state, with the following results:


Hence it appears that in the dried and shelled state their value as food is considerably inther recommends that they should be used when germination has commenced, since this so renders the much cheaper. In the East it appears to be the custom to bury the acorn for fermentation which rida thein of their natural bittor taste.

## Southdowns and Shropshires.

 Eorrong Parsss:-Would you please answer through thecolumns of the Rukat the following questions respecting


 Tree valley, Cal.
We share with our oorrespondent the regret that facts and experiences in connection with
our sheep industry do not oocupy larger space in the Rural. The industry is a leading one, and one in which success depends upon
thorough knowledge and enlightened practices as much as in any other. It is also true that ries and practices of wool producing in this State, and we believe that the future will show the profit which can be gained by keeping small flocks well than by keeping or losing large ones wholly upon the chances of seasons and wild growths. For these and other reasons we have urged upon our shepherds, personally and
through our columns, the advantage of discussthrough our columns, the advantagre of thscuss
ing their aims and practices through the me dium of comparison of views which the RURA affords. In in because of our lack of ap prectation or effort that our sheep and woor partment has not been as full as other depart ments. We trust that in the future our shep firm friends, will favor us with their experi ences and ideas on all branches of lock breed ing, feeding and care. Let each one of them
consider these lines a special invitation to them to come forward.
Our correspondent asks concerning the South-
downs and Shropshires. We have in this State ines. have in toth thes breeds, and we trust the breeders of each will favor us with local experiences. In answering our querist's questions in a general way we can
not do better than print a brief description o each of the breeds as laid down by disinter ested writers, and for this purpose we quote
from Stewart's "Shepherd's Manual," which is the latest published work on the subject. 0 the origin and characteristics of the Shrupshir original stock, upon which crosses of Cotswold
and afterwards of Leicester and Southdown were made at various periods, and the result was the Shropshire. This course of improvement appears to have begun about 1792. After three quarters of a century of cultivation they are now without horns, with legs and faces of
dark or spotted gray color, thick meaty ueck, dark or spotted gray color, thick meaty ueck,
well-shaped, rather sinall and fine head; nea well-shaped, rather sinall and fine head; neat
ears, well set on the head; broad, deep breast, straight back; a good, round barrel; aud clean legs with strong bone. They are very hardy,
thrive well on moderate keep, are quickly fat tened, and produce, at two years old, 80 to 100 which brings the highest price from the butcher The ewes are prolitic and good mothers. The being longer, and more glossy. This sheep pos sesses many valuable qualities, and promises to make a satisfactory farmer's sheep in localitie where medium wool and choice mutton ar profitable, and where flocks have to depend
upon pasture for the greater part of their supupon pasture for the greater part of their sup
port. Its close, well-set fleece and hardy con port. Its close, well-set fleece and hardy constitution will also help to carry it through con
siderable exposure and variable weather without siderable
injury."
Of the Southdowns Mr. Stewart says: "The modern improved southdown descended from inhabited the hilly portions of England from the remotest periods of knowu history of that country." After recounting the steps of im provement gained by different distinguished
breeders in the first half of this cantury, the writer concludes: "At the present time the Southdowns hold the position of being decidedly the best mutton sheep iu the world. As year-
lings they yield from 75 to 80 pounds in dressed lings they yield from 75 to 80 pounds in dressed
weight, of the choicest meat in the market, and weight, of the choicest meat in the market, and
a flock of high eharacter will produce an average of six pounds to the fleece of wool in deprolific breeders and excellent mothers. These sheep, as they are now bred. are whos or legs, The size is medium; the body round and deep The size is medium; the body round and deep, breast is broad. The back is broad and level the rump square and full, and the thigh full an massive. The legs are short, with fine bone
The form is smooth, even, fine and symmetrical The form is smooth, even, fine and symmetrical
without coarseness or angularity in any part without coarseness or angularity in any part.
The habits of these sheep are active and they are docile and contented. They are able to acc of farming where moderately good pasturage is to be had, and are well suited as gleaners upon an arable farm. The Southdown has becoule thoroughly naturalized in America, and its dark face and compact fleece, impervious to the
heaviest rains, have left their mark upon a large proportion of our nativ,
respect next to the Merino."
Theese are the general descriptions of the breeders of these shcep will take up the subwith them, whether favorable or otherwise, we
shall be able to give local facts which nearly all our readers will be glad to receive. Will the
flock-masters aid us with the facts?

Rainfalls Before and After January 1st. We are indebted to Prof. G. F. Becker, of the Department of Mining and Metallurgy at the State University, for the interesting diagram on this page, showing the relation between the amount of rain falling before and after Janwhich prevails in year since 1849. The method which prevails in the plotting is described in a note from Prof. Becker, which we priut below. It will be noticed that heretofore an average of
two-fifths of the rain of the fiscal year has fallen before January lst. While this would give us a rather light total. rainfall this year, if it conformed to the average, it is also shown in the diagran that wide departures from this rule have occurred in single cases here tofore, and we trust may occur this year. The study of our rainfall is a practical one, and we are under obligations to all scientific observers who give us
data for pursuing it. Prof. Becker's note in relation to the diagram is as follows
Editors Press:-To what extent the rainfall before the first day of January is proportional ject of discussion and is a matter of great pracical importance to the State. ect in the Bulletin of a few nights since, it oc curred to me that it would be interesting to give this relation of the partial rannfall to the total in a graphic form, and in such a manner
that the general proportionality, if it existed that the general proportionality, if it existed,
and the relations for each year, would be appa and the relations
rent at a glance.



DIAGRAM SHOWING RAINFALL BEFORE AND AFTER JANUARY 1st
I make the following division of the rainfall Illinois Industrial University, namely, the Rainfall in San Francisco.

[^0]

Acoording to Tenuont.

Regent Davidson, nearly five years since, plotted Mr. Tennent's figures for the purpose but not issing the perier as to bring this special relatiou into prominence. In the accompany ing diagrans each perpendicular line represents
a winter from the year 1849, on. The horizona winter from the year 1849, on. The horizon-
tal lines represent inches of rain and the distal lines represent inches of rain and the dis
tance from the base or zero line, at which each curve crosses the vertical line appropriate to any year indicates the amount of rain which felin diagrans represent respectively the rainfall before the first of January, after the first o January, and the total rainfall. The scale o years is continuous and is the same for all the curves; the scale representing inches, on the
other hand, is different for each and is inversely proportional to the amount of rain which hat
fallen during the period covered by the dia gram. The consequence of this selection scales will evidently be that if the amount simply proportional to the total rainfall for the the rain cif, in each year, just two-nifths curves would be identical. Hence, their variathion expresses exactly the linits within wh.ch As your readers are iuterested in the weather perhaps some of them may find this chart a conVenieut record of the past. Ge. F. BECKER.
University of California, Dec. 20th, 1877 .

An Agricultural Institute.-We notice
good work which has been undertaken by th
The Necessity for Home Manuf
The only way that California oan be made to e the prosperous State that she was before the railroads brought her into direct competition with the East, is to have work for everybody as there was then. And the only way to give cverybody work is for our capitalists to stop peculating and lending money and start up home manufactures. The trouble with us now is that we have more people than we have work buy too have uot enough manufactories. We as well or better at home, and still we wonder why "hard times" visit us and stay so long. nonether thing is we want too much for our is one per che least, simply by loaning it. Those who would establish manufactures if they could find it possible to do so and pay the rates of interest charged. Again, soine of them say,
" We nust put up $\$ 20$ in silver as security for $\$ 20$ in rold:" Nu natter how much land in for has or how good it is he finds it next to impos sible to borrow any money on it if it is in the country. And if he does suceeed in raising any thing on it they will not lend more than a quar-

There has got to be a radical change in our manuer of doing business on this coast, or things will go from bad to worse. No man can
make a manufacturing business pay when he has to hire money to carry il on at a cent or cent and a half a month. And not only that, he finds it difficult to get money at any prico to
establish anything new, such is the disinclinaion of our moneyed men to enter the manufa turing field.
"Cent per cent" has becn our bane and still continues. As soon as a man gets a little money
he knocks off work, sits him down pects his money to do the work for him, and he stops his work so soon that he wants a small amount to yield a large onc, aud charges his rate
of interest accordingly. It is all very well to of interest accordiugly. It is all very well to
say you can get moniey in San Francisco for seven or eight per cent., but let any one try it
at the banks and offer anything as security lcss than a first-class pieee of city property and see how he fucceeds. And then let him try to bor
how row from a private individual and see what suc cess he meets in that direction.
There is not the slightest doubt but that this harm in California aud kept it baek more every sense, than any railroad moropoly,
Chinese immigration, land-grabbing schemes, Mexican grauts, or any other grievance of which we have complained. When one-quarter of the people want to live on interest paid by the
other three-quarters, and that one-quarter spend other three-quarters, and that one-quarter spend
more than the others earn, the result is not sat isfactory and the state of affairs cannot last long.
we m putting off the issue any longer. The non-pro them no country can be prosperous. The thou-
sands who want to make their living from stock speculations must quit this precarious trade and work in the mines. Those who stand betwcen the producers and consumers must perforce be-
come producers as they are already consumers. come producers as they are already consumers.
The men who hold large tracts of land at prices no real farmer or herder could afford to pay must sell these lands to men who will cultivate them and must assisst them in so doing. The thousands of iders iu our cities, who eke out real work, nust take off their coats, turn up the hammer or the flane the must leave this country for some other-if they can find oue-where there is more room for them than
here. Work, real earnest, hard work is what here. Work, real earnest, hard work is what
the Pacific coast conmuity must come to i they would be prosperous. The citics are filled with idlers who should be tilling the fields or working the mincs, and rich mcn who are
money lenders instead of producers. Pcople stand, and thcse mcu must establish mauufac tures to invest their money or keep it unproductive in their hands.
The times are ripe for change, and change will , be more opportuuity for labor. As each man's arm becomes productive prosperity will rule among us once more, and California resume
the proud position to which she is so well the proud position to which she is so well
adapted. Her geographical position, clinato adaptect. Her geographical position, climato but her people must do their share in the good work to make her the most prosperous Stato in the Union.

The Lick Telescopes. - The Manufacturer and Buikler, alluding to the proposition to erect two telescoyes with the Lick fund, one a great refractor of the largost possible size, tho object
glass at least 40 inchcs in diameter; the other a reflecting telcscope, of which the mirror should be at least four fect iu dianeter, adapted to use reflector, and the other a silvered glass reflector rencector, We are confident that if this plan is iforvia, with its monster telescopes, aided by its clear sky and otherwise favorable situation for astronomical rescarch, will undoubtedly take mo cad in discoveries, of which those of the largest refractor in the world, have given us a fortataste."

## OUR PLATFORM.

It is the ailu of the publishors to make the Pacific Rcras Pr Prss a vitul force in the agricuultural developpnen twre widest success; in the introduction of eulture which are alapted to our rariel conditions of soil and elinate; in extending $a$ knowledge of the truc seience of Wrieulture, the Rca $L$ Prass is granted position as a
leader, nor to publishors nor editiors arrogate to themselves ppecinl credit for the proud place which our jour belr devoted and unremitted labor. For the elements o expertence and practical research, in which our collmms aro nich, wegt band of

Correspondents and Contributors Which any agrienlutural journal in the worlic an muster.
They dwell in everer perto of the eonst. They are oructicully entageed in every special branel of ayrtieulture. They are leaders in these ornaclices. by virtue of heif uwn suc-
cecese They are men and wemen who are ever reaty to
 ticees and experience, cach can aid the other with
such timely yud raluable information as each gains frow bis daily work and study. They respond quiekly and deanitely to all points which arise for elueidation, and
thus they make the Rrasc Press, cach week, a com pendium of intormation coneerings Pacific coast agrieul. ture, an enceclopodia of the freshest facts and experi cannoot be found in any other journal in the world.
The qualitics which we have mentioned as charraterititic
of our correspondence and contributed artices are those
Editorlal Writing.
We have no interest to serve save the true advnnce
mion of ofll our readers in ill things which unite to seeure the truest manhood and the widest success in the feld of debasing sensations. Wo givc cxpression to no sentimen except tit be ennobling and elevating. In our search for field of literature and experience for themes whith ar fresh and of direct bearing uron the improvement and loak to our colvunns for lesoons druy frum prostressic agrieulturists evertswhere.
In this work we glaro no paiis nor explense, within oir
Engravings and Daagrams

## Illustrat ive of the achierements in hreeting of cattle and

 horres and other farm auimals, the iutroduction of new and constructing agrieullural luvildinges and rural homes the beautive of landscatpo gardening, the fine arts of gratit ing and propagating; in sloort, in all lines of progress In whieh the engraver ean aid the writer in the presen.tation of valuable facts and ideas. All who read our Journal coneede us marked sulperiority in the finess and valuo and excellent trintinisy of our illustrations. The matter which is demened worti
io the attention of readers is edited In Departments. Industrial art is the esstem of arrangement and elasesif cation of knowledge which has prevailel. This systeu we find of the lighesest value in our elitiorial explerience, The Dairy, Tho Vineyard, Hortieuture, Florieulure
 made the subbicet of special stully and reecarch, and thus facts most important to the suceess
on this const, are brought t torward.

The Home Clircle
is looked upon by tho ellitors of the Reral Papas as a pleasant feld in which their best and most valuable work entertain withont denoralizinig; to anuse without engen dering coarsenesss to prrmotet trrue sentiment, lofty and
ennobling emotions -in short, to and all readers toward the attaiument of a higher manhood and womanhood and thus make lifo moro and more a joy and a value, is our Home Circle columnm.
By means, both of engravings and descriptions, we in form our rural housewives the styles which are most ap.

Our Young Folks' Column
Pleases the tinlest birdilinss of the flock with its woe
Storice sand funuy picture, and once in a while give Wholesome leseons tw their olider brothers and sisters. Good Hoalth.

The Ruval Prrss hollas a leading place in the modern
discoveries for the preserration of health and the best with tho bolices whlch clothe our intellects and soule. It
sives simple remedies for common maladies and aceidents, or the strength and heallufulunces of the racee In Domestic Economy
Which undericasall the ceanomies, the Rcral Prsse ex wends a helping hand to the housewife and thinks no cffort too burdensome whieh pronises to aid her in her
ard
anus work in the kitelen, the dining -room and in tho Eeneral eare of her liousehold.
We belicve that the success of the farmer lles in eelling isely, no less than in producing well. Hence Our Market Review
Is prepared with the utinost care, aud no pains are spared to make it fairly and truly refleet the state of the mar(unless we state expressly in a thing is given as a obtain them. Thus uct only do we give each week a ers' supplies bought, in this markct, but we are alway's on the lookout along all arenues of information for facts eceial articles in any way. We elaim to kecp our readers folly informed of the leading and important trade news, which affects their interests, and we have so far succeeded in wimning the confideuce of readers that the quutatious
in the Rural Pkrss are made the basis of transactions in many parts of the interior. We esteem this dopartment
of our paper of sucla great importancu that we do not
relegate it to repolters but hold it as strietly cditorial
work, that we m
trust worthinoss.

Improvement of the "Rural Press."
Our readers assure us that anch volume of the Rur
rress is better than the preceding one. This is our amb
ion for the paper. Agriculture on this coast is advancing
from the early chance methods and results to tho en
lightened systems which result from wider experienec fllcr investigation and experiment, and the tho application of scientifle truth. As the Re'ral paess londs in
this advancement it bears the mark of it upon its own this advancement it bears the mark of it upon its own
countenance. We have been able to improve our journal countenance. We have been able to improve our journal
in many ways aud to do this the publishers have freely applied the revenucs of the paper to its own improve. hent. They regard it as no temporary enterprise fur the institutions of the coast, confident that their hono and reward will be greater, even though it be deferred
This policy has both improved the journal in its meehan cal departments and has secured the the highest editoria intcllizence and skill which can be found in this specialty of liturary work. 13y such efforts to improve the Rurat PREss, the publishers have more than returnel the value
which suhscribers expeeted when they frst bestowed Which suhscribers expeeted when tbey flrst bestowed
their patronage. This we still expect to do, and tho wider our circle of readers beconues the better papur w
an send to each. Thus our course is onward, and thu an send to each. Thus our course is onward, and thi further huilding up of onr jomrual.

The Field of the "Rural Press."
Alchough our first and chief devotion is bestowed upon Treat mass of cour renders, we havo groups of subseriher it such widely separated parts that we may fairly elaim world-wide audience. The topics which are presonted in our culumns are sin charged with fresh experience
that they win the attention of agriculturists everywhore Hen who are prominent in progressive agriculture in the Eastern States rank the Rural Press ammong tho frst the journals of its elass in this country. In Great Britain
nd on thic contincht of Europe, among forcign resident in Enst India, China and Japan, and in the newly opener riends, and is proved of its ability to laterest its firm id thens in their work

Why we succeed?
fluence of our journal arc not difficult cextended in fluence of our journal are not difficult to detcruine irst, by the constant co-operation of onr reallers we are
able to make the Rural Paksb nil aeknowledged repre sontative of the agricultural intercst on this coast. This is of itself a key to success, and it unlocks to us the door to favor all owcr the world, for no narrower than this is the fame of our agriculture. Second, we liold the friend ship of our patrons everywhero by the freshness and prac
tical value of the matters which we present for their con ideration. Third, we win the respect of all truly pro ressive men because, though ever on the alort to battle on the sido of progress, wo are never entrapped into wor-
thip of the glittering tinsel of the sensational. Our policy ship of the glittering tinsel of the sensational. Our policy is tostrive untiringly for better knowledge and elevated prac lice, but never to let go that which is good, until a better hing is dennonstrated. Thus our policy may deflined as sore to the yel lieve is the only true policy where great industrial
interests, and all they involve, are ot stake. Fourth, we never abuse the weleono which we gain to the homes our readers by allowing our columis to earry the speeious baits of quacks, conhdence men and swinders. They would pay us roundly for the opportunity to gorge themselves upon our unsuspecting patrons, but the idea is abhorrent to us. We can build up a trucr and prouder
success without their gold. Fifth, the grand secret of our sucess lies in the word woak, enthusiastie, detightefuland yet unceaying work for the success of the Pacipic Rurat Press and all those who coms within the circle of its
influence.

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## TEN PER CENT.

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The Sierra Flume and Lumber Company have mortgaged their large property-principally lands-to secure the payment of 1,200 Bonds of s. 500 each, running for one, two or thrce years and bearing ten per cent. interest, payable semi-annually.
Two hundred Bonds of either series are now offered for sale at par, to close this season's business. The remainder will be held for another year.
The property cost over $\$ 1,400,000$, anl has produced the last six months $\$ \$ 00,000$ worth of umber, at a cost of $\$ 400,000$, most of which is stacked and ärying, to be in readiness for sale, and for which there is a good market, both at home and abroad.
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tie first term will comience Wednesday, August 1, 1877, and close Thurs the second term will cohmence Wednesday, January 0 , 1878 , and close
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ers of Short Horns and their Grades.
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Bex and Berkshire Swine.
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Will Miake Your Hkens Lay, Winter and Suminer, support Fowls during moulting,
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Soil; Preparation of the Soil; Manures; Tine of Setting Soil; Preparation of the Soll; Manures; Tine of Seting
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-THE-
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Have over 100,000 Acres of
SUGAR PINE, YELLOW PINE, SPRUCE,
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The Sugar Pine is unsurpased in quality, and tho
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the Fir and Cedar are as valuable for a great varicty of
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 MOTd $9 N \forall 9$Stoche Prenium over all at the great plowing Match This Plow is thoroughly made by practical men who
have beon long in the business and know what is required have boon long in the business and know what is required
in the construction of Gang Plows. It is quickly adjusted.
Sufficient play is piven so that Sufficient play is given so that the tonrue will pass ove
cradle knolls without elanging the working position of the cradle knolls without ehanging the working position of the
slares. It is so constructed tbat the wheels themselves
govern the action govern the action of; he Plow correetly. It has various
points of superiority, and can be relied upon as the best points of superiority, and can be relied upon as the best
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hie ahove named tustitute as a resort for invalids, wlaer lhe a hove named thstitute as a resort for invalids, where
all the facilities for the thorough and seientific treatnent Onr misethods of treatment embrace Electricity, Turk shl Rn*sian, Mareatie and Mcaciated Baths of all
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the medical profession. The bulding is one of the finest
俍 fort will be spared to make the patients feel at home Lying in roons enmeeted with the institute. Charges,
ineluding board, ete, froml $\begin{aligned} & \text { sin } \\ & \text { further infernations, addrcss }\end{aligned}$ to $\$ 30$ per week. For
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mento, Cal.; A. Lusk \&\& Co., Snil Franciseo, Cal

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## Cheap Fares．

The fact that the Legislature has passed a law regulating the price of a single fare ou the street railroads at five cents，is probably more important to the mass of the citizens of San Francisco than the question of choice of an United States Senator．Though apparently a small thing to grumble about，the six and a quarter cent fares，so long in vogue on the street railroads，has been burdensome．The railroad companies have been tenacious in keep． ing the fares at that figure，as it has given them considerable increase in revenue in more ways of course，they only give four tiekets for 25 cents，instead of five as they will have to do under the uew law．But this has been perhaps
of even less importance than the fact they got of even less importance than the fact they got
10 cents for a single fare if coin were offered and change demanded，or if a 10 －cent piece was paid instead of a ticket．Our system of coinage not admitting of taking six and a quarter cents from a quarter unless tickets were given in－ stead of coin change，the passenger had to pay for a ride and a half instead of one ride
handed the condnctor a 10 －cent piece．
We have，however，a five－cent piece，the smallest coin in use anong us，and under the new law it will constitute a legal fare and
the railroad c mpanies cannot swindle the pas－ sengers out of three and three－quarter cents any longer．The ouly strange thing is that this
swindle should have been tolerated so long as it has．A man wonld generally rathcr throw it has．A man wond generaly rathcr throw
into the street a half dollar than to feel that he
has been swindled oun to three cents；and many has been swindled out of three cents；and many street cars on priuciple，rather than to subwit to the extortion．Our strcet ear lincs aro well
patronized as it is，and ought to pay well with－ out resorting to any petty extortions to iucrease their revenues． To the humbler class of citizens residing in the suburbs，as most of our workingmen wel．
this change to five－cent fares will be very wer come．It will not now matter to them whether they have tickets or coin when they get on a
street car，as it costs them no more in either case，and we have no doubt that the measure
will in the long run be to the benefit of the will in the long run be to the benent of the
railroad companies as well as the passengers． railroad companes as well as the passene in the
The old extravaant habitt in vogue
early days of California will not do any longer， eard days by one the little impositions of com． panies and tradesinen，which have been so long pubmitted to，must give way to a changed style
sut of living．The old $12 \frac{1}{y}$ cent and $6 \frac{1}{2}$ cent swin－
dles will soon be thing of the past，although We still pay 15 cents for articles nuarked $12 \frac{1}{3}$ cents oftener than we ought to．The ditticulty
of tnaking exact ehange is taken advantage of of making exact ehange is taken advantage of
to charge 15 cents for things worth only 10 to eharge 15 cents for things worth only
cents．For instance，the fare to Oakland ou the ferries is the same as it has been for years land，Alameda，Berkeley and vicinity now con－ tain more than twice as many inhahitants as they did a few years since，and the travel by ferry las increased proportionately．The cost of operating the ferries is no more now thaul
then，althongh the revenues must lave becn then，althongh the revenues must have becn
largely increased．Still，$a$ single fare is 15
cents asch way，although on Suudays in sum． cents each way，although on sundays in summ
mer a ticket to go and return to Oakland is sold for 25 cents．When the prico for single
fare is reduced to 10 cents it will be very mucl fare is refuced to fo cents it wdil be very much
better thau now，for on Sundays aud holidays our workingmen delight to get a sight at grass
and trees and breathe the fresh nir on the bay， provided they can do so at a reasonable cost．
We hope this change will soon occur and that before many years the fare will be even lower， so that it will cost no
to go to the Mission．

## A Prescription for Phylloxera．

An Italian，Signor Torrinetti，has been treating the phylloxera evil yery nuch as doctors treat a eompound malady，by applying a remedy made
of iugredients to reach all poiuts．He aims to invigorate the vine and at tho same time kill thus describes his process and its results： Having observed that poor land is particularly
favorable to the development of the phllovera， favorable to the development of the phylloxera， Torrinetti lays great stress upon the uecessity
of liberal manuring in eonjunction with the ap－ of liberal manuring in eonjunction with the ap．
plication of such chemical agents as may be em． ployed for the direct destruction of the pest． grais own practice he uses a mixture of 50
grannmes of Peruvian guano， 2 gramines of ace－ grainmes of Peruvian guano， 2 gramines of ace－
tate of baryta， 2 grammes of acetate of lead， and 1 gramine of acetate of zinc，for each plant． the mixture being simply put into a small hole about six inches deep at the root of each vine
stock，and imuediately covered iu with carth． stock，and imuediately covered iu with carth，
The gnano furnishes the necessary manure for The guano furnishes the necessary manure for
the nourishnnent of the vine，and the other the nourishnent of the vine，and the other
three ingredients，as soon as thcy are dissolved three ingredients，as soon as thcy are dissolved
by the moisture of the earth penetrate eall parts by the moisture of the earth，penetrate all parts
of the plant with astonishing rapidity，and
eause the death of all inseets upon it without the slightest injury to the vine itself．At pres．
ent Signor Torrinetti vines in this manner，and has met with com－ plete success in every oase．

News in Brief．
Indians have started on the war－path in The Hon．Nathan Coombs，the founder o Tupa，is dead．
TIIERE was taken to China in treasure from here iu $1877, \$ 17,601,273$ ．
A NEW tariff bill is beiug diligently prepared， and will be reported after the recess．
SEvEN vessels and 37 mien were lo
Gevex vessels and 1 men were los
Av average of tive carloads of wheat per
A Are now arriving at Long wharf，Oakland．
Trie Collateral Loan and Savings Bank， this city，has fled a petition in bankruptcy，
THERE were 293 i marriage licenses issued is city in 1877 ，and 243 divorces granted． The French Governnent has requested Don Carlos to leave France．He startell Thursday． Ihe French exposition by some diplonatic up the fre
movement．
OUR police force made 19，262 arrests during ， 7 ，and the Police Court fines amouuted $t$
Tue Commissioner of Interual Revenue opposed to any change in the tax on whisky and tobaceo． A crazy man threw himself under the wheels of the sall Jose train last week and was crath．
to deat New law suits，civil，were instituted in this city in 1877 to the number of 3,909 ，the Cour
fees being $\$ 60,831.75$ ． There are less than 2,000 aeres of Govern－ nent land in fowa and une
offee has been discontinued． The delits of the Pioueer Bank，thus far scertaince，amount to over $\$ \$ 00,000$ ，divided TIIE 1,150 persons．
THE notorious Northampton bank robbers， 0 years in the state prison．
THE American ship Nimhis，with wheat from
off the Columbia
Tus Internal Revenue receipts during 1877 amounted iu San Francisco to $\$ 1,933,752.46$ ． The customored in New York that the Bank of Nevada contemplates establishing its owu
eies in New Lork，London and Paris． Courtsey challenges any oarsman in the Uuited States or Canada for any amount and the chanpionship of America－the race to be
rowed prior to the Trickett match，in July

Over $\$ 3,3,000,000$ has beeu paid out by the United states Treasury in the past six weeks，
the greater portion to officers and men in the the greater portion to officers and men in the
A Dispatch from Yokohama says：Japan has renounced all commercial trenties and ressmed
the right to revise her enstom duties at

$$
\begin{aligned}
& \text { pleasure. } \\
& \text { C'urer }
\end{aligned}
$$


collar bone fractured while on the way to a firc
Tul steaner Whipple and Chin－llu－van col－ lided during a fog in the sacramento river，one
day last week．The injuries were compara－ tively slight．

Uheson，formerly of Oregon，is now at Valparaiso，Chile，and writes that conmon taborers receive but cents per day，and
skilled labor ranges from $\$ 1$ to 1.50 per day． A blivD Italian beggar brought suit in the
Connty Court last week to recover $\$ 100$ and during the trial it come out that the plaintiff
had $\$ 1,000$ to his credit in the savings bank． REPorts received at the Departinent of Agri－ culture indicate that the wheat crop of this country for 1877 was alout $360,000,000$ bushels，
or $50,000,000$ bushels greater than for any pre－
TEN men，convietcd of riot in interfering with
TEar mining operations last August，have been sen－ ing from $\$ 10$ to $\$ 100$ and imprisonment of from nine month mbarton railroad is be ing laid ou the Alameda marsh，near the bay． long，construction trains will run over the Alaneda end of the road．
TIIE Western Union and the Pacific division of the Atlantic and Pacine telegraph lines have consolidated．Atlantic and Pacific telegraph
ofices on this coast have becn discontinued ex Cept at railroad stations． coal were sold at auction at New York Friday by order of the Lackawanna Company．There
was a large attendauce，and prices were from 10 was a large attcndauce，and prices were fr
to 45 ceuts per ton more than last month．
OfFICLAL intelligence has been received an nouncing the success of the Chinese troops in
Kashgar．They had fortified Couchtongaran and Ask，two strong strategieal points．The in habitants
territory．
The settlement at the Mint prepaiatory to he incoming of the bew superintendcint，is now in progress．During the year now ending the in the record of coinage in any institution in the world．
Complefe returns of the business transacte at the Bankers＇Clearing house in this city for
the year 18.7 show that the total amount of exchanges effected during that period was
$\$ 519,948,80 t$ ，of whicl $\$ 497,407,380$ was in gold and $\$ 22,541,424$ in silver．

The Branch Mint in this city is in operation，
THERE were 243 divorces granted in this city uring the year．
ThE value of real estate in Alameda，is set t $\$ 36,389,961$ ．
Sacramento has a commercial business
$\$ 25,496,269$ in 1877. A transit of Mercury over the sun＇s disc Res place May 6 th
Dr．Jacob B．Demarest，committed suicide a The Russig City this week．

THE attack on Erzeroum is to be delayed un the end of this month．
The old Bulls－Head Bank，of New York，is
Buresarifs and robberie
Burglarf and robberies are becoming The net gain of San Fras
The net gain of San Francisco in population
There were 5,503 deaths in the city in $18: 7$
which 3,386 were malcs and 2,117 females．
An old man was attacked by hoodlumns，and
ot dead at an early hour on New Year＇s day．
RUssia has securcd a large number of loco－ tives from manufacturers in Paris，France Ate the border troubles on the Rio Grande Superiveriper of Costruction Welsh Louis，has been removed by the Presideut． The yield of the precious metals of the Pa ． ific States and Territories for 1877 was $\$ 98$ ， H．L．
H．L．Dodge has taken the place of 0 ．H． La Grange as Superintendent of the U．S．mint
this city This city．
THE clerk of the Police Court of this city has been arreste
THE eontractors of the Brazil railroad will ot be allowed to employ colored men in the onstruction of it．
THE Harbor Commissioners report that 13 ，作解 of the new sea wall for the city fron ill cost $\$ 4,362,086$ ．
Properirr in this eity worth $\$ 997,396.98$ was lestroyed by fire last year，the insurance ou the
ame being $\$ 2.098,679.92$ THe being $\$ 2,098,679.92$
The situation on the Caffre frontier（Africa rom England to Cape Town． B．P．Kooser，an old pioneer，and until Itely，editor and proprietor of the santa
A terrible hard winter is antieipated in England，Scotland and South Wales，and the average poor rate will probably be higher than
it has been in 20 years． A has been in 20 years．
A Disp．s．rciI from Washington states that the law otticers of the Department of the Interior ions of the desert land grabbers．
EXPFRIMEMTS are being carried on in Prussia order of the German military authorities， employ the telephone for military purposes．
The Senate Fish Committee，the Fish Co THE Senate Fisll Comnittee，the Fish Com－ missioners and a comnittee of fishermen have
met in Canada，to discuss matters connected met in Canada，to discuss matters co
with the salmon of the Sacramento river With the salmon of the Sacramento river．
A Number of wealthy gentlemen ought the large conservatories imported from England by the late James Lick，and sold a to be ereeted in Golden Gate park．
The firm of Spanlling \＆Barto，printers，for many years in the same building as our edito rial and composing rooms，No． 1 Mr ay street，
have admitted to partnership，Mr．Solon H． Willians，and now style themselves Spauld
ng，Barto \＆
A Pery gratifving feature of this New lear＇s day in Washington was the general absence of
wines and otlier intoxicating beverages from the tables of persons，either in public or private life，who received visitors．Washington ha at least one good example to other eities

Drilling for Prizes in Colorado．－A Dntest of considerable interest to all rock dril ers was held in Coloralo reeently．The Sun－ shine Courier says that at the recent Boulder county fair， 860 and 83.5 were offered in pre drilled the greatest depth in granite blocks in 10 minutes＇time．The contestants were to furnish their own tools．The match was open to the whole State．No limit was fixed to the number of drills used by each within the allottell time． The Yates Brothers，of Sugar Loaf district，won the double handed match，drilling 16.2 inche within the given time．C．N．Johnson，o Corning tunnel，won the single handed match， aches We pesume the men were sadi ches．We presume the men were sadiy the fact is，that the least depth－ 5.3 inches - is atra work for a man when not working against

To make Cow＇s Milk more Digestible．－ In a German paper we note a hint given by Dr， milk by persons who have a weak stomach．He says he has always succeeded in avoiding any evil cffects by eating a little salt on bread either orits to do this，a single glass of milk will pro－ duce diarrheen，whereas with salt he can take whole liter．


## A TENTS AND（NVENTIONS

List of U．S．Patents Issued to Pacific Coast Inventors．

y Special Dispatch from Washington，D．C．





WrLL BoRiNo MAcclike．－W．F．Vautlin and S．Jack



Well Borivg Machisery．－J．Bennersheidt，Anaheim，



 ty，Nev．
Fire BRick Cospor：xDs．－G．R．Evans and W．P．Pres





The patents are not ready for delivery by the Paten Nort，－C Copies of U．S．and Foreign Patents furnished


## JublisHers＇Department．

The Sonoma Seedlisg Apple．－We learn that trees of this desirable apple，now two
years from graft，can be hal at Shinn＇s nurseries years from graft，con be hat These nurserymen ob of the originator ．They fully corroborate the opinion we expressed as to the appearance and quality of this apple．

## Important－Farmers

It is often desirable，when wishing to secure suitable Farm Hands，such as Teamsters，Milk rs，Plowmen，etc．， umberlcss tramps with which the country bers of men from all parts of the country con gregate，and among the number many good，
strong able－bodied farmers are to be found awaiting employment．Messrs．Crosett \＆Co．，
623 and 625 Clay street，are daily receiving ap－ pilcations from these sturdy yeomanry，cont－ posed of Germans，Scandinavians，Americans and Irish，who whish to be sent out to work on mes complished，they can address，giving full pai an Francisco，and particular attention will be given to supply them with good men．

## TO QUERISTS

In propounding questions tot the editorial，patent or bus－
iness deparmentit of this office，letticr writere should be
作，envelopes and stamps，ALL free eo parties who addross
 riting in our own or the publie tnterest，or who weuld
be obliged to delay writing at any time for want of an ox－


## S. F. Market Report

 Norz.-Our trane review and quotations are preparedon Wednesday of each week (our publication day), and are
not intended to represent the state of the market on Satnot intended to represent the state of
urday, tbe date which the paper bear

Weekly Market Review.

## DOMESTIC PRODUCE, ETC

San Francisco, Wednesday, January 2d, 1878. The usual brokeu week has passed in trade, and al expectancy and eagerness to launch upon the trade of the new year. Many merchants are now busy with their annual inventorying, and others a little fearful of the season makes the present days somewhat dull, but the feeliug is

Range of Cable Prices of Wheat.
Produce Exchange during the days of last week has been as recorded in the following table:

|  | Cal. Average. | Clube |
| :---: | :---: | :---: |
| Thurs | 12s $7 \mathrm{7d}$ @ 12 s 11d | 12s 10d@13s |
| , Friday | 12 s 8d@12s 11d | 12s 11d@13s 3d |
| Saturday | 12888 d 1212s 11 d | 128 11d@13s 3d |
| Monday | 12s 8d@12s 11d | 12s 11d@13s 3d |
| Tuesday | New Year holiday. | New Year holiday. |
| Wednesday | 12s 8d@12s 11d | 128 11d@138 3d |
| To-day's cable quotations to the Produce Exchange compare witb same date in former years as follows: |  |  |
|  |  |  |
|  | Average. | Club. |
| 1875 | 10s 6d@11s | 118 -@118 6d |
|  | 10 s 10d@11s 2d | 11s -@11s 6d |
| 1877. | 12 s 8d12s 11d | 12s 11d@13s 3d |

Lowdon, January 1st.-The Marle Lane Express says:
The appearance of the young Wheat plant is satisfactory, in spite of the germination of grain laving heen slow.
owing to the saturated condition of the soil. The weather has been very severe in Soctland, but in the south a fair
breadth of land is under Wheat. In other districts, farm breadth of land is under Wheat. In other districts, farm
labor is still much behind hand. The position of the
Grain trade at Mark Lane and the Provinces is decidedly Grain trade at Math the turn of the year it is likely that con-
strong, and with the
siderable activity will elsue. Supplies of English Wheat
eontinne very limited, and though holders have not been continine very limited, and though holders have not been
able to obtain higher prices, the tendency has certainly
been in their favor. Imports of foreign Wheat into London have been more moderate, last Monday's returns
showing a total of only 48,000 quarters, this decrease
being due to a falling off in the arrivals of Indian produce showing a to a falling off in the arrivals of Indian produce
being due to a
and the closing up of the North Russian ports. The most
noticeable feature of the week has been a revival of the noticeable feature of the week has been a revival of the
demand for Wheat from country millers, who have pur-
chased more freety at tbe extreme priees of the previous week, and on Frideay at ari advancecof of to to sper previorter.
A steady Continental demand is also observable, as exports continue at the rate of 8,000 and 9,000 quarters per
week, and a fair outward movement invariably exercises a week, and a fair outward movement invariably exercises a are considerable, but consist mainly of Calcutta, and
other hard varieties. The price of American, and such
descriptions as descriptions as are valued for their flour-producing prop-
erties, has becn in no wise depressed. The increased erties, has becn in no wise depressed. The increased
eountry demand is a natural result of the wants of the
country after a deficient harvest. It is not unreasonable country after $a$ deficient tharvest. It is no un ureasonable
to look for a hardeningof prices, now that there is likely
to be a diminution in the scale of imports. There have been numerous arrivals of Maize cargoes at ports of call,
and there are more sellers than buyers, but 20s 9 d 30 s and there are nore sellers than buyers, but 20 s 9 @ @ 30 .
have been paid for mixed American. The spot trade for
this article has been steady, and last week s prices were this article has been steady, and last week s prices were
well maintained. The arrival of Wheat cargoes at ports
of call have been so moderate, and the demand so steady, of call have been so moderate, and the demand so steady,
that prices have been well supported. Barley is steady,
while Maize, under the pressure of large arrivala, has while Maize, under the pressure
ruled in buyers ' favor.
Freignts and Charters.
For the first time in several months, says the Commer-
cial News, the freight varket shows ans improvenent,
slight, to be sure, but still sufficient to warrant the beliof slight, to be sure, but still sufficient to warrant the beliof
that bedronk had been reached and that a reaction has set
in. Wooden ships are now worth th and iron ships $£ 115 \mathrm{sp}$. Any lower rate would undonht,
edly be refused. Experts place the total amount of Wheat edly be refused. Experts place the total amount of Wheat
in the State available for export at about 75,000 tons,
which if we are favored with seasonable rains, will come Which, in we are favored with seasonable rains, will come
on the market. At present exporters are unwilling to
take up tonnage owing to the difficulty of procuring suitable cargoes. At the close we have nominally 35,019 tons
in port disengaged, though a considerable anount will lay
up for the new crup, 14,223 tons miscell aneous up for the new crop, 14,223 tons miscellaneous, and 17,667
tons to load Wheat. The transactions or the week have
Teen: Br ship John Gambles, 1,066 tons, wheat to hive pool, $£ 115 \mathrm{~s}$, chartcred in England; ship Annie II. Simith,
1,503 tons, Wheat to Liverpool, $£ 1$, 12 s .d; Cork, U. K., f1 Liss; Continent, $£ 2$;

Eastern Grain Markets
Nrw Yonk, December 30th. -The gencral markets have
hown a dulliness during the week, peculiar to the holiday season, but in some kinds of produce, such as Breadstuffs
and Provisions, there has been an increased expert move ment, based largely upon more warlike advices from Europe, and the downward tendency of prices has been
checked. The large purchases of Beef, Pork and Mutton,
in addition to Grain by many as indicative of a probable involvement of Eng by many as mar iut the East. Heavy stores of Wheat in
land in the war iu
soothern Russia, and reported large purchases there for
Enclish account in depreciated Russian cuarency coupled ith possible mediation and peace, serve to render specubators cautious, and the transactions of the week have
beno confned to the eexectition of imperative orders.
Home trade is ratber below the usual light average at this period of the year. The summer-like weather has regoods and the fur trade-and it has retarded Pork-packing Chicaio, Deceruber 29th..-The week's markets on'Change little more than half the week has beents devoted to business opened highern, and good firm proson. Whecs preailed Wedned thesday
until to day, when, with a fafr demand thout cided drop in prices. with a fafr demand, there ware made at de- $\$ 1.081$ a 81.11 .
Corn was lower, and gradually declined, with
 degrees, with sales in a stideall way, and became easier by
dork weakened percepti
bly from a firm openlug, going down and then reviving Lust at the close. Sales were made at $\$ 1.372$ @ $\$ 11.87$ a
Lard opened steady and firm, but closed weak, salcs a
$\$ 7.55$ a 87.75 . Receipts for the week: Wheat, 331 ,
 Wheat, 197,000 bushels; Corrn, 581,000 bushels; Oatts, 128,
000 bushels. Shipments: Wheat, 86,000 bushels; Corm
212,000 bushels; Oats, 4 ,


Crop Reports.
$\left.\begin{array}{c}\text { New York, Mecember 27th. -A Tribune Washington } \\ \text { special says. Reports thus far received at the Department } \\ \text { of An }\end{array}\right)$ special says: Reports thus far received at the Department
of Arriculture, and whicl will be conppiled and publighed,
indicate that the Wheat crop of this contry indicate that the Wheat crop of this cornitry for published,
about $360,000,000$ bushels, or about $50,000.000$ bushels about $360,000,000$ bushels, or about $50,000.000$ bushels
greater than for any previous year. The Corn crop is
estimated from the same report estimated from the same report at $1,300,000,000$ bushels.
The crops of Oats and Potatoes are correspondingly large.
Of Wheat it is estimated that $110,000,000$ bushels can be of wheat it is est.
spared for export.

Eastern Wool Markets.
NEW York, December 30th- There is ittle of impor-
tance that can be said regarding the Wool market tance that can be said regarding the Wool market. This,
the last week of the year, as is usually the case, has been
devoted by manufacturers to looking around, and, as a devoted by manufacturers to looking around, and, as a
rule, the few purchases made are deliverable after the 1 st of the month, so that the amounts will not be included in
the accounts of 1877 . In holding off the market, manufacturers, it is believed, are pursuing a very foolish pol-
icy, as but little douht exists as to the stability of prices icy, as but little douht exists as to the stability of prices,
and from the present prcspects values are likely soon to
take a turn upward. The telegraphic advices from San Francisco, giving the stock of Fall there as 750,000 tibs,
has given a firm tone to the market here and has given a firm tone to the market here and holders are
less inclined to seek buyers. Texas continues neglected,
but current prices are firm. Fleeces are taken only in but current prices are firm. Fleeces are taken only in
small parcels, but steady prices rule. Sales for the week
are: 10,000 tbs Australian at $46 c$. 96 ,
 27tc; and 11,000 ths Georria, 251 bags super pulled, 60 do
extra do, 25 do black do, 17 do No. 2 do and 3.000 to
medium New Jersey and 8,000 tos fine unwashed Western men private terms.
PHALLADELIIA, December 28th.- Wool is in fair dennand,
put sales are light, owing to a broken week, and manu but sales are light, owing to a broken week, and manu
facturers taking account of stock. Ohio, Pennsylvania
West Virginia XX and above. West irginia XX and above, 44@47c; X, 44@a45c;
medium, 44@46c; coarse, 35 Ne40c. New York, Mieligan,
Indiana and Western fine, 39@42c; medium,

 carpets, 17@18c; No. 1 and super pulled, $30 @ 36 \mathrm{c}$; extr
and merioo puiled, 37 @40; Texa fine and medium, $20 @$
25 c do coarse, 14@161ct; California fine aud medium, 2 Domestic Produce.
The following table sbows the S. F. receipts of Domestic Produce for the week ending at noon
pared with the receipts of previous weeks

| Articles. | $\begin{gathered} \text { Wекк. } \\ \text { Vec. } 12 . \end{gathered}$ | Week. Dec. 19 | Week. Dec. 26 | Werk. Jan. 2 |
| :---: | :---: | :---: | :---: | :---: |
| Flour, quarter | 18,268 | 50,778 | 15,881 | 72,847 |
| Wheat, centals | 86,554 | 130,651 | 147,937 |  |
| Barley, eentals | 14,519 | 7,859 | 8,652 | 14,143 |
| Beans, sacks. | 1,671 | 2,086 |  | 727 |
| Corn, centals. | 5,942 | 4.141 | 5,379 | 2,258 |
| Oats, centals. | 1,342 | 7,551 | 1,501 | 10,440 |
| Potatoes, sacks | 13,305 | 16.444 | 19,270 | 15,953 |
|  | 1,797 | 2,973 | 2,449 | 755 |
| Wool, bales. | 1,333 | 1,000 | 237 | 331 |
| Hops, bales | 55 | 934 | 39 |  |
| Hay, bales. | 979 | 1,252 | 1,122 | 870 |

Bags-An advance is noted in hand-sewed Wool Sacks.
Other Bars are unchanged and the trade of the week has been very limited.
Barley-Barley is purchasable at a point lower than a week ago. There are few transactions, but the Barley
firmly held We note sales during the week: 1,000 sk light Chevalier Feed, $\$ 1.621 ; 40$ sks old Bay Feed, $\$ 1.65$ 500 do dark Coast do, $\$ 1.60$
Beans-Recelpts of Beans have been small and high
Corn-A decline has occurred. We note sales: 150
sks large White, $\$ 1.57 \frac{1}{2} ; 450$ do large Yellow, $\$ 1.57 \frac{1}{2} ; 220$ Dairy Produce
Dairy Produce - Butter prices are unchanged and
dealers report the trade dull. Supplies seem still in of requirements. Pickled and Firkin Butter can bebought at considerable concession from rates prevailing a month

## Eggs Eggs are weak and sold at a decline of 5 c per

Feed-All prices are stationary. Hay sales: 64 tons Wild Oat at $\$ 16 ; 38$ do Cow, $\$ 14$ per ton.
Fruit-Apples from Oregon are abundant. Strawgrapes, cunsidering the season, have sold as high as \&

Hops-The local market is reported without transactions of any amount, although negotiations for sale are
plenty. Emmet Wells reports the New York market for we wek ending December 21st as follow:
There is a continued demand for low grades at a cost of
from 5 to 7 c, our quotations on all other descriptions being for the present nominal. There is a marked falling continue quite liberal, thus preventing much accumula-
tion of stock here. According to the reports from Landon, our Hops seem to be nneeting with the fusual good
favor in that market, owing probably to their soundness of character and cheapness. Our home brewers are also
stocking up more freely, feeling assured that prices are
mo stocking up more freely,
low enough, and as an inv
than lay in a y yar's supply.

## Oats-0 Feed, 81.90

Onions-Times are ruinous for Onions. The receipts mpossible to clear the wharves at any dd that sales were made at 10 c per sack. Prices to-day quality.
Potatoes-Potatoes have advanced, as shown in our list. New Potatoes are beginning to
Provisions-There is no change in prico and but litle doi
just now
Poultry-Poultry has sold fairly but with nothing ike the Christmas activity. The markct is now quiet. Vegetables-Beets have advanced to $\$ 1.50$ per ct \& 81 low have slightly improved
Wheat-Some of the largest mills have slunt down Wor the time being and there is comparatively no dcmand to a shipper, $\$ 2.32 \frac{1}{2} ; 266$ ctls Superfine, $\$ 2.05 ; 1,300$ do
$\qquad$ provement of 1 c for the choicest. We note sales: 6,000

## DOMESTIC PRODUCE.

##   

## GENERAL MERCHANDISE.

BAGG-Jobbing. Wednesdiy M., Jauuary 2, 1878
Kix

## FRUITS AND VEGETABLES.



## LEATHER. <br> 「wioleatel




| Carge pricesnedwood. | Wednfrsday M., January 2, 1878. <br> OFIPLEETMEIND PINE |
| :---: | :---: |
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| Refise | Fencriug and step.......28 2800 |
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| $\xrightarrow[\substack{\text { Rustic.a. } \\ \text { Refuse }}]{ }$ |  |
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| Fluoring. |  |
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| Refusie.i........... 1400 Reftuse. |  |
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| Halfinch Surfaced....... 2000 |  |
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| , |  |
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## RETAIL GROCERIES, ETC.





Signal Service Meteorological Report.

$$
\text { Week Ending January 1, } 1878 .
$$




## robur

## Gold, Legal Tenders, Exchange, Etc.


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nir 150 pounds. 150 or 500 in each hox, in eplendid evol-
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Cash must acconjany orders for less than 850 ; or qreater ${ }^{\text {t }}$
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1.,000 Seevn--lass for
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days, if not cured, repeat as at first. SPRANA, STIF
Joints. BRussks, WiNDoALLs, and all slicht ailnent, JoinTs, Brusiss, WinDoALLs, and all slight aitments, apply
a smail quantity so as not to blister. Saddle Sorcs, Cuts, a small quantity so as not to blister. Saddle Sorcs, Cuts,
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Volume XV.]
SAN FRANCISCO, SATURDAY, JANUARY 12, 1878.
Number 2.

The Preservation of our Fisheries.
A subject which possesses present interest, both for its intrinsic worth and from the fact that it is up for legislative consideration, is the preservation and restocking of our California isheries. That it is as advisable that our bays and streams should be made to yield their proportion of our food supply, as that a like area our soil should be brought to its fullness of ertility, is admitted by all who are aware of the importauce of the subject. To be convinced of this fact onc has only to study the position which fish occupies in the food supply of the world and the achievements which have been made in intelligent fish culture during the last few years. We have no space for this inquiry at this time, although the facts are very inter esting. Sufice it to remark that France years go demonstrated that an acre of water may be made to yield from $\$ 10$ to $\$ 50$ per year by the oultivation of tish. We have no data for de termining the possible result of making al available California waters thus productive, but Massachusetts, with more than 500,000 acres of $p$ onds and rivers, is pushing forward most waters to thei -time fullness of tish product $\$ 5,000,000$ per year in the value of fish taken rom what a few years ago were almost waste waters. This is at least worthy of the careful onsideration of Californians, both to strengthen their favor of the operations which are now be ng prosecuted by the State through our Fish Commissioners, and to induce them to stock the ponds and streams which lie within their own We h Whatforward much interested in reading th the Governor by our Fish Commissioners Messrs. Redding, Throckmorton and Farwell They have evidently been diligent in the prose cution of their gratuitous labors and they de serve the thanks of all. Their report contain many points of general interest and information and other points of which bring forcible suppor to the maintenance of our legal provisions for the preservation of our fish during the spawning eason. We shall instance chietly the forme at this time; leaving the latter until we know that the preservation measures are definitely
Of the reduction of the salmon supply which "In 1850 the salmon resorted in report says ers to the Feather Yuba American Mokul mne and Tuolumne rivers for purposes of pawning, and mauy places, such as Salmon bundance of American, were named from the ate as 1853 , the miners obtained a large suppl food from this source. At the present time no salmon enter these streams. It would be safe to estimate that one-half the streams in this State to which salmon formerly resorted or spawning, have, for this purpose, been de arroyed by mining. As mining is the most im portant industry, of course, for this evil ther increase the supply in those tributarie hat are still the resort of these fish.
The introduction of more than $8,000,000$ young salmon into the hcadwaters of the Sac sion, in addition to the natural increase, has the local market price of these fish. It is re ported that the "cannery" at Collinsville ha purchased all the salmon it conld consume dur of the in the Sacramento and San. Joaquin of salmon Commissioners make the following statement weight as transported from the leading theta of shipment to San Francisco from November 1st, 1874, to August 1st, 1875, to lee 5, 098,781 pounds. This year's tables show the catch from $5,311,423$ pounds, and from November 1st, 1876 to August 1st, 1877, 6,493,563 pounds. Thi
shows a gain of more than $1,000,000$ pounds in the legal catch over auy year since the organization of the Com to feel the beneficial effects of the millions o of salmon hatched artificially and turned into the headwaters.
The report aside from the points in favor o the close season for salmon, makes specific men tion of the wrongs which are being practiced upon our fishcries. One poiut is as follows:
i' The Chinese and others continue to use nets of a mesh much finer than is allowed by law, of a mesh much finer than is allowed by law,
and the young of all kind of salt water fish that spawn in the bays and estuaries, are persistently caught, dried and shipped to China. The were shipped to China, from San Francisco, dur-

An Australian Fern Tree.
We give upon this page an engraving of a "fern tree" (Grevillea robusta), as grown by John Rock, the well-known nurseryman of San Jose. The picture shows a plant only two years old. This beartiful tree has not been plants have always been high priced and diffiplants have always been high priced and $\begin{gathered}\text { cult to procure, but now, thanks to enterprising }\end{gathered}$ propagation, they may be had of any nursery This tree is a me price.
This tree is a native of Australia, and is
here much prizeci for its timber and also as here much prized for its straber and also as a "silky oak," lecause its leaves are silvered on the under sides. In habit it is unlike othe
Australian trees that grow up rapidly and the


THE "FERN TREE" OR "SILKY OAK"-Grevillea Robusta
and dried shell fish valued at $\$ 293,971$.
Although the labors of the Commission are mainly expended in the preservation and inrease of our noble fish, the salmon, due enter frise is shown in introducing valuable fish from
foreign waters. The reports mentions the shad, which are now becoming quite numerous in the Sacramento river, aud the catfish, which are now beconing quite an addition to the fish supply of the State capital. They have also implanted in California waters, white fish from the East; carp from Japan and the Danube; "awa," the most valuable fish of the Sandwich Islands; and mullet from the same waters; Fastern States. All these have been put in Eastern States. All these have been put in appropriate waters in different parts of the
State, and already there is evidence that they are thriving and multiplying. The results from all the enterprising movements of the Commission will ere long prove the wisdom of the State in taking steps for making its waters more and
more productive of valualle food for the people.
become scroggy, like some of the acacias and the eucalyptus tribe. It pursues a steady growth, has a fine fern-like foliage, and im
proves in shape as it grows older, until it be comes a stately tree. Fine specimens may nou be seen at Menlo Park, Oakland and San Jose In its native country it attains a hight of 80 feet One writer describes the tree as "a handsome evergreen tree of broad spreading, conic form dense, divided foliage, similar to that of the 'China tree,' with very neat, broad, fern-like frondose leaves. lt kecps its shape well bal anced against strong winds. The timber of its kindred mrevillcas are turued to use a of its kindred grevillcas are turued to use as have edible nuts and some exule honey that boiled to a thickened syrup, for conghs, etc." We are glad that Mr. Rock is doing much bring this desirable tree to the attention of plauters, for we certainly ought to diversify our trces to obtain therr varied beauties and utilities.

## Cor




## Notes in San Joaquin County.

Epirors Press:-Shall we or shall we no have an abnndant rainfall, is the question that
now oeenpies the minds of the residents of San Joaquin county. The rainfall thus far has been light, less that last year at this time. The first rain, whiel was the lightest, eame in the last of November, wetting the ground to the depth of about two inches in the eastern part, while Stoekton and vicinity received but a slight sprinkle. The next rain fell December 17th, falling evenly over all of the country, about three-fourths of an inch, and wetting the
ground to the depth of three inehes. The last ground to the depth of three inches. The last
rain came the 23 d, after an interval of cloudy wind; altogether the prospect was quite flat wind; atogether the prospect was quite oat.
tering for au incessant and abundant rain. Our
hopes were not destined to full fruition; the hopes were not destined to full fruition; the
rain ceased and after a few days of cloud and fog, is now sueeeeded by weathcr pro-
vokingly elear. Many and anxious are the surmises as to to what will follow. Mcager as usually eomes at this season, its present results are beneficent iu the extreme. Fields of
wheat in the vieinity of Loekford and on the Calaveras were beginning to suffer severely,
while others whieh were beginning to assume a sear aud ycllow leaf far in advance of maturit are now wearing a look of promise in their
green luxuriance, On the lottoms, and the adohe, farmers are hurrying the seeding to eompletion, and on te saind up nortu vine rancher hope On the adobe near Stockton the grain is The best pieee of grain I have seen in the
gre county is a field of 400 aeres lying one mile
northeast of Atlanta. This field was sowed early, coming np with the first raiu, and is now
stooling out aud nearly eovers the ground. stooling out aud nearly eovers the ground.
Mueh of the land on the sand remains to be sowed yet.
A few da
A few days spent in the vicinity of Farming.
on and Bellota showed rieh farming lands and ton and Bellota showed rieh farming lands and
well eultivated ranches and, richest and best of all, many happy homes with pleasant and tastcful surroundings. Farmington
Is a small railway station finely situated near the plains, and 16 miles distant from Stoekton. warehonse, bnilt and owned ly J. Harold, Hsq., one store, a blacksmith shop and harness shop
and a saloon. Grain is looking very well in this and a saloon. Grain is looking very well in this
section despite the dry weather. Summer-falsection despite the dry weather. Summer-fal-
low yielded 15 to 20 bushels here in the past seasou, aud on the plains adjoining was mueh better than in ordinary years. About five miles from here in a northwesterly
direetiou is Peters, a small station situated at the point where a road branches from the Cop peropolis railroad, running southcast and terminating at Oakdale, Stanislaus county. At
the time of the building of the railroad Peters was a lively little place. Then road wa sold out and stopped short of its projected dcs-
tination, and Pcters, like Woolsey, bid farewell to all its future greatness, nipped by this frost, this killing frost of misealculation
About five miles distant from Peters, skirting the plains, is

## Bellota,

A wee bit of a place on the Calaveras. Th
road ruus through handsome ranchcs, amon the finest of which is that of W. H. Russell. Its location is fine, eonsisting of plain and rieh
bottom land. The low laud forms a kind o poekt two broad fields by Morman slough. Mos of the surface is as level as a house floor, and is in a fine state of eultivation. Just hefore raching Bellota one sees a hand some quarter-sectiou, owned by F. B. Cogswell,
an old and intelligent 49 er, who is full of pleasant remimiscences of early times; extremely
plcasant in the narration, however they might have been in the experienee. His ranch is just
west of Bellota, and its boundary is the ing line, one night say, of wheat culture on one
side and a diversifed Above his place the Calaveras bottom othe quite narrow, and being enelosed on each side by
hills the culture of corn is rendered hoth sille and profitable, and in ordinary years is raised quitc extensively, yielding from 25.5 to 30
bushels of shellcd corn per aere. It is said to be very superior in quality and always com-
mands the top priee in markct. Very little was the princiyal cum, owing to seasons potatnes and otlier vegetables are raised in eonsiderable quantity.
known as Fishers's bridge.
Anclota is hetter
Accomodations for crossing the Calaveras and its tributary slonghs
at this point are limited to three bridges. Farther up is a swinging wire foot hridge snspende There are a few ecsy, vine-clad dwellings here,
merchandise earried on by Alfred Parker, Esq.

Mr. Parker is already known to some of th
readers of the Press as a hreeder of improved Berkshire Swine
Visiting the swine yard I saw a herd of Berk shires, whieh, for symmetry, close uniformity
in appearance, and those distinctive poin in appearance, and those distinctive point
which denote good brceding and good pedigree,
eannot be excelled on the ${ }^{\text {Iaeific }}$
Nont I saw them there were 26 of them in the herd viz: 2 boars ( 19 months), 1 sow ( 18 months),
3 sows ( 1 year), 10 pigs from 3 3 to 4 months, and 10 more three days old. Mr. Parker
areeds two distinct strains of
Berkshires, known in the herd books as the "Crown
Prince", and the "Sambo" families. The 18
monthg" sow is the mother of the litter of young months sow is the mother of the litter of young
pigs; she is of the "Crown Prince" breed and is a very fine specimen. She is fully grown,
stands low on her legs, is large, deep and eom. paet, a hearty eater and a kind mother. She is
perfcctly marked, having a deeply dished face fonr white fect, and a white tipped tail. This marking is distinctive of those two families and with one exeeption, slowing all those marks very elearly. the exceptionite tipped twil hut three white feet. This amounts to littlc, however, for Darwin has shown that with the me, oeasionally, a slight variatiou in some par par
tieular. The oldest sow, one of the venr.ald tieular. The oldest sow, one of the year-old
sows, and one boar, are of the "Crown Prince" fanily, while the other boar and two sows are direetly in the line of deseent from the famous Berkshire boar, "Othello," imported from England by Cooper, and gencrally coneidered the finest one ever brought to the United States.
From "Othello" all the older families of Berk shires of good pedigrce are descended, eithe lireetly or indireetly. I believe this strain i of more recent introdnction into California than
than the "Crowu Prince." Both boars are ex than the "Crowu Prince. Both boars a
tremely fine types of this valhable breed.
The pigs are fine, well grown and straight mong than Thougl young and but part among thcin. Though young and but partly all the excelleuces which distinguish the parent. Herein lie the great value of the thoroughbred,
the sure transmission of the best qualities of the the sure transmission of the best qualities of the xact science and eliminating the slippery elenent of chance. That this fact is well alppre. ciated by the farmers of California is finlly attested by the ready sale which Mr. Parker finds
for all he ean raise at remunerative prices, and the many letters of inquiry from all parts of the orders on hand than lic can till and he is aiming to incrcase his herd as rapidly as possible, in
order to aecommodate the inereased demand. Mr. Parker is about to introduce into California the latest and most popular strain of Berkshires
in the kast, known as the "Robin Hood" n the last, known as the "Robin Hood"
amily, and has made arraugements with the nost noted breeders of Kentucky to deliver in that family, thus keeping alreast of the times patrons.
Commeneing breeding in 1875 for amusement soon had, after supplying neighbors, more on
hand than he knew what to do with, and it seeming a pity to kill them merely for pork ifter the trouble and cost of importing the pro make then know to farmers at a distanee. The problem was solved by a two-line advertizement the rural press, whien broght the dncats in the gaining of fine hogs.
H. Edaene H.
rarming in the Clouds in Lake County
Elitors Press:-"All aboard for Lakeport!" was the ery as a stage rattled up to the door of the hotel in Cloverdale, one morning not long ago Our destination, about 30 miles across the Coast
range, is reached by one of the best graded mountain roads in the State. We soon crossec Russian river and began the ascent of Sulphur ceek canyon towards the Geysers. When in reek, a narrow and rocky defile, through whieh or a long way, a limpid trout stream wind arnong overhanging branches of ferns, laurel
and alders. About 20 miles on the way the summit is reached, from whieh a very
fine view of Clear lake and the plai surrounding it is obtained. At the left of the road, on the mountain, is the raneh of Chester
Pool, called High valley. Its elevation is well watered with springs. It grows good crops of grain and fruits. As his nearest neighbors arc tive miles distant no fences are required. his sheep and pigs. By the aid of the bount paid for sealps he manages to kecp even with
the wild cats and black hears.

Is in the bottom of a basin oi irregular shape
bout 30 inilce in diameter. The basin ha about 30 nilces in diameter. The basin has
lofty mountaiu sides, fencing it out from the cold winds of the coast, makiug the clima

## invalids it is nnequaled. The atmosphere, by reason of the elevation, is pure and pnvicorat

 iug. There are no trade winds heavy with foge and ehill with moisture. Nor is it temperecwith the furnace-like heat of the plains where fevers and ague prevail. While wandering through this regi
seemed, truly, an inspiration.
seemed, truly, an minspiration. As we descend to the valley the lake is in full view, stretching from northwest to south east, ahout 30 miles along the further side. Its
blue waters retleet the dark shadows of the fir, oak and pine, and here and there are parches of ware earth, red with einnabar,
freat rifts, wrinkles of time,
fietured Whitured steamer were nisihle. Before entering the val
ley we erossed a plateau of seeond-rate land mostly unoecupied and belonging to the United and groups of oaks. The soil is red and
gravelly; but would certainly produce vine and fruits. Considerable labor will be required to clear it. But there is every reason to suppose will yield other products if fairly tilled. There are several thousands of acres here waiting fo pre-emptors who eome to California willing to
work. They should first inquire at the Francisco Land Office for maps of ranges 13 and 14 north, of township 9 and 10 west. Mount issued a very useful little book for land hunters with maps, costing only. 50 cents. It contains loeating lands, which will save one mueh trouble.
Once fairly in the valley, which contains over
20,000 acres of first-class 20,000 acres of first-class farms, we entered on a gravelled roar, part of the way, leading by
the finely improved farms of the Boggs' brothers, Lindsay Carson (brother of the famous Kit Carson), Phelan Combs and others, where we gang plows. Mr. Carson has a meadow of red gation or reseeding that cuts an average o three tons of hay per aere, annually
Through a horder of large oaks we legan get nearer vicws of the lake. A gentle breeze,
iu flaws, ruftled its surface, leaving spots iu taws, ruftled its surface, leaving spots of
glassy smoothuess undisturhed. Along the shore little ripples sparkled like Aiamonds in ing aw ey out, set in somewhere leading to an unsecn outlet, then melted away before one had a notion of its
direction. This is springs which keep up the supply, and, plaecs, hoil to the surface.

## Fine Valleys.

There are other fine valleys hereabouts of which the writer has some personal knowledge. From Lakeport the view does not indicate their
existenee. Rid clothed with timber and studlecd with vast piles of rocks, until lost to sight in the dim hor
izon, as if Nature with a sigantic plow lad rowed this part of the continent when fitting it for habitation, and forgot to smooth the fur leys, some of ample extent for whole settlements, others, merely cosy now sheltering
single farmen. The principal ones in the vicinity of Lakeport are Big valley, Scott's valley, Baeh-
elor valley, Midde Creek, Blue Lakes, and Clover Creek. When driving through Scott's alley last summer, there were to be seeu ficlds One especially, at sinddamore's, where the rider fence, of such as the top rail of a stake and puff of wind taken the driver's straw hat, it scemed as though it would have hlown across
the top of the grain as if on ice. The soil is a moist, sandy loam, yielding about eight tons of potatocs, thirty bushels of Wheat, and bifty
bushels of eorn per aere. Exeellent fruit of bushels of eorn per acre. Theellent fruit o
most sorts is produeed. The place of $G$. C Riggs is the model fruit farm here; though productive ranches. Prices, for best class of Capt. Floyd, MIr. Buekingham, Rev. Wiley,
and others, pleased with the scenery and eli mate, parehased plaees on Clear lake and have
expended a good deal of money in beautifying them.

## Rain and Clouds.

The season's rainfall, to Deeemler 20th, is over seven inehes. It was distributed in geutle showers, hardly interiering with the work of plowing and sceding. There are real clouds up
here when it rains. The skies are not obseured by oeean fogs and draggling mists, shutting out huge, inverted bowl. Great billows of majestic clouds sweep across the heavens, as they do on
the Atlantic coast. Other times the sky is broken by Heeey masses sailing along, or linger-
ing idly about the rim of the horizon, as if playing with their own shadows on the lake and low then.
vent of the first snow. In the valleys it was
rain, althongh the wind was light for some
proaching storm, there was a dead roar from the of breakers on the shorc. It was a low monotone as if Nature heaved a long and deep sigh
of relief. Old mariners say the warning $i$


## Killing Squirrels:

Editors Press:-In your issue of Deeember 29th the question is asked what shall we do with our squirrels? Now, to me, that questio has been properly solved. I had about 100 acres of land that in places was full of the rodents, so much so that they took the entire crop, not leaving enough to seed the ground for
hay. One day last fall the Gerow Bros, camc在 me if whld like t have the squirrels killed. They said they did not kill when the snn was about an hour high my hous ont to work, and we expected them to come to supper. But that was the last we saw of them
or the squirrels for about a week. They the eame aftcr their pay, but the squirrels have not put in an appearance yet, at lcast I have never
secn bnt two. I never paid $\$ 5$ more willingly secn but
in my life.
vertisc theften wondered why they did not advertisc their wares in the RUral, as all that are
trouhled with little rodents ought to do with the squirrels. All in this section of eountry had their squirrels poisoned but on man, and there is enough on his place to seed the whole country again. It is to be hoped to compel every man that has them on his Farmers in this section of way
all through with their are good for another crow. We are in whatects called the moist belt, and failure has never been Ameriean Canyon, Solano Co., EDec. 31 st .
[We know nothing of the parties named by our correspondent, and of eourse give then no endorsement by printing the above exeept as
they are approved by our correspondent.-EDs. Press.]

A Tour Through Tehama County.

## "As a blessing siuks in a grateful heart, That kowelt an lis need So cane tue

## oter in and verdant theed he punan ear, It stlall breathe this ruth on the human In hail and oster's home.

Thht to bring thers rift of a bountcous heaven,
The pleasautt rain has cone."
Editors Press:-An abundance of rain, a least for present wants, has already fallen. The county of Tehama, lying as it does in the upper outh, is very favorably located for receiving an ample supply of rain. Consequantly an entire failure o crops is here an unheard of thing. Good living water also is found at short intervals throughout its whole extent. In addition to the fact of the Saeramento cutting the eounty from north to south, there is a series of creeks putting into the river both from the east and west, and runniug nearly parallel, all of whose valleys are lined with growing grain and hopeful homes, while the higlee and more distant hills, with some of the more barren plains, are given up to the grazing of sheep and other live stoek, or to
the craw of the more voraeious turkey. By the way,

Turkey Raising
Has proved very profitable and turkeys have been raised here in greater numbers, probably,
than in any other conty in the State. The
husines still offords the to the man of small means of any other field in
business the country, as there is yet a large tract of uuoccupicd land not well adapted for grain. One
hnndred hens will raise from 500 to 1,000 tnrkeys per season, worth from $\$ 1.50$ to 82 a head.
Mr. Martin Wilcox, on the reservation, in adfarm, manages to raise annually from 700 to 800 with some arsistance from other members of his
family. From 1,000 to 1,500 are frequently met with in a flock together, sometimes herded by

## The Chler Products of the County

 Ilowever, are small grain, wool and lumber.The estinated annnal wheat product will not fal estinated annnal wheat product wil hat will 1 roob
ping may
2,000,000 pounds, and the number of sleepp at


Much of the soil along the river and creek bottoms is of a very fine quality, consisting o the black adobe found on the hills or thei sloping sides. The land of the plains is thindish cast. Much of it has been brought unde cultivation and has been found to yield, b summer-fallowing, from 10 to 30 or more bush els of grain to the acre, accox
soil or nature of the season.
An allegorical interpretation of the first con minds one of the gradual encroachments of the present tiller of the soil on the ground hitherto occupied by the more modern Abel and hi less mutton and wool are produced, there will be more grain. A larger population will be sus tained on a given area, towns will be built, manufactories multiplied, and the aggregate
wealth of the community increased, such is the wealth of the community increased, such is the
inevitable law of the survival of the fittest in inevitable law of the sur
The population of the county is a little upwards of 7,000

## Red Bluff,

The county seat, and one of the best business points found anywhere on the upper Sacra mento. It is eligibly located, on the line of the
Oregon and California railroad, and neatly laid out on an elevated bench on the west bank of the river, but by no means on an abrupt bluff very considerable hight, as one might be led
imagine from the name. Both its stuation nd surroundings, may well be looked upon as court house and other public buildings, inclusive of a very large brick school house, are of the arge public hall, and similar buildings erected by the Masous and Odd Fellows, two fine churches and the many neat private
that adorn the town and its suburbs.
The Sacramento is spanned at this point by a well-constructed bridge, wlich puts the to wn in of the richest and most beautiful in the county. It is all settled up by well-to-do farmers. Among the number of fine ranches those belonging to epresented as the largest. The forte of the northern part of the county is confined more to grazing and lumber than to agriculture

## The Town of Tehama

Is situated also on the west bank of the river,
12 miles below Red Bluff, at a poiut where the railroad crosses, and although much smaller, i quite a lively place, being the center of the great grain-producing section of the county
Mr. A, Simpson has a well cultivated tract of 700 acres of good bottom land immediately below the town, while above come the places of
Messrs. Mooney, Schultz and Tyler, the latter iving much attention to the improve tock, having some very fine cattle and thorough Tred horses.
in the vicinity, and consists of about larges 18,000 acres. He is represented by his neighbors to well fenced, and he has built himself a beautiul and substantial residence on Elder creek, Mr. H. C. Wilsona.
Mr. H. C. Wilson, on Thomes creek, eight
miles from town, has also one of the most desirable places in the neighborhood, consisting of about 6,000 acres, the principal portion of which is leased and worked by others. This gives him consists of many different kinds, stock, which variety of breeds of each. It would seem as or fast horses, as he keeps pessed with a passion 30 head of thoroughbreds. He is raising also numerous, from 500 to 600 , and of several varieties, alnong them the full-blood Chester, Berk
shire, Esscx and Poland China. He has 3,500 goats- 10 full-bloods, and 350 crossed up to within one-sixteenth of thoroughbreds. He in large moose or mule-tailed deer, and that h made, he is likely to be successful, they being urther that he harl on his place some 6,000 grape ripe oranges and lemons on the trees of his
orchard.
On the west of the Sacramento there are
three villages. Paskenta, the largest and thrift-
iest, apparently, is about 25 miles west of Te-
hama, and supplies mail matter and other wayte hama, and supplies mail matter and other waut
over quite an extensive area. Henleyville, nearly midway between the last named places, is situated on the north bank of Thomes creek, Farmington is on the projected line of the northern railroad, 15 miles in a southerly direc
tion from Tehama, and although on the plains is surrounded by a body of good farming land Vina
Is a station on the railroad, on the east side o the river, near the southern boundary. The miles above and below, is excellent, and the grain here, as everywhere throughout the
county, may be said to be looking remarkably county, may be said to be looking remarkably
well. Among the number of fine ranches in the more iminediate vicinity of Vina may be nentioned those of Messrs. Copeland, Moore joining the station, has 150 acres in vines, and 30 in apples, peaches, pears, cherries, and other omewhat celebrated "Gerke" wine is made In conclusion let us 8 2y further details -mus Thanks for many letter is already too long. riends of the Rural during this tour throngh Tehama.

## ThE $\mathrm{DAIRY}_{\text {A }}$

## Orchard Grass.

Edirors Press:-Since I last wrote we have ad a succession of showers and soaking rains. Farmers in this section, with few excentions, are through seeding to grain, and most of it is up and looking well. Pastures as yet only rield a scanty subsistence for stock, and with a light stock of hay, and that of poor quality, af in milk are generally thin in flesh and are mak ing only about one-half the lutter per head that they did last seaso
I was in hopes that some of the readers of the RURAL Press in Mendocino and Humboldt counties, who have had experience with orchard grass, would respond to your request and give mate and its value as a forage grass and for

## hay.

 rchard gress ago I purchased a few pounds part I sowed with oats, a part I sowed by itsel pon land prepared for it, and a part I sowed feet below the surface. That which was sown with the oats did not do well. It came up well, but the oats getting the start absorbed all the noisture and about half the orchard grass per tood stand and when ripe stood three feet high. It makes a good sod. It has one peculiarity inits favor: When it throws up its seed stems its favor: When it throws up its seed stems
and is fully ripe, near the ground is always a hick foliage of green leaves which remain green all through the summer and fall without any
irrigation. If it is a valuable and nutritious irrigation. If it is a valuable and nutritious
griuss for stock, it is certainly a great acquisition, as it seems to thrive hetter than the native grasses on the Coast range. My experi-
ment has been too small to test only its grow ing qualities and its adaptability to the climate of the Coast range.
Will not some of the readers of the Press in ad a larger experience with this grass, tell us their opinion of it as a pasture grass and its
value for hay? value for hay?
Borlega, Cal., Dec. 29th.

## The Vineyaro.

## Utilizing the Grape.

Edrrors Press:-The extensive growth of the vine throughout our rich valleys and on our sunny hillsides has created a surplus of grapes, Questions have ariseu as to what shall be done with them. Various pens have written of their atility. Cellars contain their full proportion of wine; our markets are becoming filled with
many brands of raisins; choice varieties in a green state only find ready sale. What is to be-

## me of the balance?

Statements are made that by utilizing them as food for hogs, the bulk of fat well repays the outlay. It is said that in distant lands grapes are grown so abundantly that they are
fed to stock three months in the year. They are also utilized by picking them green and, when dried, pounding them into grape powder
for pickle use (?). Again, grape juice for pickle use (?). Again, grape juice is boiled
down to the consistency of molasses, under the name of "debes," and is said to
In China the wine extracted from the grape
has the property of kceping several years by placing it in pitchers buried in the eart
when brought forth it is a favorite drink
We find that the grape diffcrs in color. The
to the attention or neglect given to its culture,
as the color is wholly in the skin. So the cul
will produce, with equal care in curin
in a high state of bloom and fineness.
To To improve the quality of raisins, pluck the choice clusters and fill our market with excellent fruit. Various gatherings should be green state for market, for drying or wing making. This gives them time to mature and perfect their form... After finishing, the surplus may be boiled down into syrup, made into vinegar, or the grapes may be used to fatten stock.
The grape has many uses. If converting the rape into wine does not pay with the present tax, apply to the Government for aid. Do not
destroy your vines. Make some use of them. destroy your vines. Make some use of them.
GEo. Rich.

## Sheep fio Wool

## Wool Production and Export of 1877.

The annual circular of E. Grisar \& Co., of this ity, contains the following review of the wool industry of 1877:
During the past year the wool growing interSt of California has received a very decided heck, owing to the paucity of rain falling during 1876-1877, and the consequent failure of the grass crop, especially throughout the middle
and southern portions of the State. The mor tality amongst the sheep began in the winter, and rapidly increased as the season advanced, compelling many owners to drive their flocks to the mountains, where, and during their transit to and from, large numbers were lost; other found temporary ranges in the northern parts
of the State, and iu Nevada, also in Arizona and New Mexico, from whence a portion may in all probability return, should the coming season prove to be favorable. These disasters have of the State, from which it must take som time fully to recover. The loss, however, has, to some extent, been counter-balanced
large increase in the northern counties
The receipts of spring clip show that the nat-
ural increase has been lost, and the diminished ural increase has been lost, and the diminished
production of fall wool furnishes evidence of the production of fall wool furnishes evidence of the
great mortality amongst both sheep and lambs. Shearing during the fall has been general, and there will probably be less long stapled wools
than usual the coming clip. The drouth will than usial the coming clip. The drouth will wool hereater, as naturally the poorest sheep
have died, and owners in reducing their flocks have, of course, retained the best. It, has also served to call attention to the advantages of green feed, as an exceptionally large number of grasses, such as alfalfa, etc., and in many case the fall wool from those sheep has been superior, being quite free from dust, and very similar to
spring wools iu appearance and working properties. Of the coming clip, it is too early to
form any estimate, but the amount must be considerably estimate, but the than amount must be The wool product of 1877 has been inferior to being dusty, and the long stapled spring wool were generally in poorer condition. The unusually large proportion of short stapled, dusty wools, resembling those of the fall clip, coming
on the market may be accounted for by the scarcity of food, and consequent suffering of
$\qquad$ Fall wools, also, were generally inferior, al though better than was anticipated. The fall
ing off in the receipts from the south was very narked. The spring and fall clips of the ex treme northern counties were, however, above
the average, both in condition and staple. The market has been good. Spring wool were moved readily, and until late in the season, without any excitementy marked
tion in prices. During July the market here sympathized in the activity prevailing in other wool-growing States, and prices reached a point which subsequent events have shown to be un-
warranted. When fall wools began to arrive stocks were very light. Receipts were at firs sinall, but as they increased, stocks unsgld be came larger. As prices were lower than growers
anticipated, they were at first incliued to hold. At the beginning of November, stocks wer large, but and the warehouses here the amonnt nsual at this time.
Prices during the spring were much higher than those ruling in 1876. Average stapled frec wools opened at 17 to 19 cents, and inaintained 14 to 15 cents for dusty and unsightly parcels. Southern wools ranged from 15 to 19 cents, according to staple condition and frecdom from
bur. Northern wools brought from 26 to 32 cents, the latter price being paid for good sta pled light conditioned and slightly free wools. Rates for tall wool have bcen generally about
the same as those ruling in 1876. The lowe premium ou gold, and latterly the reduction landed in
year
The rcceipts of Oregon wool have increascd.
The Easteru wools were better than heretofore as they contained less alkail and were of finer
uality. Prices ranged from 26 to 29 cents. quality. Prices ranged from 26 to 29 cents.
Valley wools were of the usual character; from
shipped to the East for owners' account, because buyers could not be found here to take the wool character and consequent difference in values of free wools grown in the State, we omit the tab ular quotations heretofore given. Free wool
from one 17 cents, while the productions tions have realized at the same time 30 to 31 cents.




Total fieece wool ................... | $50,360,742$ |
| :---: |
| $2,750,000$ |




## Horticulture.

Soil, Situation and Mulch for Straw berries.
Edirors Press:-As- soils vary in different portions of the State, adaptation to strawberries may not always be found unless some additions are made. Still the strawberry is grown on almost any soil, but soils deep, moist, loamy airy and open in their situation are most favora ble for its growth. In referring to moist land I do not mean land saturated or stagnant and sour. Such land requires drainage to make it productive. Soils adapted to potatoes and cor make good soils for strawberries. There is a distinction of soils as to its productiveness. On highly flavored. On heavy soils they are later and larger.
Soils require diverse treatment. Those of
light, sandy or gravelly nature require the ight, sandy or gravelly nature require the use of cooling manure. egetable matter, clean-
ings of cow stable, rotten compost, spent hops
and castor On the other hand land that io wet and sour ranires direct optis cold, clayey, Light and heating manures are the best, taken direct from the stable.
In regard to variety of herrics, some thrive best in soil in which clay predominates, while others do best in a light, rich soil. Decp soil is requisite, whether light or heavy. All plants
require food. You gather fruit in proportion to the amount of plant food you feed them.

## Mulch.

Mulching berries in our State is not carricd on to such an extent as on the Eastern side.
Still there is virtue in its use during our hot Still there is virtue in its use during our hot The shadow of chips, rubbish, boards or the wood pile on its under soil keeps up a certain degree of moisture. The same principle holds rood in covering plants, trees or anything else. roots and slender fibers will shoot out bencath the surface and not dry out or lose vigor. This they will do without the shade or moisture given by a mulch. Soils act as a mulch to some noisture and temperature. Therefore, the use f clean, ripe straw or hay, swale grass (cut ul the better), or one may take tan bark, sawdust, or mill shavings and throw them in a heap and scatter lime through the mass and it will form compost in a few months that will be ready
for use. This is far more preferable than to use tan bark in a raw state, as your correspondent rom Santa Rosa used in his bcds. Leaves are mulch when they can be had. They should be
 lace without being blown by the wind. They entually can be turned in as fertilizing natter.
Sacramento. Cal.

## Patrows of Hosparipar．

## Removal．




Statement of J．W．A．Wright．
Eimitors Press：－1 have uaturally rad with some interest the resolutions of Stockton and
Dixon Granges，referring to uy humble self， Dixon Granges，referring to uny humble self，
having tirst seen thom in your columns．Of course，it is not pleasant to have any of one＇s language or sentiments in a lecture，intended only for the good of our Order，misunderstood aud censured in this public way by any Grange．
Still less pleasant is it，after devoting one＇s most faithful and unselfish efforts with but small returns for nearly five years to a good oause to see in print so harsh a resolution as that by Stocktou Grange about legislation in in general，which Dixon Grange fully indorses． Since a few of my fellow．Patrons have seen
fit，to publish resolutions which 1 doen very unkind and unjust，they leave me no choice but to make my defence as publiely．This I shall do to the best of my ability，though I wish to do so without harsh fcelings or words．Know－ ing your spaee for Grange matters is limited，I shall eondonse my comments as much as I can．
I merely wish to show wherein the censure of said resolutions is wrong．I am so fortunate as never before to have been rcbuked by any Grange．Such eeusure was wrong for the fol－ lowing reasons
1．It was hasty，being based upon the de ceism of an unfricudly jourual．
2．It condemns a brother publicly without giving him the slightest chance for a hearing， nd thence is contrary to our obligations．
3．It shows a lack of information about the principles and aets of our National and State
（iranges，whose guidance we have fromised to ollow
On the finaneial question onr friends of Dixon Grange say very plainly，that they oppose both ing of the silver dollar of 1101 urains an un－ ing of the silver dollar of that grains an un－ Pilkington nor I have any authority or right to speak for or to commit the Patrons of Husband ry of California，as a body on these questions． wished to assume any authority，that dir not helong us．In arlvocating principles of reforin and legislation， 1 have always wished and tried bodies，and the clear deductions from them．I believe this has always boen the case with my necessor，Bro．Pilkington．It has alway oreible lectures and to co－operate with him every way in my power，and I thought I had than his last at Saeramento．
I must call atteution to the faet，that neither he nor I said a word ou the subject on national nounces at Sacranento，until after 1 had an－ officially from the Cincinnati session，that the National Grange had favored the repeal of the resumption act and the remonetization of silver by over a two－thirds vote．Now it so happened to be guided by in these matters than the Na tional Grauge，for we have all sworn to main tain its chicts．Llence，if Dixon Grange eannot favor these two finaneial measurcs，they should
blame the Natioual frange，not Bro．Pilking－ ton and me for advoeating them，
The most sweepiug，if not the severest of the Stock ton resolutions，is the one which says they Wright as the exponent of the views of the Order in this State on legislation．
I have only this that all legislation on that point．I in my Sacramento lecture or any other is in entire aecord with some authoritative act of
the Natioual Crange or the State trange of California．I challenye anyone inside or outsuide whether any of my fellow－Patrons aeknowledge my authority to advocate our principles of leg－
islation，ctc．，or not a matter of very great indifference to me－if they do not favor the principles 1 have advocated，and ever expeet to
advocate in publie and private，they do not advocate in publie and private，they do not
favor the established principles of our Order． That is all．
As regards other matters with which said
resolutions charge me，I deny，and ny fellow Patrons of Saeramento county，who heard me， have also devied for me，that 1 used any really irreendiary language in my Saeramento leeture． I deny that I have ever uttered or that I enter． tain sentiments＂utterly at variance with the principles of the Order＂and＂good citizen－
the Order，not，only in this State but the
United States．＂All my wishes and efforts have aimed at the contrary results．I always have been and always expect to be on the side
of law and order．I sineercly disapprove of all iolence and lawlessucss and said so most point－ cdly iu the lecture，a small part of which has
been so unjustly critieised．Nothing I said been so unjustly critieised．Nothing I sain to the words of others．The resolutions having an willing to forgive their harshness，and I Write these explanations and deuials for the Rellal Press，not that 1 wish to ceusure my
fellow－Patrons of two firanges for their hasty and unjust condemnation，huit to have the truth known and to prevent the infiurious effeets of such resolutions to a good name a eonserva－
tive citizeu，which I value more tlau Mife itself． I heartily thank my fellow－l＇atrons of Asera－ mento county，anong whom I have worked for some time，for coming forward so promptly to the 5 th，and Thursday，the 10 th，I shall enjo the pleasure of lecturing to them again at ranklin and Ameriean River Granges．
Jan．1st， 187 s ．

## Grange Work at Walnut Creek．

Contra Costa County Grangers aro not ouly alive but lively．Danville Grange met with their ueighbors at Walnut Creek last Saturday and had a very pleasant and we believe profita－ ble mecting．Neveral Patrons frou Oakland and rom Point of Timber Grange wero present and we presume some from other parts of Contra riends gathered in the Methorlist chureh about 12 oclock，and listened to a most interesting as vell as instructive lecture by Dr．Dio．Lewis， of Oakland．The Doctor talked for the interest farmer－the herse that noble the health the women and liberal treatnent of farmers＇wives， fashionable follies，ete．The lecture was well－reeeived．We never heard more jolly and sensib
time．
After the lecture the Patrons and their guests epaired to the dining－hall，where the sisters
pread out an abundance of good things－iu－ spread out an abundance of good things－iu－
cluding coffee，turkey，roast pig，frosted cake， Harvest Feast over，Sister Stcele led an open－ nut Cre，and Danville fran offers with by A．T．Dewey，General Deputy，assisted by Bro．Jasper Jones．The list of officers of each（irange have already，or will soon，appear in the report of clections in the Rural．
It was，indced，pleasant to see so many old
workers whom we met in Walnut Creek（irange years ago，still animaterl in their effort for the good of the Order．Quite a number have heen which lately surrendered its charter．Walnut Creek Grange seems not only flourishing，but bound to progress．A vote was carried almost unanimously on Saturlay to purchasc a $\$ 400$－ ters in the town as soon as practicable．

## P．of H ．in British Columbia

13ro．N．W．Garrctson，who organized tho Sate Granges of California and Oregon，has eceived the appointment from the Dominion lirange（Canada）as a Deputy for planting the Order in British Columbia．He will soon lenve
Portland，Oregon，aud proceed with his good retson greatly endeared himscl with the Patrons in this State during his brief intereourse with them，and all will wish him
（iod－speed in his new field．We believe he will o his work well，and therefore hope that he will be well received aud heartily assisted by Fllowing is a copy of the official notice of his
＂1laving heen requested by prominent farmers in British
Colunfoia to send a Deputy imto the Province，for the purpose of orranizing Granyes of the Patrons，of Hus－
bandry， 1 and lleaselt inform those interested that we
have secured the serviees of N ．W．（iarretson，of 1 tortlath Oregon，U．S．，to organize Gralyes under aut thority of the
Dmininion Grange．Mr．Garretson is a peutle conversant with the work of the Grange gentid well gualil．
fed to nudertake the dityof organizing in a new Province，
 corregpond with him，their communications will receive
inmedinte attention，and any infurmation desired will bo W．Piveu．He will visit the Province at an early day：

Clarkwille（irangen－samuel Kyburz，Sce retary，writes us that the installation at Clarks． ville Grange，in El Dorarlo county，was held Afterward the cawe a fest a las a which were both greatly enjoyed．

EDEN firance has invited all Alameda etc．，at Haywards，on Saturday；Jannary l2th．

1astallation of Officers and harvest feast t Temescal Grange，January 12th，at one
＇cloek，as anuounced last week，


| ；F．Ungor，O．；Jas．Galbreath，1．；E．I． pham，S．；I）．（＇ushman，A．S．；Nister Addio aniels，Nec＇y；S．H1．Del＇erry，C．；（i．M． aniels，T．；F．Wise，1：K．；Sister II．De－ erry，Pomona；Sister Anna Galbrcath，Ceres； ster S．A．Daniels，Flora；Jas．（ialbreath， n．Donal，F．Unger，Trustees． |
| :---: |
|  |
| evenson，$心$ ；lins Clyma，A．S．；If．A． |
| U．；C．Williams，T．；Mrs．L．A． |
| M）in Rrownl，（4．K．；Mlary J． |
| erta ：M．E．Bruce，Poniona；Annic |
| Ohim，refk（irastr．－Eleet |
| noth＇，Nl．；R．C．Swain， |
| ${ }^{\prime} \mathrm{t}$（1）． |
| ¢．：－S．Kingery，T．；A．Ki |
| ector，（f．K．：J．Kingery，（ere |
| orma 1a；sister linner，k＇lora |
| rustees |
| yearst！：and 11. C．Swaiu（for one year） |
| ins N：E，－Election，Dee．8th： |
| Chapmars．Mi．：D．G．Heali，O．；A．Sym－ |
| Hal |
| ce＇y：11．Shuw eh，Cr．K．；Mr |
| es；Miss ${ }^{\text {＇}}$ ．Hammon |
|  |
|  | Ceres；Mliss．Chase，（i．K．；Mrs．Jenny Tyson， phine Horner，Flora；Mrs．L．F．Osgoed，L．A． saturday in January．

Clitranille（ibasee，No．149，El，Joramo Leachman，
T．；S．Kyburz，See y；W．Johnson，（i．K．；Mrs Fmma Woodward，Ceres；Mrs，Li．S．Kyburz，
Pomona；Miss Mary Mills，Flora；Mrs．Ellie E： Winehcl，
Colnsa（iranien，No．48，（ olusa Cu．－Elee tion，Dec．4th：K．Jones，M．；David Lewis， O ． Cireeu，A．s．；F．l3．Reed，C．；Mrs．L．（7 Stomer，G．K．；Mrs．C．K．Webley，Ceres； Mrs．Mary Kilgore，Pomona；Mrs，
Flora；Miss Katie Jones，L．A．S．

Conpidence Grangi，No．12l．－Election John Sewlove lipit，M．：A．Mckechnie C．Mctiuire，A．S．；Mrs．Angie Ayrcs，C．；A wen， 1 ，K．：Mrs．E．A．Hudson，Ceres；Mrs． Flora；Mrs．R．N．Triplett，L．C．A．Cocke， Flora；Mrs．R．N．Triplett，L．A．
Corronwonn
Cotronwoon（rrasge，Mercen（o．－J．L．．
Crittenden，M．；T．M．Gardner，O．；Mrs．M．P． rarduer，L．：S．Ewing，S．；J．L．Hale，A．S． True，Nec＇y：W．T．Bradley，（i．K．；Mrs．A． Pomona；Mrs．M．C．Wiggs，Flora；Miss L， Tinuin，

Installation third saturday
Dexverton Gbaniek，No．123，Solano Co． Eullars，O．；W．D．Merrill，Carrington，（I．H．Bullars Mrs．J．E．Stewart，A．N．；Mrs．l．，Speneer，
Mrs．Merrill，T．；John，Bird，See＇y；R．H． Barkway，（：K．；Mrs．H．Carrington，Ceres； Mrs．E．Urnold，Pomona；Mlrs．N．Barnes，Flora；
Mrs．E．Bullars，L．A．S． Eilliot Hravie，No．183．－Elcetion，Dee．
22d：H．H．West，M．；Jas．Lamb，O．；Mrs，

Creen，L．；F．litter，S；H．B．Smith，A．
Mrs．M．A．West，C．；U．M．West，T．；H． Adams，Nee＇y；J．Wiltse，（i，K．；Mrs．Hannah
Adams，（＇eres：Mrs．Misener，Pomona；Miss Ausie Adams，Flora；Mrs．Lamb，L．A．今．
 Dec．F．B．Fitch，L．；F．Bell，S．；A．Nl．Ciunter， A．．；L．B．Sharp，C．；Nelson Shaner，T．； W．Parker，Ceres；Mliss Mary Shaner，Pomona
Mrs．J．C＇anpbell，Flora；Mrs．Plummer，L．A．S． Florin（tranter，No．130．－C．Towle，M．； Taylor，O．；I．Reese，L．；Sister U．l’ates，S． 11．1ucll，T．；1．T．Amos，Sec＇y；J．Jaekson， I＇omona；S．A．Buell，Flora；E．A．Fassett，L
A．S． Lassen（irange．No．2̄̄3．－1：．s．Talbot，Nl． Theo．Williams，A．S．；E．Winchest，（1．；T．N Long，T．；C．W．Moore，Eec＇y；Allen Wood，
（i．K．；Mrs．T．N．Long，Ceres；Mrs．C．John
son，Ionona；Mlrs．Nary Iennett，Flora． Livcola Granik．Election，Dee，15th： J．Sonle，M．；Mollis Newton，O．；Jacol
L．；※．J．Lewis，太；John Crook，A．太．；J．P＇
Fowler，C．；E．J．Cox，T．；J．太．Philbriek， Sec＇y；C．Cronk，（i．K．；Mrs．H．J．Cox，Ceres；
Mrs．A．İ．F＇rench，l＇omona；Mrs．II．Newtou， Mrs．A．1．＇rrench，l＇omona；Mrs．II．Newtou，
Flora；Mrs．T．I）．Williams，L．A．S．
Matrole fieange，No．201．－Eleetion，Hec．
15th：David Simmons，M．：Stephen fioff， 0
 M．K．${ }^{\text {M Mrs．Martha Simmons，Ceres；Mrs }}$ Flora；Mrs．Sarah F．，Marshall，L
stallation Jauuary 19th， 1878.
Oiticers of C
elect，date
ottice direct．

 A．\＆；C！C．Watson，C．；N．Ne，son，T．；James Anderson，Sec＇y；（ieorge Hoffmat ．G．K．：Nis－
ter．Watton，Ceres：Sister A nnie Abell，
lomona；Sister Lena Rhodes，Fh ra；Sister Virginia Kerren，1．A．A．；W．${ }^{\text {＇} u \text { uroughs，}}$
 H．C．Fainsworth，C＇eres；Mrs．M．Hale，l＇omona：
Mrs．W．L．Manly，Flora；Miss Jennie Yowell， Vili．k．jo（irange，No． 113 ，Solano C＇o．－．J．
F．Demiug，M．；S．S．Drake，O．；G．C．Y＇earson， L．；C．Deming，S．；M．Carroll，A．S；Mrs．A．
Deming，（＇；B．Brown，T；Mrs．C．J．Mnsely，
See＇y；（i．Cireenwood，fi，K．；Mrs．Iettie Dem－ hee＇y；1．Cireenwood，（；．K．；Mrs．Mettie Dem－ C．Pearbon，Flora；Mrs．S．S．Drake，L．A．s taaka Co．J．J．Holloway，M．；Jock Miller，U．：
M．H．Stephen，L；F．D．Cook，S．；B．T． Wiley，A．\＆；John Thornburgh，C．；Mrs．M． Moore，f．K．；Mrs，Elizaheth Harris，Ccres Nitephen，J＇lora；Mrs．Sarah Linelangh，L．A．S．
 W＇n．Kell Sec y；John Lawson，G．K．；Sister F．J．Kelly， E．Roblen，Flora；Sister listher Ialph，1．A．S ville Giaver，No．10й，（Consotidated）．－．J Me．Mullen，M．；Mrs．J．M．Baldwin，O．；Mrs．
A．M1．Cox，L．Mrs．Geo．M．Berry，S．．I． 1 ． Morris，A．S．；J．Cunningham，C．；J．M．Bald （i．K．；Mrs．G．11．Ellsworth，Ceres；Mrs．M．J Hora；Mrs，A．Paugburn，IL A．S．
 Hart，Sec＇y；J．A．Goodwin，T．；P．S．Tracy，
（i．K．；Mrs．J．A．（Goodwin，Ceres；Mrs．A．P Merritt，Pomona；Mrs．（1．W．Wray，Flora Mrs．J．Nerritt，L．A．


Agriculturil Notes.

## California.

Our Crop.-Sun, Jan. 5: There has been a greater area sown to wheat in this couuty than
ever before, and it is all looking very well, considering the extraordinary heavy frosts of the
last fortnight. That has of course a tendency to turn it yellow, but a rain will bring it out of EL DORADO
The Crops. - Repullican, Jan. 3: We have interviewed a number of farmers of late who
reside in this vicinity, and none have we found who complains in the least at the outlook. Al
predict good crops of grain and hay, and as the past season was an "off" one for fruit, we may confidently expect an abundent crop this sea
son, which alone will put from $\$ 200,000$ to son, which alone will put of the producers.
$\$ 300,000$ into the pockets
Everything looks bright for the coming season. FRESNO.
Notes.-Expositor Jan. 1: We learn that the of the Sierras, plains, bordering the foothills the farmers plow up new land. The grass on more forward than it is in this vicinity. A few days ago our people had begun to get disthe consequent sufferings of stock on account of scarcity of feed. Now, since the rain, they
feel in better spirits, and are hopefnl for the future.

Edtors Press:-Our total rainfall to date has been 3.05 inches. Grain is looking well at
present. The acreage sown is less than last preasent. Grass is good and growing fast since are doing reasonably well. -E. S. Russell, Bor den, Jan. Sth.
KERN.
the conclusion, Jan. 5: Mr. E. R. Green, ou the conclnsion of his harvest, fonnd himsel
in possession of corn to the value of $\$ 4,000$. It was raised from 100 acres of new ground, and for quality has never been excelled in the State. He proposes to double the quantity the coming
season. The efficiency of the Kern Island Canal throngh the dryest season ever known in southern California, is most thoroughly estab-
lished. There is general exnltation by the stock men over the favorable weather since the
heavy rains. In some of the alfalfa fields hay heavy rains. In some of the alfalfa fields hay side, but many were too poor to shrvive, even
when driven in the midst of plenty. The large when driven iul the midst of plenty. The large
bands have already been started for the foothills.

## OS ANGELES

Good Dircir.-..Edrons Press: We are at Work building one of the finest irrigation ditches
in the State, aud I hope that hereafter the dry seasons will not affect us like the last did.-H.

## INCREASED

Increased Area.- Santa Monica Outlook̀, were constantly in sight of extensive seediug operations. Qnite an area is being sown to
barley just out of town by several parties. Beyond, when one reaches the plains beginning at the Centinela, and stretching away to Wil-
mington, a distance of some 16 miles, his eyes rest upon large fields of grain already green;
others brown, and fresh and jnst sown, while others brown, and fresl and jnst sown, while
large gangs drawn by four, six and eight horses, dot the plains in all directions. This large sec-
tion was barren last' year, and of conrse ther are many similar localities in the conntry, which are now being sown to grain. To these let us add the large areas that are seeded every mous small grain crop that will be gathered next harvest.
Edrors Press:-Our frosty spell is over,
now raining and thermometer marks $43^{\circ}$. Twenty hundredths of an inch has fallen dnr ing the night; .04 fell last week in the shape of
frost; $25^{\circ}$ was the lowest marking of the thermometer; $21^{\circ}$ in Potter. Grain is not injured,
the ground not being wet enongh. Nine and seventy-one one-hundredths inches is our fall
of rain for the season. Only a few of the strcams are running, and they not strong.-A.
O. C.. Ukiah, Jan. 7 th.

## MONTEREY.

and February will not fail of some rain, so that a more prosperous year than the last may be ley short rains may still produce a good crop if the temperatnre be not too low and the fogs of alroady more rain than last year and can there Pine Station.-Cor. Star, Jan. 4: We have some very forward grain in our neighborhood cominencing to fall or lodye. The ground
seems to be plenty wet elough for the present.
In digging tree holes we found the water has gone down from four to five feet. I find only one case of there being dry dirt at the depth of
three and one-half or four feet. In digging a five-foot hole to remove gravel, it was found
wet the entire depth. What rain has fallen
has come in showers, so as to all sink in and
not run off. Mcssrs. (iraves \& Sous have sold

80 head of their caltle to a party in Knight's
valley, to make rooms, as their feed is getting short. The immense stacks of straw are grow-
ing small. Some people think straw poor feed, but it will maintain life--in fact, keep cattle in fair living condition-yet there is much of it wasted.
Editors Press:-I have been four months anong the oak timbers bordering the foothill interest for you. I conld not help telling these people that I thought they ought to have more
to show for a five or a ten-vears' residence upon their claims. "There is the Nickerson ranch right in your neighborhood, what was there to hinder there being a constant succession of such places the whole length of Doty's raviae." improvement. Some are ashamed at buying government wood. J. C. Crosby had a castor
bean plant which survived ten winters and bor beans in various stages of growth, every month
of that time. This last fall it showed signs of failure, but whether from old age or on account of the extreme dry season we could not deter five years old. Mr. Crosby also had a tobaceo plant that grew and blossomed for four sum-
mers. In the midst of such climate and with such soil, there is very little
of residence. -Jergh Arri.
SACRAMENTO
Alfalfa or Barley.-J. N. Hoag in Record mine for ourselvas which is the best winter feed for hogs-growing alfalfa or growing barley.
We had a field sown in barley and alfalfa last spring. We headed the barley and cut the
stubble and young alfalfa for hay. There then grew a second crop of allalfa hay, and we cut this also. When the first rain cane there came as thick as it should be sown for a crop. Since that time, though we have been pasturing it
with cows and hogs, both the alfalfa and barley have been growing rapidly, each seemingly rosty weather commenced, however, the barley alfalfa looks wilted and checked, the barley keeps green and tender as ever. We have also
noticed that hogs reject the alfalfa but eat the young barley as eagerly as ever. In addition olcan alfalfa where the seed appears to be ield these hogs have now thrived as well as hose that have had both alfalfa and barley to sow a pieceafter of barley early-say before the firs rains-on purpose for winter feed for hogs. $t$ can be pastured all winter till March, and will then nake a better crop than if sown late. SAN DIEGO.
he National.-News, Jan. 1: Mr. Walker, of mas day, the largest beet we have evcr seen. It Was a blood beet of the ordinary quality. He
had the beet photographed, and we do not onder at that, as its size and appearance ought to be perpetuated. The beet, or rather the high, and weighed 166 pounds, while its mate, dig from the same row, weighed 93 pounds. These beets were only the growth of one season, being planted less than a year ago SAN JOAQUIN
Large Pears.--Independent, Dec. 31: Pears Easter Beurre variety, of immense size, pro-
anced in the orchard of Mr. Phelps, not far nom the Agricnltural Society's park, excited the wonder of sojourners from New York last Saturday. That variety is large, roundish oval, yellow, melting and rieh, and will keep until pring. Visitors from the East regard the dishe year with perfect amazement

## SONOMA.

Alexander Valley.-Flay, Jan. 3; M. seeding is in the main done; wheat is up about
six inches, thrifty, and has a good stand. The six inches, thrifty, and has a good stand. The better for that. Early-sown barley is exceedingly heavy.
Argus Notes.-Petaluma, Jan. 3: Neal
HeIsaacs, at Nicasio, says that this is so far ne of the most favorable seasons he has known J. C. Scndder informs us that crop prospects in
Green valley and the vicinity of Sebastopol, Green valley and the vicinity of Sebastopol, year. J. McMillen, of Tomales: Crop prospects are fully as good as usual in Tomales. the growth of vegetatiou, but the sea
a week ago has
Returned.-News, Jan. 3: Mr. A. Stonsi
er, of Hill's Ferry, after an absence of some his band of fine French part of the State, with
turued. He comes home feeling much better turned. He comes home feching mueh better fore. In his pilgrinage he has been very forHe lost but 25 head during the season.
TuE Season. - Herallt: Tho rainfall during December amounted to $60-100$ ths, a very small season. Still many are confident that we will
have abmince of rain during the month of
anuary. The grain is up and growing, and
will not suffer any for two or three weeks. Feed is
nights.

## Oregon.

Orbaon Productions.-Oregonian, Dec. 29. To be seen last night at the st. Charles hotel, egon exhibit" at Philadelphia: Oats in the straw measuring over seven feet high; samples of wheat raised on the farm of G. 1 . Sackus on the Columbia river, and yielding 80 bushels borue, near Walla Walla, a veraging 75 bushels per acre, in a fiela of 50 acres; a strawberry no plant grown in the open air in the garden
of Dr. Adauns, Hood river. Likewise at the

Adans, Hool river. Likewise at the
R. R. office, a turnip raised on railroad ands near silverton, measuring $27 \times 26$ inches in when first dug three pounds and two ounces, without any excrescence or secould growth,
raised by S. Herren near Jefferson.

## News in Brief.

The Pope eontinues to improve in health.
The Pottsville Bauk, Pensylvania The Pottsville Bauk, Pennsylvania, has sus-

Gen. John O'Neill, the noted Fenian leader, GENERA
dead.
General Graitt has arrived in Cairo, and has
isited the Khedive.
The National W
The National Woman Suffrage Associatiore i
Charles M. Nye, son.
Charles M. Mye, son of the late Senator, is
The Columbia river has been filled with ice
uring the past few days.
Don Francisco de la Guerra, a noted mative Californian, is dead.
AN octopus eight feet in length was found at
An octopus eight feet in length was found at
Hunter's Point Dry Dock a few days ago. Hunter's Point Dry Dock a few days ago.
Is New England, on Monday morning the thermometer marked from 24 to 42 degrees be The zero.
The U. S. Supreme Court has rejected the
The McGarrahan claim.
The late Nathan Come
The late Nathan Coombs, of Napa, left prop-
erty valued at $\$ 363,750$, to be divided equally erty valued at $\$ 363,750$,
among his five children.
The garroting epidemic is becoming alarm ing in San Francisco. Robberies are being
Ninety-Nine new buildings werc erected a
Rio Vista during last year, at an estimated Rio Vista
The big California ship Three Brothers has
just. arrived fiom liverpool, making the fas
age in 112 days.
The difficulty
garding the threatened execntion of a Spanish
ubject, has been amicably arranged.
been indicted by the grand jury for riot and
been indicted by the grand jury for riot and
conspiracy, but were released on bail.
The absurd report comes from Paris, that
Bonanza Mackay is to become Count di Mac-
kay by purchasing an Italian earldom.
THE Pennsylvania Snpreme Conrt has a
firmed the sentence of death passed on Molly Maguires Hexter, Tully, McCune and Kehoe.
The attachment against the Collinsville Fish THe attachment against the Collinsville Fish Cannery, owned by Emerson Corville, has been
released, and its original owners have taken ossession again.
military ShFter, before the sub-committee on military affairs, testified that there was less
stealing on the Texas border during the past year than in any former year.
ON Tuesday 14 tons of bultion were received rom the California and Consolidated Virgina mines. This is one of the heaviest shipments received in this city for some time.
Augustus Hemmerway, of the class of '75 f Harvard College, has given that institution that will accommodate 300 persons. A Washington special says the Cabinet has agreed to recommend a popnlar loan, and the President will send a message to Congress
once, asking for legislation upon the subject.
Hickox \& Spear, bankers oi this city ha Hickox \& Spear, bankers of this city have
made an assignment for the benefit of their made an assignment for the benefit of their rty of the firm, slightly exceed the liabilities. Tuis week has been marked by heavy bank
uptcies, in Chicago especially, but also in the vorthes, in Chicago especially, but also in the and a decline in real estate bcing the prime
The report of the Commissioners of Immi-
gration shows that the total number of aliens
which arrived at New York last year was 54,536 ,
a decrease of 16,129 , comparcd with the pre-
a decrease of 16,129 , comparcd with the previons year.
The new
Che new tug bnilt by order of the Harbor
Commissioners has been launched, and is now
at Harrison street, receiving her boilers and
machinery. She has been named the Governor Irwin, and will soon be ready for service
A St. Petersburg dispatch says that hopes of an armisticc are rapidly disappearing. The strictest secrecy is maintained as to the terms
Rnssia would propose. It is said that even the Commander-in-Chicf has not yet been in-
structed on this point.
Liev'. Wise and his party of explorers rc-
turned to Panama from the cxamination of the
Bayano. The examination of this route ha
tended to confirm tho repurt of Commander
would be necessary in opening the Isthmus

Victore Emanuel, the king of Italy, died on Tuesday.
Keene says be is $\$ 2,500,000$ ahead of Wall treet Ir is estimated that $\mathrm{l}^{\prime}, 593$ hou'ses were erected THE number of deaths in Chicago, duriug $8^{\prime} 77$ was 8,026 , or 546 less than in 1876 . ... . The total number of bodies thus far recovered from the
York is 15.
A NEw frawd upon the Indians has been dis covered connected with the sale of their surplus produc
SEVERAL Tessels were driven ashore and oundered in a gale on the Massachusetts coast Supervisor Gibrs, of this city, has been equitted of the trivial charges of misappropria The election funds.
The Oakland Transeript has changed hands. Mr. Johnson, of Santa Barbara, has purchased the entire establishnnent
men of the Lathan has resigned the Presi ency of the London a.ad
Ar the East there has been an unusual fall ain, and the prayer has been for a change to THE teled cold weather
and Catephone has been tried between Dover dect satisfaction to the in The British government embargoed 2,000 cases of cartridges on board a steaner at OarIr is said that Victoria and New Tacoma will the termini of the Pacific Mail Steamship orth coast service in a short timc
Fulton to go on with the sale of prod Collector Fulton to go on with the sale of property aban IT is again reported that
It is again reported that Jomes Gordon Bendon, to be called the London Herald. The Great Western market, on Bush street, in a building formerly nsed as a stable by the The Kickapoo Indians in Mexico forme has ur "are now asking to be allowed to return to the United Sitates, as Mexico is too
Interval revenuc receipts for December fell off $\$ 448,000$. The cause is thonght to be the
agitation in Congress to reduce taxes on whisk

Ir is stated that President Diaz has signified the desire of Mexico to resume diplomatic relaapproaching exhibition. Ohio train during the July a strike, killing two persons, has been found quilty of murrder in the
second degree and sentenced to 18 years ims.

Probably an order will soon be issued from he Treasury Department for uniforming Cusonewhat on experiments yet to be made in oue New Orleans for Liverpool, loaded veared from 000 , the largest shipment ever made in one day Gom ally southern port.
has been but one conviction ine fact that ther der since the abolition of the death penalty, in refutation of the argument that a carnival of THE would follow such abolition.
The Official Gazette of London announces the
creation of the Imperial Order of the Crown of ndia, for ladies only. The order has been con esses, and 18 other persons of distinction. The grand jury suggests that, as diptheria i shonld be ellacted which makes it a penal of fense to send children to school out of a family 912 deaths last year from this diseasc.
The Aldermen's Committee for the investiga-
ion of New York ring frands have finished tion of New lork ring frands have finished a
report. It seems that of thirty millions stolen 876,000 has been recovered. The committe ot given up their stealings, including Oakey Mir.
Mr. SWIFT has in the Assembly a bill to presuch as are known to bs tho usual food for sal mou and large fish. His plan is to stop the taking of these small fish to dry them, as is now stop the drying of such fish
Ir is stated that l'resident Hayes has defi nitcly determined to make the Chinese question
the subject of a special message to Congress. In this message he will call attention to present and prospective evnls of nulimited Chinese in migration to this conntry, and will recommen may be most proper and effective to restrict and regulate the inumigration of Mongolians.
T'ue Supervisors, on Monday cvening, on mo
reging tion: Resolverl, That this Board is opposed to and deprecates any action being taken by the Legislature of this State to compel tho employ chargo and expeuso of the taxpayers of this city and county, and hereby respectfully re
quest that all legislative action taken in refer in this city and county shall vest the number to ment in the discretion of this Board.

## 2) 

 Treasures.Malden nithng at the elose of day
 That sweet torgetene nothe, thrice preciois, now Yet though the fow rect now has lost its butes t tioites the matad deatere hie nevere knew


1 mother gzing ind aurl or grold Whiont tell herot he tine she did ontold dink
 But sonn the tond one exesing her despair Herbor from her, and that the eoliden hair She reasuresith her ango edindidis ineeven

An azed man with waving silverd hair







## Modern Tyranny.

Fimpors Press:-The annual taxgatherer s around again, and I am more fully convinced than ever that there is more truth in the principles for which our forefathers fought and died than people generally comprehend-that is, "That taxation without representation is tyranny." I notice that women as well as captain's office and settle, even though the latter have had no say as to how their money is to be expended.
As according to the old doctrive it takes a an and woman to make one-man being the ne according to law, it is perhaps not surprisgig that we should be so ignored in regard to cypher by which one-half of the world is repeseated legally and intellectually, the same spirit which actuated the brave hearts of 100 ears ago now urges us to clain for ourselves, with a self-satisfaction fully as intense as any gained by custom, or prerogative, in what a imple mamer and with what entire accordance o arithmetical principles the little cypher wedged in the vacant space, or added with small consideration, increases tenfold the value of the quantity to which it may be attached. ion with endorse the sentimo be that taxawords are full of meaning and so plain that "he who runs may read," Are women taxed? Then why not represented. Do you tell me that our are many arguments made to prove that we are so represented, but every argument that call be made in favor of suffrage for man applies equally to woman. There cau be no better argument made of the necessity of woman rep-
resenting herself than the manner in which she is nsually so palpably ignored, and which you see illustrated in the affairs of everyday life. A faint snspicion arises in my mind as to whether the opinions of the wife are fully rep-
resented by the husband in his speech, his yote resented by the husband inl his speech, his vote,
or his actions. If she is not present to expound or his actions. If she is not present to expound too much for granted. "My dear," he remarks to his better half, "there is to be a delicious little supper at Brown's to-night and I will do my best to represent you!" or he may volunteer to be present for her at the lecture, couccrt, or sermon. These comparasions may seem irrathat a being of mature yeare so than the indea that a beilig or mature years and intellect can perhaps contrary dispositions? Yet we are every day asked to accept this as an established fact. Can we expect the misfortune of sex
destroy the noble attribute of self-respect? Any being of independent spirit, born with love of justice and a proper self-appreciation, cannot possibly be sufficiently represented by another, Who has opinions dear to himself and
ples embodied in the words $I$ have just quoted,
are not less evident now when applied to pare not less evident now when appliad to
woman than in the days of the revolution when wom an than in the days of the revilthor, heo
our foreathers, yea, and our mothers, too fought and died for liberty. So believing in the goad time coming, let us $g$ bravely ou, count
jing the milcstones of the coming years, feeling sure that the tine will come when our nation will be able to see clearly the whole meaning of that brave declaration:
representation is tyranny.

## Dress Materials.

Evening dresses usually follow after street and visiting costumes in the order of interes felt by a lady who is fond of social life. Not that full dress is least because last in being pre pared, but because her other apparel is first re
quired for use. It was at one time supposed that the "Princess" style of shaping a costume


## A Street and visiting costume.

was unsuited to anything but the heaviest fab-
rics, but a trial of models for this gracefui dress has established the fact that it is an altogether elegant fashion even for tissues. A plain under dress cut by the same model is always worn beneath gossamer materials, but this underlress need not be made of silk if it is inconvenient.
The silky surface of an English silesia not nuly The silky surface of an English silesia not ouly but it may be procured in all the evening shades, Soft wooleu goods in cashmeres, cloth, etc., in evening colors, are in large mand, they are now as much an established need in the outfit of young ladies, both married and single, as are black cashmeres in the ward robe of ladies of every age. These goods receive all the shades that can be found in evening silks, and are less trying to the figure and complexion, because they bear no gloss upon their
surfaces, and besides they wash quite as well as a piece of linen.
Plain silk or satin sleeves, silk pipings anc perhaps other additions of ornament, are made

> The coat shown in this engraving was cut by pattern
No. 6030 . The waist by pattern No. 6024 . The skirt by
No. 4886 . The overskirt by No. 6041 . These can be ob No. 4836. The overskirt by No. 6001. These can be ob
tained at the agency of Bitterick \& Co., 12\& Post
street, San Francisen. See ailvertisement in anlther
o bourettes to highten and intensify their rough effects. For vcry elegant toilettes Lyons popular combined with brocades take the lead in popular favor. For cloaks, rough and smoot basket beavers, hinchill cloths, velvete, vel veteens, plushes, and shagg are worn.

A ScN Stove. - An East Indian newspaper made of Mr. Adams' patent solar cooking appa ratus; the result was pronounced to be highl satisfactory. At $110^{f}$ clock in the forenoon the apparatus was so placed in the open air as to receive the solar rays, and abont every hal hour its iuclination was changed by a touch of
the hand. A bout 4 o'clock in the afternoon the apparatus was removed from the spot, place in a room, and covered with a railway rug. At 8 P. M., wheu the cover and the rug wer removed, the contents (several pounds of mut-
ton and some vegetables) were found thoronghly

## After the Honeymoon

Most wives after a year or two of wedded life dmit to themselves-if not to one or two per sonal friends-that husbands differ essentially cosen of their hearts. The cmall, the courtesies, which made the lover mall, switl re forgotten or put aside, and the husbaud nakes anybody else welcome to perform such五ces for his wife, so long as he is not internd with in the enjoyment of his newspaper tranger, the friend, the guest, the casual parasol runs the wife's trivial errands. The aext one handy is the convenient person ou whom these little duties devolve in too many and now she who was a sovereign lady must minister to the wants of her former slave-now her lord. She does not doubt her husband's fealty. She knows that he is ready for all the big things of life! but she who longs for the every-day demonstration of luve, would rather have the little things. To her it is not the great sacrifice, the all day work and weariness that constitute evidence of affection, but what was evidence of now, berd ore narriage is to her little cares that warmed her girlish heart, the things he would be doing for her and her personality alone. And uow he is indifficrent and careless, not only when they are alone butworst sting of all-when in company.
Womaus pride is usually equal to her love. She cannot bcar that others should see her husband's neglect of her, she wants people to see by his outward demeanor that she has been able to preserve his love. The small courtesies of In rare instances women are to blame for this tate of affairs; a vixeu or a sloven cannot hope as a rule it is the man not the woman who ignores the graceful atteutions which sweeten life. It is the wife who tries to make home What it should be, and herself as pleasing an object as may be in her lord's eyes, and it is often by this very course of her's that his neglect has come about. She has pampered him till complains; the wife with self-respect or spirit makes no demands; what love does not render as a free-will offering sle will go without; but if her husband knew what she suffered in going without, it would never be withheld, for his neglect usually has its origin in thoughtlessness, or perhaps the fanlt lics with his parents. Most boys are trained to an utter disregard of the feelings of others. The sympathetic and considerate are got in their lime in Rural New Vorker

Draining the German Springs. - Much ex itment has been crcated at Emis, in Germany, by the threatened destruction of the baths which are its main dependence. The miving companies working in that neighborhood are andermining the springs. The mines formerly snpplied lead and silver only, but since the cx tension of the manufactnre of steel, the gangue rock-which is a carbonate of iron-has become more important than the other parts of the orc. The fact secms to be that the in creased activity given of profit has led to excavations to a depth which may really interfere with the natural water courses of the region. Such a result is by no means new in mining, for, frequently, wells and springs dry up when the shafts near then are sunk to a great depth. Sometimes the mine is the snfferer from the mishap, as was the casc with the famous Rainmelsherg copper mine. The discovery of a very rich veln in one portion of the workings Was followed a town of 10,000 inhabitants, situated two or three milcs from the Ramnielsberg shafts. The managers were ubliged to wall up their rich stores and furego the benefit of work ing them. At Ems an investigatiou has bee ordered, bnt as yet the result has not been re ported, 80 that, for the present, it cannot be dc ermined whether the baths or the mines are be the sufferers.
Origin of the Name of "Punkin-Head," -Newhaven (now New Haven) is celebrated for having given the name of "punkin-hcads" to all the New Englanders. It originated from the "Blue laws," which enjoined every malc to hav his hair cut round by a cap. When caps were ot to be had, they substitutcd the hard shel fumpkin, which being put on the heal round aturday, the hair posed to be derived from this custom, say Peters in his History of Connecticut, I know pot; but there is much pradence in it; first, prevents the hair from snarling; secondly, it saves the use of combs, bags and ribbons hirdly, the hair cannot incoonmode they eyes by falling over them; and fourthly, such per ons as have lost their ears for heresy and othe wickedne
A little fellow, five or six years old, who ad been wearing uudershirts much to small fo im, was one day, after having bcen washed put into a garment as much too large as the
other had been too small. Our six-year.old ther hai then shoulders, shook himsclf, walked around, and finely burst out with, "Ma, I do feet awful lonesome in this shirt:

## Chaff.

"I CAN'T sold you some of dot sauerkrout,"
said a Shelby Dutchman. "I shust hafe tree barhels, und I keeps dot in case of sickness." Josir Billings says: "Don't despise your
poor relations. They might get rich some time poor relations. They might get rich some time,
and then it would be so hard to explain things." A MAN in Louisiana has had four wives go off
and leave him. The fifth he swapped for an old shotgun, and now he has got something that won
A LITtLe Florida boy taught an alligator to
ome to the shore and take food out of his hand. come to the shore and take food out of his hand. it took the food and the little Florida boy too.
Mampa: Look, Cissy, here is the dear doctor coming. What a favorite he is! See, even
the little chickens run to meet him. Cissy;
Yes. ma; and the little ducks cry "Quack! Yes. ma; and the littl
quack!"-Funny Folks.
"Mariah! Mariah! please slet me in!" said a man to his wife, who was looking out of
the window watching him trying to open the the window watching him
door with a toothpick. ",
and it'sh all flattened out,"
Two men met on the piazza of a hotel at Lincoln, Neb. One claimed that Nebraska was all said he, "is good society and water."
the other: "That is all that Tophet lacks."
Frrst Scot: "Fat sort o" minister hae ye
otten, Geordie?" SEcond Dirto: "Oh! weel" gotten, Geordie?" SECOND DIrro: "Oh! weel
he's no muckle worth. We seldom get a glint o' him. Sax days o'th' week he's enveesibl
and on the seventh he's encomprehensible."
Mamma sat in the nursery, sewing, wit baby May playing at her feet. Six-year-old
Lau was there, too, tending her dolly; and
Mand Mamma was talking to her of her duty and
pleasure of being kind and generous to those
not so well off as ourselves. Lou drank it all eagerly. Her eyes grew bright and earnest.
"Oh! Mamma," she cried, "if baby had something awful pretty, and there was a real poor little girl coming along the si,
CAN such things B? A young laly of the . in
gorgeous R A went out 2 T. She 80, but soon gorgeous R A went out 2 T . She 80, but soon
arose from the table, saying: IC O I wish for here. Society is going into $\mathbf{D}$ K, or I am D. C they R not 2 B filled. Is there NE Ds N tell me B 4 I go? I would rather be hung in F $1 G$, and have an $L E$, writen on my untimel teath by an "occasional poet, than quietly
submit 2 such treatment. I will go 4th like $X \& R$ and weep for new worlds 2 conquer. IN an assize court the crier was old and
deaf. "Call Arabella Hanks," said the Judge.
Entertaining much doubt of the name the crier arose from his seat and said with much puzzled look. "What, your lordship?" "Call Ara-
loella Hanks, crier," repeated the Judge, much provoked. The old crier thereupon, with a countenance indicating both doubt and despera-
tion, in his loudest voice called out, "Yaller Belly Shanks! Yaller Belly Shanks!! , Yaller Belly shanks!! come imto the court! It is was compromised; and quiet was restored only by the crier, who, in answer to the court as by the crier, who, in answer to the court as No, my lord; and I don't believe there is
such a person in the town, I have lived here 40 years, and I never leard of him before!'
A New Arctic Expedition.-A whaling steamship, the Vega, has been bought for the Swedish Arctic expedition, which is to start
next July from Gothenburg. The vessel is yery next July from Gothenburg. The vessel is very
strongly built, and can carry coal enough for a strongly built, and can carry coal enough for a
cruise of 8,000 miles; she is to be supplied with
sufficient provisious to Capt. Palander will be in command; less than 30 persons will be on board, in all; three or four
will constitute the scientific corps. The Kin of Sweden, the Government, Oscar Dickson, of Gothenburg, and Mr. Sibariakoff (a Russian), conjointly defray the expenses. The projected
voyage will circumnavigate Asia and Europe.
A Japanese Directory.-Prof. Edward S. Morse, now of the University of Japan, in lec-
turing about the Japanese in Canbride other evening, praised their diet of grassthe city directory of Tokio as a much more
poetical volume than people are accustomed to think directories can be; it contains, besides the names of streets and business places, the locali-
ties of pleasant walks about the city, with directions where "sweet singing insects" can be foliage, etc
The Sycamore of Palestine.-The sycamore of Scripture, it may be observed, is a species of
fif. The English sycamore, a maple, and our
sycamore, the buttonord camore, the buttonwood, being so called from
he resemblance of their leaves to the old-time
It was at one time thought, from carvings, entations are now proved to be the fruit of An Arrican Rallway.-In the United
States Senate, on the 7th ult., Mr. Conkling States Senate, on the 7th ult, Mr. Conkling
(New York) presented a petition of Austin
Packard and others, of New York, in favor of cate with other nations with a view of
railroad across the continent of Africa.

## Young Folks' Column.

## Jesus Who?

John W. Chadwick's little daughter May once asked "What's Jesus' other name." "Jesus
Who ". "Jesus God?" This being told to Mr.
W. C. Gannet, he thereupon wrote the follow-

And are the children prophets then,
Or have they lived before; To speakk grayid words, so so simple wise
And babble spirit lore.
Their wonder plays on questions quaint,
Cilke vision ald surprises yates whose clumsy swing,
Re
Reveals hali paradise.

The earth is one home only,
Our father only one; And all the fokss ane brothers,
And every one his son.
So up and down the city,
Andeverywhere Ive trod,
Ats Mary, Mand and Katy,
John God and Wille God. Dear Jesus was your brother,
Wh died ol long aro
And Mas's his litileter, sist
I think he'd like to kuow. Out there's another brother,
His name is Pat, or Thi,
If May's his itte sister, His first name's Tim-bis other,
That name we say in prayer, That name we say in prayer,
For when we asy our father,
Ar'n't Tim and Jesus there?
o, life and love, in whom we are,
From whom, to whom, lall lives;
thank thee for the chistening now
Thy litte prophet gives.
The fat ther's name, the children's name
More plain nor earth nor sky;
Ady yet n never uaessed, till now,
The name ihou knowest me by.
$M$ name it shames, it greatens me;
If cel so weak, sostrog,
And all the
gates are sing

## A Father's Advice

## [Writen for the Rural Press by R. o. Roor.]

My son, always wear your own clothes. No man can act up to the full, rounded measure of manhood while he knows and his friends know that he uses another man's boots aud owes the
hatter and the tailor for the nice fitting garments he wears.

Always wear good clothes, neat, whole an clean. Never allow yourself to look seedy, as make the man, and that " a man is a man for all that," yet all will acknowledge that a neatly and as we have more pleasure to the beholde well-dressed people thas with the rough and slovenly, so it is our duty to contribute our
3. Never wait for dead men's shoes. Do not
wait for the death of your rich friend, in order wait for the death of your rich friend, in order
that you marry the lovely widow and succeed that you marry the lovely widow and succeed
to his place and share his estate. He may not die first after all, and if he does you cannot b sure of becoming his successor. Much better
go out among young people of your own class, choose a companion and build your own fortun and family. So also in business. Do not wait have a place. Go and find a place, or make one and then it will be your own. Life is too shor the wagon;" if you wish for the wagon, go and get it. Do aid a good cause." (Be a first-class workman in Whatever you undertake, and have first-class
wages for the work you do. Do some one thing wages or the work you do. Do some one thing
better than any other man, and you can have your own price for it. Then if you have $\$ 100$ to
spare for some good cause, the friends of the cause will be ready to thank you; but if you work for the good cause at half price, some on elsewhere?"' Better to give two weeks' work out and out than to work two weeks at half price.
for when yon are old you cannot save it. A man is capable of doing and enduring about so
much in his lifetime. If he dissipates and squan ders his vitality recklessly in early life, he will die early, or drag a miserable and diseased body with him during his last years. A man who
takes good care of a good constitution has the best kind of a savings bank in himself, on which he can draw in the prime of life, and which will
carry his prime into those years when others begin to fail.
It is better to keep the reins constantly well in hand, than to trust to picking them up from
the ground after you find the team is running

Tomмy came home from school, and handed to his father the teacher's report on his progress
during the month. "This is very unsatisfactory, Tom; you've a very Thall number unsatisfactory I'm not at all pleased with it." "I told the tea."

## GOoo HEALTH.

The Pernicious Habit of Drinking.
An English physician, Dr. Duckworth, writes as follows: "Medical men may fairly tell the up stimulants if they fully maintain their health without them. Total abstainers are generally arge eaters, and the ultimate textural effects of excess in eating or drinking, if any, may not be very dissimilar. I think it is proved that the addition of a little alcoholic food to a meal secures a more moderate ingestion of solids, and where it agrees, which it does not always, proBut a large number of persons suffering chieffly from dyspepsia or insomnia are better without
stimulants of any kind. A daily allowance of alcohol is manifestly wrong; more to-day and
less to-morrow may be needed or instinctively less to-morrow may be needed or instinctively
called for. The rational individual must honstly and conscientiously find out for himsel where a right-minded christian individual is in earnest in such a matter and has a proper control over his appetite, he is not likely to go far wrong in the matter of stimulants.
"Medical men should urge teetotalism upon the nervous classes of drunkards, persons who
are careless and self-indulgent or who by their ives or callings are much in the way of drink.
Stimulants should be always taken at meal Stimulants should
times, and only then
"I am confident that, as a body, our profession is unanimous in condemning the modern
American habit of taking odd glasses of stimuAmerican hall hours and laments the grievous mul tiplication of the means of gratifying this mis nasses of young business men in our cities and large towns in this respect is becoming diggraceful and the practice is fast gaining in other circles and communities. Our countrymen o
these classes have no excuse for this, for they are well-fed and have liquors with their meals in addition to their hourly drams, while Ameri cans, who are notoriously the worst dietitians
in the civilized world, are water-drinkers at in the civil
meal time."

Experiments with the Turkish Bath. Some interesting observations were related at
the last meeting of the British Medical Associathe last meeting of the British Medical Associa-
tion, by William James Fleming, M. B. (Glas gow. These experiments were performed by vations on the effect of the Turkish bath at tem peratures of from $130^{\circ}$ Fah. to $170^{\circ}$ Fah., upon the weight, temperature, pulse, respiration and
tecretions. The results showed that the immer sion of the body in hot, dry air, produced loss of weight to an extent considerably greater than of about 40 ounces an hour. This was accom panied by an increase in the temperature of the body and a rise in the pulse rate, with at first
a fall and then a rise in the rapidity of respira

The amount of solids secreted by the kidneys was increased and coincidently the tity of solid matter in solution and among other things a considerable amount of urea. The nost important effect of the bath was the skin By this means the tissues could, as it were, be washed by passing water through them from within out. The increased temperature and pulse rate pointed to the necessiry of caution was diseased.

Boractc Acid for Skin Diseases. - Sur-
eeon Major Watson reports in the India Medical Gazelte, that he has lately employed boraci acid with very great success as an external ap
plication in the treatment of dermatophyta, o plication in the treatment of dermatophyta, or
vegetable parasitic diseases of the skin. He was, it appears, induced to try this remedy from witnessing its employment as an antiseptic in the
Edinburg infirmary wards. The diseases in which he has hitherto used boracic acid have been the various forms of tinea, especially that very troublesome form of the disease whicl
affects the scratum and inner sides of the thighs affects the scratum and inner sides of the thighs
of many Europeans in lndia. Dr. Watson declares that the external application of a solu
tion of boracic acid acts like a charm in such tion of boracic acid acts like a charm in such
cases. An aqueous solution of boracic acid of a drachm to the ounce, or as much as the wate will take up at ordinary temperature, is em
ployed. The affected parts, he says, should be ployed. The affected parts, he says, sholy some little friction being used, and it should not be wiped off, but allowed to dry on the part. Al. remedies of the same class.

Warts.-If they give youn no special incon-
renience, says Halls Journal, let them alone. But if it is of essential importance to get rid of them, purchase half an ounce of muriatic acid, not easily turn over; take a stick as large as the end of a knitting-necdle, dip it into the acid,
and touch the top of the wart with whatever of and touch the top of the wart with whatever of
the acid adheres to the stick; then, with the end of the stick, rub tre acid into the top of the wart, without allowing the acid to tonch
the well skin. Do this night and morning, anid

## Domestic Economy

## The Wholesomeness of the Orange.

Julia Colman, Superintendent of the New York cooking school, gives the Ph Prenological
Journal the following: Not a few of those who Journal the following: Not a few of those who
wish to be carefui as to the quality of their food wish to be carefui as to the quality of their food
have doubted the wholesomeness of the orange have doubted the wholesomeness of the orange
as it is found in the markets. A fruit, they have said, which is picked so green and kept so queries, however, have mostly died away before the experimental proots of its wholesomeness. reely without known ill effects. Many have one to the other extreme and attributed to it health-giving properties, which they deem
almost marvelous. For example, it is said to almost maryelous. For example, it is said to
be a sort of insurance agaiust disease to eat two oranges before breakfast for three months in We spring, say from March to May inclusive. sued, might turn many doctors out of employ-
Another prescribed use is to cure a longing
or alcoholic drinks. The sufferer must eat sufferer must eat an have faith in the remedy, so far as it goes, but o make it effective the subject must earnestly desire to give up the drink, be determined to do so, and then the orange will be a natural
help to quench thirst, to aid in healing the stomach and to induce a wholesome tendency in the system generally. This much ought to ing that it acts like a charm or philter to take away the unnatural craving. That will return again and again for some days, and if the subaged, he will take another orange, and calling all the moral and social aid he can command to his help, he will be much more likely to
If in hot, unhealthy countries generally, men would eat an orange in place of drinking a glass
of gin, brandy or other alcoholic liquor, the of gin, brandy or other alcoholic liquor, the
result would be most advantageous. And if some juicy froit were eaten always in place of taking unwholesome water or any other drink miatever, the malaria of the worst locainies be wholesome, oranges or other fruit juice more satis alf the both in taste and results. If we took hat we do to provide ourselves with alcoholic drinks, we should soon see a beneficial change on the face of affairs.
How to Clean Engiavings.-A correspondent has recently succeeded in cleaning some
engravings by the following process: Soak the engravings by the following process: Soak the
rint in cold water till all creases are out and $t$ lies quite smooth; then put into a dish conwice its quantity of clear cold of lime with the stains have disappeared, put the engraving into plain water, and afterwards dry with blot-ting-paper. For the solution referred to, put with one pint of water; let it stand, stirring it hrough fine mor 24 hours, and then strain it iquid is to be added to one quart of water. The prints should not be left in the solution longer than is necessary to remove the stains,
and the more thorougly they are washicd in old water afterwards the better for them; for, if any of the bleach is left in the paper, it is uires care in handling.

Spice Salt.-You can make this very nicely ays the American Agriculturalist by drying,
owdering and mixing by repeated siftings the ollowing ingredients: One-quarter of an ounco each of powdered thyme, bay-leaf and pepper; one-cighth of an ounce each of marjoram and powdered clove and nutineg; to cvery four unces of this powder add one ounce of salt, Ouc ounce of it added to three pounds of stuffing, or forcemeat of any kind, makes a delicious ing, or forct
seasoning.

Dried Celery and Parsley.-Wash the leaves, stalks, roots and trimmings of celery, no poot and rnb the lcaves and stalks through a sievc, and put all into a tightly corked botost delicious seasoning for soups, stews and tuffing. When you use parsley save every bit of leaf, stalk or root you do not need, and treat parsley the root has even a strouger flavor than the leaves, and do not wastc a bit.

Sausage-To 80 pounds of meat chopped fine-not too fat, add two pounds of fine salic;
three ounces of pulverized sage; five ounces of black pepper; two ounces of savory; four tablespoonfuls of singar; warm and inix without watcr.

Molasses Candy.-Two cups molasses, one cup of sugar, one-half cup of vinegar; boil to-
gether (but be carcful not to burn) for a fcw gether (but be carcful not try a little on snow or in cold water; whilc yet warm pull until white.

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## SAN FRANCISCO:

Saturday, January 12, 1878.

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GENERAL EDITORIALS-The Preservation Of



 port of 1877. 19 URE.
HORTII, Situatiou and Muleh for










NEW ADVERTISEMENTS,



## The Week.

Auother week and another rain; refreshing, eleansing and, in some loealities, quite a soak-
ing rain, but for the most part only a "sample" of the whole piece of water which we necd, aud little more satisfying than a smell of roast heef to him whon hunger prompts to drive his teeth
through jiuey morsels. To the lover, the prescort coyness of the elouds can suggest nayght
but the eyes whieh promise and the lips wlich deny the boon. To the angler the figure is the
diny flirters of the flood which fondly "nibble" finny flirters of the flood which fondly "nibble"
but refuse to "bite." To the merehant the but refuse to "bite." To the merehant the
lowering but ungenerous sky brings to mind the purchaser, of ponderous purse, pricing
plenteous produce but expending naught. but a deep regret that the winds and elouds do not do business, settle down and show for onee
the persisteney aurl determination of "oldthe persisteney and determination of "old.
fashioned storms." And yct great good is done in many populous portions of our state by the
preseut measure of rain. The coast and the preseut measure of rain. The coast and the
adjacent valleys can count of gratifying growth for a wonth upon the waound anticipations of more in fewer days than

Work for the Unemployed.
The problen which is now forced upon pub Tic attention by the threats and demands of lic attention by the threats and demands of
incendiary leaders is one whieh should be quickly brought to solution. Although we have no sympathy nor toleranee for the riotons ineitements of those who have constituted themselves leaders of the unemployed, it cannot be doubted that in the rank and file of those who follow this unfortunate leadership there is real
hardship and an honest desire for assistance. In our view of the matter, the way to meet this condition is to disarm the movement of the only element of strength there is in it, aud that is by providing work for the unemployed at a price which will sustain life. If there were no mate rial in the form of men without employment, the fabric of riot, which a few men are striving
to weave for their own aggrandizement, would fall to the ground by its own weight, and the weavers would be regarded as too harmless and In the cen to lumber up a 1 Tison.
corernments, in their beneficent character as conservators of the public well being, could, we
think, find fitting opportunity for the exereise of their paternal functions in providing a means of earning bread to those who are kept froun it own fault or choice. There are public works which ean be wisely thntertaket, an There is wealth enough in the conntry to defray the expense with no hardship, for the chief
burden will come on those who have most, and whose money now lies idle in the banks becanse of the slight demand for it. There is prospect enough in the future of the city and State to warrant the ineeption of wise and perinanent
improvements now for the coming generation to improvements now for the coming generation to
pay for, and eapital is said to be ready to entrust itself for future returns.
sec way by which the pultio us that the cheap from dangers which now threaten destruction of life and property, is in disarming the mal-
contents by providing for them, rather than contents by providing for them, rather than
by allowing them to pursue the present evil tendencies until they eventuate in riot and erime. Prevention is proverbially better than cure. It
would be far cheaper to build a boulevard than to fill our streets with armed militia. The lesert wastes of Golden Gate park ean be male city would lose ly a riot and by the prosecution and exteution of the offienders. No one donbts but than uprising like that we hear so frecly
threatened would be quiekly and perinanently crushed if it should assert itself; but who thinks it is the dictate either of economy or humauity
that the city should wait to have its streets that the eity should wait to have its streets
raked by grapeshot and perhaps its proudest raked by grapeshot and perrapps its proudest
buildings in ashes? We have, of course, no belief in the accomplishment of the revolutions which agitators urge upon their ignorant and
thoughtless follo wers, put thero is reasau to fear that they may inllame desperate men to deeds which may lead to the destruction of a part of
the eity and their own. This is what we believe can be preventel for far less money than it
could be cured, if the disease is permitted to eonld be cured, if the disense is permitted to
lreak out. For this reasou we are in favor of the request which the city is making this week upon the Legislatureriry pern thion prosecution
money on its own security for of certain beneticial public works. If the city those who will lalor for it, the present movement of the uncmployed will be shorn of all the endeavoring to profit by men's misfortunes will be foreed to seek more bonorable employment,
It is elaimed by those who object to the eity's offering employment to all who need bread, wound bring thonsands of unemplpoyed from the bear the burlen of the whole state. This would prolably be true to a certaiu degree, and it inight be advisable for the state to andertake
some needed publie work in the interior. It
might might be found that the West side canal pro-
ject was ripe enough to push forward into aetual building, and this would give employment to an arnny of men. This too could now be eonstructod eheaply if the funds were
honestly administered, because micn could be had at little more than the cost of living. It this kiud hurriedly, but we take it that the form and the Legislature might safely order that the preliminaries be aecelerated with
all proper speed and the work begun. This project would have to be fostered by the State, althongh the benefited lands should ultinately
fully assume the burden. Thus it might be found that the State could most cleaply provide for its unfortunate wards and relieve communi
ties from the sustenance and plundering of the horde of tramps which now besiege our farm and village homes. The whole State would be
iuterested in this result. As it is the burden of supporting tranps falls most upon those who them and should direet them to hail work for them and should direet them to assume it or go
to prison, many a resident of the interior would breathe nore freely and sleep more soundly The beginning of the West Side soundy. season, slould it be found praetical, might g
work to those who may need it none the
although they are good citizens and not tramps,
nor "revolutionists." Should this year prove dry as the last, a contingency which seems quite possible, at least so far as the San Joaquin
valley is coucerned, there would the a need among many dwellers in that district of oppor tunity to employ their hands and teams. It has becn shown by expericnee in the valley that
the farmers build the best irrigation dithes and it would be a boon to many to find employand it would be a boon to many to find employ-
nent on a public work whicb their own fields denied. For this reason, as well as for giving
livelihood to the country's "wnemployed," it would he a public benefit to have this work be gun and prosecuted with rigor
The view which residents along the line of building is to be learned even more fully dur the coming wcek, as the Senate committee fon irrigation has resolved to hold meetings at different parts of the State, as may be seen by something may be found feasible, both in eity all who honestly nced and lesire it, and then "agitators" and "revolutionists" will find them
selves without an avocation.

## Free Reading Rooms.

The Union Reading Room Association has done credit to itself and the eity of Oakland, in arranging for a popular low-priced leetures in these hard times. It places within the reach of that elass deserving of and mostly to be bene fited by such entertaiuments, amusement and instruction combined, at a priee with which no fallt call be found. As a general thing the prevent mechanies and other working men from attending; but the result of the experiment inaugurated by the Union Reading lioom Asso ciation shows that low-priced lectures can be made a sueeess. It is noteworthy that Oakland, responded wobly in this case showing that pric had a great deal to do with it.
Following is a list of the eoming leeture of the eourse: "Nebular Hypothesis," by
Prof. John LeConte; "1rrigation," hy Prof (ieo. Davidson; "An Apology for the Turk"
(by request), by Prof. Bernaril Mloses; " lieeeut
 Bartlett;
The tiekets for the course are sold at $\$ 1$, and musical entertainment will be given at the elose of the conrse, free to holders of season tickets, but single tickets for this will be 50 ceuts. The Oakland Reading Room Association has done a worthy work. After a great
deal of trouble and labor the Managers of the association have provided good rooms, with plenty of papers and books, where any one, the
eapitalist or laborer, is weleome to ecme. Ther are here no social distinctions whatever, one man having equal rights and privileges with another. No fees are charged, and any one who chooses has the privilege of visiting the rooms.
It is to the erelit of the Managers that through their efforts Oakland led off practically on the free realing room question; Alameda
followed and is doing well. As a result a joint stoek association there is ereeting a ten thonsand dollar luilding, the largest publie hall in Ala aud iu er the purpose. aun Francise hollows, great metropolis of the Paeifie it should be municipal institution, so Senator Rogers-all honor to him-has drawn up a bill which is oreme a law and the resulss of withe built or now building in California. The Rogers bill to establish and inaintain free public libraries and reading rooms, arithorizes the variou Boarts of supervisors of the varions counties, and of the city and eounty on onicraneisco, towns and cities of this State to levy andl collect annuially a tax not exeeeeding one mill on the dollar for the 1 urppose of establishing free puhbie
libraries aud reading rooms, putting up buillinaries and reading rooms, putting up bulld
ings and luying books. The sane authorities may appoint seven Trustees to carry out the
ideas of the act. All moneys collected go to a " library fund," and can only be used for the purposes speeified. Tho following 10 persons,
John S. Hager, Irving M. Seott. R. Tobin, Louis Sloss, A. S. Hallidie, C. C. Terrill and Henry George are instituted and appointed during good behavior, honorary Trusteos without
salary of any library or reading room in the eity and couuty of San Franeiseo. These Trustees are elothed with powers to make rules and regulations for the goverument of the library or reading room. This is for this eity.
In other places the term of offiee of Trustees is In other places thers
One of the elanses is as follows: "The promay, upon sueh terms and eonditions as shall be agreed upon by them and tho municipal authorities of any ineorporated eity, town or city and eounty, donate and transfer its property, real and county, for the purpose of establishing aud naintaining a publie library within the mean-
ing of this Act. As a condition of any such donation, such proprietors slall nominate a appoint, as honorary Trustees, a number equal
to those authorizod, and to be appointod
hereinbefore provided. A majority of sucl
honorary Trustees may fill all vacancies that may occur in their number. Such honorary Trustecs shall have an equal voice with the other Trustees appointel, as hereinbefore auth
rizel, in the management and eontrol of such rizel, in the management and eontrol of such
ibraries as may be donated and transferred un dibraries as may be donated and transferred un All this is the of this section nenced in Oakland by a few gentle work comthe need of free reading rooms for the who saw and who were public spirited enough to give me and labor to inaugurate the one over there The friends of the Union Reading Room Asso ciation hope to advance, and add new and appropriate features to make their ghood work
felt in a wider range of benelits. It is not often that a course of seven lectures is given for a sum S1. especially when the leeturers are persons hose education and int hence such as is a worthy one, and should be uphel.t by ald cood citizens, and the example set by Oakan cities, if a few liberal-hearted citizens take hol

## Queries and Replies.

## Tamping in Squirrels,

 fill ever see claylielth afterward. J. II. G. in our columns during the last six month est others may have overlooked it we inser thain the tampin's in is often snecessful. It call est be done with a pieee of scantling or fene put through an auger hive, so as to be at right angles with the stick and give roon for or one hole with this packs the earth very tight.

## Warty Potatoes.

Editors Press:-I notice in the Press that Mr. White, of Bloomfield, has sent you som 1 potass corerel wide often thus alfected. I beliere it is eauscd by exces sive manuring, richness and moisture. Last
season 1 moved a chicken house and planted potatocs where it stoorl, and most of the pota tofen were covered whem on low, swaley ground, moist
often ich and sandy. Upon no other couditions of il have ever found them,-E. H. CuExYy



The Mastrial Valef of Rodests, - IV have not
ridden
ry their by thcir presence, and this is the consolation which a German philosopher tinds in a similar on Farmer that from all quarters come com laints that the plague of miee in Austro rungary and Cermany is ever on the inerease. that local agriculturists omitted to sow in the autunu, partly because they knew it would be laloor lost and partly in the hope of thereby starving out the vermin. In Bohemia things the pest have proved in vain; poisons and traps
and trenehes are abandoned iu despair. A Leipzig philosoppher endeavors to mako the bes of it. The mice must die some time or other, he ploints ont, and what a valuable manure sueh 10 mice come to grief on each square meter of hectare; and, taking their average weight as 30 to the pound, we get 33 centuers of anima howe on each hectare laud. Nould rathe howerer, less philosopic folk would
draw their supplies from other sourees.

Our Poblic Schools. - We have received from llon. liza S. Carr, superintendent o Publie Instructiou, a eopy of his report to the
Governor, coveling the work of his department luring the last two years. 'The report is evi during the last two years. The report is evi-
dently prcpared with great eare and furnishes information which all interested in the discussion of edueational topies should possess. In
the body of the report Dr. Carr deseribes the urges several matters which hedems worthy of adoption. He also speaks generally upon the quality and aims of edueation and the bes furnishes an exelient paper deseriptive of her edneational studies at the Centennial and in the Lastern States, and draws deduetions from he full and eontain statistics of the number of sehools and pupils, list of teachers holding state
certifieates, etc. The report shonld be widely ireulated.
On File. - "New Year's Greeting," S. J.;
"Floriculture,"W. C. I. D. "A ride through
Lisbon Distriet," G. R.; "In Mcm.", Potter
Vallyy Grange; "Cultivation and Rainfall,".
B. "Cotree Germination," C. H. S. and II. G.

January 12, 1878.]

California Climate and Consumption. Indiscriminate praise is productive of evil. It cannot be doubted that our favorite State has suffered more from flatterers than defamers. Glowing statements with either thoughtless or tudied neglect of qualifying conditions are quite apt to mislead, and those who place reliance upon them often reap disappointment. Those who have glorified our conditions as fa forgotten to state that labor is requisite to success here as elsewhere. The result has been that hundreds of thoughtless persons have come to California expecting to gain a livelihood and
competence simply for the asking. Failing, of eourse, to receive it upon such conditions,
they have become bitter denunciators, blaming the State for the failures which their own weak hearts and unwilling hands achieved. Not otherwise has been the praise of the climate of California in its relations to consumption. Glorious as we find our elear and invigorating air and warm sunshine, we have been too apt to
speak of it as the sovereign cure for all the ills to which flesh is heir. Especially in its favoring influence upon those afflicted with consumption has our climate beeu lauded high. This general praise has been productive of evil in many cases because it has been spoken without discrimina-
tion. We have forgotten that we have a comtion. We have forgotten that we have a com-
plex climate, and therefore diserimination is plex climate, and therefore diserimination is consumption is a disease capable of division pass almost wholly beyond the reach of climatic influences. For these reasons there seems oecasion to conclude that in some eases Califoruia
climate, in its relation to eonsumptiou, has been climate, in its relation to eonsumptiou, has been
praised not wisely bnt too well. We are glad to see that this subject is being considered by eompetent and diseriminating minds, and that the true opportunity which our State affords to
unfortunate victims of lung discases, bids fair unfortunate victims of
One of the most interesting papers in the valnable report which our state Board of Health subjeet which we have mentioned, and is by nent Secretary. For the information of our readers, both here and at the East, we proprose
to present, as briefly as possible, the leading to present, as briefly as possible, the leading practical purposes he divides the State into fo regions, more or less distinct, in respect of cli-
mate. First, the coast and the valleys bordering thereon; second, the interior valleys, as the
Sacramento and San Joaquin; third, the Coast range mountains; fourth, the Sierra Nevada mountains.
Beginning with the elimate of the coast and the coast valleys, Dr. Hatch starts at San FranFah., and follows the coast to Sau Diego with a mean temperature of $62.11^{\circ}$ Fah., inclnding a narrow belt of eountry extending along the
eoast for a distance of 479 miles. The climate eoast for a distance of 479 miles. The climate
of this extensive district presents certain features in common though varying in degree-a
winter season mild and agreable, a certain winter season mild and agreeable, a certain
amount of fog, and cool wet winds in the summer. Taking Sau Francisco as an extreme, we find some modifications in each of these extremes as we go southid as a rule to become less, the severity of the summer wiuds is subdued, the temperature somewhat ligher and dued, the temperature somewhat lugher and
more equable, the rainy season shorter and the rainfall less abundant, and intervening between these two seasons of summer and wiuter, a
short season representing spring, which becomes short season representing spring, which becomcs more and more attraetive, inviting by the mild-
ness of its temperature, the purity of its atmosness of its temperature, the purity of its atmos-
phere, the early freshuess and beauty of the phere, the early freshuess and beauty of the which have given to this region its popular rep-
utation as a resort for health. Dr. Hatch then utation as a resort for health. Dr. Hatch then of local physicians as to their fitness and untitness for consumptive people, and the months in ness for consumptive people, and the months in
the year. when these qualities are most predomthe year. When these qualities are most predom-
inant. We have no space to follow these interesting inquiries, but the result will appear in
the general conclusions which we shall present the general conc
before we close.
Of the climate of the great central valleys, the Sacramento and San Joaquin, an extensive
district, stretching from the 35th to the 41 st parallel, with an average width of 50 or 60 region presents certain features eommon to
reme every part. As compared with the coast rcgion, to be warmer and drier during the summer, not much subject to fogs, a high temperature during Althe day, with a considerable reduction at night. credit for its many charms and excellencies, Dr.
Hatch eoncludes that "in the prolongod high temperature, the sudden changes which oicur winds (which sweep through the Straits of Carquinez and diverge north and south), the com-

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render this interior valley region ineligible as a
summer residence for the summer residence for the consumptive the Coast range and the Sierra Nevala, Dr Hatch speaks at length and with definiteness.
We have space only for his We have space only for his general comparisons. As compared with the great valleys, the moun-
taiu climates, as a whole, possess a less prolonged season of high temperature; a lower relative humidity; comparative exemption from malarial influences; altitude and its supposed compared with the coast region, the mountain climates have a lower relative humidity; a reater exemption from winds and fogs; the advantages of altitude and a more invigorating atmosphere. These points of comparison refer to
climates in the different regions during the ummer months
After treating his subject in all its parts sci eutifically, so far as data afford grouud for a
scientific deduction, Dr. Hatch concludes with cientific deduction, Dr. Hatch co
First-That for the majority of invalids seek ing a change of climate in consumption, the alvantages, during the summer and early fall months, sulp
of the State.
Second-That a certain proportion may find the eastern slope of the Coast range agreeable Third-That a life in the open air-camp
life, with the exercise to which it iuvites, agreelite, with the exercise to which it iuvites, agree-
able companionslip, pleasant occupation of
mind and body, are indispensable to the attainment of the full henefits to be derived from climate.
Fourth-That for a large proportion of consumptives, some point on the southern coast
seems eminently suitable as a winter residence Fifth-That the premonitory stage of phthisis,
or the first stage of its actual development, are the only ones in which climate may be safely relied upon. That some cases in the seronit
tage may be greatly benefited, especially when the nutritive processes are not seriously impaired. That a few may secure an applyarently permanent arrest of disease, and enjoy good
health for many years; but that the elimate of spire hope offers, in reality, no very strong in lucement to those lapsing, or who hav
Sixth-That the remedy, if found beneficial,
restoration of the nutritive processes is com
plete, and the progress of disease, as determine
by the physical signs, appears to be arrested.
The Wood Boring Shrimp.
The Linnoria Terelbans is a crustacea of the
Isopoda order. The limnoria is about two lines in leugth, or about the size of a grain of rice, and of a dark ashi gray color. The front out-
line of the body is a long oval, though the head is largc, round, and strongly defined. The ascelli placed elose together. The general apdisturbed or handled they roll themselves up like a hedgehog. These little creatures are wonderfully destructive to submerged timber, such as piles, doeks, piers, bulkheads. etc. In
the Bay of San Francisco they eat piles off en tirely in a short time. The contents of the stomach eonsist of comminuted wood, showing that food is the object sought. They attack a
pile about half tide. The limnoria swarm around the timbers attacked in great numbers rings excavate growth, and while eating the wood for rits albumen, as is presunted, make a sheltering place for protection from enemics, and in whici look, and is very frail. A mass of these pet forations as large as a base ball taken into th forand and the water squeezed ont leaves a mere
halp of woody fiber many times reduced from its original bulk
The illustrations on this page show this tim-ber-boring shrimp enlarged seveu times.
Another engraving shows the appearance of a pile eaten oit by limnoria, and another shows
how they letve the knots in their work. Mr. how they leave the knots in their work. Mr.
Jolin P. Culver, au engineer of this city, has been investigating the halits of these creatures, a plan to prevent their ravages. The process a plan to prevent their ravages. The process or off, as follows: First there is a poisonous pile or timber, which is allowed to dry; then
the pile or timber is coated with asphaltum, laid on at great heat to the bare wood, after
which bur-laps treated in asphaltuin are wound which bur-laps treated in asphaltum are wound
around in spiral courses whilc warm, and fin around in spiral courses while warm, and fin
ished by a final coating of hot asphalt. Th ished can be handled, transportcd, and driven, with reasonable eare, without injury to tho coating, and after being driven are most fully

The Necessity for a Physical Survey of California.

The subject inatter of the few remarks which I shall offer for your consideration this evenin is not strictly new to you. On more than on occasion this Academy has expressed its view upon the necessity for a thorough and exhaust State, but of the States and Territories adjacent creto.
Whatever has been partially done has its value and its useiulness; hat it is now a neces be iuangurated, which will embrace every fich of enterprise and investment.
I do not propound this necessity from theoretical or abstruse considerations, but upon the plainest, strongest demands of utilitarianism. such a work, on the contrary it is only upon the
clearest deductions of observation and research, conducted by scientific methods, that the great est gains ant advances can be made in every-
day praetical life. When the practieal man raises huge beams, and structures, and volume
of water by the application of the lever, or the pulley, or the plunp, he is simply utilizing
knowledge; and all of the so-caller "practical that is eftected by rule of thulmb, withont a, is capital, and of time, whieh is profit.
I repeat, that every great industry on this
const is largcly and directly interested in tha subjeet of a physical survey of the state, and
the hunthlest trades and professions are therefore certainly and intimately affected, and af
fected favorably. The great mining interests, in the preciou
and base metals, in coal, building material, etc. the minilions of money and thousands depending
upon the success of agricultural investments the large capital bound up in manufacturin railroad undertakings. involving so much
wealth and eomfort, and rapidity and certainl



Knots Left by
Limnoria.
or have borne no crop; hundreds of thousands have been running to the ocean, the life-blood of this State has ebbed without imparting a spark of vitality, the green places are parched and arid. refer to the agricultural phase of the and directly to hnndreds of thonssands of our poople, to the whole population indirectly. I mention it because the solution of one part of it ng still for want of the necessary skill to accomwaiting for some supernatural inter bridge them over the rainless years.
What will this physical survey give to the be earried on? Will its cost be excessive? These and a hundred corrclative qucstions may readily be proponnded, and yet to each I am
convinced that a satisfactory answer can be given.
Let me answer the main question that must arise in many minds. Qui bonol-of what good
is it?-by asking another and analagous quesis it?-by asking another and analagous ques-
Oif what good has been the survey of the acific coast of the United States: The mapping of its outline, its dangers, its harbors, its
islands; the establishment of light houses, fog whistles, buoys and other aids to navigation;
he knowledge of the currents and winds, and climatology; the variation of the compass and its sechar changes and local peculiarities; the sands of positious; the marked peculiarities of
the tides, whereby they are closely predicted or years in advance, and a multiplicity of other information that daily and hourly has its practical application in a hundred ways. To-day estly found and mauned, and properly handled. and shonld be far less upon this coas than upon, the Atlantic and Ginlf seaboard. The loss of ife is necessarily diminished, and all commer cial ventures depending upon regularity of pas
sage must profit from the knowledge acquired. The partial information, early made known, of the great eurrents of the north Pacific, and
their efiects upon the weather, solved the ques rancisco to the great circle route from San rancisco to Yokohama, or even to Hakodadi, evente to China througl the warner and more agreeable latitudes had not been shown to out-
weigh any merely theoretieal and shorter, but A perfect map of the physical features of demanded by the farmer seeking for land and a home; by the manufactnrer, seeking to estab-
lish new industrics, or to enlarge previous ones; aad by the eapitalist, seeking for the investment Amongst other information it should afford a complete geographical exhibit of its entire sur-
face. This is absolutely necessary for the agriculturist, the miner, the engineer, the settler,
and to the State as a body politic. Without it and to the State as a body politic. Without it Sacramento salley; the reclamation of our
swamp lands; the irrigation of our millions of
rainless acres; the relation of our mineral and imber belts; the most advantageons and profitable lines of transportation; the opening of new avennes of eommunication and traffic. Every
day for years I have been appealed to for information upon these and cognate snbjects-in-
formation that is scattered in hundreds of driblcts, frequently withont reeognized anthority unless gathered by the State or General
Government. The demands are unceasing; the Government. The demands are lunceasing; the invested; crery year's dclay complicates property relations, and involves dead loss from erro-

With snch a survey the problem of reclamation and irrigation can be shaped for solution; system can be cvolved from the present chaotic condition, and future interminable complieations lessened or avoidend. It will openter for is metes and bounds; it will settle many difficulties arising from imperfect surveys, or from surveys made where loeal eatses are obnoxious yet unknown; it will afrord the means of best the adjacent lands from the
The geographical map is the ground and basis every other character on work involved in a the location of railroads, highways, canals. Had such a map been in existence the requisite
field work of the Water Commissioners would have been a minimum, and the logical conchto control the projection of railroads by corporations, and may detinitively measure the value of any proposed scheme. It can decide almost with certainty what cinterprise shall be slpp-
ported and what condemnel. It can winnow the true from the false with merciless precision. It will assist in quicting titles and give stability to lamded property. Ahroad and in the Atlan tic States it would be stnhted by the thrity and the inamfacturer with means to invest, whereby its development wonld be hastened. It is in
vain that you look for details in any published map of this State. Distances are er ignored orographical featnres exaggerated or ignored,
and locations established very much as in John

How an Axe is Made.
A writer in the Polytechnie Reviero describe
the process of axe making as now practiced the process of axe making as now practiced in
our largest American factories. There are several departures from the old method, and these we note as follovs: Formerly the polls or heads
of axes were made. by drawing down a bar of of axes were made middle each way, leaving the iron fron the middle each way, leaving the ing the eye and the combracing, flaps for the re-
cention of the steel bit. Bnt it was found that ception ot the steel bit. Bnt ew was fand
the welded portion below the eye was lo split in nse. The present method is to form the
poll from a solid bar of iron. This is done by a poll from a solid bar of iron. This is done by a
machine that operates two punches simultaneously to form the eye for the reception of the handle. The attendants of this machine take
the bar and, after hcating it, place it under the bar and, atter heating it, place it under shears that cutce if a piece jist sumicient ior the
poll, which picce is placed in the machine, the pol, whinches working from either edge, a sup-
two plenentary punch finishing the eye and a set of
pren dies forming the sides, when the poll drops, stil red hot, really to receive the bit. There is n
welding around the eye by this welding around the eye by this method, and
consequently no danger of producing a "cold consequently no danger of producing a "cold.
short." The after insertion of the steel bit and shaping the axe are done by ordinary forging. tempering roont, which is partially darkened, 8 that no ray of sunlight is admitted to mistcad sense of sight for the perfection of his work The hardening ovens are circular, having a ver tical shait in the center to which are attache rotating tables, on which the axes are laid with the bits toward the outside. The table turn furnaces of anthracite coal alternating spaces When brought to the proper spaces. When bronght to the proper rednes
by heat, the axes are hung on liooks on a revolv ing frame, the bits dipping into a tank of brine which is kept in constant circulation by a pump.
When cool, the axes are brittle and must be tempered, which is done by heating them in rotary oven like that nsed for the hardening except that the fuel nsed is charcoal. One o the batch of perhaps 200 which are tempered, or
drawn, at one time is brightened, and serves a a test of all the others, the rotary action of the shelves insuring equal heating. then the batch is removed, and are then ready for sub. sequent finishing operations of grinding and polishing. One axe out of each batch is broken after tempering to test, not only the temper, but
the guality of the steel. The grinding is done the quality of the steel. The grinding is done
on Nova Scotia stones from six to seven feet in diameter.
Why a belt rexs on the Higher Puleey in his new book on "The use of Belting" a
follows: "That end of the belt which is to follows: "That end of the belt which is to
wards the larger end of the cone is more rap idly drawn than the other edge; in consc qucnce of this the advancing part of the belt i,
thrown in the direction of the larger part of the cone, which lead the belt on its higher of ards the nay here be observed that this very provision keeps the belt in its place so long as the ma chincry is in proper action, tends to throw it
off whenever the resistance becomes so great a to canse a slipping. To maintain a belt in po-
sition on a pulley, it is necessary to have the sition on a pulley, it is necessary to have the
advancing part in the plane of the whecl's ro tation.'
 OUR AGENTS.
 infiuence and encouraying favory. We intend to sen J. L. THARH-SAn Franciseo

$\qquad$
$\qquad$
E. B. Dxvsy, Oregon,


## TO QUERISTS.

In propounding questions tot the editorial, patent or bus-
iness deyarturents oi this oftice, letter writurs should be Carelul to onclose a stainp and addressed convelope of
they wish prompt answer. of we were to furnish time, pa-



Every new subscriber who does not receive the paper aud every old subscriber weeks after paying for this paper, should write personally to the publishers without delay, to secure proper credit. This is necessarv to protect us and the subscri bers against the acts and mistakes of others.

## DEWEY \& CO.

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Continued from page 25
Phernix's elassienl survey of the Mi-sion Dolores. The whole system and method of the usinal
land survess of the (iovernment is a delusion and a suare, and any and every map, hase
upon then alds to the confusion. It is but hittle over four years since the eastern boundary
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tler claimed to be witlinit the State of California. Within a yery few miles of san Franeisco the sea coast, by one survey, is sudulenly thrist one
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available. The interest manniested in the Fas available. The interest mannested in the past
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there is very much vet to be learned and pre lieted concerning them and their ceonomiea
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As I have alr

State has been well advanced, and a large mass all) he utilizel. The U. S. Coast. Nurvey has alnost eumplleted the topographieal survey
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barometer for the montli was $310.0+$ : mean tem perature, 52.6 ; mean humidity, 73 ; prevailing W1.t. lighest temperature, $04:$ lowest, 42
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 ractivat move is on foot in Oaklaulto estallish
milechanies institute there which is to be
real school of techuology eall shool of technology. Col. Sohn hoott, a
ileral-hearted citizen of that town has some start it in the shape of a site for the buildings and a numbler of gentlemuen are now devisin graving of the proposed bil Iding and such de
tails of the plan as lare been arranged. to be hopled that the project will reeeive the at-
tention it warrants from all gool citizens.
 growing crops as follows: "1 hen a mortgage s upon a growing crop, the licn thereof shal into the usual conlition for sale, anded until it is gent, if the same is done within 15 days after t is harvested and put into the nsual conlition
of salc. When enough of the mortyagee's erol has been delivered, as aforesaid, to answer for
he delt of which it is sceurity, the lien thereo shall cease on the reluaining part of such crop.
Prebe Butrek. - A dispatch from New Yor passel a resolntion forming a national assoeiation for the protection of dairy lirolucts fron
anlulteration; the enforcement of the stante nulteration; the enforcement of the statute
elative to the sale of oleomargarine, and to procure uniform statc laws regulating the sale of Bntter."
 eived, It is pulhished by Lather Tucker ionillman?. It contains much meseful matter le exal.
ments.
 Sacrammento, has intruluced into the Legislatur
a bill to anment the colle so that the number o
rotes which cast shall be regulated. The bill is evidentl) cast shall be regulated. The blill is
in the interest of suall shareholders.

## Notices of Recent Patents.

Among the patents reeently obtained through bewey \& Co.'s Sulentific Press Ameriean and Foreign Patent Agency, the following are worthy f mention
Air Brake. - M. W. Areen and G. W. Hoag, Mountain Housc, Nierra Co., Cal. The patent covers an improved automatie arrangement for railway air brake between the cars of a train so as to aroid the ineonvenience of conpling of their being negligently left uucoupled. The invention consists in attaching a supplementa
spring bumper to the truck at each end of every spring bumper to the truck at each end of every hight of the ear body. These bumpers pro ect ont qomewhat fnrther than the ordinary will come together and be tightly eompressed before the ordinary bumpers are connected. The heads of these supplemental bumpers are chambered out and provided eael with a valve which remains closed when the cars are diseonnected, lut which is opened automatically by
the mecting of two bumpers. The air pive of the neeting of two bumpers. The air pipe o
the air brake is then conneeted with the cham the air brake is then conneeted with the cham-
ber in the bumper head, so that the connection ber in the bumper head, so that the connection
of the air passages will be antomatically conpieted whed.
Howne: Macmive Attachment.-Samuel Suencer, Turlock, Stanislaus Co. This inven tion is a novel device to be used in connection with the ordinary sicklc of a mowing machine, or the purpose of selarating the cut from the standing grass, when the nachine is working ment is operated by the same pitman which operates the mower siekle. in mowing tangled grass or grain, especially alfalfa, where only the usual siekle is used, the standing grass being ntangled with that which is ent, remains mat ted together 80 that no indieation is left where
the cut grain leaves off and the standing grain the cut grain leaves off and the standing grain
begins. Jhis invention consists of a short, up)ight sickle attached to the outer end of a yoke. the ordinary sicklc. This upright sickle makes a vertical eut at the outer end of the ordinary ickle so that the cut grass is eompletely severed from the standing grass, and the driver of the he sickle so as to eut standing grass.
Laiat W゙acat Rope.- Nlfred I). Lacdy,
The oljeet of this invention is to provile rope which will be large in diameter and, at the same time, light in weight. It often happens
that rope of large dianeter is desired when a much smaller rope would be sufficiently strong; pach is the case for instauce in supporting weight of the scafiold, and the woight of the persons who stand upon it, lint it is painful and with a small rope, when it wonld le but a sim lle task if the rope was of twiee the diameter The improved rope is intended to supply suelı demands, and it consists of a hollow rope filled
with cork or other light tlexible filling or 8 tuff. ng so as to provide the necessary qualities equisite flexibility.
Rumway and Condert.-Tno. B3. Ward
F. This invention consists in an arrange ment of water pipes, conveying water for irri gation or other uses in combination with an On the nsual tics, pipes are laid. 'The rails are curved to lit the top of the tube, and arc secured ies have coneave grooves for receiving the pipes, cut at both ends. The distance between
the rows of pipe will conform with the gauge of
the road. The pipes consist of an inner the road. The pipes consist of an inncr and is formed of staves in lengths of any suitable material, so placed as to break joints at the onter tule or mask of iron. The inventor claims that the combination of pipe and track ways. The pipe as a support for the rail is coninnous and elastic, greatly redueing the dange of aceidents from broken rails, and furnishing a smooth roadway. The water pipe by bcing wree of water than by the usual way of laying found and quickly reached for repairs.
Stoneware. Kila.-Chas. Gladling, S. F in the construction of stoneware and potter kilns. It consists of a novel method of utilzing the waste heat from the downward draft pottery kiln, and an arrangement of secondary fired after the tirst kiln is burned ofl in order to eomplete the burning of the secondary o nent of certain dampers whereby the heat is egnlated and the eharged sccondary furnaces re wrevented from burning until desired, and

Wispuill.-R. R. Lander, Turlock, Stani slaus Co., Cal. This invention relates to cer tain improvements in windmills and regulatin devices. There are two vanes, onc of which i intended to lie flat and present but little surface to the wind, while the main rane is vertieal and
holds the wheel to the wind, but when the holds the wheel to the wind, but when the While the wind blows with moderate strength the main vane will hold the whecl into the it turns a small side vane, which, by appropri ate mechanism, allows the wheel to be turner from the wind.
Well. Boring Apparatcr.-W. W. Vaugh and S. Jackson, Stockton. This improved ap paratus for boring wells and other holes in the ground consists, first, of au improved arrange into the earth; seoond for hoisting the loaded cylinder to the surf and discharging its contents. thirl, of a derice for steadying and bracing the crowding rod o shaft which drives the anger into the earth; and fourth, of a device for foreing the curbing down the holo as the boring progres

Chance of Deatur br Trayel. - It takes the men, skilled in that line has demonstrated the great improvement which has taken place in that in the old diligenee days a man had on chance of being killed in 300,000 trips and on chance of being injured in 30,000 . On the rail way, between
chance of beiug killed in $2,000,000$ jourueys and one chance of being injured in 500,000 . Fron 185\% to 1875 , one chance of being killed in mak injured in 600 journeys and one ehance ol being killed are as one to $45,000,000$ and of heing injurcd one to $1,000,000$. Consequently, a person an houg 10 hours a day at the rate of 40 mil ehance of escaping destruction during 3 I y years, during the second period during 1,014 years, and between 1572 and 1875 during 7,439 years.
Colcosa County.-We are in reeeipt of the "Colusa County Annual," being a holiday supof our iuterior newspapers. The pamphlet is neatly printed, and contains a lescription of the situation, extent, surface and resources of Co-
lusin connty, 1ts large farms, its towns and villages and sehools, its geograply, soil, climate,
utc. There are also historieal notes, official directory, and vahnable tables concerning the county. We esteem the publication highly, and
hope it will be sent far and wide over the land It may be had by addressing Addington \& Colusa, Cal

Tue firm of Spaulding \& Barto, printers, for many years in the same bus 114 Clay street have admitted to partnership, Mr. Solon H. In illiams, and
ing, Barto \& Co

## Plant Last.-Chas. N. Read, of Santa Barbara, sends us a copy of lis list of rare and in in his nursery. It should be consulted by all planters. <br> Tife Frencl Academy of Naval Nciences has elected Ralph eign associates. <br>  <br> | ses liy fire in this country were $\$ 52,000,000$. |
| :--- | <br> Patents ano ofnventons

List of U. S. Patents Issued to Pacific Coast Inventors.

By Speclal Dispatch from Washington, D. C. Wrek Endino Dycragarr 25th
 WASII BASIN.
STENCII TRAf

STExch Trap. F. W. Volkman, S. F.
Uwokralts.-Clara S. Bradley, S. F.





graph or otherwieg ant the lowest rates. All patent harl-
ness for Pacifc const inventors transactes with perfect

## S. F. Mafket Report <br> $\xlongequal[\substack{\text { Nork, -Our trale review and quotations are prepared } \\ \text { on Wedinesday of each week (our publieation day } \\ \text { not and are }}]{ }$ not entendedeato repreresent the stat of of th nrday, the date which the paper bears. <br> Weekly Market Review. <br> DOMESTIC PRODUCE, ETC. San Trade is quiet, and business is hardly under way yet, except in some lines of food supplies. In produce there is waiting to gain a clearer outlook and count the cost of the last year. The Grain market abroad has heen stationary, as mey be Grain the following: <br> Range of Cable Prices of Wheat <br> The course of the Liverpool quotation for Wheat to the Produce Exchange during the days

|  | cal averagr. |  | Club. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 12s | 8d@12s 11d | 12s 11d@13s |  |
| Tbursday........... | 128 | 8d@12e 11d | 12s 11d@138 | 3d |
|  |  | 8d(col2e 11d | 12s 11d@13s | 3 d |
| Monday | 12s | 8d@12s 11d | 12s 11d $¢ 13 \mathrm{~s}$ |  |
|  |  | 8d@12s 11d | 12s 11d@18s |  |
| Wednesday | 12s | 8d@12s 11d | 12 s 11d@13 |  |
| To-day's cable quotations to the Produce Exchange compare witb same date in former years as follows: |  |  |  |  |
|  |  |  |  |  |
| Average. Club. |  |  |  |  |
| 1876 | .103 | 2d@10s 6d | 10s 8d@11s |  |
| 1877 | 10s | 11d@11s 1d | 11s 2d@11s |  |
| 1878. | 12s | 8d@12s 11d | 12s 11d@133 |  |

## The Foreign Review.

Lovoon, January Sth.-Tbe Mart Lane Fixpress says:
Sustained by political apprehensions and strengthened by
increased consumptive demaud, the present position increased consumptive demaud, the present position of
the Wheat trade is strong, and, in spite of large arrivals
of foreign Wheat, prices have been steadily maintained. Speculation is wanting, but a healthy stinulus has been
found in the supply of legitimate requirements of millers who have purehased witbout much resenve at rather
wigher prices. Maize remains about the same, frm on
hit spot owing to limited supplies, and rather easier off coast under pressure of numerous arrivals of cargoes at ports
of call. The market has varied litte for Spring Corn,
but a slight improvement both in value and demand is but a slight inproverent both in value and demand is
noted for ats. Crop returns for the year 1887 show that,
exter except Hay, all crops have been nuch below the average. of 409 returns only representing it as over average, and
no less than 369 describing it as below. According to
tables it was even a worse crop than that of 1875 , which tables it was even a worse crop than that of 1875 , which
was the most deficient crop previously had during 15
years. Barley, too, was the smallest grown within the years. Barley, too,
same period.
Freights and Cnarters.
Tbe firmness in the freight market noticed in our last
review, says the Comnazerciill News, still continues, and is even more apparent now than at that time. At this writing it would be difficult to obtain a wooden slipi for cork
at $£ 115$ and it is doubttul if an iron yessel could be had
at $£ 2-$ certainly nothing less would be accepted. The amount of tomage in port available for Wheat is small,
and rapidy tdiminishing, and of this amouut three or
four vessels will and rapidly diminishing, and of this amount three or
four vessels will probably ber required for oregon. Out-
side business is dull and without any interesting features. side business is dull and without any interesting features.
There is now in port 10.686 tons under engagement to load Wheat here, 1,0 and 27,164 tons disengaged. The
tons miscellaneous,
latest Wheat charter reported is Br. bark Cochrina, 1,011

## Eastern Grain Markets.

New York, January 5th.- The Wheat market has been
quiet during the week, and though uo decided change
can be noticed in values, they have tended in buyers can be noticed in values, they have tended in buyers,
favor. This is true of Winter as well as of Spring, the market for this description having lost the buoyancy by
which it has been characterized durin the last few week Which it has been characterized during the last few weeks.
Closing quotations are nominally $\$ 1.45$. $\$ 1.50$ for White
Western; $\$ 1.44 @ 31.45$ for No. and \$1.2@@ $\$ 1.29$ for Milwaukee Spring. The fiour market
axhibits but little ehange. Shipping extras have been exhibits but little ehange. Shipping extras have been
sought after to a moderate extent, but holders have not granted any concessions.
Cuicago, January 5 th
Cutcago, January 5th--On 'Change the Wheat market
jumped up quiekly on Monday last, and then a pretty jumped up quiekky on Monday last, and then a pretty
steady downward movement followed, which ended to-day
in the lowest prices in the lowest prices of the week and about the same as
last Saturday. Trading was rather limited, although there was a large attendance of operators, who seem to
take unusually lively interest in the future of Wheat, and the foreign markets are carefully watched. Next week
heavier arrivals are looked for, but it is hard heavier arrivals are looked for, but it is hard to predict
whether or not the farmers will bring in their Grain
readily, even with good roads, for the experimnce of the readily, even with good roads, for the experimnce of the
past year lias made faney priees sweet to them and they past year has made faney priees sweet to them and they
are just now prone so hold their Grain. The Corn mar-
ket has beeu very constant, with lowest prices at the ket has beeu very constant, with lowest prices at the
elose, and so little fluetuation that speeulative business fagged. Operatora are, however, all on hand awaiting
developments with an eagerness that betok ens a break or
bulge before long. ©ats were dull and steady, atracting
hut little attention far
 Oats, $242 @ 25 \mathrm{c}$. The Provision trade seems to have at ttentions or operators from the Grain crowd. Pork was
rregular and fluetuating, with a fine speeulative market and Lard was in a similar condition. Much interest is felt Mrovisions, especially in view of probable heavy \$11.75; February Lard, $\$ 7.37$ t(as 8.72 . Receints for the
week: Wheat, 225,000 bushels; Corn, 60,00 bushels; ats, 82,000 bushels. Shipmentss: Wheat, 230,000 bush
els; Corn, 24, 4,00 bushels; Oats, 43,000 buhels. Receipts
ame time last year: Wheat, 165,000 bushels; Corn, 515 , 000 bushels; Oats, 155,000 bushels. Shipments: Wheat,

## Eastern Wool Markets

Bosrox, January 5 th.- Wool is quiet and steady. The
mall stock now on hand at the principal centers of trade are giving strength to the prevailing feeling. The stock
held in Bonton is less than last. Lear by , 2, 200.000 tis
omestie and 350,000 lbs foreigns. In combing and delain Fleeces vcry little doing. Pulled Wools ure quite firn
and in steady demand. Sales this week couprise: Ohi
No. 1, X, XX and above, at $43 \frac{1}{2}(\mathrm{~m} 46 \mathrm{c}$; Michigan and Wi

 only $41,000 \mathrm{lss}$ Spring at 201 @33e, and $200,000 \mathrm{lbs}$ Fall
15 a
15e. The total sales of domestic for the week wer 88,700 ths. Total stock in Boston, December $31 \mathrm{st}, 1877$,
was $12,447,480$ tos of domestie. Nrw York, January 5th. The year has opened without
any important ecange in the Wool narket. It is rather
early, however, to expect buyers in any
that manufacturers sbow any inclinatiou to purchase.
From present appearances, holders have decidedly the
advantage, for the season is now well advanced and stocks advantage, for the season is now well advaneed and stocks
arc reduced, whieh tends to give a steady and frim sup-
port topreviligg rates. No immediate improvement in
values is looked for, but should port to prevailing rates. No immediate improvement in
values is looked for, but should a suddculy activedcmand
spring up, prices would, without doubt, mend. Tl stock of Wool, as jnst compiled, shows the aggregate to
be $6,055,000$ ths domestic and 8,329 bales forecign. In-
cluded in the former total are 862,000 the Fill California chuded in the former total are 862,000 ths Fall California
119,000 1bs Spring do, Oregon, Utah and Nevada, 33,000


Pruranecerest, on private terms.
Colorado fine and mediunt. Wool is stcady and firm. pets, $17 @ 18 \mathrm{c} ;$ e extra and Merino pulled, 30 eoarse, Texar fare
ande
and mediun, Domestic Produce.
The followng table shows the S. F. receipts of Domes tic Produce for the week ending at noou to-day, as com pared with the receipts of previous wecks:

| Articles. | $\left\lvert\, \begin{gathered}\text { Wekk. } \\ \text { Dec. } 19 .\end{gathered}\right.$ | Wers. Dec. 26. | $\begin{gathered} \text { Wefk. } \\ \text { Jan. } 2 . \end{gathered}$ | Week. Jan. 9. |
| :---: | :---: | :---: | :---: | :---: |
| Flour, quarter | 50,778 | 15,881 | 72,847 | 43,883 |
| Wheat, centals | 130,651 | 147,937 | 81,518 | 173,451 |
| Barley, centals | 7,859 | 3,652 | 14,143 | 15,775 |
| Beans, sacks | 2,086 | 778 | 727 | 1,725 |
| Corn, centals. | 4,141 | 5,379 | 2,258 | 5,041 |
| Oats, eentals. | 7,551 | 1,501 | 10,440 | 6,319 |
| Potatoes, sacks | 16,444 | 19,270 | 15,953 | 18,612 |
| Onions, sacks | 2,973 | 2,449 | 755 | , 377 |
| Wool, bales | 1,000 | 287 | 331 | 248 |
| Hops, bales | 984 |  | 81 870 | 90 |
| Hay, | 1,252 | 1,122 | 880 | 11 |

Bags. - Wheat bags are unchanged, but reported
firmer because of the rain and a little speeulative demand which secms springing up.
Barley.-Barley is weak, and holders and buyers cannot agree, the forner being quite firm in their views. W
quoto sales: 558 sks good Bay feed, $\$ 1.621 ; 600$ sks fair feed, $\$ 1.62 \frac{2}{2} ; 320$ do medium Bay feed, $\$ 1.65 ; 140$ do Beans. - -There is another advance on the choieest price list below.
Corn. ---Corn
sks grood large Yellow, $\$ 1.57 \frac{1}{2}$ per ctl; 34 sks good large
Dairy Produce-Fresh Roll Butter is unchanged The supply is ample for all requirements. There is stil pickled and imported Butter. Supplics of these kind are reported large and sales are being pusherl ot alnost any price. We hear of a sale of grood Eastern Butter at
13 f c क. th. Cheese is scarce and the faney California now

Eggs-Eggs are lower, as quoted below. We hear lot of 50 barrels of Eastern, which were found frozen arrival.
Feed
Feed. Hay is the favorite, and much activity is r ported at prices which have prevailed. There is a firm
demand for top prices, and $\$ 23$ has been refused for choice Wheat Hay. We note sales: 25 tons poor Wheat, $\$ 16.50$
64 do good Wild Oat, $\$ 17 ; 38$ do choice Cow, $\$ 17 ; 51$ do medium Wheat, $\$ 18.50 ; 38$ tons medium Wild Oat, $\$ 16$ medium Wheat, $\$ 1850 ; 31$ tons medium Wild Oat, $\$ 16$
20 do ordinary Wheat, $\$ 19 ; 24$ tons Clover Cow, $\$ 1 ;$ per

Fruit-Lus Angeles Oranges are enming in more plenbifully, and the price tends downward. The Apple mar-
ket is crutted with poor Oreron stock, which stands in the way of the better qualities which are now arriving.
Hops-We note a sale of 64 bales Orcyon at $6_{8} \mathrm{C}$,
These were some of the best Orerons we have had thi season, although they were damaged. Emmet Wells r ports the New York market for the week ending December 28th, as follows:
A much larger business has been doing in Hops this think the same may be said of the London market. Th very low prices at which American Hops are now being
offered tempts both foreign and home buyers to lay in large supplies; for they well know that the ruinons prices
now current cannot long exist without driving farmers now current cannot long exist without driving farmers
out of the business, which of coursc would soon result in
high higher prices, from a decrease in acreaze. Regarding
present prices, there is no change from last week; a qap
between 7 and 11 still exists, and any fore betwo between and and
these quotations are entirely noninal; in otther words,
the wcek's transactions have been on a basis of 5 (e7 7 c for poor to fair grades and 11 @ 13 c for choice export Hops, Quotations: New Yorks (ehoice export Hops), 11( 113c;


Oats Oats are unchanged. We note sales: 200 sks Ood Oregon Feed, $\$ 1.87 \frac{1}{1} ; 265$ sks fair Oregon do, $\$ 1.77 \frac{1}{2}$,
150 do do, $\$ 1.80 ; 180$ sks cloice 1fumboldt Feed, $\$ 1.00$; 100 do do, $\$ 1.95$ per ctl

## Onions-Onions ar

Potatoes There is no change, except that Kidney Potatoes have taken their place in the recent advance. New Potatoes, which are now in, are like marbles and
have sold at 5 e 粠 th. Provisions Fresh Meats are abundant, but about
priee of Mutton has advanced since our last report albout le $\$ \mathrm{~F}$ li, and the quality offering is not as grool. Bcef is also a shade firmer. The supply of Pork is light but equal
to all demands. The market for Cured Meats, Larll, cte., is inactive and prices unchanged. Considerable un-
smoked M cat is arriving frem Oreron, and finds a ready sale, hut chiefly to local packers, who huy for futuro more freely, but the market is still light by being stocked with new crol
Poultry
In Ifens, Roosters and Broilers. Turkcys are lower at Squash rules at $\$ 10$ per ton
Wheat-The trade is quiet, and, as millers are doins We note sales: 350 ctls Oregon Milling, $\$ 2.30 ; 2,000 \mathrm{ct}$ |choice Stockton Milling, last weck, in two lots, $\$ 2.37 \frac{1}{2}$.
hiterior are still firm in their view of the future.
Wool-There is alment Wool-There is almost a standstill in the Wool trade Wool trade for the last year may be found in our "shee

## DOMESTIC PRODUCE.



Friults and vegetables.


## LUMBER.

|  | LUMBER. <br> WEDN1T\&DAY M., Jalunlry 9, 1878. |
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Gold, Legal Tenders, Exchange, Eic





GENERAL MERCHANDISE.

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RETAIL GROCERIES, ETC.

Signal Service Meteorological Report. Week Ending January $8,1878$.


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| E | E I N: NOD MLLKs тRAYKLED.

## Nurserymen.

## J. ROCK'S NURSERIES,

san Jose, cal.

Fruit and Ornamental Trees,
Evergreens, Shrubs, and Flowering Plants,
orange and lemon trees, american and japanese. pershimos, sut bearing trees tr large variety. hardy palas and ornamental plants.
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the characteristic points of both the bull and the cow of this tine heef-making breed of cattle.
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At a public sale of these cattlc in England,
short time since, the auctioneer claimed that hive could be grazed or
fed at same cost as four fed at same cost as four
Short Horns. This statement has led to some discussion in this
and the old country The Kentucky. Live stock Record admitted the statement so far as three - year - olds we ree
eoncerned, but claimed it was not true as regards two - year - olds. writer went beyond this and stated that Here-year-olds and over was always worth norere in
the London market than that from Short Horns. Although we do not pre-
sent these points in a controversial way, w give them as a part of
the cattle literatur the day and worth of consideration of breeders. The Hereford cattle meat-producing qualities. The beef interest is a large one and whatever tends to cheapen nuch added wealth, and we shall avail ourselves of such information as
we ean obtain to solve this question. Our grazand while they offer great inducements to the grazer, there are some drawbacks, and the
breed of cattle that readily to these conditions will yield the largest returns. We hope the Herefords will be tried on this coast, both in their purity of blood and
for crossing upon the common stock in the direction of improving our beef product.
Sowing Wheat on Horseback.-Mr. James Burnell, of Pacheco, has adopted for several years a nethod of sowing wheat which has
never been described in the Patent Office, but never been described in the Patent Olfice, but
which we have heard has been practiced and advocated by some of our farmers. He fastens a common sack of seed in front of him, on horseback, attaches his feet to gnide reins and uses both hands in throwing the grain broadcoast, right and left, in such quantity as suits him. Being elevated from the ground the seed obtains a wide spread. He says he can sow 20 State Agricultural Society's Election.The time for holding the annual election of the the Directors for Weduesday, January 23 d , at 3 oclock P. M. At this election a President of the society will be elected to serve one year,
and three Directors to serve three years, and one Direetor to serve out an unexpired term.


THOROUGHBRED HEREFORD HEIFER OWNED BY T L MILLER, BEECHER, ILL
problems, and uncertainty should be swept problems, and uncertainty should be swept
away. If this conmittee investigation was nn.
necessary, let us have proof that something can necessary, let us hav
be done without it.
While upon this subject we notice that a
ponderous bill of 58 pages has been introduced iu the Assembly, providing for an irrigation eanal for the West San Joaquin valley. copy was received by the Antioch Ledyer, and
the following outline of its provisions was made the following outline of its provisions was made:
It omits the counties of Alameda, Contra Costa and Tulare uhich were embraced in the former act and contines it exclusively to the counties The first section occupies 34 pages of the bill in delineating the territory embraced in the profive divisions, as (1) that portion of San Joaquin county on the west side of the San Joaqnin river; (2) that portion of Stanislans county yying north of Orestimba creck; (3) those por-
tions of Stanislans and Merced counties south of Orestimba creek and north of San Luis creek; (4) that portion of Merced sonth of San Luis
creek: (5) the west side of Fresno county Five Commissioners, one for each district, are to be appointed by the Governor within ten days after the passage of the bill. These Conngating canal only on the linc delineated in the report of the Commissioners appointed unde
the act of last session. An election is to be sioners to succecd the appointees of Governor Irwin. All qualified electors are to vote at said
election. The bill then, in terms similar to the act of last session, authorizes the elected Commissioners to issne bonds for $\$ 3,000,000$ instead of $\$ 4,000,000$, as in the present, but to pay for
the coustruction of the canal aud the other the construction of the canal and the other
neccssary works. The bonds are issued for 20 years, bear interest at eight per cent., and interest and principal are payable at the office of
the State Treasurer. Bonds are not to be sold less than 90 cents on the dollar, except that The first $\$ 500,000$ may be sold for conts cents of 1876 , that no Chinese labor shall be employed in the construction of the canal.

Immigration Wanted.--It has heen common for the people of the Oceanic colonies to cry for mmigration, hut what peculiar classes of imm-

Swine as Vineyard Gleaners.
That grapes are good feed for fattening hogs been stated several times during the last ew months in the Press, the statement being based upon the experience of our realers as re ported to us. Whether it can be shown that it is profitable to grow grapes for hog feed we very donbt, although we believe even this claimed. We would speak at this time of the profit of using hogs as gleaners in the vineyard One of our leading producers in the interio purchased folling facts: la October last he good stock hogs. They were of ordinary practice to let the hogs have the run of the vineyard, in the daytime, after the run of the the market and for raisin making had beo gatherel, and at night they were turned out an alfalfa field. Their food then consisted of the loose grapes which
fell to the ground, the decayed clusters, in
short, the grapes which nsually go to waste in the vineyard; with
bite of alfalfa at night In 31 days these 30 hogs gained in werage of 63 pounds
aver than two pound mor than two pounds pe on them when sold after the refuse grapes wer gone was abont $\$ 115$,
We give these facts an interesting contribu tion to the niderstand ing of grapes as feed for there was a this cas hays about silo of the refuse grapes in a 20 acre neyard, as th
alfalfa pasture at nigh alfalfa pasture at nigh
would hardly be wort more than the odd $\$ 1$.
for omo month. This w should consider quit worth the saving, espec
ially as the hogs would return to the vineyar more fertilizing materia than the refuse grapes
would amount to if left to dry or decay on th grouncl We should like to
know if any reader has kept weights on grape-
fed hogs, so that he can tell about what retur was made per ton for the ither says: "Let sufficient reward be given, grapes fcc. We presume the feeding has no farmers, to each captain of a vessel for the ind - grapes or hogs can be told, but it may be that portation of every weasel, stoat, polecat, marten, erret, ichueumon, meerkat, or other inveterate adversary of the rabbit, and let these be turned out in pairs, male and female, on the lands infested by this voracious rodent, and the
result will soon be satisfactorily apparent result will soon be satisfactorily apparent.
There is no donbt that, had the rabbit becn an There is no donbt that, had the rabbit becu an an iudigenous antagonist along with it, and the wo forces would have kept each other pretty well balanced. As it is, eagles and hawks prey here on the smaller birds, birls devour inscets which would otherwise destroy the vegetable world, and the kangaroos and wallabies have their natural foe in the dingo or wild dog. But there is no wild animal in Australia able to keep down the rabbit, whose extraordinary powers of increase require extraordiuary treatment. Man has disturbed the balance of nature, and man must eqn
way I have indicated."

Turre were 515 failures on the Pacific coast in 1877. The total liabilities were $\$ 12,495,417$ year over the prececding one is as follows yar over the prececding one is as, folows:
Number of failures, 158 ; liahilities, $\$, 37 \%$,
058.52 ; assets, $\$ 6,084,487.54$.
some one has made the experiment. If so, we should be pleased to knew the result.

Chotce Hops.-Happening in the wholesalo drng store of J. R. Gates \& Co., on Sansom street, the other day, our attention was attract ed to some tiny packages of hops bearing the mark of the Centennial premium taken by Mr Clock, of St. Helena, Napa county. They wound papers, and were as bright and fragrant as the closest critic could desire. The hops are put in these forms to mect the demands of druggists and for fanily use, and some who have becn using the poor hops which are generally worked into this form, will be surprised when they open the papers. Mr. Catos told ns that they are the best hops he ever saw packe
for his trade, and that Mr. Clock will estab lish his brand at onco among druggists on qual ity alone. We do not suppose the demand for small parcels of hops would warrant others in packing in this form, but we note the fact a wo saw it, as an illustration of the wisdom of an enterprising producer adapting his product to the form demanded by all trades. The fact
is capable of many applications. is capable of many applications.

## 奂 G RRESPONDENCE.

Notes from Fresuo County.
Editors Iress:-I send you some notes of my agricultural experieuce in the Central California colony in,Fresuo county. I came here
in March, 1876 , and seleeted a lot, expecting to get the water upon my lot right away, but the route of the distributing diteh failed to bring tho water. So in Augnst I made au excliange taking a lot in a more favorablc, and, at the anne time, more pleasant llocation. But just at that time the water was turned off from the not get the water to nse nutil soluc time in Jannary last, when 1 succeeded in getting abont seven acres settled, and, although late, got
the land into barley, from which I sold abont seven tons of hay. 1 also graled off two acres of hround, and got a fone crops of hay, the last cutting some timo in August. I did not ge a
water again until October, too late to make a crop of hay, but have at preseut a heary crop
of feed upou the field. I also planted a few acres to beans, but rather too late in the season, and the long continned hot weather caused the blossoms to fall; but later in the season they commer, too late to nature.
1 have planted Irish potatoes at three different times, raised some very good potatoes, bnt
light yield. Two acres this fall were cut by the light yield. Two acres this all were cut by the paying crop here. Sweet potatocs make a
splendid crop. Iudian corn makes atine growth but fails to make nuch grain. Still it is better this year
tivation.

## Heavy Yield of Egyptian Corn

Last spring I also planted about eight
unces Egyptiau corn on a small picce of ground rather uneven, and 1 could not successfully irrigate it. Although planted late and not irri-
gated, I threshed ont some 1,100 pounds of seed. From a few hills which 1 left standing I har vested three distinet crops of corn. That is, by
eutting off the beal or cars, and by giving the foots whter, a new head started out from field planted early will produce in this way at least four crops in a season from one planting,
and the yield is enormous. I was the first one to introduce it in the colony, but some of the farmers outside have planted it on a small scale with great success. I eonsider it the best crop
for this valley, as it required but little water. for this valley, as it required but little water.
When made into flonr it nakes good bread and When made into flonr
the best of hot cakes.
When I came here the water was $3 \bar{J}$ feet from the surfaee, but at preseut water can be got althe near future, as tho canal runs through, that water will be found still nearer the surface. The lot 1 have is nuch letter than the average, and smoother upon the surface, but in working
I soon found that it had ton mueh slope for successful irrigation, except for flooding previons to planting. So laid off my lot into 20 fields inehes, eut or filling. I shall have 15 acres cows, hogs and clickens can be kelt, which,
coll
with small expense will materially add to cows, hogs and elickens can be
with small expense, will materially add to
the income of the place. I intend putting out fruit trees this spring; have graperines one year old, and as I go along many nore things no
doubt will be snggested that eau be raised doubt will be snggested that eau be raised
with profit. I intend this year to cultivate with proit. 1 intend this year to cutivat

## Fresno, Cal., Dec. 24th, 1576.

## Notes in San Diego County.

Editors l'ress:-Our late copious rains have caused man and vegetation to look lright and joyons spirit of the farmer, for they well know that the prosperity of all trades and professions depends on the productiveness of wother earth. We have already had more rain than during
last rainy season. The ground is thoronghly wet and plowing and sowing are going briskly forward. The hopefnl workers ean scarcely fail of a bountiful reward.
Orange cultare is gradually winning favo here. Mr. lioek wood has a tree, eight years old, smiling nnder a burden of 300 magnificent
oranges. Its owner may well smile ton, for he has several hundred, which, in a few years, wil doubless make as ine display. He has proved hetter addapted to oranges thau the valley.
Most of our fruit growers agree with him. Most of our fruit growers agree with him.
Five years ago Los Augetes friend sitil to
me: "If you goly had orange trees in learing me: "If you only had orange trees in learing
to show that they could lie prodnced in San
Die Diego, with your ineomparable elimate, there
would be no end to home seekers." We have would be no end to home seekers. "1. have
elimate nnequaled; oranges will grow; now for
more home seekers.

Kimball Bros. are making a specialty of the
live. They have now about 4.000 young trees. olive. They have now about 4.000 yonng trees.
Mr. F. A. Kimball gathered from trees, grown
from cutting put ont in the spring of 7, , from five to 12 gallons per tree. Those raised at the Ther 1 insion sell readily for 81.25 per gallon.
The is no portion of the United States where the olive can be cultivated
I have never heard that the pawpaw tree had receivel any attention in California, and I see no reason why it might not be a desirable fruit
on raise if the best varicties are cultivated. A Jentleman here planted a seed last May, and It grows with astonishing rapidity
The coffice obtained at your office producce heavy rain, one might, washed the earth or them. They will probably die. But for this
they wonld have done well. A neighbor of miue eut open a squash which
was seedless and solid clear through. The philosophy of the freak is not quito elear.
F. M. K. National Ranch, San Diego Co
[We are glad to know that some of the coffee seed we distributed germinated. This is the only case of germination reported from that lot
of secd. It was from Costa Rica and seemed quite fresh.-Eds. Press.]

## A Ride Through Lisbon District.

Edrtors l'ress:-Of late years the reelama tion of tule land on differeut islands below Sac ramento, has proved a decided success. Parties in our city and county have had their attention the west of the river. Mr. (iwynu has taken the enterprise in his own hands to a great ex cut, assisted by Mr. Gardner and others. The listrict was first surveyed, mapped off and the during the early part of the summer. It is now nearly completed. To give a more detinite furuished the following items: The length of the levee is 13 miles. It encloses an oblong tract. The southwestern line of uew levee is attached to the river bank. some miles above
Freeport, and extends some four to five iniles below to a point to the river. The hight of general run is 17 feet. The river levee is 10 eet ligh. The number of acres enelosed is
5,900 . The land is distributed annong 1.5 to 20 hollers. Mr. Gwynn, the largest holder, has ans acres. The former tos. Mr. Gardner has In traets of from 150 to 2202 acres on shares. The renter lrake it up, provides everything for three years, and gives four per cent. of the proceeds for use. Along the river bauk are the
old residents and Portuguese vegetabte gardens, who cultivate the higher land along the levee in grain, hay and vegetables.
levee and other points miles and struek in on tule land. I came to the house of Mr. slack. He has of late put 1 p a new houso and barn. He is busy burning of
tules for future wort tules for future work. To burn them up more
effectually he uses a large roller, some six. in diameter, constructed in a frame similar to a reaper. Placing the double rotler before the
horses and mashiug down the tules, he leaves but few spots untouched. These are cut by the mower. He also showed me a new cultivator previous to plowing. This aids greatly in pulverixing the sod. The teeth are bars of iroul some I8 inchcs in length, sharpenel on one
side, similar to a coulter of a plow. It cuts some four inches in depth, leaving the strips the same size in width. The time thus employed he expects to save in harrowing, as it leaves
the land in better order, crnumbling the sod in finer partieles.

The drawback whiel most of the renters are apprieneing is a laek of llows snitable for suee,
work. That used is ealled the "Garclen City." These are made especially for such work. As
there were but six in the state, all were spoken there were but six in the Nate, all were spoken
for early. The others are on the way from Chicago aud expeeted withiu 20 days. This po cut rots. The depth of first plowing is lhut
of tule root Cour inches. Two plowings are required, aud Ready plow, but it would not answer. Barley will be the priucipal erop. Alfalfa
will be put in to some extent. Wheat oo rank and mildews unless put iu late iu the season. They expect barley to yicld 50 to 76
bushels per aere, and want to get all in by the 1st of May next. Four plowings are require I alfasta and the soil unist be well pulverized.
passed on to Mr. Gardner's land. Thy are also clearing np aud will nese 15 heal of horses. Mauy are putting ap their houses and barns on
their respective lands. I siaw sone laud which had been previously broken by an old resident. It looked in tine condition.
Passing to the southern extreme, I struck the
newly-construeted levee. The lower requires finishing by topping the eap; 30 portion are steady yat work wheeling by lanud dirt from
outside. As it is of a sticky nature, it will paek
to advantage and become a solid wall, il tine,
rendering great protection. Many judge the
seepage will not amount to much, as the founda tion is constructed on a elay bottom, proteetion is ever secure. To further its security it is the
intention to pliant a close hellge of willow ou the outside to break the force of the waves. This grasses, as the latter draws gophers and they ndermine it
truck for the river miles along the levee laud that was plowerl by the "Golden City"
single eutter. Three were in sight. The movement seemed easy and they are expected
to prove a great advantagc over others iu working such land. I noticed the sod laid more flat ide by side.
The reason givell for shallow plowing is that more readily. Therefore it is practicable to kecp onlv the surface loose, allowing tho moist ure to come as near to the surface as possible. Sacramento connty is increasing in her agri
cultural capacity and will soon contain a much cultural capacity and will soon contain a much
larger qnantity of productive land, this iucreas ing in wealth and distinetion. All this land will eveutually be divided in smaller parcels,
Mr. Gardner informs me there are lands ad joining eomprising some 2,500 to 3,000 acre under the superintendence of Gen. Thomas 11 Williams. If the coming season is favorable they will evee it in, theretore giving the lan
which I have described a double protectiou.
Sacramento, Cal.

## Horticulture,

## Hints to Orchard Planters.

Mr. W. B. West, of itockton, has succeeded in introducing a great deal of practical and val uable information iuto his annual catalogue for 1877-S, and thus has given his price-list inthis and all ought to do it, because nurserymen are naturally on the qui rire to gain the results experience and experimeut and thus gai nuch light which should be made known. Mr West's experience lies ehiefly in the San Joa
quin valley and his remarks may be supposed to have particular application to the condition in the interior. They are, however, full of sug estions which ean be applied elsewhere. W hall quote Mr. West's advice as to planting and reatment of orchards
In the first place, seleet a suitable spot for the orehard, if possible, land that lays well for
irrigation. Then see that it is well fenced, and plowed when the land is in proper conlition, he is, when not too dry in wo wet. thossi Le, have it plowed before or soon a ater the firs Then, before you purehase your trees, make u yonr inind as to the quautity of each kind o rruit trees you will want, and the senson o
beariug. If you are not açuaiuted with the names of different varieties, request the nur eryman to select such as you want. A selee oin of varieties that wili give a suceession o ruit through the season is nost desirable, even By all means purchase your trees early, eveu if They can be transplanted with much less daner of injury oarly in the season than later; the climate is much more humid in Weeember, Jan nary, and the early part of February, than you ean first ehoice. If the ground is not in conditiou plant, or other business interferes, the trecs , they can be planted closely in a trench, tak , they can be planted closely in a trench, tat so that they will not get dry. Yon then have our trees in su

## Planting

In the important operatiou of preparation the trees, tbere are more mistakes made than in auy other. Usually trecs are planterd just a hey come from the nursery; in removing a tre ully it is doue, a portion of the roots are ent If and conseqnently the balauce existing be
ween the root and top is destroyed; this must be restored by proper pruning. Apple, pear nid plum trees are sold usually at two year old, having been cut back in the nursery at the nd of the first year, to from three to five feet they have branches from this hight, which the previons season's growth. Next the roots mnst be atteuded to; all ent and jagged place must be made smooth. The holes should be
ang large enongh to ailmit all the roots to be pread out in their natural position; then let ne person hold the tree and another shovel in and bring every portion of the root in contac then be thrown in to settle the ground and keep it moist; then fill up the hole. Standard trees
should be planted just so deep that when the should be planted just so deep that when the in the nursery. liwarf pears should have a

When the trees are planted throw about six inches of coarse manure around them, which
will prevent the ground from drying, and keep will prevent the ground from drying, and keep
the trees in good condition. the trees in good condition. The orchard should be kept free from weed and cultivated as long in the spring as they
grow. I do not believe in plowing too much grow. Iry weather sets in. Some protection after dry weather sets in. Some protection either by
On a majority of farms in the San Joaquin valley, irrigation is absolutely necessary; trees may live and produce some sinall and inferio ruit, but for large and hne crops do not spar pared with the benefits derived; better irrigate and cultivate one acre well thau 10 poorly

At the cud of the first year, if the trees have about half their summer growth, and all the branches growing across the tree or in the injurious to the syinmetry of the tree, should be ent out. The result of this pruning will be that scveral branches will start from below ach cut forming a round, well balanced head It is neccssary for another reason. If the long rood growth but from anot, usually, make ood growth, but from almost every eye fruit covercd with fruit, which will bend and perhaps beak the limb, or at any rate destroy the summetry of the tree. As the tree becomes older necessary to be done will be to cut ont an occa ional shoot that grows ont of place or shorte one that grows nnecessarily long. All kinds of
trees should be grown as low staudards. This ad rees should be grown as low staudards. This ad
vice is as necessary to the fig, cherry, plum and apple as to the peach and nectarine. Many
trees, especially the cherry, die the first year trees, especially the cherry, dic the frst year
from the nursery, from no other reason than
that the sun and borers have destroyed the trunk
Where land can be thoroughly irrigated, small fruit may be grown hetween the rows of
the orchard. Blackberries, raspberries, currants ud uoberies can be grown better thus tha in the full exposure to the sun. To have stran berries produce abuudantly they must be irr hem planted too near trees that lo not want so much water. It is astonishing to see what an amount of fruit can be producel upon a vated.
Apples, pears and plnms, well grown, will e fruit the second or third year from the fourth or fifth. Peaches, if not cut hack to severely, will bear a erop the third year. Black berries-will produce a good erop the second
year. Currants, raspberries and gooseberries re uneertain. Strawberries can be made to hat they have been lanted. l'lant early, irrigate freely.

Diseases of Fruit Trees
Perhaps the most common eause of disease the prime cause of many other difticulties. If tree is kept growing by giving it an abundance of water, then, perhaps, it may not suffer from phe sun, but this is not always convenient or
possible to do. The best rud most practical way to overcome the evil arising from this canse is to grow only low, standard trees. Borers
We are troubled with the worst species o orers. Young trees shonll he examined fron Their presence can be determined by season. pot upon the bark of the tree, usually, but not always, on the sunny side. By examining with a knife a grub will be found, very small, at first hardly diseernible, afterwards growing to half an inch in length. By a little attention the first and second years they ean be conquered. he bark by a fly
Wo have no long list of diseases caused by itter cold and sterility, but only such as can be conquered by eu
little common sense.

## Plum Growing.

Eurrors Press:- The article on "l'lum on 'each Stock," in the ICral of the lith ult and sustained by Mr. Patterson in the issne of Dee. 29th, eaught my eye. I wish to offer my expericuce and the opinion of every orehardist of this country, embraeing tho great basin of the Columbia, which is that there is no stoek it for a plnm bnt the peach. No man of pracical knowledge here would plant $\Omega$ phum tree on plum root if you wonld make hius a presen of the trees. I believe that ordmarily when weh a thing is the ease we should be alle to give some reasons for it.
While engagel in the unrsery business for about 20 ycars, I observed somo points that suggest to me the propricty and advantage of grafting plum on pereh stock. First, the peach
root is a vigorous, healthy ront and a gross eeder, and was always fonnd to le of a healthy soil; that the top or wood above ground was
the time it was three years old. This observa tion resulted in the practice adopted by my par-
ents, over 40 years ago, of cutting back aud renewing, the same as we renew grape vines. Remembering that our old peach orciairds had the tops while the roots remained healthy, I
was led to the thought that a plum would sucNow, on the other hand, I always found the plum root diseased, seldom digging a tree five
or six years old but what $I$ found the root knotty, with rotten spots and wood borers in
them. At the same time the wood of a plum tree is a sound, hard, fine wood seldom brown and decaying inside like the peach. Knowing
that they assimilated on the same stock, that they assimilated on the same stock, I com
menced grafting plum on peach and I have had
them hearing up to those 15 years old, I have always found the fruit superior in size and the tree appearance.
I have had experience with them upon vari-
ous soils and am well satisficd that if I was planting upon a damp, heavy soil, where a peach tree would be worthless, I would use plum on nothing but peach root
human patience to bear. I at is beyond human patience tum 1 at one time had some plum on plum stock and they were so
much trouble that I dug them up and worked the ground for two years to get rid of the suckers.
plum orchard that will produce the fiuest of fruit and succeed on a greater variety of snils than any other. Lay off the ground as you
want the trees to stand in the orchard. Plant a few peach pits at each point. Bud them in
September following with plunn, and the followSeptember following with plun, and the follow-
ing spring remove all but one tree from each point. In this way you have a tree without the mutilating process of transplanting and you will
find that you can raise plums from the tule find that you can raise plums from the tule
lands of the Sacramento to the frost line of the

I have seen plum on peach stock of the finest and most vigorous growth produce the most excellent fruit on wet, springy land, on dry gravel
land with a well-drained subsoil, on alkali land with a hard-pan, subsoil, upon the foot-
hill lands in Walla Walla, on the sand ridge hill lands in Walla Walla, on the sand ridge Ronde valley, where, in the month of August,
the potato and squash vines were killed with the potato and squash vines were killed with
frost; and here in Boise valley uppon the warm, frost; and here in Boise valley upon the warm,
sandy plains in the cozy little foothill valleys, and upon the low bottoms of the river where
their feet stand constantly in water, the plun
Boems City, Idaho, Jan. 3d, 1878.

## Coffee Seed.

Edirors Press:-Mr. Reed's very interesting article has encorraged me to give my expericnce. I think most of the coffee seed we buy
has not been properly gathered or dried, and hence is very deficient in germinating power. Bat I have good reason to believe that good much to import plants, and the risk of losing them is so great, that we ought first to mak every effort to get reliable seed.
Two small lots of seed which I obtained, one through the kindness of the Rural, failed entirely with greeu-house treatment. I had little
faith in them, for I had subjected a portion each lot to various tests, which resulted badly the germ seeming devitalized. Now if we had not previously succeeded with coffee, I should
feel that possibly other methods would have done better.
It happens, however, that two years ago we
had a large lot of berries from the Sandwich Islands, nearly every one of which grew. This
seed was gathered for us by seed was gathered for us by a friend, from the
trees; was dried slightly, with the pulp on, in
the shaide. was packed carefully so it could not mold, and sent at once. When they arrived, the berries were fresh enough to eat, and tasted

This seed was at once planted in shallow were put in the sand and loant some of thase house; both lots grew finely. We found, how the hot san destroys the young plants. Coffee receive a fresh lot shipped in the same way and Our hope to report a success. dried lerries are worthless for seed. Let oun seedsmen take note, and import only ripe seed, slighlty dried, with the pulp on, and kept warm
and dry until sown. Otherwise, thesc costly failures will continue.
Niles, Cal., Dec. 29th.

## Better Experionce. Eorrons PREss:-The propaga

 coffee tree being discussed in our paper, Ithought I would offer thought I would offer my experience, which
'uite the reverse of Mr. Chas. A. Read's
About package of coffee seed, and advertised in th Santa Clara Echo that all those wishing a sinal ened and found two seeds in, just like al
pots, which I placed in an ordinary cold-frame
and kept them moist. and kept them moist. In about one month or which I afterward divided and placed one in each pot. When they were about six inche fair. I afterward lewt home and stayed about five months, where I now live, and during $m$ absence they were
mnch for the coffee.
Mr. Samuel Purnell's articles on trees and rainfall are very interesting, if nothing else.
But will the gentleman condescend to tell u where the rain would fall providing all the for ests on the globe were destroyed

## Arboriculture.

[Cultivation and Rainfall.-No. 4.
Editors Press:-There is yet another view of the influence of trees on rainfahl, which I have not noticed specifically. It is that trees, and especially forests, keep the earth cool-or the lower stratum of air-by their shade, and water-are so cooled as they pass over the shaded lands that they are contracted below the dew point, and so let down their water. To this I reply: First, that a wooded country is
warmer than the prairie, and not cooler. The prairie is cooler in summer and in the winter than the adjacent forest. The thermometer shows it, the depth of frost shows, vegetation
shows it, and a man feels it. You that have lived on the borders of prairie country and for est, is this not so? My friend Col. Hollister, of
Santa Barbara, claims to Santa Barbara, claims to have increased by
some degrees the warnth of some parts of his some degrees the warnth of some parts of his orange orchard by encircling them with fores
trees, and I think he is correct. What, then becomes of the theory that forests cool the hight the passing cloud confesses its strong grip hight the passing choud confesses its strong grip,
and, like a squezed sponge, lets down the rain? Let two balloonists ascend into the aerial regions, one from out of a forest, the other from out of the treeless plain, to the hight of 500 feet. Let them note their thermoneters. Who believes the thermometer miles, amid the steady currents of that upper
sea, we all know the caloric influence of forest sea, we all know the caloric influence of furest
or plain would be less than the fine dust of the
balance.
And here let me notice a very common mis take in regard to excessive rain and snow storm. in mountainous conntries. The cause of this
is said to be the cooling influcnce of the moun tains upon rain cloonds. But the thermomete of the same hight. Being your thermameter to the ground, and the mercury rises. The only mountains which are cooler than the adjacen mure than half the year they are warner than1
the air of the same level. Some other caus must be sought for excesssive rains in mountain
regions.
I ornce spent some time on a large island in
tropic seas. It was denscly wooded, yet daily a strong breeze set in from the sea at 8 A. M. it blew in upon the island, showing that the it blew in upon the island, showing that the of its "cooling forest." In other islands, under forests, the same sea breeze by day and land breeze by night prevailed. My conclusion was to do in governing the winds and storins of
But we are told that "'all wooded couutries have abundant rainfall." Ergo-" the trees
cause the rain!" The willows are plenty along the course of a neighboring water ditch. Ergo - the I Isuggest that the rain is the cause of the trees, and that Oregon would be a rainy comn try if the last tree were cul roins-who has observed that all our rains commence far of npon the sea, and drift inland, but emptying them being.

The Question in Southern Calfornia. Before closing this article let me refer to Mr. regard to the condition of southern California before the greedy, seltish and destructive white
man came. He says: "It is ascertanied that man came. He says: It is ascertanied that
the coast and the islands off the coast of Santa Barbara were then densely peopled with Indiennial streams; summer rains refreshed the earth, and all the country for humdreds of miles ance! How difffrent now since the fatal pres
ence of the white man. The forests have been felled; the. streans heave disappeared; the he earth; the native people have becoine en
tiely extinct. To such a state has the felling the forests reduced the co shat elling Calfornia. Santa Clara river, of Ventura county, and Posa creek, and the springs that
ced them, have mostly dried up," etc.
ern coast of California was that made by the
Jesuits at San Diego in A. D. 1769-just 108 Jesuits at San Diego in A. D. 1769-just 108
yars ago. That of San Francisco 101 years gan The first white settlement made here (in years 9 tirely to themselves till 1831, when, according to Forbes, they and their white attaches, and adventurers connected with their missions, num bered only 7,463 . These were all the whites and the Indians belonging to the missions a that time numbered only 15,562-in all 23,025 . A few more people than in San Jose, yet this
23,025 -counting in women and children-were able to occupy the whole country from San
Francisco to San Diego, fight and whip the Francisco to San Diego, fight and whip the
pagan Indians, and cut down and destroy the pagan Indians, and cut down and destroy the
vast forests for 500 miles down the coast so that not a vestige is left behind! What Anakins the days! Think of the vast treeless plains between San Francisco and San Diego! These al years ago, and before 1831 all gone, and not ness to the murderous axe of these few priests and their neophytes! Besides, what ad they
do it for? Not to sow wheat, no plant corn, nor to raise barley or fruits. They must have they stopped the summer rains, dried up the hrooks, and played the duece with our climat Eneraly-and all too from
Yyours! speak of Santa Clara river and creek bpeak of cause. I live on the Santa Clara river. I know
very part of what you call "Posa" creek. Its name is Los Posas. Los Posas creek rises in big spring, and there is not a particle of evi-
dence that it has ever averaged a greater flow
per annum than it does now. As to Santa Clara per annum than it does now. As to Santa Clara the mountains where no man lives, and no axe
man has fallen the trees. There is not a partiman has fallen the trees. There is not a parti-
cle of evidence that its annual flow is diminishing, and if there was, no cutting down of for ment that "Arizona was once covered with for ests, had summer rains, abounded in limpid streams, and was very populous till the axeman
came, and cut down the forest, abolished summer rains, wiped out the brooks, dried up the rivers," etc., shows a facility for making history
worthy of a patent. Men hereabouts familiar with every part of Arizona say it is "pure ro-
nance." The editor of the San Luis Tribune calls it "bosh." Most of the ruins you speak
of are less than 100 years old. There was a time when the Spaniards had near 100 silver to raise supplies for their employees. Hence the larger part of these ruins. The rest are
Aztec or other Indian ruins-few and far be tween, and all indicating, at best, only a sparse population in that arid land.
$\xrightarrow{\text { San Buenaventura, Dec. 28th, } 18 \text { S. Bristol. }}$

## FLopiculture.

## Pruning Flowering Shrubs.

Edrrors. Press:-If there is one operation in the flower garden that requires more thought and judgment than any other, that operations pruning; and yet how often, particularly in our
State, do we see it done as if it were the simplest of garden work. The operation being considered necessary only $t n$ get rid of a portion of the plant, the most awkward hand on the place, or the one with the least judgnent,
is set to work with a pair of garden shears to trim the roses, hilacs, snowballs and other shrub bery. As a rule, he goes through the place eak grower, a bloomer on old or new wood ndiscriminately.
While, in pruning, we should study to get the greatest symmetry of formattainable on the
ubject on which we are working, we should also take into consileration its habit of growth, hether iteak or vigoros, ins or on as or year old wood.
A plant that is of naturally vigorous growth o the desired shape. Pruning naturally pro duces a more vigorous growth, and, therefore to severely prune a vigorous growing plant. will only make it grow more rampantly. On the other hand, a severe but judicious pruning of a
weak grower will make it grow stronger, and weak grower will make it grow
therefore is to be recommended.
Many of our handsonest flowering shrubs, like the lilac and mock orange, bloom on the plants it inust be done (I am speaking now of fall and spring pruning,) at the expense of the Where fo fowers.
mportance, first find out whether the particula duced on new or old wood and prunc accord ingly; if oun new wood, prune severely, so as to
induce new growth; if on old wood, prunc

## ightly. Rose

rees; some nuch handsonsi when trained into fious fancy shapes to which they train them.

In regard to the best season for performing this work there are conflicting theories. I
prune entirely in the spring, however, and on the whole, I think it spring, however, and In pruning all flowering plants, cut close and use a sharp instrument; on soft wooded plant
always use the knife in preference to shears. Answers to Inquiries.
Since I began to write for the Press I have eceived quite a number of inquiries from different readers. These I am always willing to
answer through the Press, when the subjects Mre of sufficient general interest.

## Hoya Carnosa

This is the true wax-plant; the leaves are shape, in the center one inch across, very thick nd wax-like, appeariug when the sun shines ers in clusters, a delicate yellow. Easily propagated from slips. To make it bloom, set it out
an the full sunshine and water freely. It will in the full sunshine and water freely. It will
grow with the meanest of treatment, but no plant, repays better for a little care
J. H., of California, asks of the

Tricyrtis Grandiflora
This is indeed a superb plant. Flowers white, variegated with purple spots. Does best
in pots or boxes of rich loam. In the spring in pots or boxes of rich loam. In the spring
and summer water freely. In October and Noember it will bloom, after which the stems or no water from December to April, when it will again start into growth from the root.

## El Dorado, Cal.

## The Swine Yaro.

## Bacon, Hams and Pork.

ives the following practical information and instructions: As the salted flesh of swine is the hief reliance for food of a great portion of our best manner, and to do this we have only to ake a lesson from the English, whose bacon is
lways in great demand for a breakfast relish ways in great demand for a breakfast relish let the pig hang for 24 hours before it is ard, sausage meat, and head and feet, the rixts, of saltpeter, sugar and salt is thoroughly rub-
 added to the salt, and one-sixteenth as much altpeter. Enough is used to wholly cover the
meat. Then it is placed in long pieces into a turned over, and a little more salt added. Af ter it has laid two or three weeks longer in the pickle it is taken out and hung up into the
kitchen to dry. If possible, it is hung on poles placed across the ceiling; and is two months it is cured enough to eat, but is better in three
months. Early in the spring it is sewed up in cotton cloths, and brushed over with a thick
whitewash, to preserve it from flies. whitewash, to preserve it from flies. In France they pursue a different plan, and
there bacon is also the chief food of hundreds of thousands of the inhabitants. They never scald the hog to remove the bristles, but singc
them off. A large bed of straw is prepared, and the carcass is laid upon it. Fire is set to
the windward. Ater simgeing it on one side, the windward. After simgeing it on one side,
the pig is turned over on the other side for a
few ninutes and if any bristles are singed off with wisps of straw. The carcas
are is then brushed thoroughly and washed in cold water, and shaved off with sharp knives. Meat thus treated is supposed to keep in a better con-
dition than if scalded. For a hog weighing 300 pounds they use 40 pounds salt, and 10 pounds of brown sugar, three ounces of ground pepper,
and six ounces of ground allspice and cloves, and six ounces of ground allspice and cloves,
mixed half and half. These ingredients are all mixed together, ahd rubbed into the pork for an hout or two. It is then packed tightly in a and all that remains is laid over the top of the meat. In three or four weeks it has become suf-
Hams and bacon are usually smoked in house built for that purpose, but they can also be
smoked in large, olddefashioned chimneys, by sinoked in large, old-fashioned chimneys, by
burning corn on the cob in the fire-place. In Hamburg, Germany, the smoking is done in upper roons of large luifdings, and the smok cellar. The sonoke being dry and cool when it enters the room, the ineat is of a much whan flavor than when nearer the fire. The celelirated Westyhalia pickle is made with six pounds of rock salt, two pounds of powdered loaf sugar gallons of water, and boiled till all scum is re moved. When quite cold it poured on the brime. In four or flve weeks the hams are ready for the smoke-house. This pickle can be
uscd several times, by boiling it over to remove uscd several times, by boiling it over to remove
all scum, and adding a small amount of its in-

Hans should be thoroughly washed before being pickled in order to remove all the blood,
and then be wiped dry. After being smoked they can be kept for several years, if, after sewing them up in old cotton cloth, they are closely
packed in ashes or powdered clarcoal. They

## Parkons oz Hospararr.

Correspondence cordially invited from all Patrons for this
Removal.



## Temeseal Grange Installation

On Saturday, Jan. 12th, Worthy Secretary Adams, of the State (rrange, installed the officers of this Cirange. Past State Master Web-
ster resumed the duties of Master of his Subordinate Grange with all the zeal and vigor of old times, and the eonfidence of his fellow Patrons.
Deputy Nathaniel Jones, of Coutra Costa county, by invitation, spoke on the Rochdale
co-operation plan, and ably and enthusiastieally co-operation plan, and ably and enthusiastieally
advoeated the organization of co-operative assoadvoeated the organization of co-operative asso-
ciations in Oakland and clsewhere. He also ciations in Oakland and clsewhere. He also
well portrayed the need of, and advantages to
be derived from a narrowe derived from, a narrow-gauge railroad from Wassed lyy Mr. Jones will, no doubt, he further cussed in the Grange. W' hope he will have
urgeortunity of speaking them more widely. opportunity of speaking them more widely.
Upont the adoption of the memorial resolutions to the nemory of Sister Lydia A. Cresscy
(published in this issue) Sister Jeaune C. Carr, (published in this issue) Sister Jeaune C. Carr,
from Sacramento, who seemed so opportunely from Sacramento, who seemed so opportunely
present in her charter Crange, paid a glowing present in her charter range, pas as feeling and
tribute to the departed, speaking as eloquent worls as it has ever been our lot to
listen to. of
No fraternal association, no matter how aneient and implosing, has ever elicited a higher
fraternal feeling than our Order, and Mrs. Carr's allusion to the manner in whieh the great
heart of the Grange comes mp in sympathy and heart of the Grange eomes np in sympathy and
comfort to the aillieted in the hour of trial, comfort to the aftlieted in the hour of trial,
touehed a tender chord in the hearts of those present.
Dr. Dio Lewis and wife were preseut at the harvest feast, os bountifully provided by the
sisters. With all present thy seemed to roundly enjoy the occasion. With great force the Doctor spoke upon the curreney question, giving
forth some novel ideas, which were well listened to. He will most likely be invited to repeat this speech before a large audience.
Installation and Lecture at Stockton Grange.
Emitors Press:- On Saturday, the 5th inst., the officers of Stoekton Grange were installed
by Past Master Win. Fr. Phelps, assisted by
Past Master Wolf. The installation was Py Past Master A. Worf. The installation was
public and was largely atteuded. Immediately public and was largely atteuded. Immediately
after the installation all present were invited to partake of a harvest feast, which was prepared
by the sisters of the Grange. About 200 sat down to the talles, which were loaded with good things, aud rare flowers of many kinds graeed the board. All seemed to enjoy the feast, whieh was so abundant, that many bas-
kets full were left, and distributed among the worthy poor in the town. nia, arrived in time to partake of our feast, and nia, arrived in time to partake of our feast, and
after we had adjourned to our hall delivered one
of the most interesting leetures it has ever been of the most interesting lectures it has ever been our fortune to hear. The subjeet was, "The
Treatment of Alkali Soils." The lecture was public and the hall crowded with people, who evineed great satisfaction in the manner in
which the Professor treated the subject, and which the Professor treated the subject, and
the experiments nuade by him. We feel that the experiments nuade by him. We feel that
he has done much yood to the agricultural por-
tion of the community in this section, and would suggest to our hepresentatives in the state suggest to our kepresencance
Legislature to take into consideration the expe-
dieney of appropriating more money to enable dieney of appropriating more money to enable
Prof. Hilgard to visit different portions of the State to give information to the people, and also
to Iearn himself, by actual observation, the exto learn himself, by actual observation, the ex-
tent of the soil that is, at the present time, almost worthless, but whieh he belicves ean be reelaimed without great expense. The Professor
made many friends here, and we believe that he made many friens the "right man in the right place" and we
is
wish to keep him there and assist him all in our power,
Stockton, Cal., Jan. 12th. WM. G. Pueles. Pomona Grange, No. 3, Endorses Stockton Editors Prpss:-The following resolution was adopted by Pomona (irange, No. 3, at
Dixon, Jan. 3 d 1 sif .
Resoned the the


1. J. True writes that at Cottouwood Grange
Some one iutrodueed a resolution for the Some one iutroduced a resolution for the
frange to returnits charter to the State Grange, Frange to return its charter to the State Grange,
thereby disorganizing the Grange. But it would
not down worth a cent. The season may be not down worth a ccnt. The season may be
bad, and, of course, it is then hard for most of ns, to keep up our dues, but nenrly all feel like
doing all they can to keep up our organization.
Pono Grange-John Woolcver, Secretary,
writes us that this Grange is in the ascendant: writes us that this Grange is in the ascendant-
installed oftieers January 5 thi, and starts for-
ward zealously toward a more prosperous future.

## In Memoriam.

Our Grange eircle has again been broken ly the death of our beloved Sister Mrs. C. J.
Cressey, the seeond link in our ehain severed siuee its organization. A long painful illness of three years' duration, the greater part-of which she suffered untold bodily anguish, was borne true heroism. Her ted patience, forticione and rejoicing in the clear and bright assurance o rejoicing in the clear livine Master above,
aceeptance with the liver
mains a blessed eonsolation to her bereave family.
Outside her little family she had not a single relative on this eoast, but she did not lack for
warm friends; they are many, to whom she warm friends; they are nany, to whom she ation for others.
Living in the delightful suburbs of the large
city of Oakland, adjacent to san Franeisco, she had all the combined advantages of country air and city skill for her recovery. But all these, together with the ever-watchful, thoughtiful, tender care and constant, untiring, self-sacrific the efforts of their eldest son, failed to arrest the disease, and could only in a measure miti daughter and a so . young to fully realize their loss. As time ronls on, may they uever know the full meaniugo that desolate word-motherless.
Whiriris. In the death of Sister Cressey Temeseal Girange has lost a loving, esteemed
sister and faithful Matron of our Order, our sister and faithful Matron of our Order, our
anflicted brother and fanily an affectionate devoted wife and mother
Reesolvel, That we deeply sympathize with although we feel that all words must be a empty shadows to the strieken heart.
Rexolved, That we who watehel by
side during her last who wateher by her bedwere greatly benefited by the lesssou there reeeived, through her spirit of patient endur
ance aud unnurnuring, eheerful resignation, which arose superior to all pain, in joyful anticipation of the future, so that when the las hour came, the soul shone out of its frail tene
mcnt, and with mind clear as a sunbeain, sh gave directions as to the place aud preparations for her final rest. Theu, with a press of the
hand, she called each weeping friend by name and said good-bye. Then, as a weary child i its mother's arms, she turned to her weepiug
husband saying: . How kind you have been to husband, saying; ..How kind you have been to
me in all my aftictions; faithful to the last. am very weary, good-bye. I am passing awa Resolved, That this heartfelt testimonial o our syirpathy be placed on record, and a copy
sent to her fanily, also to the California Patro and the Pacifec Rural Press for publieation. Committee: Mrs. A. T. Dewey, Mrs.
Salter, Nellie M. Crouch, J. V. Webster.

## Sacramento Grange.

Editors Press:-Saturday, Jan. 12th, the members of the above Grange assembled in
their hall for the purpose of installation of of fieers for the eusung year. It was also tue in-
tention to hear Prof. E. S. Carr lecture, it being the seeond series of the course; but be Professor was confined to his bed unabled to be pleasure of Bro. J. W. W. Wright, who after installation lyy Past Master, fieo. "11. Haneock,
gave us a fiue lecture on "I'raetieal Education," spending au bour in giving an aecount of hi visit at the Royal Agriculture college at Ciren cester, England, and showing the practical
teaehings there undertaken in the sehool and farin experinents. A very good uumler was out, and all were pleased with the aftcrnoon sessiou.
Sacra

## acramento Cal.

H. Mailere writes that Sutter Mill Grange is prospering and is heal thier thau any time since it to confer the fourth degree on the 18 th inst Ne are talking of having a big time in April or ington to address us.
Romting straw Piles. - We will give she
(in subscription to the Rural Press) for the best formula reeeived previous to April next for converting rapidly the refuse straw heaps left
ly thresling machines on the wheat and barley fields of our California valleys. We will leave it to a vote of the Stoek ton Grange to decide
the winning process. Certainly there should be some simple metho whon can material without redueing it to eres wis invite correspl
utilizing straw.
A. $\aleph$. Tolles writes that Old Creek Grange is in tine workiug order at present, having expelled
all delinquent memhers: those we have are good orkers and faithful to the eause. Consider ing the dryness of the season and the hardnes
of the times, we have done well to Grange alive and pay up our dues, but we hope to report more favorable next quarter.
J. R. Tornan writes that the Colusa county do not iutend to leave anything ly together, and can do to help the cause along.

## Election of Officers.*

 fingwell, A. S.; Saide Kaetzel, C, ; J. C. Baker
T,; Rufus Rigdlon, See'y.; J. Mullin, G. K.;
Indiana Rigdon, Ceres; May Leffingwell, Po-
mona; M. J. Carey, Flora; M. E. Quinn, 1. A. S
Der. mona; M. J. Carey, Flora; M. E. Quinn, l. A. S.
Deep Crek Cirance, No. 136, Farmers
ville, Tulare Co. Eleeted, Deeember 2ed,
$1877:$ Installed, January I?th, 18;8, ly Bro. 1877: Installed, January [2th, 18:8, hy Bro
Merritt, Master of Tulare Grange: F. f. Jef
ferds, M.; I. Teague, O.; A. W. Mathewson, L.;C. Van Loan, S.; E. M. Jefferds, A. S.; Mrs S. Buek man, C., John Teague, T.; M. (i. Pen-
nelaker, Sec'y; M. Jasper, G. K. i Mrs. N. Jef
ferds, Ceres; Mrs. A. Calhoun, Pomona; Miss lilla Pennebaker, Flora; Mrs. M.' A. Harlow,
L. A. S. EtNa Grange, No. 219, Siskivou Co.-Elec-
tion Dec, loth: J. Ehler, M.; Charles Hovenden, O.; I. S. Mathews, L.; O. N. Green, s.;
D. B. Kingery, A. S.; S. D. Varnum, C.; Jerry
Davidson, T.; L. S. Wilson, Sec'y; Clark Brad. bury, G. K.; Mrs. D. B. Kingery, Ceres; Mrs,
A. A. Green, Pomona: Mrs. L. S. Wilson, Mrs. J. H. Walker, L. A. S.; I. T. Moxley, Morro City (iravie, No. 27, SAN Lui
Omispo Co.-H. Y. Stanley, M.; J. H. Cueke O.; F. Lilcy, L.; T. J. Stephens, S.; W. H
Lovell, A. S. Nister S. Langlos, C; F. W
Parker, T.; A. J. Mothersead, Sec'y; Joh Parker, T.; A. J. Mothersead, Sec'y; John
McCune, G. K.; Sister H. G. Riley, Ceres Sister S. C. Stcphens, Pomona; Sister S. N. A. S.; D. II. Whitney, Trnstee. 29th: J. M. Thompson, M.; S. Eaton, O.; A

1. Butter, L. J. F. Knief, S.; C. Dill, A. S
J. M. Marshall, C.; J. W. Ward, T.; H. II J. L. Marshall, C.; J. W. Ward, T.; H. W.
Haskill, Sec'y; H. (ioodrich, (1. K.; Mrs. H.
Coodrieh, C'eres; Mrs. U. W. Plass, Pomnona Goodrieh, Ceres; Mrs. U. W. Plass, Pomona;
Miss M. Eaton, Flora; Mrs. M. Amos, L. A. S. Installation ou the last Saturday in January,
with harvest feast. Nord Gravge, Nord, Butre Co. Vlection
Wec. 99th: L. McIntosh, N.; I, Kerne, O.; r. W. Colby, L. : Wm. Van Woert. A. P.
MeGwin, A. S.; A. Swena, C.; J. R. Ilaugh.
ton, T.; C. A. Colby, See'y.; T. N. Smith, (1 K.; Mrs. Mattie Kern, Ceres; Maggie Leininger, Nan Woert, L. A. S. Public installation, Saturday, January 12th, 187 s.
Iomo (tranie, No. 2l6, Meniocivo Co.-
John Mewhinney, M.: T. W. Dashiell, O. M. M. Nower, A.S.; Stoddard Neil, C.; E. V. Jones, (i. K.; Mrs. D. M1. Mewhinney, Ceres; Mrs.
L. J. Hale, Pomona: Mrs. M. J. Neil, Flora; M comay row rame san
 Purdy, Sec'y; John Lawson. G. K.; Miss Flor-
ence J. Kelly, Ceres; Emma J. Wood, Pomona
Miss Anna E. Rablen, Flora; Mrs. Esther lialph; L. A. S. Costa Co.-Election, Dec. I5th: M. L. (irey,
M.; A. W. Hammitt, O. ; N. Jones, L.; J. W.

## Jon J. I son, ten mi Yo Y M. Ho M Ne M $M$ da

 son, G. K.; Mrs. J. Petersou, Ceres; Ella Weter ten, Pomona; Lizzie Hodges, Flora; Lizrie 1 Iammitt, L. A. S. Installation Jan. Sth, 187 S . YoLo Co.-. Election, Jan. 5th: ( eoo. Sharpnack
M.; F. Harley, O.; A. W. Morris, 1.; J. G Hawer, Cr., s. M. Mapes, T.; J, G. Jower, Jr Sec'y; (ieo. Farlow, G. K.; Mrs. Hadley, Ceres
Miss Watson, Iomona; Mrs. A. Bower, Flora Mrs. Harley, L. A. S. Installation, first Satur
day in February. day in February.

- Offieers of Granges are requested to send lixt of ofti-
eers eleet, date of election and day set for installation, to
this oftice direct.
The Salakies of Officers of the National

The Salaries of Officers of the Natronal the National Grange has fixed it for the comin
year is something less than what was paid then last year and the year before. The Master's
salary will be $\$ 1,000$ instead of $\$ 1,200$; the Treasurer's, $\$ 000$ instcad of $\$ 600$; and the Sec retary's, $\$ 1,500$ instead of $\$ 2,000$. The 1 pec
turer is to be paid all traveling expense neurred in the performance of his official dut stead of $\$ \overline{5}$, as lieretofore, for time spent in doin the work of his office. Members of the Exeeusame reduction as the Lecturer. They are to receive $\$ 4$ a day instead of $\$ 5$ for time speut in
performing the duties of their offiee, aud their performing the duties of their office, aud their
traveling expenses. All the salaried officers o jeeted to a reduction of compensation.

Officers and members Golden Gate Grange are fraternally requeste to rememberits regular ineeting and installation, we may have a full attendance and a usefu meeting. All visiting Patrons, who eau attend,
will be cordially weleomed. J. W. A. W.

Morro Grange.-A. J. Mothersead, Seere
ary, writes as follows: "Our little firange is tary, writes as follows: faith that the firang

## AgriculturaL Notes.

## colusa. California. <br> Seebing. - Napa Register, Jan. I2: Mr. Chris.

 last Friday. He has just finished seeding 700 cres of land between Stoney ereek and theSaeramento river, some 40 miles above Colusa, and feels eneouraged at the prospect of an abundant harvest. In putting in his erop up there he has used two eight-mule and three six-
mule teams; these he now hires to others who are summer-fallowing. Mr. Adamsonsays they northern about $5 \frac{1}{2}$ inehes of rainfall in the thing looks well.
CONTRA COSTA.
No Fexce Law. - Antioch Leilgur, Jan. 12 : Assemblyman Young that he would ende to to abolish the "no fence law," our Representative sent word to leading citizens at Point of Timber desiring an expressioll of opinion of the armers in that eommunity. Aecordingly a taken, which showed five to one were in favor of the present law; another meeting is to be he form Marsh Creek and a remonstrance whin contcmplated change. The fariners say it would be a great hardship to compel them to
fence against stock at the present time, having ence against stock at the present time, having
just experieneed one dry season with prospects of a greater drouth the present year.
Stock Dyivi,--There having been no early rains to start the grass, thousands of cattle and
shce, on the plains and tule land have died the Stone llouse on the Marsh who resides at about 1,000 out of a land of 6,000 sheep. Of
a band of 700 or 800 Snanish cattle which came up from a southern county and were placed on were parehased by E. 1. Upham, of Collinsville, or $\$ t$ per head. The owner paid $\$ 1,500$ for
island pasturage, henee was loser to the exisland pasturage, hence was loser to the ex-
tent of several thousand dollars. Various other parties have lost stock in proportion. mecordance with a resolution adopted at the Saturday, December ned, for consultation upou the means to be employed for abating the squir-
rel nuisance, the following Committee, of two representatives from each township of the report the action of the meeting to the Board of supervisors, at their meeting on the first
Mouday of February, and to confer with our representatives in the Legislature with a view application the most economical and effectiv For township No. 1, Alanson Benson and C. B. Porter; for township No. 2, A. W. Haminitt Walker and Munson (iregory; for township No. o. 5, J. E. W. Cary and A. C. Wristen.

## LOS ANGELES.

Wholesale Farminci,-Erymess: Mr. Ii. Nadeau, of the Cerro Gordo Freightiug Com-
pany, to-day purehased from Barrows, Furrey \& Co. 20 gang-plows of seven shares each, making 140 shares altogether. He had a very large
number of idle mules at his Florenee farm, and with these he intends to plow and sow about good land in various parts of the country, prineipally at the Brea ranch and in the Caliu-
euga distriet. He expeets to raise in the vicinity of $15,000,000$ pounds of barley, and with
this enormous amount of grain he will be able to feed his teams through the year
11,200 acres of grain have been sown in San Fernando valley, the greater portion of whieh is already ul. Plowing is still being proseeuted at the rat

## Gicmand Qeall.-San Rafael Journal, Jan

 12: Mr. Shippee, of Olema, has gums of as mar were set out in February, 1876, being theu 110 , over six inehes high. In the Octover follow. high, with a diameter of fully 10 inches. He planted a thick grove of guins on one side toafford shelter for fowls, and a few quails came and joined his chickens. These he protected, hens feeding with them and in storms roosting in the ehicken house.

## MERCED.

Fine Grain.-Argux, Jan 12: The fiue rains faces of our farmers. Mr. M. D. Atwater, a farmer whose farm is situated a few niles northso fair a prospect of a full crop at this time in the year; he has 3,500 acres of propo wheat $u 1$,
and looking well, and he expresses the opinion that even if there should be no more rain until sibly be a failure on his land. Mr. Atwater is
sittle the an experienced and suceessful farmer, and full especially that of California.
MONTEREY
MONTEREY.
Ar W'ork, C'astroville Argux, Jan. 12: The
 NAPA.
Hardy Oranges.-Reporter, Jan. 12: Notwithstanding the great severity of the weather
during last week, orange trees at Hon. M. M. Estee's place, about four miles from Napa in a has alsu some lemon trees, aud although they were well protected by corn stalks, they could not withstand the heavy frosts, and were killed tected.
Fine Crops.- Editors Press: We have had plenty of rain in Napa valley, an
looked finer.-H. W. HAsKEL..

## SAN BERNARDINO

Riverside.- News, Jan. 12: The agricult ural outlook has improved considerably, the late
rain having extended to every portion of the rain having extended to every portion of the
State. Business in Riverside has perceptibly improved, and we have every reason to expect a prosperous season. The farmers in the foothills express themselves satisfied with the appear-
ance of the grain fields, as they look unusually fine for this season of
Notes.-Colton $S$
have upon our table a Sicily lemon front one o for these trees was planted in June or July, 1871, consequently the trees ars not yet seven years
old. The lemon is very fine in color, not a speck or blemish to be seen, and is very large,
being nine inches in circumference one way and being nine inches in circumference one way and
ten the other. The unprecedentedly cold weather has not damaged fruit a particle. No trees are injured except those whose growth had been
forced by injudicious watering late in the fall. forced by injudicious watering late in the fall
As for the deciduous fruits, they will be bene fited by the cold. We have promise of an im this year

## AN DIEGO

Notes.- News, Jan. 5: We had a look yesterday at the snow off on the mountains, and it
seemed to be pretty plenty, coming down well on the sides of tid mountains., At Julian, w of snow, and if so the streams will be filled ul considerably by it. The grasses are growing of gren that is very gratifying. We noticed
a band of sheep feeding between the city and a band of sheep feeding between the city and good order.
Sumac Surpuekt. - News, Jan. 12: The first
shipment of sumac of any note was made by Mr. Adler, Monday. This promises to be an important industry for San Diego,
the enterprise may be successful.

## SAN JOAQUIN.

The Valuex.-Stockton Indepentent, Jan. 10: The present condition of the young grain
throughout San Joaquin valley was never sur-
passed at this season of the year. Reports from character. The rainfall in the southern part of the valley has been much more copious than throughout san Joaquiu county, yet in the lat-
ter early sown grain is in splendid condition,
and the young feed is growing rapidly. Robert Dallas, who is now on a visit to this city, says that nothing could be more satisfactory than
the wheat crop on the upland between the val ley and the foothills in Stanislaus, where suf
ficient rain has fallen ficient rain has fallen to moisten the soil to a
considerable depth. The farmers in that section are well satisfied with the existing state of things and feel confident that with the occasional rains that may be expected as the seasor-
advances, a fair yield will be had. In some portion of San Joaquin farmers are still plowing. few miles north of the city the rain had not penetrated the soil to a greater depth than six
inches. In some distriets the rain seems to have.

## SAN LUIS OBISPO

Mects of our county for grass and grain crops are very good, having had sufficient rain for farming purposes and to bring on the feed for our
famishing stock in good season. The heart of the husbandman is made to rejoice, and to give
thanks to the Giver of all good for the beantiful

## and timely rain

The SEason. - Times, Jan. 12: The rain of for the first time this season the adobe lo lads in
the vicinity of Redwood. The teams work on them now, and this peculiar
soil is in best of condition for plowing. It is of land sown to grain in the county this season than last.

Solano.
Drxon.-Tribune, Jan. 5: Comparatively few
farmers are plowing in this vicinity farmers are plowing in this vicinity. We have not heard of a dozen in any direction from
town. Riding over to Vacaville, the first of town. Riding over to Vacaville, the first of
the week, we observed but two places necessary to plow deeper than the late rain wet
the ground, and consequeutly in dry the ground
SoNOMA.
Nores.
Nores.-Healdsburg Enterprise, Jan. 10: The armers have finished sowing wheat; a much
larger breadth than usual has ween seeded this season. The ground was in good condition, season. The ground was in good condition,
being neither too wet nor too dry; all the land was well cultivated before seeding. The tule
land near Yountrille is sown to wheat which land near Yountville is sown to wheat, which,
at the present time, is two inches high, and should the coming spring not be too wet, it will
yield a good crop. Farmers are busy cultiva yield a good crop. Farmers are busy cultiva-
ting their vineyards, pruning trees, making
fene fences, etc. The prospect for fruit is very
good, as the climate so far has been mild and rood, as
favorable.
Prickly Comfrey. - Russian Piver Flag, Jan. 12: During a late call on Mr. G. Hunzi-
ker, at Cloverdale, to whose interesting experi ments we have already had occasion to refer, we were shown a small patch of prickly comfrey, which was set out last April, and has
been cut eight times since then. Mr. Hunziker informs us that after feeding it to his cows there was a perceptible increase in the flow of
milk, to the extent of a pint or more each. The milk, to the extent of a pint or more each. The
habit and appearance of the plant is something habit and appearance of the plant is something
like the mullen, and, as it sends down its roots to a depth of six or seven feet, it seems as
though with a good start it ought to do very thnugh with a good start it ought to do very
well without irrigation. Where it has had a fair trial it is especially recommended for hogs. Mr. Hunziker is somewhat reserved about re-
com ing of growing it to experimeut iu its adaptability, etc., for themselves. From the results
obtained, however, we should say that with obtained, however, we should say that yit
proper attention it would be likely to yield
largely a most desirable green fodder the year largely a most desirable green fodder the year
round, on land which could not be relied on for alfalfa.
SUTTER.
Whear Shipment. - Banner, Jan. 12: The Vednesday, the largest cargo of the season, 2,158 sacks. To this she added 1,000 sacks at
Vernon. Returning, bhe is again loading, as ernon. Returning, she is again loading, as house. The wheat goes to San Francisco and there has been considerable wheat sold lately, which is awaiting shipment. The present
stage of water will enable the steamers to relieve the pressure of shippers.
tulare.
Winter Tomatoes. - Delta, Jan. 12: Up to with fresh tomatoes from the vines in our garen. They were in full bearing when the first hem till the late freezing spell, the fruit ripening slowly, but in quantity sufficient for table use. Another season we intend to protect the vines more completely, and have fresh tomatoes
all the year round. We are satisfied from our experience in gardening, that this month aud he next is the best time of the year for sowing
lettuce, beets, carrots, parsnips, turnips, cablettuce, beets, carrots, parsnips, turnips, cab-
bage, rutabagas, etc., provided the ground is in uitable condition
VENTURA.
Bers.-Signal, Jau. 5: The crisis has passed
or the bee men. In the hills bees will soon feed on alfilerilla blossoms
The Condition of the Bees. - Free Press, Jan. 12: From one of the most noted bee-
keepers in the county, we learn that during the past dry year, all bees died which were not fed.
He estimates the losses as fully one-half of the Te estimates the losses as fully one-half of the The survivors are yet gathering little if any honey, but a couple of weeks of this weather will bring out the alfilerilla blossoms, which
vield plentifully of a reddish-colored, fine, sweet honey. The prejudice against its color prevents
any demand for this, and it is stored away for food in tight times. This is succeeded by a
kind of sage, also yielding , iuferior honey, and kind of sage, also yielding, iuferior honey, and
then follows the white sage, the honey plant, par excellence, of southern California. So soon as this appears, the inferior honey in the hives
is carefully removed, so as not to be mixed with the merchantable honey of the white sage, which is stored up by the bees for over three
months, ending in August. Again, every par months, ending in August. Again, every par-
ticle of honey is carefully removed and the little insects, from that time onwards, continue to
gather vast quantities of honey from variou
blooms which yield a good article, but not so highly prized as that of the white sage. Our
informant, Mr. Corey, who has carried his bees
through the season, has fed them a ton and a
half of honey. As the price now is nearly double that of last year and all the old stock consumed, high prices may be looked for a
soon as there are any to sell, which will enable apiarists to retrieve their losses of last year YOLO.
Hope-Mail, Jan. 10: We are extremely god to know that most of our farmers have
hopes of plenty of rain for a crop next season. We have
couraged.

The losq ly the fire in London on Saturday

## News in Brief.

They have had a $\$ 250,000$ fire in Honolulu. They are having serions freshets in Virginia. Henry M.

## ow in Rome.

A BABY show is the latest place of amuseCases of city.
CAsEs of garroting still continue on the out ide streets, in this city.
The Roger bill for eme
THE Roger bill for employing 2,000 men on A SEAMENs' bethel has been established Oortlañ̈, Oregon, the first in the State.
A CHINAMAN, arrested for murder last week, commi
Capt. Bogardus, the shot gun expert, has succeeded
minutes.
minutes.
The winter is now severer in Turkey than
that during which the fermans campaigned in France in $1870-71$.
The heaviest northeast gale ever known on
the coast of Maine prevailed last week. A great amount of damage was done. $22 d$, inst., to select a suc cessor to the late Nathan Porter.
Cheyense business men are making overture to have that place fixed as the starting-point o
The Postoffice Department has issued order to increase the mail services between San Raael and Petaluma to three times a week.
James R. Keene says there is no truth in
the California stories of his intention to return to San Francisco, for residence or business THE bark Osmyn was sunk by a collision with the bark Aurcola, near Port Townsend last

A fire broke out in the steamship Herman, while at sea, on Friday evening, which was
with great difficulty subdued, after several
There are now 854 manufacturing establish. ments in San Francisco, whose aggregate pro-
ducts amount to $\$ 62,338,000$. They employ Rev. Hevpy lv.
Rev. Henry Ward Beecher offers to give up a quarter of his salary, in view of the falling
off in pew rents. This will make his salary $\$ 15,000$ for the year.
H. T. TAYLOR $\&$ Co. struck a new well on Si mon Well's farm, on the Ghost Well territory Pa., which is flowing over 1,000 barrels. opens up a large tract of new territory.
THE Immigration Society of Guatemala, the government, have sof $\$$ an agent to Sa Francisco to endeavor to dfrect immigration to
Guatemala Guatemala.
A LoNDON dispatch says that the Wigan cot-
ton spinners have resolved, in consequence of ton spinners have resolved, in consequence of
the depression in the trade, to give all their
operatives notice of a five per cent. reduction in wages.
Ar Lynn, Mass., on the 14th inst., most of the shoe operatives were requested by the em-
ployers to withdraw from the Crispin organizaployers to wuit work. The Crispins have adopted
tion or
the the latter alternative.
GENERal Sheridan has been informed by Indians, who threaten a severe outbreak in Montana that will devastate ranches and destroy
the lives of white people the lives of white people.
The boring of the Channel tunnel between
France and England is to be done by the French Railway company, the Chemin de Fer du Nord, and the Southeastern and Chatham
Railway companies of England.
Demetrius Bulgaris, the well-known Gree politician, has just died of apoplexy. He was
President of the Provisional government of Athens in 1862, and later was President of the Council and Minister of the Interior
W.S. Deval and W. T. Duncan, (son of have been arrested on charges of felony, as accessories to the escape of J. C. Duncan, by
harboring and protecting him and not giving him up to the officers.
The revolution in the northern Provinces of Sau Domingo continues. The insurgents sur-
rounded Porta Plata, Santiago and La Vega. The whole mercantile community is in danger of beng ruined. It appears that Ex-President Gon-
A stenve ard Saturday for a cargo of arms and ammunition for the Turkish government. Another steamer, laden ween in the souud the past 14 days, waiting orders to sail for Constantinople, drawing, in the neantime, $\$ 250$ per day demurrage.
Senator McCoppin has introduced a bill athorizing the Board of Supervisors of San
Francisco to expend $\$ 50,000$ out of the General Fund for the improvement of Golden Gate and Bellevue parks, under the direction of the Commissioners, a part of which is to be used for the improving the squares and plazas of the city, under the direction of the Superintendent of Streets; $\$ 10,000$ for cleaning sewcrs, under the
direction of the Board of Health, and $\$ 25,000$ for cleaning the streets. The bill further provides that the Board of Supervisors shall tix by
resolution the compensation of the men to be employed at a rate not exceeding $\$ 2$ per day,
end that no man shall be employed who was
not a resident of the city at the beginning of the

Minister Noyes conveys to the United States the thanks of France for proposed participation in the Paris exposition.
HENRY M. STANLEY the has been presented with a gold medal, the gift of the late King Victor Emmanuel Marlboro', Mass., where sevcral strikes began on Monday.
Mecca, to the 31st of December, was 60 , at Alfred E. Edgcumbe has been appointed by ongressman Luttrell as cadet to West Point. The young man is a resident of Vallejo.
Slade the Spiritualist, has been expelled
rom Vienna, because he was is avocation satisfactorily to the The storm and heavy sea of Tuesday night Cadly damaged or destroyed the wharves at
Carpinteria, Morro Lauding, Ventura and Tanta Barbara.
The exports from New York last week incluof corn, 6,624 bushels of oats and 77,892 bushels of barley. recently released Fenian prisoners, who, with his companions reached Dublin Saturday, died suddenly on Monday
Tue sloop-yacht Clara, having been pur-
chased in New York by San Francisco parties, chased in New York by San Francisco parties,
will be brought hither on the deck of the clipwill be brought hither on the deck of the clip-
per ship Young America. 300 Chinamen, they having completed their part of the grading on the railroad now buildng between Benicia and Suisun.
tructed in this State last year, bringing the number of miles in operation up to figures exce eding 1,000 .
On Saturday last, at San Rafael, a boy nine
years old, while watching the operation of calding a hog at the slaughter house, fell in to The Courts have decided that the money the Lick trust matter legatees, viz, the Pioneers and Academy of legatees,
Sciences.
and
George H. Pendleqton has been elected
United States Senator from Ohio to succeed Stanley Matthews, the latter having been chosen to fill the unexpired term of John Sherman, Secretary of the Treasury.
THE two most important Committees at work Committee on the Navy Departiment and Glov er's on the Treasury. The latter have evidence Iready that promises sensational developments.
The Cousett (England) Iron Co., the largest nakers of ship plates in the world, have blowi employed at another furnace have received notice that their services will not be required at the end of a fortnight.
Postmaster-General Key says business has soincreased in the South that over 200 postnamely: such as receive appointment from the
President, and coufirmation by the Senate. This indicates prosperity.
IT has been resolved at a meeting of the
Board of Directors of the Bank of California, to declare a dividend att the rate of seven per cent. per annum for the three months endin December 31st, payable on the 15 th instant.
No dividend has been paid by the bank since No dividen.
July, 1875.
Sevator Jones still maintains that the Presi dent will sign Bland's silver bill if passed, and ridicules the idea that it will receive a veto.
He refuses to believe the President will go against the silver sentiment of the West and
allow his judgement to be influenced by lard money members of the Cabinet.
Lieutenant Clark, who left New Red Coud agency on the 7 th instant, and New
Spotted Tail on the 11th, says: "The Indians at both agencies are well satisfied with the promises so far carried out, but they are anx-
ious to move back from the Missouri river in the spring, and trouble is anticipated if they are not allowed to do so.
THe bill for labor schools, introdnced in the California Senate, authorizes boards of educaIt permits $\$ 50,000$ to be expended the first year and $\$ 20,000$ per annum thereafter. It also au ages of 13 and 18 , where they may learn milli nery, printiug, dressmaking, telegraphy and

Winged Phylloxera.-The Comptes-renulu he Acadelny of ciences contain a notico of M. Boitcau's most reccnt observations on the arc this year especially numerons, and, what evcr people may say to the contrary, are capaon a bright afternoon in summer ly placing
himself near the infested vinos, with the suil shining is face. The tlight of the myriad of insects playing around will be found to be regular, continuous and rapid, aud the capturo of some of these by tho hand will prove that
nearly all of them are phylloxeras. M. Boiteau has also found ruantities of winter eggs, the very existence of which is still denied by many search have extended, it seems prolbable that luart of the stocks.

#  cemis 

asked various questions about the
and productions of the tistrict.
Suddenly he straightened up. suddenly he straightened up. "Wall, what hev ye yan? nod

Mr. Midden," I replied, "you raise goou crops here?" "In course."
"Wcll, of course, you want to raise better, and, of course, you want to know what is going
on and get the best prices and buy cheaply; so, on and get the best prices and buy cheaply; so,
of course, you want to take the Rural Press. He grinned sardonically, dropped his stick and shifted his quid.
"So that's yer game, young man; its a mighty than all your 'Frisco men." "I am glad to hear it," I replied. "If you know so much, we will give you
to write letters for us. You shall have steady work and a free copy of the paper if you will
write as good articles as Stratton, Lyon, Reed, urite as good articles as Stratton, Lyon, Reed,
Sanders, Drew, Strentzel and a host of others." He hitched along on the rail. "Tonguey,
ain't yer? I know too mnch to tell all I know." ain't yer? I know too mnch to tell all I know. tree
"Don't want it," lee said, shifting his quid.
"Well, now, Mr. Midden," I suggested mildly, "I think you are rather a queer genius,
with a style of your own. Suppose you let me show you a copy of the RuBAL, with its pre-
iniums, and, perhaps, I can show you where miums, and, perhaps, I can show you where
the profit comes iu.".
"I wou't do it." he cried mildly. "You're "I wou't do it." he cried mildly. "You're
a pretty slick fellow; might talk me over; the
wimen folks shant hev no paper, he! he"" I straightened up and looked him in tbe eyes. " Mr. Midden, I don't urge your subscription. The luval stands on its own merits. But
allow ine to ask, would you like to make some money, a fortune, in fact?"
"In course," he drawled out.
"In course," he drawled out.
"Well, if you will let me put you in a glass case and exhibit you over the State, as the man Who knows more than the whole Rural PREss
corps, we shall both get rich. l'll furnish half the tobacco,
The motion amused him and he laugher Midden never does what you want. Saay, how


Thunder! Wall, ye don't git me." All right," I said, monnting
"And you won't go in a glass case
"No."
"Then I'll write you up and print this interriew,
Take the RuraL He slapped liis skinny hand on his thigh.
(Great feller, aint ve? l've half a notion ter see yer phler. No, swore I wouldn't. But ye're a purty peart chap. Come round next
year. Dlebbe I'll take it then." "Oh, I don't care," I said, take it for your own sake. Foord-bye.
Half an hour later John Nameless hailed me. " bid ye get Midden?"" Midden rather got me but I had lots of fun." And, thereupon, I told the stor
John shook his ribs silently, enjoying the narrative.

A queer chicken," he exclaimed.
got off better than anyone else 1 ever heard of." "Oh, he couldn't get me mad," I said, winding road.
A siefping Car lipisode. - Only a few nights ago an accident occurred, says the Nashrville
A mericenn, on the Northwestern road in which a slceping coach was turned over on its side. A the car went over a lady in a berth ou the oppo-
site side was hurled out and landed in the berth site side was hurled out and landed in the berth of a gentleman whose wcight was about 250
pounds. She was sound asleep at the time of pounds. She was sound asleep at the time of
the accident, and so was hc. Both awoke, startled at the sudden turuing of the car, and scarcely knowing whether they would be hurfallen out of the lady's berth and was almost suflocating the gentleman. She hcard his deep breathing for a moment; then it suddenly ceased, and the horrible thought passel through He recovered himself, however, to find that his nose was flattened against the cold glass window. Not knowing what manner of person had fallen upon him, he held the lady up off his liead, and at this juncture, when the conductor
asked if any one was hurt, he cried out breatblessly: "Nobody's hurt, but I wish "you'd come and take this fellow off my head." The lady attempted to move, but found she could not.
Lights were soon produred and both passengers Lights were soon produred and both passe
were relived of their awkward dilemma.

Tue Conset Liver.--Some medical student in one of the Cincinnati collcges, dissecting a female subject a few days ago, found what is When tight lacing has been practiced through several years, a permanent dent or hollow is produccd in the liver, which may be seen very
plainly after the woman is dead and her liver taken out. This kind of liver occurs so fre quently in woman that physicians have given
it the namc of "corset liver." In the subject mentioned, the hollow in the liver was large
enough for the wrist of a grown man to be laid

## A New Year's Greeting

[Writen for the Reral Press hy Sas Jomquingr.]
1 yield to an almost irresistible impulse extend to you and all the charmed circle of con tributors who make up the Press family, my New Year's greeting. Not so much for the ta ents or originality of the writings do I prize the notcs from the north and south of our State, for the glimpses of home life, the social feclin and good cheer. I, too, have been dreamingbuilding castles in the air, whose foundation stone shall be a fortune something like a bo nanza king's. Then I should send out invita tions to the whole Press family for a glorious some, cheery dwelling-not a massive pile of some, cheery dwelling-not a massive pile of winding passages-I stould welcome them. They would all be there--the editor, the more frequent contributor; and some whose names have appeared but on
hear from them again.
Would we know each other? No. I venture to say there would be many surprises. Thos ease would be found slow and liesitating Thos who, under a convenient nom de plume, ex pressed their sentiments with very positive boldness, would in the actual presence of their hearers appear shy and retiring, until we should feel like poor Hood, who seeing his grave face hanging near the smiling one of a noted divinc Bught the two should have been exchanged.
But the gravest face should relax in the happy hours of the new year devoter to socia plions shonld glide across that banquet hall, but the kindliest part of every banquet hall, but the face. With healthful sympathy for each other, and courage for the future, the New lear may be a good one, and the echoes of the to man" not dic away until the bells ring in an her year. I es, the New I car may be a good one, altho
gathered.
gathered.
Every
Every day is making it more painfully appa colurage to breast anowh a long, lony breath of Nothing but hope can anchor the soul amid so many repeated discouragonents. But hope w for the good time surely comiug.
Ellis, Joan Join Couuty, Jan. 4th, 1878

## Silly Extravagance.

"The dianond coat of Priucc Esterhazy very court ball to enrich the servants in th morning, has passed into romantic history; but ton Capital tells a story that will rank with the Esterhazy fable as a companion piece. He says the wife of a wealthy banker of that city recently appeared at an evening party, whose
dress was covered on the skirt so as to make it appear as one piece, with one humdred and tive hundred dollar bills. The waist and sleeves were $\$ 1,000$ bonds sewed iu , and her fingers and ears blazed with diamonds. The tiara was said to lave been worth $\$ 80,000$, and the total
valuc of the notes and diamouds on her person valuc of the notes and diamouds on her person
was $\$ 260,000$. Two pages carried her train was $\$ 260,000$. Two pages carried her train and watched lest the
should fall to the floor

The American sojourner of wealth is a wel onne visitor to l'aris. He is an object of spe and dealers in costly fabrics. The cutertaiument given by Mrs. Mackey, wife of oue of the bonanza chefs, has been described as bril liant almost beyond precedent, and the trous ean of Miss Vanderbilt, lately married in that ity, surprisel even those accustomed to the men and women make the money fly. Her yons from the oren's onn design at lyons from the dressmaker's own design. The fine pearls were wrought, and trinmed simply with a single marabout feather, cost siv. The six bridesmaids' dresses of thin gauzc were each embroidered with different flowers. All the
other appointments were on a scale of equal other appointm
We clip the above items from one of the daily papers. It is hard to read with patience such lavish waste of money when so many worthy enterprises are waiting for the capital necessary to push them forward. Is it an gives wealth use it so basely and with such nt ter inappreciation of the fact that wealth
shonld be used as a trust to be wisely disposed for the good of the race, and not turned to th vortex of vanity and selfish extravaganc

A "Tolling" Macuine.-In the current num ber of Fors Clavigera, Mr. Ruskin gives the good thing for ''Fors.' A tolling-machine ha 80, and seems to give universal satisfaction. It and seems to give universal satisfaction things would (at 300 funerals a year) be in the au hour to riug the bell. Thus we mourn for the departed!'

## How and When to Laugh.

Robert Hall, of world-wide fame, once preached a powerful sernon, and was acconpa-
nied home by a brother ninister of the solemn sort. Robert was a great wit and his house mazennent of his solemn brother, who said "Brother Hall, how call you be so inconsistenty" "Oh!" repliell Hall, "I get off all iny nonsense out of the pulpit, you in it!" He knew pit, andstring his inental bow out of the pul. it, and thus nade it the power it was to send
ts arrows down through all time. The other is nly remeinbcred by this rebuke.
A laugh is a very characterist:c thing. As
people remarked, cats never laugh and people remarked, cats never laugh, and some wind.like langh. As foldsmith says; "The empty laugh that spoke a vacant mind." Others gound laugh with a uerry, gurgling, and musical sneery, sarcastic laugh, like the yowl of a jackal or hyena. Others again have a fat, ox-like kind of laugh-a lazy, lubler-1ike effusion. But one thing is lazer than tbeir laugh, and that is themsouled, Another class has a genuine, whole laugh, which has the same relation to the corpus that a storm has to the sea-purifies it to the bottom and fills it with health.
Carlyle says, "Never fear a man with hearty laugh." And Charles Lamb says: "" I suppose he included the religious exchange. Leigh Hunt struck the core of the subject when he said: "Laughter is oue of the privileges of And Addison added. "If we human mind." quent relief we receive from langhter the fre often it breaks the rloom which is apt, to depress the mind, one would take care not to grow too wise for so great a pleasure of life
Above all things laugh in the right place Don't laugh when a piece of hot paucake is burning your tongue, nor cry when your mother n-law alls dowu stairs at the risk of breaking cr neck. Above all things, remember the 49 h. commandment, which reals. Laugh if you laugheth rightly, liveth wisely."-Rer. Gipo. II. Preke.

Attaching Wages.-Judge Stowe, of Pittsburg, has announced a new rule of practice was that of George Miller vs. (ieorge Rush, in which wages in the hands of Singer, Nimick \& Co., garnishee, were attached. A rule was
asked to show cause why the attachment should not be quashed. The Court says: "There is, perhapls, no other class of cases in which it is so necessary to adopt a summary proceeling as
this. The law is that the laborer slall have his wages to live and support his family npon, withtion for his debts, and courts should, as far as possible, see that this object is secured and the law so administered as best to reach the result intended. To allow wages to be attached, and then compel the laborer to wait for months, and perhaps for ycars, to get a trial lefore a jury on facts whoh are not disputed, is clearly tel if it can be avoided. We think the court has a right to and can establish a practice to secure the end proposed, without iufringiug the right of trial by jury. We have, therefore, cone to the conelusion that hereafter when wages are attached, as in this case, we will quash tand so far as other debts, if any not excmpt, are concerned. But whenever the allegation that the debt attached is for wages, is properiy and requirc the calse to go to a jury to deterand require the cause to go to a jur
nine all qquestions of facts involved.

Reflisisg Passate to a Drenken Man.In a recent case the Indiana Supreme Court
olds: A railroal company is not bound to receive any person as a passenger who is crunk to such a degree as to be disgusting, oftensive, disagreeable or annoying; and a person so drunk as to be likely to violate the common proprie-
ties, civilities and decencies of life has no right to passage while in that condition. The commust be protceted, their opiniong and feelings regarded, and a proper decorum observed. Alhighest breeding of the drawing-room nor the astidious delicacy of the parlor is required, yet the behavior of all persons therein should be becoming the place and the general character of duct not be likely to seriously affect the consuticient car, althongh the persons behavior might not be in all respects strictly becomiug.

> Americay Yrogrfss in Sclence--The Chemmade lor, Lon, the Uuited States for the advancement and difusion of science, and calls especial attention Technology has provided special laboratories for the instruction of women in chemistry-analytieal, industrial, and physiological; in botany, it gives credit for the work done in this depart-
inent by the ladies.


## "Nothing But a Farmer.,

He's nothing but a farmer," said a little miss, a few evenings since, as she scornfully
curled her pretty lip, on heing introduced to a curled her pretty lip, on heng introduced to a
fine, generous, open-hearted fellow, whose fine, generous, open-hearted fellow, whose
broad and expansive forehead was the symbol of his broad acres. "He's nothing but a farmer. And who was she that looked thus
disdainfully on one of God's noble men? She was the daughter of a broken merchant, whose fortune had been ruined by the extravagance of her father's heart lad been wrung by misfortune - and he had paid the penalty of extrava-
gance by being incarcerated in the home gance by being incarcerated in the home prepared for criminals-his danghter had not yet
learned the difference between pride and worth, extravagance and wealth. The noble man who ate the bread of industry and looked every man "I owe you nothing," was in her estimation only a farmer.
Did these foolish persons ever read their Bibles, they would find that God himself has farmers. Noah was a husbandinan and planted a vineyard; Abraham was rich in cattle and was not pasture for both and they divided the country. Lot selected the plain of Jordan and Abraham took the hilly country of Canaan. Jacob was a great cattle grower, as he pre-
sented Esau with several huudred cattle. Moses was a wool grower and Gideon wien from his threshing floor. Saul was a herdsshepherd and was taken from that occupation shepherd and was taken from that occupation to the flesh, of the Messiah. Uzziah was a cattle grower. Elisha was plowing, with 12 nantle on him and called him to be a prophet of the Most High.
And yet, though God has honored the hus-
bandman-selected his kings and prophets from among the farmers-there are some so foolish as

Postal Note.- "How much do ye ax for
twinty three-eint stamps I dunno?" Inquired Barney Drumgoole, at the post-office wicket. make any reducshin at all for buying thim that way?" "No." "Say half a dollar, now."
"I can't make any reduction." "I'll give ye
fifty-five cints." "If you don't want to huy hity-five eints." "If you don't want to huy room for other people,", said the official savagely.
"Well, ye needn't get mad over it," said Barney, mighty stiff and stuck-up like, poslit-office
people are. Faix, now, av some av the people as av money wud shtart an opposition poshtothice an' be more accommodatin', they'd take the heft wud."

A wrivess in a Western court was asked if the party to the suit was not a truthfui man,
"No," he answered; "he'd sooner lie at 60 days tha:a tell the truth for cash."


Grandma Tries the New Bonnet.

## Young Folks' Column.

"What Shall We Do?"



 Manma thought for a moment, then gaily reenied,


"Xow eapht take a pencil and raper, and draw

The brightenen-up ehilidren took penciit in hand,





Good Manners at Home. - Shut every doo fter you, without slamming it.
Never stamp, jump, or run in the house
Never call to a person up-stairs, or in the quietly where they are. ants, if you wonld have them do the same to When told to do, or not to do, a thing by either parent, never ask why you should should not do it.
Tell of your own faults, not of those of your Cothers and sisters.
Carefully clean the mud or snow from your oots or shoes before eutering the house
Be prompt at every meal Be prompt at every meal.
wh lirty with dirty hands or tumbled hair.
Never interrupt any conversation, but wait patiently for your turn to speak. Never reserve your good manner for stran Let your fy polite at home and abroad Let your frst, last, and Mest cone
nother. Oliver Optic's Magazine.
"I wish I was short-sighted," said a little boy to his mother, the other day. "Why, my the precocious six-year-old, "I should not then be blamed for always taking the largest plums off the dish; for, of course, I should not lee able
soe the small ones.
"I will not learn a trade!" exclaimed the Chicago youth to his father. But this business of learning a trade is only a matter of time, for
within a year that young man was studying within a year that young man
harness-making in State-prison.
"Mister, will you lend pa your paper? He wants to send it to his uncle in the country," Oh! certainly. And ask your fathcr if he 11
lend me the roof of his housc? I only want it to make the tea-kettlo boil?"
"Charlev, what is it that makes you so sweet:" said a loving mother to her little boy,
as she pressed him to her bosom. "I dess when Dod made me out of dust He put a little thuger

## Good Health.

## Causes of Diphtheria.

In a paper read before the Syracuse Medical Society, and printed in the Journal of Chemistry, E. R. Maxson M. D., L. L. D., instances the ollowing conditions as conducive to diphtheria: In this as in all putrid fevers every imprudence and deviation from the laws of health, such as
exposure, want, improper clothing, unwholeexposure, want, improper clothing, unwhole-
some and inproper food, low, damp apartments, filth of every kind, including animal and vegetable, act as predisposing causes.
A damp atmosphere, such as always exists in some localities, from protracted rains, or ally cool, there heing little ozone generated to purify the air, may also predispose to this dis-
ease. It acts, doubtless, not only by causing to be retaineds in the blood the perspirable mater, but also by letting down the positive electrical condition, depressing vitality, thus ren-
dering the hrain incompetent to generate and dering the hrain incompetent to generate and
distrihute sufficient vital force to keep up aistrinute sumincient vital force to keep up in summer, purifying the air, lessens the liabil-
ity to this disease. On the temperate, well-fed, properly clothed,
and cleanly, whose blood may be up to the tandard of health, such atmospheric and electrical influences may scarcely operate unfavor-
ably. Not so, however, with the unfortunate childiren of want, who are half fed, improperly children of want, who are half fed, improperly
clothed, and filthy withal. Nor with the intemperate nor imprudent, not with the gand-
ily-dressed, bare-armed and hare-legged children of wealth and vanity, equally unfortunate dren of wealth and vanity, equally unfortunate,
their parents not having the discretion to protect a child as they would a brute.
It is probable, however, that in every case of
diphtheria there is an animal poison introduced into the hlood, either from the bodies of those suffering from the disease, or else arising from an accumulation, and perhaps decomposition, of various animal secretions and exhalations. It is also probable that the paludal poison is generally comhined with the aninal, in a greater or less degree; often in sufficient quan-
tity to render the disease slightly remittentity to render the disease slightly remittent ud increasing its malignancy.
It appears that the animal
It appears that the animal and paludal poisons ontracted, may early enter the blood through contracted, may early enter the blood through
the skin, stomach, or lungs, decomposing the
fluid; and hence the putrid odor, and the fih. fuid; and hence the putrid odor, and the fih fever, and evcry essential feature of the dis ease; the animal miasm decomposing, or pro-
lucing fermentation, while the paludal deucing fermentation, while the paludal de
presses the nervous system, causing the remit tgnt tendency. The contagion, when it is the
cause, produces a similar change in both recause, produces a similar change in both re-
spect; such cases being, perlials, less remittent especialy in districts that are but slightly if at
all malarious. 11 malarious.
Among the sources of the poisons causing
diphtheria, the most frequent are doubtles personal filth, dirty, damp apartments, imper fect sink-drains, privies, filthy water, pig-sties,
hen-coops, and piles of decomposing animal and hen-coops, and pile
vegetahle matters.

Adapt your Shoes to your Feet. - Why it should he desirable to have a sinall, weak foo easy to conceive. For the purpose of having
such small feet, not a few wear loots one or two sizes too small, and about two-thirds of the width of the foot, as it would be at, the ball is allowed to spread as it does when standing
without the confinement of the boot. As a natural and necessary result of such pinching corger than it would naturally larger than it would naturally grow, with en parallel with the foot, to say nothing of the trou blesome corns so annoying and crippling to a large class of young women. The worst re sults of this crippling custonn of wearing small
and narrow boots is felt by children when al. and narrow boots is felt by children when al
lowed to outgrow their boots. It is poor econlowed to outgrow their boots. feet have become too large for them, since de formity of the feet is easily produced at thi time. When the boot is too short for the wearer, and ine heel to natural result.
Scarlet Fever.-Rules for the prevention of scarlet fever have lately bcen issued by the
Michigan Board of Health Michigan Board of Health, and as this is one of
the most contagious of discases, it might be the most contagious of diseases, 1 might be
well to bear them in mind. The first precaution is the isolation of the sick from the well and the prevention of contact with the patient. The room should be cleared from all unnecessary clothing, carpets or other substances inasferce clsewherc. The patient should use rags insteal of handkerchiefs, so that they may be burned. Body and bed linen shonld bo placed in vessels of water containing chloride of lime or similar
substance. Disclarges should bo received in a solution of sulphate of iron or copper and be afterward bushould be considored dangerous as long as there is any scaling of the skin, sorones of the eyes, etc. Many other precautions ar ineulcated, all of which are considered more or less important.

## Domestic Economy.

## Soups.

The delicate and proper blending of savors,
writes a housewife to the Germantown Teleyraph, is the chief art of good soup making Be sure and skin the grease off the soup when it first boils, or it will not become clear. Throw in a little salt to bring up the scum. Remove all the grease. Be sure and simmer
softly, aud never let a soup boil hard meat into cold water, and let it srow warm meat into cold water, and let it grow warm
slowly. This dissolves the gelatine, allows the albumen to diseugage, and the scunn, to to rise th diffuses the savory part of the incat. But if
dise the soup is over a hot fire, the albnmen coagulates and hardens the meat, prevents the wate from penetrating, and the savory part from disengaging itself. Thus the broth will be with-
out flavor, and the meat tough. Allow about out flavor, and the meat tough. Allow about
two tablespoonfuls of salt to four quarts of soup, where there are many vegetables, and one leave any leave any ar floting on the surace. A quar a good rule. Soup nade of pouncooked meat, is is as good the second day, if heated to the boiling point. If more water is needed, use boiling ho water, as cold or luke warm spoils the soup. It is thought that potato water is unhealthy boil elsewhere and add them when nearly cooked. Keep the vessel tight in which you boil soup, that the flavor be not lost. Neve is thus soup in metal pots, as sometimes a family more seasoning, nearly double the quantity used for thin soups.

Dose for Rats.-A writer to the Rural New Yorker says: My method of ridding my-
self of rats in the cellar, or about the house, is self of rats in the cetlar, or about the house, is
to take a quantity of refined potash, (I use Babbit's) partially pulverize it, moistcn it with daub this about the hottoms of their holes and run-ways, so that they are compelled to step in it, in entering the premises. I have practiced this method for several years, with very
satisfactory results. If the first application i with but little trouble or expcnse, and I am
onfident of favorable resnlts. Such, at least confident of favorable resnlts. Such, at least,
has uniformly been my experience since I first has uniformly been my experience since I first
adopted the method, many years since. The adopted the method, many years since.
theory is, the rats step in the moistened potash while entering. Its . caustic nature produces a marting sensation in the feet. He at once The consequence is, a not-very agreeable sensa. tion in the mouth. He is compelled to rene the application in going out-result, he does
not care to renew his visit, and probahly imparts good counsel to his associates, and the ra nuisance is at once abated. I prefer this method to the use of phosphorus, or any of the
"rat poisons" recommended, as it is not al"rat poisons" recommended, as it is not al-
ways safe to have the latter arounit, and we ans ine the of other out. -the-way places to infect the air with thei
ofensive odors.

About Vegetables.- Don't wash your veg. ust before you are ready to eook them. At romatic element practice of having washed clean of the natural earth adhering to its fibers and surface during the growth, and which, when ronghly dug, is put into the cellar or pit of the countryman
for winter keeping. Did that countryman wash each beet, carrot, potato, etc., as is gencrally practiced for sale by the dealer, and by the conhis produce a siugle month. The receiver of a clean-washed vegetable, according to the newly established law of refinement, never yet ate of good natural flavor, and these same people, the country farm-house, rarely fail to notice the superiority of the vegetables. It is not because of the letter knowledge of eooking, butpit is from tho fact that the earth is a prescrvative root, which, as soon as washed, evaporatcs rapidly into the air and is lost.

Seasoning Foon-Many people have tho idea that a fincly flavored dish must cost a great deal. That is a mistake; if you have unlian meal, to begin with, you can make it elicious with proper seasoning. One reason ther is that it is scasoned with a great variety of herls and spiccs. These cost very littlo. If you would buy a few cents worth at a time you inds are saro thyood assortmarioram, tarragon, mint, sweet basil, parslcy, bay leaves, coves, mace, celery seed and onions. When you huy a bunch of dricd herbs rub, the leaves
through a sicve, and bottle then tightly till you eed them; tie the stalks together and save hem until you want to make w fll a bouquet, for a soup or stow. A buet of parsley, thyme and two bay lcaves. The bay leaves, which have the flavor of laurel, can be bought at any German grocery or drugstore, enongh to last a long time for five cents.

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SAN FRANCISCO:
Saturday, January 19, 1878.

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GENERAL EDITORIALS A Hereford Heifer















## new advertisements.




## The Week.

This rain is grand. It will nerve the arm of nany an aching poocket with comfortahle gold Inany aur aching pocket with comiortahle gold.
It will bill trade revive, and will nake investment relax its twistede, features. It will awanke
wur state from the troubled slumbers which cur state froun the troubled slumbers which
the long drouth induced aud will dispel the Ireams of hariship and distress by the dawu-
ing of the sun of general prosperity. Let all ing of the sun of teneral
rejoice and give thanks.

Almoxd Blossoms.-Mr. E. L. Beard, Mission San Jose, Alameda county, iuforms us
that almond trees are in blossum nin the oll nis that almond treess are inl blossom 112 the oll mis.
siou orchard. The trees are of the bitter siou orchard. The trces are of the bitter
almond variety. The recent frosts did but little injury in the Mission belt, and that to tender garden plauts.

Protection of the Wool Industry.
It has become a conmon remark that while Congress is in session the busincss interests the country tremble. It is quite natural that this shonld le the case, for onr national law nakers have in their hands the power to so commodity in which men may invest thei noney, or a line of industry in which all thei interests are iuvolved, may be reduced in a
few days from a condition of protitability to the reverse. The men whom we choose to make laws for us often have far too little knowledge of the necds of producers and are led into vot ing for ineasures which are proposed ly trade theorists or the emissaries of foreign capitalists, and which, if permitted to go upon the statute
book, will result in snatching the bread from the months of thousands of our produciug classes. Althoung qucstions of the is chiefly in the 8o-callel "tariff tukering that element portel, and, so far as we know, with truth that luring the last year or two the believers in free trate and the removel of all protective du-
ties have snceceded in increasing their power Congress and that at the present session letermined eflort will be made to launch the nation upon a free trade experiment. We do
not propose to disciss the general theories of not propose to dischss the general theories of
ree tride and protection, because the argunents ou either site are well nigh endless and correspondents in at mazee oi tinely drawn argn ments for which we have no space. What we
lesign to do is to call attention to a single lesign to do is to call attention to a single point at issuc, aud that is the one which in
volves the great wool industry of the I'acific It is believel that a movencut has bcen set on font to remove the protective tarift on wool
and woonlen goods, and this alluit tuty free the wonleu fabres from Liurope and the great
masses of wool which are beiug clippect in Ans masses of wol which are eng chppect in Ans.
tralit, New Zealand and the south Anerican titates. The immediate efleet of such free ail.
nission of wool, raw and manufactured, would undoubtelly be to greatly rednce the prices
which our Hock masters are now receiving for which our Hock masters are now receiving for
their clips and which ane certainly low enough already. This being so, it is evident that for arowers should let their voices be lhearll by those who represcut then in Congress, and
thus bring forwarl an intelligent and forcible opposition the renoval of the duty on imool growers lowth last and West are awakin to the necessily of unitel action in this diree The National Association of Wool (irow-
ers aud the National dssociation of Wooleus Manufacturcrs, have worked together for the last to years in protection of their mntual in-
cerests, and these two soceteses are now awake o present dangers. For the last year they the industries into focus for use at the prope hime, and we have no doult that the parties ities of woul and woolens, will find that those
wind whose interests are threatened will contest the
woint with vigor. IVe nutice that the National Wint with vigor. We notice that the National
Vool Growers Association have arranged for a heep show at st. Louis next fall, at which all pete for liberal preniums. The gathering
the them to make their influence felt toward the naintenance of favorable laws with regard to the inlustry. We hope that some of our fine racitic coast sheep may he shown at St. Lonis
nul that nur coast may speak for itself in the
ouncils of the growers.
The subject of the naintenance of the present otice by a very forcible letter ly an, Orego otice by a very foreible letter by an Oregon armimer. F'rom this letter we draw the follow
ng staten ject: "The report of the Apons the general sub ment upon its industries for 1576 , deplores the ow state of their wool growing interests, which ombined returns of all other industries, in luding mining prolucts of the continent, and bined intlucnces of the boards of trade, indus trial associations and commercial circles of the Aame goverumeut, of their own ports and that of the boarls of trade of the commercial cities of America, will be able to break down the protective tariff of the United states and again open up than
wool market
is
II have mo hesitation in expressing the tratia, to New Zealand to Buellos f (ivod Hope, Adrianople and the wool produc ing parts of the worll, at such reduced rates of duty as will admit of frec importation, the sheep in the Columbia valley will not be worth the pelts which inow cover them. We pay our
herders $\$ 100$ per year and board, while the average of wages for the same service in th "The followint are the and board.
Berlin, a mincmler of the Imperial Parliament of Bertin, a momber of the Imperial Parliament,
of Germany, upon the efflect of free trade upon
their wool industries. ife forly Cermany the best wool in the world and a most
flourishing sheep hinsbandry. The whole world was attracted to the ficrman imarket of ine
wool, and the Gcrman woolcn cloths in nearly all, cualities was the best produced in any comp-
try. Since the lirst and scond steps in the way of free trade, we have lost succeessively our great number of sheep and our great quantities of fine cloth.' He adds that a large portion of the wool now used in (iermany, is purchasel in
London wool market, which, should friendly London wool market, whieh, should friendly
relations be disturbed between the nations, relations be disturbed betw
would close the Cierman mills."
would close the German mills.
These things are well worth the attention of our wool growers. So far as we cau sec, there agnin into its former position of profit, excelt the maintenance of the tariff of $186 \overline{7}$, which was the cause of the prosperity of the following
vears. Now, as a revival of gencral husiness contidently expected all over the country, would be but a sorry sight for our wool grow ers to see the rcuewal of dcmand for woolen goods met by a free importation of forcign the money of our own citizens is taken to eurich the shepherds in all the quarters of the globe instead of falling into the worthy .hands of home producers. This, we believe, will be the
condition of should wisely refrain from meddling with a pre--
tective measure which has fostered the great tective measure which has fosterel the great
developnent of our wool resources.

## Temperature and Rainfall.

While frosts were coming thick and fast, not long since, and no less than eight or ten rame n. went withont bringing rain (much to the their umbrellas after the thirel frost) we deter mined to look into the possible relations whic might exist between tenperatures and rainfalls n this chast. Repressing the alluring task of rawing elog口uent conclusions oh hoth sides the question before examining the rccord, we set our pencil at work among the tathes of tem city. It is wall we did so, for if we understan! the fignres aright, there is but narrow ground to base any deduction upon. Wैe will, how. ever, lay our computations before onr readers and if they can nake any more of them than We can we shall be glad to know it.
each month in the year and struck anather mean betwecn those months (Octolor to. Aprit which comprise the ramy season in each fiscal year. Opposite this mean we place the rainfall
for that fiscal year and the resilt is shown as

As one studics this table he will think he at the lowest tenuprature, hecause the wettest ear, 61-62 ( 35 inches), was at the low temperature of 51.1 , and hecause the driest year 63(8.5) inehes), was at a high temperature of
of $t^{\circ}$. But if the inquiry is pushed farther it will be discovered that some of the heavies rain years were those of the higher tempera
tures, To make a carefnl comparison of the whole list of 5 -5 years we took the inelium tem perature of $54.3^{\circ}$ as a median point and groupent the 12 remaining years as they graded above the 12 remaining years as they graded a

This table shows that there is but one-thir au inch iucrease in the average rainfall at th close it is nut strange that different olserver find individual cases within their memory to high or them in dectaring with heavy rains Our conclusion from these computations would with it.
Our talles are inade from the records of $D_{r}$ H. (ibblon, as his only give both temperatur ud raiufall for so long a period.
The amount of custom
st week was $5.3,299$.

Queries and Reples.

## Bird Lime.

Editurs Prkss:- In the Rurat Prarss of December 20th,
isif, 1 noticect an article on bird lime. Can it be prourd in san Prancisco, annl if so, of what firm
it cost?-M1. K. SAvikrs, Iuveneme, Cal.
The inquiry which we have made fails to dis-
onver bird line in our storcs. One of our leading wholesale druggists, Mr. J. I.. Ciates, said that he had a package about seven years ago,
and harl sold it, but therc lias been no inquiry and had sold it, but there has been no inquiry
since that time. It can, of course, be obtained easily from Japan if people call for it, as our Ir Gouses have correspondent in Yokohama. Mr. (rates informs 118 that the price would range
from 30 to 00 cents per pound. It comes in wooden packages something like a butter tirkin.
Honey Locust or Three-Thorned Acacia.
Editors l'resss:-This is a tree of rapid pinnate, close at night; seed pods a foot or more in length. The tree is armed with triple or They are trained in hedges and foot in length. a wind brake. Mr. I'earson, near Florin, has grown a tine hedge of honey locust facing one osage orange. Both do well; loth, properly beast. Hoak the seed the same as black locust, as it quickens germination. Let the stem rise , then check it to force oin forming them, some advocate plassing, others the ordi-
nary way, turning over. 1 believe this covers nary way, turning over. 1 believe this covers respondent in I'tral P'ress of January 12th. (iko. lich, *acramento, C'al
Diseased Cattle at Large.

Foltors 1 'resss:-Therc arc diseased horses running at
lar'te a part of the time, aid rrequently traveling the rutice rouls, lnudy infected with a divease said to be the horecy frum so lweconing infected weve would like to remain law-abiding cit
BaRBor k , Sucling, C
If the lorse or other diseased animal has no owner, either guout and shoot it down, and as an cstray and then have it condemued and to kill the animal or have it killed, have him arrested for maintaiming a pulbic unisance.

The No-Fence Law

- Finturs preas: As a sulseriher of he Reral Prase, 1

The "to-fence" law, which was passed two ears ago, is still in force. Nodecisiou adverse only applies to certain outside counties.

Heamy Grapms.-There is some noise being made in our Eastern and Euglish cxchanges
about heavy buthes of grapes. We have no loubt California conld weigh them all down if the effort were made. At the last Mechanics' fair in this city Mr. Bhowers showed a bunch of fimperur grajes which weighed es pounds, and
made no special effort about it either. There was also a bunch shown in this city last summer
which wei hed 12.5 pounds, but it was an artifiWhich weighed 12.J juunds, but it was an artifial allair, made hy interweaving a number or iest lunch of black grapes cver known," has
recently been on exhihition in Dublin, as we recently been on exhirion in from the fiardemer's Chronice, of london. The variety is Gros (iuillaume, and the grower
Hr. Poherts, garicuer to the Countess of charlevillc, C'harlesille foncst, Tullamore, King's county. Its weight is 23 pounds 5 ounces; its $2 y!2$
rises, and general finish, it is described as all that could he desired. This bunch stands third on the list of heariest bunches (irrespective of than the bunch of Laisin de Calabre (26 pounds 4 ounces), shown by Mr. Curror, at Edinburgh, than the Whitc Nice ( 25 pomuls 15 ounces), shown by Mr. Dickson, of Arkleton, at the same time and place.


Agricultural Topics Before the Legislature.
Aside from the peculiar action taken by the Senate on the irrigation question, which is noted in another column, there have been several important agricultural measures brought forward during the week. One of these is the listing of growiug crops and "improvements" with real estate instead of as personal property. A bill to this effect is before the Assembly, and thus takes its first step towards becoming a law. It is a measure which we have strongly urged, and which is neccssary for the just assessment of agricultural values.
Mr. Hart, of Colusa, introduced a bill authorizing the poisoning of wild geese, which are an insufferable pest in some counties, and it was referred to the Committee on Agriculture. The
first section of this bill reads: "It shall be lawful for any person or persons residing in any of the agricultural counties of the State of California to use any poisouous substance, including phosphorus, strychnine, or any other noxkilling wild geese; and for this purpose may mingle or saturate such poisonous substance with any feed, grain or seeds that will be most likely to kill destroy and exterminate the same.
Provided, that the provisions of tlis act shall only apply to persons either owning land, or in possession or having control of laud." Other clauses declare that the poisoning shall only be lst of March in each year, and rauthorizes Supervisors to give public notice of the passage of the act.

Assemblyman Hanna, of Santa Clara, has This provides a bil iu relation to clieese factories or supply, or bring to be manufactured to any butter or cheese factory, any milk diluted with water, or from which auy cream has beent taken, or tainted milk, is made liable to a penalty of not less than $\$ 25$ nor more than $\$ 100$, with costs of suit. This law, we presume, is similar to
the one which is in force in New York State the one which is in force in New has been found of great value for the proaud has been found of great value for the profactories, for the protection of honest dairymen gainst those of different character
The miming debris question was bronght up in the Assembly by Mr. Berry, of "utter counth, debris from the hydraulic mines of our state is greatly injuring, and in many places has totally destroyed large quantities of our finest alluvia lands, and the sanne cause is fling up ours. Therefore, be it resolved, that the speaker ap. point a committee of five to investigate this
subject, and they are authorized to send for subject, and papers, examine witnesses, administer oaths, and may visit San Francisco and the city of Marysville if they deem if proper. her at diem not to exceed ses for act ual service rendered." The resolutions was adopted without a dissenting voice. The fol pointed: Messrs. Ostrom, Garvey, Waters, Coffey and Kercheval.
Mr. Thompson, of the Committce on Agri-
culture, reported back with a recommendatiou culture, reported back with a recommendatiou
for its passage, Assembly bill to regulate the for its passage, Assembly bill to regulate the
use of artesian wells and prevent the waste of ase of artesian wells and prevent the waste oil provides for capping flowiug wells where the The Assembly
The Assembly Committee on Agriculture concurrent resolution asking the Ferleral Con gress for sush legislation as will prevent streams and sources of water supply from being appropriated to private use.

## The Rains.

True it is that the louds have not forgotten their mission nor the strong south wind its power. A storm, such as all have longed for during all these months, has come and filled the heart of Californians with joy. It is no local, discriminating blessing, but most gener ous and general. From the exious rain. In the Coast valleys the drenching has been complete, and streams are running which for two years have lain with bleaching bottoms. Through the lower San Joaquin valley the first notable rain since the last good year has come. In northern counties, the down-pour was of cours of its usual grand proportions. As we write
on Wednesday the rain is coursing down onr window panes, almost as though some kind friend was emptying huckets from the roof,
And still it comes. Any table which we could prepare to-day would be but partial before it week a measure of the blessing.


## A Plan for a Flower Garden.

## |Written for the Prisss by C. H. Surix. 1

Some definite plan in the garden is essential to floral success. It will not do to have a monotonous succession of similar beds, nor is it advisable to mix plauts of all sizes and styles of growth iu the same bed. Morcover, some flow ers are only showy in inasses, and others are in continual demand for decorations, vases, and the ever welcome bouquet, so that little groups of each kind are by far the most effective
If the ground is undulating the plan should follow the uatural curves. The highest beauty of landscape gardening is attaiuable ouly on varied surfaces. But when the ground is level a mathematical plan shows the flowers to much the best advantage, though in this case the
flower garden must be surrounded by lawn and shrubbery, so that the eye fiuds relief from its
precision accompanying plan is now in use on a
The act


DIAGRAM OF A FLOWER GARDEN-SIZE 104 BY 52 FEET.
piece of level ground $104 \times 52$ fcet. The large carnation dragging its blossonss in the dirt for circles and straight paths are four feet wide; lack of a helping liand, all others are three. Surround the garden by a parallel lines. Use heliotrope from Euonymuls. var. aurea and Clematis rubia, on a low trel
is. If these hed eplants are used on different parts of the enclosing circuit, the effect is very pleasing. At the ccitral point in the desigin is an appropriate location for
or piece of garlen statuary
Arrange the flowers as follows, referring to the tigures on plan: 1. Crocus pansies. 2. Anemone followed by portulacea.
3.
. Verbena
(striped).
4 Nemoyhilu var. 5 . Dwarf ten-wcek-stock. 8. Verbena (white) . Liies, native and foreign. 10. Hyacintlis followed ly asters. 11. Buibs in varicty, Raa medium, edged with C. carpuctica. I4. Delphimium formosum. 15. Iris and oruatnental
grasses. 16 . Gladiolus and cannas. 17. Everlastings in variety. 18. Penstemon and antin20. Foxglove, elpged with whitlavia. 21. Chrys anthemumss and zinnias. 22. Geranium, monntain of snow. 23. Candytuft, phlox, and
annuals for bouquets. 24. Anagalis. 25.
CoLeus, or perilla. 26. Pansics. 27. Blue lobelia.
28. Petunias, single and double. 29. Succu-

| lents. | 30. Pelargouiums. | 31. Verbena (sear- |
| :--- | :--- | :--- |
| let). 32. White daisies. | 33. Linum grandi- |  | forum. 34. Calla lilies aud caladiums. 35. Dwarf nasturtiums. 36. Convoltrulus, mino The ed shrubs. 88 . Choice perennials.

The edging should le of dwarf pink on one
ircle, and of Oxalis florabunufa on the other circle, and of Oxalis florabunula on the other,
unless a uniform edging of box or tiles is pre erred.
No place is given for roses, which are supposed to occuly a prominent position on the
lawn, and among the shrubbery, but, if it is lawn, and among the shrubbery, but, if it is
thought advisable, one or two roses may be put in each bed.
By a little care all of the early bulbs can be The irises used nust be the choice hybrids. In the tallest must be ini the middle, or the little ones will not have a fair chance.
The bods mist be well manured, and kep, loose and light by frequent raking. A little clean sand sprinkled on top adds sto the appear ance. Almost all the plants will need staking
when they begin to bloon. Nothing is more when they begm slipshod than a lily, gladiolus or

Rapin Growth of Ercanprus.-The rapid Coodspeed has on liis lot in north Ilealdsbur some trecs which have grown 40 feet in two years, and others 22 feet in 18 months. The
latter were set out one year ago last March; in latter were set out one year ago last March; in
Mlay they had not grown more than a foot May they had not grown more than a foot.
He then began watering them with the above He thlur bogan watering them with the above
results. His experience teaches that they results. He experience teaches that they
should be planted in the fall, so as to receive the benefit of the
We cannot too strongly urge upon onr farm crs the importance of planting out thesc valuable trecs. livery farmer should put ont at least an acre of cucalyptus trees the present winter. They are rapid growers and said to dollars' worth of young trees, would 1 liant an acre; $\$ 20$ would be sulticient to ercet a wind mill toirrigate them with, and in three years
more then enough fire-wooll can be takcul to more than enough fire
All the Pacific Coast Congressional delegation, except Semator Sharon, are again in
Washington, to remain during the seasoul

Our New Year's Callers.
The Rukat Press received a host of congratlatory New Year's greetings from those whose approval and patronage give us strength and courage. Although we do not propose to make public all the kind words which were writte aud spoken to us, there are a few which are descriptive of our work and the value which is set upon it, and which, if spread abroad, may aid as to extend onr field. A few such we shall quote:
"The Rurat las paid me its weekly visits many ycars, and I invite its continuance and
make provision therefor. I regard it as invaluable to every agriculturist, pomologist and stock abe to every agriculturist, pomologist and stock
raiser. However well versed each may be in his department, the Rural will give new ideas worthy of thonght and consideration, and no ing become its patron." -J. 12. CravDAn Auburn, Cal.
"Enclosed is amountoof iny sulbscription for pleasure my year, and I must express with many important, interesting and carefully gathered subjects treated in the columns of the Rtral. Though the past year has been truly a keen one in this part, 1 trust that you may
not lave felt the pressure that has been forced not have felt the pressure that has ,been forced
upon all in southern California."-Thos. P. Hinds, Anaheim.
"I do not wish to lose any of the valuable information contained in the RURAL, for it has been a great benefit to me and 1 have found it
to contain many valualle hints to one in my business, that of market gardener. Its column are always filled with valuable information to first-class relial 1 find it all you claim for it, a I can say for luundreds of other jonrnals which 1 pick, up during a year. Please send it right
along."-(iro. S. Brouv, Silver Star, Madison county, Montana.
"I have been a careful reader of the Rural Press the last three months. I intend settling down on the lacific coast, and I am getting
infornation now and at the same time naking information now and at the same time naking
the nioney to 100 acres of good land, and I think when my old neiglibors in Scotland can get rich on 60 a good living on 100 on the Pacific coast. I
 rumal fers. -alex. Test, hirginia
"One of your readers told me, the other day, that he cannot get along without the Press,
although he has found it a hard year for him. The Phess is a stand-by and a farmer's friend. - Young Folks' column pleases my clildren with its odd cuts, 1 leasant stories and spicy
sayings. When Saturday comes, the first thing sayings. When Saturday comes, the first thing
is: 'lapa, let's see the l'ress, and, find us the
俍 good things it has got to read. I hore the
opening year' the PRESs will still increase in prpularity, circulation and in correspondence, phl coutinue to by il ve palee among t'ie far,
aners and the intelligent readers of the world. mers and the intelligent reade

- (iEo. Ru'nl, Sacramento, Cal.
"' Success to our paper'- -the Pacific Rtral
Press, the farmers' true friend."-A. J. MotmerPress, the farmers true
EAAD, Sall Luis Obispo.

I renew my interest in the Press for an. other year and am well satisfied with the paper,
having found inany single articles well worth having found many single articles well worth
the whole year's cost." $-W$ W. Duncav, Red
Red. Bluff, Cal.

- The Pacticic Rural Press closed its four-
th volume with last year. The Press is a teenth volume with last year. The Press is a
favorite in this office, as well as in the liousefavorite in this office, as well as in the house-
hold of the agriculturist. Wic trust it will contimue to enjoy many ycars of prosperity, and to
its enterprising pullishcrs be a satisfactory
"The Rural l'ress closed its fourteenth volume last Satnrday. It starts upon a new volume with resolution strong to make it sur-
pass all which have gone beforc."-Castrorille pass all which
Argus, Jan.

De Lesseps on the Darien Siup Canal. At a recent meeting of the l'aris Acadeny of
Sciences, a paper was read by M. Dc Lesseps, Sciences, a paper was read by ll. De Leesseps,
iu which somo further particulars are given of the proposed canal across tho Isthmus of Darien. The line advocated by Lesscpss, starting from iver Turyrast, Alligators' island. From this point a straight cutting 16,200 meters long, connects Tuyra with Chucunaque near thoo point where the Tupisa flows into this lattcr river. The line
then asceuds the Clucunaque for 14,400 meters; then ascends the Chucunaquc for 14, 400 meters;
then turning to the northeast, it continues up the yalley of the Tiati to a point, where, for reasons of economy it wouk be preferable to make a tunncl rather than continue decp entting. Gandi, under the romarkable ridge from which on one side an arm of the Tugnesa, and the latiflow down toward the Pacific, and on the On er the Tolo and Acanti flow to the Atantio nes through an open eutting nbout ten kilonctors long, down the valleys of Acanti and Tolo to the deep waters of port Candi. Tho probweon 13 and 14 kilometers, and the cost of mak ing the whole canal at $600,000,000$ francs,

Continued from page 35
can also be kept in chests filled with bran or finer dish than one recently smoked
iner dish than one recently smok wo punces of powd saltpeter hain with remain in the salting pan for 24 hours. Make pickle of three pounds and a half of salt, on pound of sugar, four ouions sliced fine, a pect of pale-dried malt, and one gallon of water
Boil all together teu minutes; pour it hot over the ham, straiuing ont the malt and onions Keep the ham covered with piekle for three on
four weeks. Take it out, wipe it dry, an smoke it slowly for two or thrce weeks. picces should be so cut that they will lie flat $i$ down closely. But before the sides are cut a it is a gooll plan to rub them over with a mix as mucl suggar as sait. Then place the piec in the tub, riud downward, and sprinkle each
layer with the sugar aud salt. When the tul is well tilled, put a layer of sallt over it so thiek as to exclude the air, and cover it closely
ten days; then look at tit, and if the brime not formed enough to cover it, sprinkle in
very little cold water. In three months th pork will be ready to cook, and it will kee gooll for two years at least, and the sugar will
cive it a finer Havor thau saltpeter. In warn climates both sugar and saltnetcr can as advantageously as in piekling be
housckeepers know that tlicy can make housckeepers know that thicy can make corne
beef more tender and bcter tlavored, by usin a pickle of one ponud of sugar to two pound

The Berkshire Herd Buok.-We have re ceived a copy of ol. of the herl book issmed M. Springer, of Springtield, Ill., Secretary: 1 contains the pedigrecs of males numbering from
$4 \geqslant 1$ to 1,005 , and females from 1,092 to 3,500 . The volume is well gotten up and is of uncues swine, as it places in their hands a permmuent lished. That the work is a success can le seen
from the faror which it sains at the lhands o breeders. We notice that several C'alifornia lreeders lave taken space in its payes. Ful
infornation eoncerning the publishcil voluncs and the conditions for revistry in finture vol umes, may b
tary, as alov

## 

 with fresh, valuable and interesting reading. E
farnuer and ruratist slonhld tuke it. It is is

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Ninstruments we never heard
lara Louise Clara Louise Kellogg, Annie Louise Cary, Zelda Seguin, Maretzek, P. Bribnoli, S. E. Mills, P. Ferranti, Frar minertz, E . Bohren.
A matter which we would make most prominent in this connection is, that the Decke Brothers name is the subject of attempts at
counterfeiting. This is the penalty which the counterfeiting. This is the penalty which the to pay for the gaining of a good name, and all our readers should be on their guard against imposition. Unprincipled parties have manufactured and sold cheap pianos under the names of "Decker," "Decker \& Co.," "Decker \& Brothers," "Becker Brothers," ctc., doing business on the reputation and popularity of the celebrated Decker Brothers' pianos. All genuine Decker Brothers' pianos have their name in front on the pianos above the keys, viz.: Decker Brothers' square pianos the following words ap bear, cast upon the iron plate on the inner leftpeand side of the instruments: Decker Brothers patent, June 2d, 1863.
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baniel inman, (Prisident).
 w. w. w. gray.
$\qquad$a. $w$ CELEY
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Grangers' Building,
$\qquad$ thos. FLINT

Consignnients of Grain, Wool, Dairy Prodncts, Fruit, Vegetables, and other Produce solicited, and
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armished free on application. DANIEL INMAN, Manager.

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NO 218 SANSOME T, SiF
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Any printer laving an Eighth or Quarter Medium Iol Press for sale, will please auldress 3. 1'., eare of Dewey s Co, S. F. State condition and loweat price. FOR SALE-A Gond Type-Writer. Price, $\$ 50$ For further luformation, suduruss "COPYIST," thif Q office.

PublisHers' Department
Fine Pusos. - Those who desire first-elas pianos of diffurent styles ean safely eonsult
Messrs. Kolller \& Chase, of 6.33 , Clay street, San Francisco. This firm has ly its long eontimanee aud upright dealings won public confi dence, and they have also done it by keeping first-rate instruments.
the Decker Brothers' pianos, grand, upright and
Dis. scuare, whieh lave a reputation uusurpassed in
all desiralle ctualities. They lave also the Emerson pianos, whieh are also in good reputc,
and for an ulpright speeialty they have the inand for an upright sp
truments made by make a good list to elioose from. In. addition to pianos, the firm are importers of all kinds of Their establishmeut is well worth a visit from all musie lovers.

Mrsic in Eveir Fanili.-When so much whieh cost from $\$$ to $\$ 500$, every household should be enlivened with a musical instrument
of some kind. Take a musie box until you ean afforil an ortar or a piano. The nusie hox is of comparatively small cost, little tronhle, but
ofteu the source of great happiness. Wie wish ofteu the source of great happiness.
all investuments eould prove as aish people who have not visited $M$. P'aillard \& Co, salerooms in sau Francisco are aware of the
sreat variety and exeellenee of musical boxes now offered the public
shall Farmes For Theints. - An advertisement in another column auuounces the deter
mination of the Natoma Water and Nining Co mination of the Natoma Water and lining Co
to lefase their valuable land, in lots, to suit, fo agricultural purposes. Thus laud las already ductions and we douht not the present action of the owuers will give many a man with small means just the opportunity he needs to get a
good start in ('alifornia agriculture. The chief owners are well known for their gunerons enter-
prises in develming the resources of their propprises indeveloping the resources of their propthe attention of all who desire land to culti

Bhakimpes. Mr. Saxe shows his Berkshire hogs in tine style on the last page of this issue
of the Prass. The pupularity which this hreed is gaining everywhere on this cuast warrants the
nost prounent exhibition of them. We have seen quite a mmber of the animals which
Mr. Naxe has delivered to his customers, and we have heard expressed the satisfaction of
those who have received them. We believe be is loing a good thing for the swine interest of
this eoast in bringing the lierkshires to the at tention of all swine growers.
 the hattle grond at coucorl, Nass., the first and will be prized by all students of American listory. It is about lsx 30 inches, and deserves a good frame. The puhliwher is s. Wr. Brun-
dage, of this city, and we understand that he
will solicit preliasers in person. lt deserves will solicit parchasers in person. It deserves
wide sale. To sirbshabers. - We have recently mode enntract with the publishers of Mall's. Journol of
Health, Nuw York, to furnish ns that old and 1opular publicatiou, for any of our subscribers at old or new of the Pa'lific liourai. Prrass, ean
have the advantage of clul, rates for Hall's
 Cabbage C'cluture is the title of au interest-
iug 2 a cent pamphlet, published by llavid Laudreth \& Sons, seedsmen, of Philadelphia, Pa. kinds, gives modes of culture, and has a valuahle chapter upou the insects whieh prey upon the eabbage.

WiNDMLLs. - We are pleased to notice that the linterprise windmills and pumps, sold by
Messrs. Iforton \& Kennedy, of Livernore, California, who are the general agents for the coast, give the best of satisfaction, so far as we have
heard, in every instance, and to our friends who wish to be sure of a good article at a reasonabl price, we recommend them to this firm

Olu Eies are Mude New to a wonderful de gree, oftentimes, by the applivation of the right
kind of glasses. It requires linest kind of glasses. It requires honosty, skill and give general and lasting satisfaction to his cusl give general and lasting satisfaction to his cusl
tomers. Unfortunately these three esseutia-
gualities are too selloun found in a business in which eheating temporarily pays such goon wages. For reason of the facts above stated, we take pleasure iu introducing to our readers Mr. samuel D. Burbank, a tirst:class opitieian who has recently cstablished himself in Oak mately for over 20 years as a practical (and spectacles and eye-glasses in Springtield, Nass IVe bespeak for him a rapidly increasing busiess, by reason
ll lis patrons.

Rainfall at Sacramento. We give herewith the tabular statement of the rainfall at Sacramento which we have been great value, not only to the residents in the adjacent country, but also to the general studeut of meteorology as it affords an opportunity to contrast the rainfal in the interior with the
eoast rainfall in this city. The table is in the

main the one prepared for us by the late Dr. table is brought down to the elose of last year, from the records of Dr. F. W: Hatel, Seere tary of the state Board of Heaith.
Tuk World's Wine Prodrct,-An oflieial statement gives the number of gallons of wine produced by eaeln of the grape-producing coun-
rics of the world for $18-6$ : Fratee, $1,176,076$, 19; (iermany, $76,317,204$; switzerland, 30 1un,000; Bohemia, 85,000 ; Austria, $84,502,84$ Hlungary, $921,214,400$; Russia ( (j)rovinees in
part), $44,361,000$; Yortugal, $111,000,000$; Tur1,928, 624 ; Cape of Cood Hope, 1, $\overline{1} 5,926$; Balearie aud Canary Isles, 291,$450 ;$ spain in
part), $66,000,000$; Greeee, $2(0,400,000$; United part), $66,000,000$; Greeee, $26,+400,000$; United
States $14,000,000$.

Woodmard's Garders has the following new attractions The buffale chase; large whale skeleton; new numeum;
inpprovenent in the zoolsyial deparnment, hesides the
other featurus which have made it popular.
S. F. MARKET REPORT

Nors.-Our trade review and quotations are prepared
on Wednestay of each week (our publication day), anid are


## Weekly Market Review.

DOMESTIC PRODUCE, ETC.
San Fraxetsco, January 16th, 1878.
City trade has lieen well nigh suspended dur ing the last two days, owing to the heavy storm. Merehants have divided their time between exchanging views about the "glorious
rain" and baling and puinping out their cellars. The difficulty of moving produce and the general disposition to enjoy the improved prospect e reduced traffic to a sinall amount.
Range of Cable Prices of Wheat.
The eourse of the Liverpool quotation for
Wheat to the Iroduce Exehange during the
days of last week has been as reeorded in the following table:

## Thursday: Friday Sneuriay. Monday. Tuesday.

To-day
Exchange compare sathe date in former years as follows
$\qquad$

The Foreign Review.
Lonnos, January lith. - The Mark Lane Express says: The Wheat plant is progressing
favorably, and has, as far as can be aseertained, snstained uo injury from reeent heavy rains. At Mark done in English wheat, lut in provincial markets the tone has been rather better and a moderate amount of activity has prevailed.
The upward tendeney in values for foreign Wheat has reeeived a temporary clleck, owing to the unusual heavy importation which rcached arrival of over 111,000 quarters, besides large imports of American and Indian Grains. The out by arrivals of linssian Wheat by way of lieval. Should the season continue mild and the Reval route remain open, our winter supplies may slow an unlooked-for increase, havher available produce into gold to enable her to
earry on the war. Apart from political considearry on the war. Apart from politieal eonsid-
erations, the present range of values for Wheat appears to be a safe one, as far as can be seen. Any material elange either way result of political iufluence, but evell if peace is eould not ealculate on receiviug supplies mach before April. So, taking all things together, it
is doubtful whether a paeifie turn in Fastern affairs would materially affeet prices. It must, however, be confessel that tiris opinion searcely
obtains credence with millers. I'rices are slightly in luyers' favor, although not quotably place have heun to supply immediate requre place have been to supply immediate requrespot mixed American eased slightly, but a revival iu demand may oecur at any moment,
is the stoek of sound Corn in London is very short. Firmuess characterizes the trade for Barley and Oats, with small arrivals at ports of
call. The tloating eargo trade has rulerl dull call. The tloating eargo tr.
for $W$ heat and rates receded.

Freights and Charters
The improvement in Wheat freights whieh Was noticeable a week ago, says the Compurcial
Vews, has continued during the period inder review, and quite a number of ships have leen taken at increased rates. The last charter
drawn was at $£ 2$ is for an iron vesscl to a direet drawn was at $£ 2$ is for an iron vesscl to a direet at the latter part of Deeember. At the elose, however, business has been cheekeal by the
news of an armistiee between T'nrkey and linssia. A number of vessels have been added to the disengaged list, but the eliarters have been
sufficient to nearly offset the arrivals. There are now in port 13,363 tons under engagement to load Wheat here, 2,119 tons in Portland, 15,366 tons miseellaneous and 32,0 ans tons disengagca. Mhe heat eharters for the week Liveruol, in ls Br ship lloogly, 1300 tons, Wheat to Cork, U. K., $£:$ is (xd; Br. ship Nereus, 1,108 tons, Wheat froin Portland, Oregon, to Cork, U. K., £2 178 6d; ship Queensown, 1,40 tons, Wheat to Liverpuol, fl Iis 6 d ;
Br. ship K. J. Marland, 13,333 tons Wheat to Liverpool,

## Eastern Graln Marketa

NEW lork, January 1'2th.- l'eace prospeets in Europe have had a depressing effect on the Grain market, and prices of Flour, Wheat and Corn are lower, and for the moment very dull. Curn for export at 57@60
opened lower last Monday
tinued steady until to day morning, and con-
action oecurrcd. The decline was oceasioned by several eauses, chiefly loeal in character, the
European question being at present a secondary eonsideration. The principal causen of the
decline were the unsettled state of tinances, and decline were the unsettled state of finances, and the temporary inprovenent early in the week in the condition of country roads, which, with
the severely cold weather, froze stiff, and adthe severely eold weather, froze stiff, and an
mitted of some transfers of Grain from granaries mitted of some transfers of Grain from granaries
and barns to elevators. Wheat has been fairly and barns to elevators. Wheat has been fairly with inereased reeeipts and a prospeet of a de eided deeline before Spring. Sales at $\$ 1.05 \mathrm{~S}^{2}$ ( $\$ 1.083$ for February. Corn has steadily de
elined, with a barely speculative fluetuation, and sales of February at $40 @ 41 \mathrm{cc}$. Oats wer very dill and weak, and easy at aimost stationary prices. February sales at $24 \frac{1}{8}(2433 \mathrm{l}$. Pro isions were rather active, and an intense packing weather exerted a depressing influence late in the week, and the distressing finaneial rumors alluded to above, were mostly effective here. A heavy break occurred in Pork toward the elose of the week, being nearly 50 e easier Eastern quotations hcre are influenced, too, and the week reeords the most marked decline of the season. Hog receipts were 225,000 , the seeond largest week's reeeipts that ever eame \&10. $62 \%(a \leqslant 11.35$. February Pork sold at S10.62tas 11.33 . lard simply reflected the neither so lieavy nor so decided. Sales of Fcb-

 was dull at $\$ 1.05$ throughout. Reenipts for the week: IV heat, 32,000 bushels: Corn, 252,000 bushels; Oats, 89,000 bushels. Shipments
Wheat, 200,000 bushels; Corn, 86,000 bushels Oats, 31,000 bushels. Peeeipts same time last bushels; Oats, 138,000 bushels. Shipments: Wheat, 53,000 bushels; Corn, 317,000 bushels Oats, 94,000 bushels. The only increase indi
eated by these figures is in Wheat, and that under the eireumstances, is very ereditable and remarkahle.

## Eastern Wool Markets

New York, Jan. 12th.- The week has de reloper considerable aetivity for low price in any week for some months past. Manufac turers generally are running on an inferio quality of goods, and, in consequence, the latter class of Wools are taken only in limited quanti. ties. As regards the strength of the market, there exists the same firm feeling, no desire being shown to foree supplies at anything under previous current rates. This feeling arises light, and priees current are believed to rest on bottoin and that any changes that may take place will surely be in the interests of holders. Wales for the week are $2,000 \mathrm{lts}$ coarse South Ameriean, I3e; 400,000 ths Fall California, 14@ $19 \mathrm{e} ; 53,000 \mathrm{lts}$ spring do, 22(a.24te; 10,000 lte Colorado, $1 / 2 \mathrm{e}$; 31,000 ths Hastern Texas, $22($ 24c; $2,000 \mathrm{lth}$ inferior Georgia, $20 \mathrm{e} ; 2,000 \mathrm{ths}$ $40,000 \mathrm{Hs}$ and $15,000 \mathrm{ths}$ nnwashed Kentucky combing, 39 c Donskoi, 50 hales Oregon, $1,000 \mathrm{H}$ He Vitah, $61 \mathrm{I}_{\mathrm{r}}$. 100 Ihs Western Texas, 5,000 ths Kastern do shearlings, 5,000 llis unwashed Olio aind 1,000 lhs II estern Fleece, on private ternis; aiso $3,000 \mathrm{lts}$ Buffalo Hair, at 8 e .
Bosron, January 12th. - Wool is rather quiet, the new year not having as yet brought any inercased aetivity. There is, however, a very
firn feeling, and holders are confident that full current priees will be realized for some months plies and large eonsumption. Combing anit demills, after continue very quiet, the kurge six months, having withdrawn entirely from the market. Ohio and Peunsylvania X, XX and
above, $42(a 46 \mathrm{c}$; Miehigan, Wiseonsin and other F'leeces, $37 @ 42 \frac{1}{2}$; combing and delaine, 52 c for a fine quality unwashed eombing, 29@3se coarse Cotswold and eombing, $2 \overline{3}$ (a 45 e; seoured, California Wool, sales were large, amounting to about half oi the transaetions of the weck, in
eluding $516,000 \mathrm{lhs}$ Fall, at $\mathbf{I 4}\left(a^{2} 25 \mathrm{l}\right.$ c; and 90 , 000 His Spring, at $25(632 \mathrm{e}$. Total sales of domestie for the weck were $1,209,900 \mathrm{fts}$.

The General Wool Trade of 1877.
From the "Annual Wool Circular" of James Lyueh, of New York City, we make the follow ing extract: The Ameriean farmer was com pensated with good priees for his wool the past year; the importer failed to make money, and the manuiaclurer, on the average, 1 . ter than hold his own. At the beginning of now current, and trale light; business improved in February, but fell off in Nareh, and remained when until the approach of the new elip, tremely active, and the prices paid producers were advanced to figures quite as high as they importers have had a very unsatisfactory year in imports, while in many eases losses have had to
be borne. The manufaeturing business, while not really isfactory than that of the preceding year, and a
exists than has been experienced for a long
time past. In worsted products the business time past. In worsted produets the business low and inedium clothing roods. Strictly fine woolens have not done well. the raw material has been too expensive, and buyers would not pay the high cost of the cloth. Stocks of fine Wools in the principal markets are smaller than they were at the beginning of last year. The or chp of the United States in $18: 7$ exceeded in quantity all its predecessors. Nool growers their attention to the production of Combing Wools, which of late years have found a readier sale, and at better prices, than clothing descripNew Mexion New Hexs a a a 11 times command a carpet The year begins with a fair demand. Already some important sales have been made at full prices.

Grain on Hand January 1st
The Produce Exchange has completed its taking of stock of Flour and (irain remaining in the Staie on the lst day of January, 1878. The following is the report issued, showing the the two preceding years:


The amount of Rye on hand is 3,901 sks, January 1st, 187?

Oregon Wheat and Flour.
The Oreyonian publishes the following statement of the exports of heat and Flour from Oregon duriug the year just ended:
To Europe, hheatest. of 1876 .
To San Francisc, harvest of
To Surr
To san Francisco, harvest
To Eorpene ,arvest of 1887
To San

## 




173,121
Total.............................
The following table shows the S. F. receipts of Domestic Produce for the week ending at noon to-day, as compared with the receipts of previous weeks:

| Artioles. | Werk. Dec. 26. | Werk. Jan. 2. | $\begin{aligned} & \text { Wввк. } \\ & \text { Jan. } 9 . \end{aligned}$ | $\begin{aligned} & \text { Werk. } \\ & \operatorname{Jan} 16 . \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Flour, | 15,881 | 72,847 | 43,883 | 11,235 |
| Wheat, centals | 147,937 | 81,518 | 173,451 | 10,793 |
| Barley, centals | 8,652 | 14,143 | 15,775 | 12,538 |
| Beans, sacks. | 778 | 727 | ${ }^{1,725}$ | 466 |
| Corn, centals. | 5,379 | 2,258 | 5,041 | ,428 |
| Oats, centals. | 1,501 | 10,440 | 6,319 | 339 |
| Potatoes, sa | 19,270 | 15,953 | 18,612 | 16,586 |
| Onions, sack | 2,449 | 755 | 1,377 | ,283 |
| Wool, bales. | 287 | 331 | 248 | 186 |
| Hops, bales | 39 | 81 | ${ }_{841}$ |  |

Bags-The rains have induced dealers to add $\frac{1}{2}$ e. to their prices for Grain Bags. Other Bags are unchanged
Barley-Barley is quiet and unchanged, We quote sales: 500 sks light Brewing at $\$ 1,65 ; 2,460$ ctls Bay Feed, weevily, at $\$ 1.60$, silver; 980 ctls do do, $\$ 1.52$. per ctl, gold; 500 sks fair bay Brewing, 150 sks choice Coast Feeding, \$1.621.
Beans-There is no chauge since the last advance, e
Corn-Corn has improved since our last
and holds rates of a month ago. We quote sales: 500 sks Large Yellow at $\$ 1.60 ; 100$ sks Large Yellow, $\$ 1.72 \frac{1}{2}$, silver; 100 sks Large Yellow at $\$ 1.60$ per ctl; 200 sks do, at $\$ 1.65$ per

Dairy Produce-Last weeks comments are still true. The supply of fresh roll is ample (unless this storm should retard shipments) and sales are made at last week's figures. Cheese is scarce, dealers' shelves are bare
Eggs-Eggs are unchanged
Feed-Hay sustains an advance of 50 c per on for ehoice Wheat, and the market is activc. Corn Meal has advanced abont $\$ 1$ per ton There are now two grades of Straw on the mar good quality at 70@80c
Fruit-Oranges are improving in quality and the best now bring $\$ 30$ per M. The price *ill probably advance with the quality when the better Californians come in.

Hops-Hops are unchanged, and no nota
He sales are reported. The New York mar de sales are reportel. The New York mar
et for the week ending January 4th is reviewe by Emmet Wells as follows:
The New Year opens with a brisk market the demand still running chiefly on low to fair grades at late prices. There is a growing scarcity of choice export Hopś, and those of our dealers who are favored by orders experience great difficulty in fiuding the quality to suit. It will be seen that the shipments this week exceed the receipts by nearly 500 bales; This is of very little account, however, as the stock is large and fully adequate to meet all interior A ew Hops are changing hands in the interior at nearly the same prices as rule here export Hopss, 11 to 13c. New Yors ( export Hopss), 11 to 13c; New Yorks, good to
prime (nominal), 8 to 10 c; New Yorks, low iair, 5 to 7 c ; Eastern, 8 to 12c; Wisconsins, to 8c; Yearlings, 3 to 5 c ; Olds, all growths,

Oats-The price is unchang
les: 52 sks rood Feed $\$ 1$ 85, 100 , We 110 Washington Territory, \$1.8.5.
Onions-An extrente of 85 c per ctl has een reached by the best Union City.
Potatoes-The advance is contiuned for oice lots, as may be seen by our list.
Provisions-An improvement is noted in nearly all kinds of Fresh Meat, owing to the scarcity of gond Cattle and sheep. The late drouth may now be expected to show its infth ance on our Meat market for a while
Poultry - The market is firm, though slightly lower schedule of prices has prevailed The storm may reduce supplies for a time.
Vegetables -There are no changes. The winter store Vegetables are chiefly shown lthough thi
ireen l'eas.
Wheat-The rain, the probable ending of the Turkish war and the begiming of the year have induced a slight reluction in current rates in this market. Wu nuwe oales: 1,200 ctls fair Shipling, $52.22 \frac{1}{2} ; 800 \mathrm{ctls}$ Milhing, $82.30 ; 1, \cdot 00$ ctls fair shipping, $\$ 2.22!$; 800 ctls choice Shipping, $\$ 2.30$; 400 do fair Milling, \$2.2.3.
Wool-We hear of nothing new in the local trade. The telegraphel review, in another column, shows increased activity in California Vools in the New York market.

DOMESTIC PRODUCE


GENERAL MERCHANDISE. fWholesalr. 1
Wednespay m., Jauuary 16, 1878 ,


FRUITS AND VEGETABLES


Gold, Legal Tenders, Exchange, Etc. [Corrected Weekly by sutro \& Co.]

AN Francisco, January 16, 3 P. M. Legal Tendersins.
Gold in New York, 102.
Gold BA
count.
Exemanot on New York, $1 \%$; on London bankers, 493;
Commercial, 50 ; Paris, hye francs $¥$ dollar; Mexican


## Important-Farmers.

It is often desirable, when wishing to securc ers, Plowin Hands, such as Teamsters, Nilk them, and so avoid being imposed upon by the numberless tramps with which the country abounds. The city is a place where large nuin bers of men from all parts of the country con gregate, and among the number many good, awaiting employment. Mlessrs, Crosett \& Co, ${ }_{6} 23$ and 625 Clay strect, are daily receiving ap pilcations from these sturdy yeomanry, con posed of (iermans, Scandinavians, American and Irish, who wish to be sent out to work on some farm, and should any of our readers wis
to avail themselves of the opportunity to pro cure such persons for any work they wish ac complished, they can address, giving full par ticulars, Crosett \& Co., 623 and 625 Clay strect San Francisco, and particular attention will b

TWENTY-FIFTH YEAR-1878
Hall's Journal of Health.
Contents of a Single Number
The little Courtesies of Life; Coughing in Consump tion: Influcnce of Christianity on Medical Seience; Ignorance and ill llealth: lhare and Ruin; Kindness the Best Pinsanity; , Grass in Rim, Vhan The Spirit Rapper Premium on Babies; Our Proverbs; Wrecked Clergyncn, Harrying Well; The Lifting Curc; Sea Sickncess; Face Painting; A Filthy Atmosplicre; The Latest Crazy Man Surgestion; The Erie Railway; Sick Children.
Published in New York. E. II. Glbbs, M. D., Editor.
This journal has maintainca the highcst record of any ath journal issmed in the Englishl language. It is no he amount of matter published which makes it the mos aluable journal, hut the plain and condensed truths it ring that whi

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## 

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MARKS.
 Thise erho manufacture a supverion article, or put ul


 DEWEY \& CO., Patent Solicitors, No. 202 Sansome Street, S. F.

## ANNUAL MEETING.

## Office of Grangers' Business Association

Notice is herebsy given that the Aumual Meecting of the lection of Directors, and for the trumasation of such other business as mayy rroperly come le lefore the Anmual Mcet
ing of said corparation, will be held at the oflice of said
 Amos Adams, Sec ${ }^{\circ}$ y.

## PEAR SEEDLINGS.

We litive left over from the fall trade a finc lot of No.
2, from threc-sixtccuths to onc-fourth of an inch ind dianetcr, which we will sell at $\$$ \& licr thonsand. Wo will dcHUNTER \& BREWER,

## W. \& J. ROBINSON

Hanford, Tulare County,
California
THOROUGHBRED BERKSHIRE SWINE
Pure Brown Leghorn Fowls
This paper is printed with Ink furnished by Chas. Eneu Johnson \& Co., 509 South loth St., Philadelphta, \& 59 Gold St., Cor. Ann, N. X.

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Fruit and Ornamental Trees,
Evergreens, Shrubs, and Flowering Plants,
orange and lemon trees, american and japanese persinhoon, nut bearing trefs manage varietr. mardy palas and ormamextal plants.
A Large Assortment of Small Fruits, Etc
ctis For complete list send for a CRtalogue.
JOHN ROCK, San Jose, Cal

## STOCKTON NURSERIES.

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and other tropical fretits
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from the place of their nativt in
Furope, and havinlt
 tar send for catalorue and further information.

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MENT OF FIELI, GALDEN, LAWS AND TILEE SEEDS, WIICH WE OFFER AT VERY
LOW RATES, BOTH TO THE TRADE AND PLANTER IN LARGE
OR SMALL LOTS

Wos. 6,8 and 10 STRONG \& CO,
HANNAY BRGS'. NURSERY SAN Jose, CAL
Larce and splendia stook of Fruit, Shade and Urruanen tal Trees, , inces, Platto, ete. Apple, , Pear, Cherry, Peaeh,
Apriwet, Almund, Quince, Olive, Fio, Griperines and mall fruits assorted.
Eucalyptus, Cypress, Pine. Acacia Pepper, Elm, Poplar, Etc. whelesale and retal
Our trees are well grown, stalky and healthy, and those
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well
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## Forry Boat has keen and the putwe in general hat a gool

 move stock in luta to suit, an a large barge is eomnecthal withOfflce, N. W. Cor. Jackson and East Sts., S. F.


FLOWFRING PLANTS AND BULLES, FRUITS AND RAMENTAL TREES, ETC FANCY HIH
DEIGSS, GARDEN TRELLISES, SYR. 1,GES, GARDEN HARDWARE. Comprising the Most Complete Stock ever offered on the pacific coast. Prices Cnusually Low will he cuide to the vegetahle and Flower Garden structions on the culture of Fritt, Nut, and ornuaniental 19 R. J. TRUMBULL \& CO.

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tahle seed ever sent nut of any seed house in America, larye portion of which were arown on my six seed farnum printed directions fir Cultivation on rach prackage. Al
seed solld from my estallishment warranterl to be both fresh and true to name; so far, that shonld it prove oth erwise 1 will reflll the, order kratis. As the orikinal inl-
roducer of the Hubard and Marllehead squathem the Marucer of the Hubbard and Marllehead Equashes, the
Mabbages, a score of nther upw verctuhles. invite the pratronage of all whon are anxious to have
their seed directly frons the gromper, fresh, ,rrue, and uf JAMES J. H. GREGORY, Marblehead, Mass

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Crosby's Extra Early
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$\left.\begin{array}{l}\text { Marblehead Matomoth } \\ \begin{array}{l}\text { Stowells Evergreen } \\ \text { Mexican Sweet, New }\end{array}\end{array}\right\}$ Sweet Corn,
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mont any one cae at-
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so rapid, it will shell
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machine machine, and seven or
eight hushels per hour
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$24,26,28,30$ inch-blued. Octagon barrel, set extra heavy, $24,26,28,30$ iwn $26,28,30$-extra finished, case hardened and check stocks. Octagon barrel, set extra heavy, 24, 26, 28, 30 inechextra finished-C. 1I. \& C. S. Octagon barrel, set, 24, 26, 28, 30 inch-beautifully finished-C. H. \& C. S., known as "One of one Thousand." Octagon barrel, set, gold, silver and nickel plated and engraved. Carhines model 1860. RELOADING TOOLS, PRIMERS AND PARTS OF ARMS.
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## A Chance for Poor Men.

 Farming, Vineyard and Orchard Lands to Let.The Natoma and Water Mining Company, having been, during the last four years, perfecting a svstem of irrigating ditches, over their property, situated near the town
of Folson, in Saeranento County, California, havin! eleared most of the land and fitted it, for cultivation, now propose to let the land (about 10,000 acres, in subdivis-
ions as required by applica:ts. The land being alluvial, is well adapted to any purpose of farming or fruit raising Special Terms will be made for Irrigation Every portion of the land can be irrigated from the
company's canals, aril the railroad runs througl the property for nime miles, with convenient stations
From he growth of orchards and vineyards now fruit
bearing on these lands it is sudloubtedly praved These Lands are Specially Adapted for Fruit RAISING. The Company propose to lease also, for a term
of years, their FARM, with stock, machinery, implements, utensls, etc., complete, to carry it on, situated on Alder The Company's fruit-drying cestablishment farme finished, the Company is now prepared to buy all the
Vegetables, Fruits, ete., that can be raised by their te ants For further information, inquire at the Company's
offices, Ft Folom, and No. 53i Market Street,

RANCH FOR SALE.
ranch for sale, near Riverdalc, Fresno County At comprises 160 acres, (U. S. patent,) of rich bottom year ryh house and out-builains. irrigation, as water is hut six to civht irrigation ditcl rumniny across the rancl, and three cubic
 lands, There are a few Fruit Trees, strawberries and
Bhackebries. The ranch ix one mile fromn the scluoril
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adidress
DAVID S. ORR, Riverdale, Fresno County, Cal.

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Fofer for sale a Ranch of 320 acres, sithited in Paradise Valley, Hunboldt Comity, Nevada. Two hunlred and fifty acres of plowed land, and 70 acres of hay land, with plenty of water for irrigating purposes, with good diwelling and out-houses; also, warons, teams and fann-
ing tools. Ranch beautifuly situated), about two miles mom a good school. Olject, change of climato. Terms from a good school object, change of elimato.
reasonable. For further information, address
B. S. RILEY, Paradise Valley, Humbolt County, Nevada
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To loar on Farming land in lay Cou
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\text { D. D. T. }-1868 .
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Lrops, and all own sonse, apply frecly so ns to blister,
from three to floo dlays in sucession, aill in frur or five
days, if not cured
 a smali quantity so as not to blister. Suldle Sores, Cuts, iment half and half with any kind of oil, and anply in

WILLIAMS \& MOORE, Proprietors,
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Importer and Breeder of

# THOROLCHBRED ENGLLSH：KEITTCLKY BERKSHIRES， 

Of the＂Crown Prince，＂＂Bob Lee，＂and＂Sambo＂Families．

[^4] These Twenty－seven litters were all from sires and dams imported，directly or indirectly，from England，and every pig perfectly pedigreed by the breeders in Kentucky．

[^5]
#  

Volume XV.]
SAN FRANCISCO, SATURDAY, JANUARY $26,{ }_{3} 1878$

An Idea on Winter Irrigation.
One of our best known vinegrowers thinks his experience and observation have taught him lesson concerning the growth of vines and fruit trees during a dry season which may be turned to practical account. Whether the idea be assured, but we give it for the sake of drawing attention to the subject. He thinks he discovers in perenmial growers, like vines al, an opposite and in annuals, like the cerelry season if the winter growth during a his vines active iu winter be dry he finds as possible, but little is done in perfecting the buds for fruiting. This he counts a rovision of nature to preserve the life of the plant by husbanding its strength in the oots, by which its life is maintained. On eral obscrvation that the cereals, being annuals and dependent upon the perfection of seed for future propagation, throw up a single seed-stem, instead of stooling, if the ground be dry. If the drouth continue, this stem will be hardly more than a finger's hight, and the heal will be for the most part
unfilled, and yet there will be onc or two unfilled, and yet there will be onc or two
perfectly forined kernels ncar the base of perfectly forined kernels ncar the base of be barley. Thus the annual will perfect seed or fruit enongh to perpetuate its kind, in spite of the dry season. Herc, then, lies the contrast. While in drouth the vine and tree permit tho fruit buds to shrink and
never develop, the cereal sacrifices all for the sake of developing a fcw perfect sceds. These are the facts if they be facts.
The practical deduction from this observation, with reference to vines and orchard
trees, is plainly this: If the plant begins thins early to modify its growth so as to withstand a drouth, artifcial watering to seeure fruit shonld be applied before this
modification has progressed too far that is, rrigation should be given before the plant has marked out its method of growth for the season. Here then is a theory which speaks in favor of winter irrigation, so that alumlant supply of water may be at hand when riend finds proof in the wisdom of his prac tice of winter irrigation in his vineyard, in this year's yield of grapes, which was the hest he ever had, while very few vineyards in the State were similarly circumstanced. demand in the case of fruit trecs, he instances some orchards which he observed in Placer cnunty, where, in spite of the watcr applicil and fell off, buds quickened, they shriveled failure.
We believe that the experience and opinons of the great majority of our frnit growers are decidedy in ravor of a complete saturation of the grouud by winter growth and fruitage in their trees and vincs and ensures a crop, no matter what the our friend modestly advances be the true ne or not, there is money in the practice and we feel sccure in recoinmending it all who have the facilities for applying The subject is now open for discussion.

Personal.-We had the pleasure, the other day, of meeting the Hon. Mr. New-
berry, Mayor of Portland, Oregon, who was on a business visit to this city. He is a \& Comber of the firm of Newberry, Chape recently taken the local agency for the D. M. Osborne \& Co.'s reaping and mowing marhinery. Mr. Ncwber tural growth iu his state and in Wasl ington Territory, and he assures us that it is i active progress. There is wide prosperity and in cultivated areas, and there is much enter prise in various kinds of developinent. We re glad to hear of the forward movement wlich glad to hear of the forw

## Centennial Premium Raspberry

We give on this page another of the series o premium berries, which were originated by Mr . Oscar Felton of Camden county, New Jersey after IS years of careful culture of seedlings. Mr. Felton begau in 1858 with seerls of the

shows the berries reduced to about two-thirds
of their natural size. There were 138 berries of their natural size. There were 138 berries
on this stalk. The "Farly Prolific" is fromone week to 10 days earlier than the "Reliance." The plant is short jointed, of stocky habit, having very dark foliage, great vigor of growth, and is perfectly hardy; were never known to
winter-kill in Fastern winters. The fruit


## Investment of Savings.

cheme of some lobby opposition to the any other plan which shall interfere with the present working of the savings bauks. In the esent state of feeling there is no doubt but that some plan must be devised to protect depositors in savings banks, and give then an opportunity of knowing what is don with their property. The people want the present system remedied, and it is probabl better guarantee can be given than the fact that the bank has offices, officers and a tray or so of coin on its connters, the people wil soon give up having anything to do with put their banks and look for other places to put their money. A certain class of people sary to do so. Aecordingly they put them in savings banks. Unscrupulous men hav taken advantage of their positions as man-
agers of such institutions to walk off with the money entrusted to them and the de positors have no redress.
It remains with the representatives of th people to enact such. laws as shall preven with the depositors' money. No bank should be allowed to to business for two or thre be all ruht do dorsine years right als with representative of the depositors having a right to enquire ho have such cxaminations made has resulter disastronsly hare and elsewhere and remains with the Legislature to devise some plan for preventing the people from being we have had some bad good bat the de positor never knows the bank is bad unti it is too late to get out his moncy.
faeilit idea of government provision for facilitating the deposits of savings has bcen brought forwart by the introduction of a bil in the Honse, by Mr. Price of lowa, which anthorizes the se fery ations of $\$ 10, \$ 20, \$ 50$, and $\$ 100$, each o rtificates shall bear rate of 3 6 $6-100$ per cent. per annum
Certificates thans issued shall be deposited in such amounts as the secretary of th Trcasury may direct, with any designated depository of the United States, or with any postmaster of any postal moncy order offic of the United States, on condition that al such certifieates so deposited shall be paid for by such designated depository or post master, within 90 days from the tine of lent or the return of such cortifiente, any lart thereof to the scretary of the 'Treasury and that certificates issued as foresaid shal be relecued only in nited States forr cent. bouds; and the holder thercof shall be authorized to reecive from the Scerctary of the 'l'reasury United States bonds bearing interest at the rate of four per eent. per annum when presented at the United State Treasury or any designatcd depository, in sums of $\$ 10$ or any multipte thercof; said houds being payable, principal and interest The bill further provides that all nationa the bs orgaized pud doius busincss under the National Banking law of the United States are required to receive at par and accrued interest all such certificates in pay ment of any debt duo to said banks; pro vallow, however, that no interest shall be alowed unless tho same shall amount to 50 any national bank doing busincess ander tho United States hanking law to hold at its option two-thirds of the reserve now required by law Sem-Tropical Fruits, - We acknowledge with thanks the receipt of fine, large specimen, orchard in Sacramcnto county. They are proof of what the interior can do in this line of pro duction.

## GORRESPONDENCE

The Royal Agricultural College, Ciren cester.
Edrroks Press:-It may interest some of your readers to know something alout the origin, ob ect and prescnt position of the only agricul tural college that at present exists in this island. There is a similar, though somewhat sinaller, institution in Ireland, at Glasnevin, near Dub lin, and a Scotch university of a similar kind is being talked about, to be built near Aberdeen; but, with the single exception of the Glasnevil one, this at Cirencestor
in the British Islands.
Fou must not infer from the fact that we have ouly one agricultural college in this wealthy country that science las had no intluence over agriculture in England, for it has had already an enormous one, gaiued bit by bit, without
the fariners themselves being more thau dimly aware of it. Mlany scientifie men, such as
Voelcker, Lawes, Gilbert, Playfair, and other of lesser note, each "paddling his, own canoe" (Which, by the way, is a favorite customn with
Englishmen-especially English farners)
have y patient experiment and investigation brou cht quietly, without any pedantic pretense at tuition, seattered the results of their toil broadeast thronghout the land. These have slowly
molded the bucolic nind of this country, though that mind is yet, in many cases rebellously unwilling to admit it; and the result is that agri-
culture has made great advances, despite the bstacles which barred the w
At a meeting of the ('irencester Farmers
Club, held in November, 1842 , Mr. ries Brown delivered an address "On the Ad ral Pursuits," and from this sprang the lioy Agricultural College. Mr. Brown devoted a year to the work he had so well begun. Lord
Bathurst offered a farm of 500 acres for a long term of ycars, and an adjacent building site for
99 years, at a moderate rent; a society was ormed for the establishment and management of an agricultural college; the interested noble-
men and land-owners in distaut parts of the men and land-owners in distant parts of the
kingdom were raised to subseriytion point a proposed cap1ital of $\pm 12,000$ was thas obation was ohtained from the crown but as was now fonnd that $£ 12,000$ would be insufficient to accomplish the ohjects in view, it was
provided in the deed of settlement that this apital should be doubled.
The managcrs, being pioneers in the new venand they had all their experience to buy and they had all thecir cxperienec to buy-dearly,
as most beginners have to buy it. The archi-tect-several of his craft have done the sane within the prescut century-considerably exceeted his estimates. But the council were
nothing daunted by this, and they legan work like heroes, by offering board, lodying, practi-
cal and scientific tuition -all for the magnanimous sum of $£ 30$ a year! A lricf expericnce
demonstrated the awkward fact that, while the demonstratcd the awkward fact that, while the
cash studeut paid c:30 a year for the whole curriculum, he cost the college $£ 32$ for meat and noney and the salarics of principal and profes sors, wages of servants, coal, gas, to come from? Oh, the profits on the farn would supply the
deficieney; for were not the students to do all the work, or, at all events, that in the course o their practical tuition in farn work they should knew the manual labor of an agricultural pupil, anything 110ore than a little less than nothing in value. The idea was a very pretty one in theory; a book was to be keppy in which ever
student was credited with the wates of work on the farm, and it was thns thought that thcir industry might pay some part of the cost
of their maintenance. of their maintenance. $O$, saucta simplicitus!
This was in the olld days of the colloge. No all is changel. Finding things were all going
the wrong way-the stadeuts wouldn't work and the farm diln't 1 ay - it was deuncd expediestablishment should lec adopted.
In the ycar 1s4s the managers found that they had overdrawn their account iu the bank
to the tune of some telo,000) and beyond this to the tune of some $t 10,000$ and beyond this
the college andl farm were both being worked at a loss. at this point the promoters met to consider whether or not the eolle ese was to be closed -a
enfessed failur. The 1airl of Ducie, Farl
Cin Bathurst, Mr. Kateourt, Mr. Holland, and Mr. for the eollcge delts, but aided, on their own personal security, upwarls of $\& 30,000$ to the
original sulscriptions anil donations. These orignal sulscriptions and donations. These
noblemen and gentlemen then became the Coun-
cil cil of Management, and under their eare certain rists of the institution, were brought aliout. In risks of the institution, were lirought alout. In
the first place the farmi was let to a t tenant, a farmer studnt of the college-oue who hal
taker1 honors there, who now farms it on his own accomint, having no connection with the col-
lege himself officially; the students, however have the privilege of going with the Agrieul-
tural Professor over the farm, whenever and wherever they think fit, for which accommoda. tion the tenaut receives a subsidy of two
guineas per student per annum. This arrangeguineas per studcnt per annum. Thi
ment is found to work tolerably well.
Meanwhile the college is now not only paying
its way, but is rapilly reducing the old delt its way, but is rapilly rellucing the old debt.
The students' fees are over $£ 1$ l 5 . The students fees are over tlo per annmin,
and the course of study extends over three ses. and
sions of 18 wecks each; but where tley proceed to the diploma an additional session is nceces-
sary. The college diploma almits those holding it to the position of graduate under the title of

## member

The subjects taught are scientific, theoretical and practical agriculture, so arranged that they tural chemistry, in all its branches' naturea philosophy, mensuration, mathenaties, surveying, botany, geology, mechanics, anatomy, physiology, therapeutics and pathology, hygiene,
book-keeping designing and drawing-all in their relation to higher agriculture.
The agricultural course consists of lectures
and daily classes on the farm. The students and daily classes on the farin. The students are not required to perforin any manual lalior
on the farm. The lectures embrace cultivation in all its liranches; crops, livestock of all kinds and their breeding and management, labor, mapossible by ont-door examples. After a time it 18 hoped that the farm may again be taken in hand by the college, and managed lys a practical agricultural professor whose labors shall
supplemented by an assistant to whoun slall be supplemented by an assistant to whonn shan bo
contided the theoretical portion of the in-door lectures. Put before this can be done the debt Only in a in
Only in a most limited sense do the farmers of this country take alvantage of the advantages
which the college offers for the education their sons; not more than $3 \%$ of the number students who go through the course of this college are sons of farmers, and at the present farmer's son in the college. They are inainly the sons of noblemen and landed proprictors, who wish to learn how the better to manage their patcrnal acres; the sons of land ayconts who
intend to walk in their fithers' footstels; the sons of varions professional men who do not inor happly to become land agente in this coluntry whilst a few intend to be themselves farincr
Thus it follows that only in a linited sense can this be regarded as an agricultural collegc,
but that it is eminently qualified to accomplish but that it is eminently qualitied to accomplisli
the objects for which it is nsed, none can deny. It is, however, disappointing to reflect that it is so little used for the education of our rising gencration of farmers. Still, I am hoping that in
time it will be sought out by those for whe bencfit it was originally intended, because science is gradually working its way so far and so firmly into our farming practices that it will soon becone necessary that our farmers shonld have cation, however practical that may be.
J. P. SileliDos,
Professor of Agriculture
and.

Circncester, England.

## The North America Uniones.

Eurrors Press:-At the recent mecting of the Washington Philosophical Socicty in this city, Dr. C. A. White, paleontologist of the
Hayden Geological Survey, delivered a short adlress on some phases in the evolutional his tory of the North Americau Unionidite
1 le commenced by a comparison of thic Uniones of North America with those of other
parts of the world, showing that tlie types in which their variation is expressed are not only numerous and varicd, but many of them are peculiar to North Ameriean waters. The greater part of these types, whieh conchologists
in all parts of the world recognize as North American, are found only in the great Missis. sippi river system and in the lied-river-of the North. Then giving a table of the mesozoic
nnd cenozoic formations of western North America on the hlackboard, he explained that collections of fossil Unionida have been wale
from nearly all the mesozoie and all the cenzoie formations of the great Rocky mountain engin; their alm thance increasing with advanc-
ing time. All the speeies arc different from any of those now living, but they are all so sin.
ilar in type as to leave no doubt that the fossil forns represent the living ones ancestrally.
Some of thesc fossil Unios, especilly the some of thesc fossil Unios, especially the earlice
ones, arc found in layers of formations that eontain marine forms with few or no other cx-
ceptions, but they have been mostly obtaincd ceptions, but they have been minstly obtaincd
from the great locustrine deposits of the terThe great Lian and
losing epoch of the eretaceous, or the the mencing one of the tertiary period, has proved
to be especially rich in fossil Unios of Jortl to be especially rich in fossil Unios of North
American type. This great group of strats reaching a maximum thickness of 3,500 feet, was deposited inainly in lrackish waters, as
evidenced by the following faets: 1 st. The ali. evidelicen by the following faets: 1st. The al.
sence of true marine foring, hut the presence of
Oitrean and Ostren and Anomia throughout the whole
thiekness of the formation. 2 d . The common occurrence of the genera Corbula corbiculle and

Neritinu. 3.. The presence hut more restricted
range of the genera Goniobasis, Jivipurus, Syher ium and Unio. Those of the third cate-
gory are occasionally found alone, but usually gory are occasionally found alone, but usually
associated with those of the second, and not unfreflucutly with those of the first also; and so associater as make mevident hiat they ters. The abundant and almost constant wrescuce of the Ostreidre gives satisfactory proof that the waters were, in at least some degre
1r. White advanced the idea that although the Unionidie may now be found only in purely
fresh waters, the great and varied differentia fresh waters, the great and varied differentia-
tion of these ancient representatives of the family probably took place under the inlluence o that the fanily, once having inpressed upon it these tylues, they have been hereditarily pre environment to the present day, and therefore did not originate in the waters where they now exist.
The history of these North American types of Unio antedates that of the Rocky moun-
tains, for the strata in which they are fonnd tains, been displaced by the movements that re in the elevation of those mountains They have witnessed, so to speak, the origin vertelrates of that sreat rection which hav been male known by the lahors of Marsh, ope and Leidy. When the continent wa gradually emerging from the sea, a large por
ion of what is now western North Americ was almost or wholly enclosed hy the rising and and cut off from the open ocean. Thus a great, brackish, inland sea was foruned, hun the Laramie group was deposited. This sea of the Wecane elltirely fresh, when the strat groups were dcposited. By firther movement
of the earth's crust and the action of denuding forces, these great lakes became entirely drained. Some of the strcams that now con-
stitute portions of the Mississippi and northern stitute portions of the Mississippi and northern
Iived river drainage systems, were donbtless clamuels of drainage overtlow of those ancien lakes; and through these, by an unbroken lill American types lave reached their present hal Washington, D. C., Dec., 31st.

## Signs of Rain.

"The south wind never lies indebted to the norther."
Editors Press:-This is an old sailor's prov erl, originating in the North Atlantic, and ap pears to be qnite as well suited to this coast Early in November we noticed the arrival of large numbers of northern birds in this portion
of the state, and then ventured to predict of the state, and then ventured to predict
plenty of rain this winter, on the gromnd that weather north of the Uuited states. These little weatherwise crcaturcs always migrate storns, as if able to foretell them. This year
we saw birds here that rarely come so far south We saw birts here that rarely comesofar south,
but which we were onee familiar with in Oregon during the colld season. They came her while it was still quite warm, anyl at least two
weeks before the long spell of frosty weatlee with north wind. This wind began at onee to counties, and abundant rains fell there, while it still blew too much from the north in this part
of the State. But as the sun ayain cane northward, the south wind has gaincd power, and now we are within the region of heavy rain, causcll ly an upper current from the north,
condensing the moisture of the lower sonth llaywood, C'al.

## Exchange of Seeds Proposed.

1.initors Press:-I beg to suggest the opening tings plants, etc. There are many horticulturists, farmers, gardners, ete., who would gladly pro-
cure plants but do not care to spend monicy for them; and yct these very persons are in possession of an aluadiance of other plants which they wonld really be glad to disscminate. on
course in opening your colunnus to such an nouncerneots you could pot guarantee the good faith of parties making insertions, any mure me legin: I offer the seed of the catalpa tree at current market rate, $\$ 2.50$ per poind (the secd is very light), in exchange for the secd of any

## persimmons. The catalpa

propagates itself freely.

## Horal

Gcorse's Hill, Philadelphia, I'a
Dusk you hodents. - The following, cheap and simple method is said to be used in Ger
many: A mixture of two parts of well-1ruised common syuills and three parts of finelymuch meal as nay be reyuired, and then baked intos small cakes which are put down for the rats to eat. Several correspondents of the Germun Agricultural Gazelte write to amomne the connthis simple plan.

## THE Swine Yaro.

## Mr. Parker's Berkshires.

Editors Press:-In your issue of the 12th inst. I notice an article by your correspondent, H. Eugene II., entitled "Notes in San Joaquin County." In that portion relating to my Berkshires he has, unintentionally of course, made few errors in regard to ages, pedigrees, etc., and with your courtesy 1 will proceed at once $t$ correct the same. At the time (about four weeks since) that your correspondent inspected my herd there were 2 boars aged, respectively -1 months; 4 sows aged, respectively, 25 months, 21 months, 21 months and 18 months 10 pigs $3 \frac{1}{2}$ and 4 months, and 10 pigs 3 day that were fall, after selling all the prgs on han breeders to one trio, my fine "Nambo" boar an two "Crown Prince" sows, those mentionel as 25 and 18 months' old, respectively. I after Aapa, a trio, one boar and two sows, which he mported in $18 \% 6$ from the herd of J. A. How erton, Paris, Ky. These are now in my herd (1,113 Vol ii., Am. Berkshire Iiecord), bred by Heber llumfrey. The sow se were sired by red by Jolun Snell's Sons, Edmonto 'B. R., Canada. The first dam of the sows was Trince Arthur; second dann, 'Rritish Maid." s70, for the be a prize of pige at I I never let a sow have a litter of pigs unti Ie least one year oln and fully two-third has had two litters, 6 of the $3 \frac{1}{2}$ months be longing to her, and she is due to farrow he third litter abont the middle of next month The 18 -months' sow lias her second litter, nov our weeks old. The remaining two sows ar aso due next nontli with their second litters
The characteristic markings of the improve Berkshires are: Black with four white feet ome white in the face and on tip of tail, with sometimes, however, the white is lacking either on the tail, in the face or on one or two fect sometimes more white appears than is dc of impure blood. The exception to eorrect arking is with my "Sambe" boar, he having ith wee wis pigs, al. I regard to my importations this year, 1 am
already booked with W. C. Norton, Nidge farm Wready booked with II. C. Norton, Ridge farm, rom his famous Fug. imp. boar Liobin Hood,筬 TRobin Hood" 81,400 , cash. I have also a der with Chas. B. Moore, Glelldale stuck farm, the latest and most fashionable pedigrees. This trio will le added to my herl early nex Pellota, Cal., Jaunary $1+$ th, 1878 .

## The Vineyard.

## White Grapes at the East

Emitors Press:-Probably ouly a small pro portion of the people of this country are aware be grown in the open air very generally through out the Fastern Sitates. It is a treat indced t e alle to decorate your table or fruit-dish with beautiful clusters of white grapes, that rival in flavor the far-fanerl and deservedly popular frui that comes to us from California and the shores of the Mediterancan. If our Castern conntry en were only aware of the ease with which white grapes ean lee grown, we feel assured that ut what would be agreeably pleased in growing these fair-hued clusters. As white grapes have so largely been grown in the l:ast under glass in rcen-houses and graperies during the past few years, the impression has very uaturally become prevalent that the white varieties are more tenen upon our garden trellises. That this crrosort deseription of a f.W of the more promine of the white varietics, that are found to be hardy and most desirahle in our Eastern climate

This is prolably better known than any of called the "W'hite Concord," owing to the vigorine. In size it is one of the largest of ou dative grapes, and will prove a decided help in deling to the attractions of a well-arrauge le of the season, and follows very acceptably The Lady
This promises to be even more popular than
it will be well appreciated by those who have
felt the want of a good, early white grape, and fell the wand decidedly to the pleasures to be found in the fruit garden. The fruit is of the largest size, which, together with its other good quali-
ties, is causing it to receive a cordial welcome. One gentleman, who upon seeing it was rendered specially enthusiastic in its favor, re-
marked: "'The Lady' has the right name; it is a perfect beautyi. In flavor it is somewhat similar to the well-known and popular Concord,
though by some considered to be even superior to that variety. In some markets the Lady grape will undoubtedly prove quite profitable,
as the very early ripening, large size and tine appearance of the fruit will cause it to command good prices.

Elvira.
This is also quite a new variety, and differs in as large as the others, yet it has qualities that fruit-growers have been very quick to appre-
ciate. It is thonght that it will prove to be the best white wine grape that has yet made its ap. pearance. Correspondents in different parts o the country also speak of it as being a decided
acquisition. The vines are vigorons, healthy and prodnctive, and ripen their clusters during about the middle of the grape season.
These three varieties make a very gond selection of white grapes. In the way of rel grapes,
I might mention quite a number, but Brighton, Diana and Catawba will probably give as good
satisfaction as any, while Concorl, Wordens and Ives will be well appreciated by those in search of desirable black varieties.
f. H. Haines.

## Arbopiculture.

## Trees and Evaporation.

Edrrors Press:-At this time, while we are enjoying the first southeast storm of the season,
and the first old fashioned south west gale siuce 1576, it is a very appropriate time to diseuss the question of trees and rainfall. I, for one, believe that, as a general rule in nature, trees
have nothing to do with the rainfall. We all know that the rainfall has everything to do with the trees.
Any one who has traveled on the great interior plains of our continent and had the opportunity at the proper season to olsserve from
some eminence that commandled a bird's eye some eninence that commanded a birds-eye below, will have noticell the phenomena of the The clouds form at some point in the nenidst of The clouds form at some point ing the wir water,
the timber; commence discharging the
as they move rapilly down the stream and follow its meanderings until they are emptiel.
This phenomena seenns to form an exception
o what I consider the general rule of nature to what I consider the general rule of natu
that trees have nothiug to do with rainfall.
Observations taken at sea off our coast, com-
pared with observations ou the land takend during the same storm, prove that what are popu-
larly called southeast gales are southwest gales larly called southeast gales are southwest gales
upon the ocean. The wind impinges upon the upon the ocean. The wind impinges upon the
mountains, and is felt upon the land as a southeast gale. Wind from the direction of the southregions west brings currents of air from the warm
of the Pacific ocean. Our present sonthwest gale of wind commenced here about Sunday noon.
The minimum of temperature on Friday the 11 th was $32^{\circ}$; Saturlay, the 12 th, $41^{\circ}$; Sunday, 13 th, was $3{ }^{\circ} ;$, Natur lay, (hast night), it was $55^{\circ}$ The
$47^{\circ} ;$ Monday, 14 th
maximnm temperature yesterday was only $60^{\circ}$. The warm air of the tropics has been driven across, Californ
days duration.
If the trees
If the trees produce the rainfall, their influence must be exerted here to produce the sonth-
west wind, and to keep it blowing, for this west wind, and to keep it blowing, for this
wind, whatever may cause it, always brings the

Forests as Conservers of Water.
I believe that the influence of trees is exerted to save the water after it has fallen. The same
is true of plowed ground. It absorbs moisture is true of plowed ground. It absorbs moisture
better than the unplowed land. Every farmer
knows how to plow his hillsides to retain the knows how to plow his hillsides to retain the
rain-that they nust not he plowed perpendic-
ulariy. I have a small pieee of road leading up a hillside, the grade not very steep, and on each
side of the road is an almond orchard. A few weeks since, during a period of 24 hours, when
$82-100$ of an inch of rain fell, the road was gul lied, while the newly-plowed ground absorbed
all the water that fell. This illustrates the way ertain conditions of the ground favor the retention of the water that falls, while other eon-
ditions allow it to pass rapidly off. In a forest
Ine oliage and hark, trunk, and roots of the trees
all act as reservois. Napoleon the Third reIn the Vosges mountains in order to preven ticed by the French Academy of Sciences that the cutting away of certain forests was fol.
lowed by inundations that had never necurred nnil the forests were cut down. The lisas
toous floods in the Pyrennees a few years since were cited by the foreign press as going to show
that the trees must bee left on the mountain
sides to exert their indlence in undations. If trees produced rainfall,

Emperor, to save the French valleys from in undation, should have cut down more trees. agua, and formerly N. Y. State Senator from Steuben county, gave me some valuable infor-
mation on trees and inundations. Mr. D. was mation on trees and inundations. Mr. D. was
a practical farmer and full of information obtained by his own observations. He was also ers. Riding through the tropical forests of
Nicaragna, 1 asked him the direct question, "Had he during his experience as canal com missioner in New York state noticed any facte to support the theory that trees produced rainfall?" He answered none whatever, but he had noticed after 25 years' observation of the work. ing of the canal that the cutting down of the
forcsts in central New York had increased the forests in central New York had increased the
number of damaging tloods and reduced the supply of water neeessary for the canal reser voirs. That if the canal engineer had antici pated the eutting down of the forests he would
have constructed larger reservoirs and secured more sources for his supply of water. That the maste gates and ditches to carry off the surplus that was sufficient at the time the canal was finished, were not large enough after it
had been constructed 25 years. He cited the fact hereinbefore referred to, that the forests
form reservoirs and allow the water to run off form reservoirs
nore gradually
Take the case of tropical western Nicaragua They have a rainy and dry season as we have.
During the dry season the wind is from the northeast from the Caribbean sea, and duriug and from the Pacific ocean as ours does. They have their wet and dry winters as we have.
In Boissingault's "'Rural Economy" I have seen a quotation from Humboldt setting forth the following facts: That Humboldt had noticed a
lake in New Grenada that had passed through a transitiou state. Within one generation the
inhabitants had cut down all the timber bordering the lake and the lake had so shrunk in its proportions that land was cultivated along its
margin where the water formerly stood, and the people faced it would entirely dry up. This fear induces them to restore the treestand
the lake had assumed its original proportions. It was in this connection original proportions.
Inat Huboldt recorled his observation of a crime against posterity of cutting down the forests, resulting in
the two evils of a loss of wood ter for the next generation. 1 am quoting
from memory, the book I referto not being ae. cessible to me. I have not readl any quotations
from Humboldt that upon dissection would from Humboldt that upon dissection would
support the theory of trees causing rainfall. In the case of the lake to which he refers the
facts are self-evident: destroying the trees destroyed the reservoirs that fed the lake
Some time in the early history of Calitornia,
under the Spanish government, a clump of palm trees was planted on tor site known in 49 and on as Palm springs. genous to California. The springs were located Yuma, San Diego and Los Angeles and near the eastern base of the Coast range of mountains.
A $=$ a rule little or no rain falls on the Colorado dusurt. This sandy tract forms a climatic boun-
dary betwecn the rainy season of Arizona and dary betwecn the rainy season of Arizona and
Sonora, which occurs in the sumnrer months and the rainy season of California occurring in the winter months. Paln springs formed a de but very soon after the immigration comnenced to California some vandals cut down these paln be a good opportunity for our Legislature to trees the site of Palm springs and see whether the water would return. As no rain falls there the experiment would be a very simple one.
My opinion is that the water would return; that the trees, by preventing evaporation, wonld
allow the water, which has its source in the allow the water, which has its source in the
Coast range of mountains to become once more Coast range of mountains to
a liviug spring on the desert. I have seen it
often stated in the public prints that the French in Algeria have restored lost springs by the planting of eucalyptus.
Before the occupation of California by the
Anuericans, redwood trees srew on the summity Americans, red wood trees grew on the summints
of the mountains back of Oakland and Hay-
ond of the mountains ark of ark and and May-
wards. The timber nsell in the old. Mission
loildings at this place, according to the tradibuildings at this place, according to the tradi-
tions of the chncre, was draged ont of the mountains hy the Mission Indians. It is, moreover, within the recollection of our pioneers,
that the hills back of Oakland hal their sumthat the hills back of Oakland hat their sum-
mits covered with a small belt of redwoods. Prof. Kellogy botanized and IIarry Edwards, our I'acific entomologist, cast his nets there for
lugs and butterflies. Springs flowed out of the hills and some farmers or stock men resider there Now the redwoods are gone, the springs
and the ranchuncn have followell. We have
Por Pruf. Kelloyg's authority for the statement that springs, plants and flowers that fornnerly grew
there there have disappearell and been replaced by
other species. Mr. Edwards stated to the writer within. a fow days that the former insect ife had been replaced by entircly different The IIon. Eugene Casserly informs me that he crosseed a certain stream that 11 ws into
Pajaro valley, about the year 180, and particnlarly observel the quan the stream, also the amount of water in the
ing the stre
creek at the place where they forled it; that he
diminution of the water seemed to have a direct comnection with the annual destruction of the and the creek has beconie a mere remnant o
what it was 27 years ago.
It seems clear to me that the phenomena
have cited as having occurred within the last 25 years, on the mountains back of Oakland and trees shading the ground, and by preventing trees shading the ground, and by preventing Your correspondeut, Mr. Purnell, stated, some weeks since, in one of his articles on trees ous ruins of ancient cities and aqueducts. He also stated that Arizona was once a fine agricul tural country and had been ruined by its people
continually cntting down the trees. Iaddressed you a cominunication at the time, asking him
for his evidence in support of that statemen for his evidence in support of that statement
and further wishing to know where the sites o Arizon was an Thus far I have seen no answer to my demand for the evidence in support of his statement. Being myself familiar, by travel, with that por pronounce his statements, so far as that portion of Arizona is concerned, to be without any
foundation and to be as baseless as a dream There are plenty of evicences in Arizona of it, ably under the early Spanish governments Arizons hoving ever bee an agricultural coung of try, but the testimony, on the contrary, shows that since the Spanish conquest, all its cultiva from streams that are themselves fed by the perpetual snows of the Rocky mountains.

Reasons for Tree Planting
I am as earnest an advocate for the planting o trees in Califorma as any believer in their po
tency to increase the rainfall. I would plan
them around all spring and spigy places them around all springs and springy places, be
cause of the facts set forth in this article. would plant them around all enclosures and
pasture lands, because of their grateful shade to stock during our warm sumner days. All
animals avoid the sun as
much as possible. Sheep will always do their best to take advant
age oi even the shady side of a feuce. I would plant trees for another reason, and and thus pre venting evaporation. The effect of our north
winds on soil andl vegetation by producing I think that semi-tropical fruits in Alameda county require protection from the northwest
wind. We have orange and almond trees here at the Mission yielding fruit of the best kinds, orange groves at San Bernardino. I know also of a lemon tree in the town of Alameda which
or years has grown a fine crop of lemons and
believe that in thoth this pace and Alameda the believe that in both this pace and Alameda the
result has becn produced by a proper protection dgainst the summor wind
the drying days, so do the masons and plasterers so do carpenters and all workers and manufac-
thrers of lnmber. I consider that we have wandered so far away from the real influence o wres by being led to believe that they wonld
trat
produce rainfall that we havc overlooked their real value in saving the rain after it has falleu.
Mission San Jose, Cal., Jan. 15.th. C. Woods.

## The $\mathrm{S}_{\text {table. }}$

## Aims in Horse Breeding.

At the late meeting of the Massachusett Board of Agriculture, as reported for the Nen
England F'rmer, Mr. John E. Rnssell Leicester, spoke on the brceding, training and
management of horses. Ife said that hors managecing in New England for the past 20 ycars,
hat cause capital and ability have not been em ployed, but because they have not bred horses horses, both for the saldle and carriage, good large, stylish carriage horses, not fast, hut goon
stately horics. There was also a deunand for stately horscs. There was also a den
cool fanm horses, and heavy dray horses.
The leading object in lreeding horses at pres ent is to lroduce a any morne or a Dexter,
but in this e isc, everywhere, failurcs are the rnle; success
lay clain to lay claim to ane exception, and the failures are trotting horse was an accidental horse, which trotters when they obtain a low record are used in the stull, and not unfrequently more is clarged for tho servi
whole stock is worth
It is much casier to produce a finely devel oped horse than a fast one; good bred horses o good form reproduce themselves, which fast noble lineage, invariably reproducc themselves; to some inferior stock. sastern horses are the foundation of the best stoek in the world. The
English blood horses, their descendants, ar
found all over Europe, and if New Eughn found all over Europe, and in Now Enghn to the thoroughbred horses. Rreed from
weedy stock. He would have no horse who di
not show good style and noble action; would long at that. It wonld be easier for him to tell what mares not to breed from, than to say what thicy should breed from. The dam should be
equal to the sire in blood. Old, worn-out mares equal to the sire in blood. Old, worn-out inares
were not fit to breed from. A mare in foal honld have regular exercise, and if gently worked every day she would be all the better or it.
Whe
When a horse enters the stud, he should fined in a close box alone. for horscs so confined nd fed high become vicious and sometimes in ane; should have regular exercise, be worked ther horse. In feeding the colt use common sense. It takes the first two years to make a
orse. At two years old the colt should be roken and put to gentle work. The French and a half they earn their living. The best me to sell is before the colt is foaled; the next, when it is a weanling; and to kecp one beyond
two years is like burning dylight.
. year costs more thant of trotters that are produced not more than erson seeks tred proves successful. Before a person seeks to control a the greatst mistake made with
himself. But the
the horse is in allowing an ignorant, stupid the horse is in allowing an ignorant, stupid
smith to shoe them. Few horses live out half heir days, on account of ball shoeing
He objected to the
He objected to the manner of awarding premiums at fairs; he did not object to speed being
considered as one point, but he would also consider symmetry of form, soundness and style of action. He saw a horse which took a pre-
nium because of its speed which was suffering rom because of its speed whic.1 was suffering
rom opthalmia, and another had two spavins and to such animals the highest prizes were

## Death of Flora Temple.

The Prairie Farmer, says: At the advanced age -for an equine-of 33 years, Flora Temple, acknowledged one of the grandest mares that ver stepped upon the turf, died last Friday, at Chestnut Hill stock farm, near Philadelphia. She had not figured in trotting circles to any
xtent since 1861 , when she was retired, but xtent since 1801, when she was retired,
down to that time, from 1852 , she was the acknowledged queen of the turf. For great and
nniform speed and endurance, and long conintil a ripe old age-she was over 17 when Anerican turf, except the lately retired queen, Goldsmith Maid. When four years oll, Flora Temple was such an ther owner was glal to rid him-
little brute that the magnificent sum of $\$ 13$. The
self of her for the man who bought her in turn disposed of her for \$68, and was extremely glad to make the
trade, feeling that he had rid himself of a bad hargain at a good pricc. The last purchaser
disposed of her, and she finally, in 1850 , turned up in New York city, the property of a
butcher, when a Mr. Vielee, of Dutchess county, N. Y. recognizing that there was something in the brute, bought her for $\$ 1 / 0$ He
kept her a couple of weeks, speeded her a litle
and sold her for $\$ 3.50$, to George E. Perrn. From that time began her triumphs. 1uring races and lost 18 . netting a total of $\$ 113,000$. She was the first horse to trot below $2: 20$, win
ning at Kalamazoo, Mich., iu harness, October 15th, 18.59, a third heat in $2: 193$. She still
leaves an nubbaten record of two miles in liar.
ness, made over the Eclipse course, L. . in
 Wince her retiracy she ha
two fillies and onc colt.
A. Parasitic Caterpillak.-We read that
Ir. J. Iowring has discoverel a a curious moth, which in the caterpillar statc is parasitic The eaterpillars are very short and thick, fleshy nully feout half an inch in length, and, when nakes them resemble certain bark lice. The pupa is covercd by a thick cocoon, and the time
in which it remains in the pupa state is very variable; in one instance only nine days, in an1.
other "during our cool season" other "during our conillason upward or in-
montls. The caterpillars are themselves infestell by hymenopterous parasites. Prof.
Westwood, who deseriles the insect in tho "Transactions of the Entomological Soeciety of London," under the name of fipyyrow the waxy seeretion of the fulgora. The moth is referred o the aretians by Prof. Westwood; but while it is probally oue of the lhombyempe, "arctiilie.
it is wrongly referred to the "ares.
Prev and the Cunamen. - While Califorthe l'eruviaus are making unusual efforts to induce him to come and work on their sugar plantations. The government of l'ern has granted poses to and Hong Kong, and an agent has ar embark for l'cru, where there are promised the "frcedom of the country" and a "soft" dollar plantations.

## Pavequy or flisprapry.

Remova



Sacramento Granges and Bermuda Grass Equally Hard to Root Out.
Eidtons Press:- A few items from some of the Sacramento Granges in the beginning of
their New Year may be acceptable. The meettheir New lear may be acceptable. The meet-
ing of Frankliu Grange, the installation of its officers, and their harvest feast, on the 5th, were quite as enjoyable as a similar occasion I shared with them Il months ago. Since then they have inintiated several new in quite a flourishing condition. At American River Grange the neat school house in which they meet was well filled with an attentive audience of members and others to hear the appointed lecture. The subject
was, "Some things the Grange has done, and some things it has yet to do." Under the latter clause a detailed account was given of the thor-
ough training for young fanmers by lecture, text ough training for young fanmers by lecture, tex the Royal Agricultural College at Cirencester, England. Their Grange is one of the strougest
and most harmonious in the county. Saturday, and most harmonious in the count I enjoyed being with Sacraunento Grange at their installation, conducted by Bro.
Geo. W. Haucock. We all anticipated a treat in the way of one of Bro. E. S. Carr's good -none more so than your correspoudent. Hav ing attended with the wish to enjoy the luxury of a sileut listcner, I had unexpectedly to sup-
piy his place, by request, as well as I could. It
is gratifying to be able to testify to the wideis gratifying to be able to testify to the wideGrange. Its members are aiming to make it the bauner has as good claims to this houor as any in our jurisdiction. Their uewly-installed Master,
Bro. Daniel Flint, proposes "Excelsior" as their Bro. Daniel Flin
motto this year.
I write this while enjoying a quiet visit in the well-improved aud happy home of Bro. (reo Rich, six miles southeast of Sacramento. He ings show the care of years in adding to the attractions of one of the finest building spots in surrounded by ornanental and fruit trees, stands in the center of a large and regular natural ground, some 16 feet above the surrounding
plains. He has eight fine orange trees and two plains. He has eight fine orange trees and two lemon trees in full bearing, now well loaded ones. They are from 8 to 19 years old. Among
his other trees are English and black walnuts, his other trees are English and black walnuts, Languedoc almonds, mountain cedar, or giant
arbor vita, Monterey and Italian cypress, Monterey pine, several of the genuine English bay, been bearing for three years past, a date tree
some four ycars old, wax, myrtle and pomegransome four ycars old, wax, myrtle and pomegrantrata), crape myrtles, pepper trees, aud the graceful pampas grass, to say nothing of the Usua box, larges,
lized locusts, a large vineyard of
White Muscats and Flame Tokays, fine strawberry and blackberry patches. He has the only genuine English yew trec I
have ever seen in the State. It is now about 12 years old, though not more than eight fect our sequoias, or redwoods. The writing of this letter, after an evening of singing and instru-
mental music, is interspersed with the cnjoy mental music, is interspersed with the enjoy-
ment of some of his home products-as good I have inspected with Bro. Rich his flourishing patch of Bermuda grass, which he wrote to the State. It is the genuine article, beyond to resist destruction, when it spreads where it is not wanted. From a suall patch 12 years ago, he has enough now to stock the whole
State. When he plows every fall, he is will
ing to furnish any number of farmers witl ing to furnish any number of farmers with
roots, if they will pay the expressage. Alfalfa
having failed to root it out, he has turned his having failed to root it out, he has turned his ing, it is doubtful yet which will triumph, the hogs or the Bermuda. Yet Bro. Rich is bent
on checking its growth "by thorough cultivaon checking its growth "by thorough cultiva-
tion."
On Saturday, January 26 th, I have promised On Saturday, January 26 th, I have promised
to install the officers of Social Grange, in this
county. The Grange at Elk Grove cxpects to renew its work soou. There is, perhaps, no
county in this State where the frange cause is county in this State where the frange cause is
iu a sounder conditiou in every way than in sacramento county.
The Crangers' Co-opcrative Association o Sacramento $Y$ alley has opencd its store, with strictly cash business, has a large patronage
from the city as well as the country, and is giv
which they can sell many groceries, and yet Which they can sell many groceries, and yet
make the desired per cent. of profit, is surpris ing. The rain so far this month has been abundant.

## January 15th.

## Installation at Healdsburg Grange.

## Editors Press:-The officers elected to serve

 the ensuing year in ILealdsburg Grange, No. 18 were duly installed last Saturday. The selec-tion of officers is a good one, mauy of them having previously servel and are familiar with the
workings of the Grange. S. T. Coulter, W. Mi of the santa Rosa Grauge, officiated as installing officer. About 100 members were present.
After the installation all aljourned to the auteroom, whore a harvest feast had been spread for
the occasion. The feast reflected much credit the occasion. The feast refiected much credi
on those who had prepared it, and consisted o all the delicacies, as well as more substantial
edibles that could be desired. It was fully apedibles that could be desired. It was fully ap-
preciated by all. Several of the members made short add resses.
Mr. Coulter spoke very flatteriugly of the prosperity of the Healdsburg Grauge, the pluck and energy of its members, the beanty of the
hall, the strength of those united in one pur poose, the beneitits to be derived from secret so
cieties, the power and influeuce that differen cieties, the power and influeuce that daferen
societies wielded in governmental affairs and closed his remarks by thanking all for the honor bestowed upon him.
Nelson Carr, of Bennett Valley, also made a
a few encouraging remarks. He gave the mem-
bers credit for their untiring euergy, said the Grange contained more young men and women
than any other he had visited, and expresscd a than any other he had visited, and expresscd
hope that good will and harmony would pre
vail. ${ }^{\text {val. }}$ The C
satisfaction; considerable graiu is still stored in the building, awaiting shipping orders. Perhaps a brief outhe of the building would not be out
of place here. It covers an area of 7,500 square of place here. It covers an area of 7,500 square
feet; the walls are $50 \times 150$ feet, 18 iuches thick, and arc formed of concrete; the hight of the
building is 15 feet iu the clear; the roof is tin; on each side of the building are three heavy double doors. The storage capacity of the build
ing is 3,000 tons. The prices of storage are ing is, 000 tons. The prices of storage are
noderate, and are as follows: A single month 25 cents per ton; for more than one month, 12 cents per ton; for the season, 75 cents per ton
On the whole, the warehonse is a substantial On the whole, the warehonse is a substantial
and commodious one, being both fire and bur-glar-proof.
The stor
The store is constantly gaining popularity, and is giving general satisfaction to the custo
mers, as well as the stockholders; an invoice is mers, as well as the stockholders; an invoice is
being taken, aud the results are satisfactory The patronage is daily increasing. The stock
of goods kept is the best the market affords of goods kept is the best the market alfords,
and none but trustworthy customers can obtain goods on credit. The town people are now
patronizing the store liberally, and many residiug at a distance buy large bills of goods. The
sales of the store are increasing each month sales of the store are increasing each month, and now average between $\$ 6,000$ and $\$ 8,000$
per month. Clark Andrews is the business manager, and George Steadman principal sales man. Both are first-class hasiness men, aud
give entire satisfaction. E. H. Barnes is President of the Board of Directors, and is recog
nized as one of the best business men in Souoma
county.
The Grange and everything connected with
it is in a prosperous condition, everything workit is in a prosperous condition, everything work-
ing in perfect harthony; the best of feeling confidence and uniformity of opinion exists. In membership it is slowly, steadily, but surely increasing. We have the honor of numberiug
among our membcrs some of the prettiest women in the State, and they are as grodtiest orave as they are beautiful. Healdsburg (range, and flourishing Grange in the Golden State
So mote it be Healdsburg, Cal., Jan. 14th.
Installation at Washington Grange.
Eutrors Press:-As the time has arrived fo the officers elect of the different Granges to be installed, I have received several invitations to
perform that duty. Last Friday, I left home perform that duty. Last Friday, I left home
at 7 A. ..., in company with Bro. D. A. Lerned, risit Washington Grange, located in the northeast corner of San Joacuuin connty, about
20 school house a little after 10 o'clock, havin with a cordial reception, we were soon in coul ersation with the members that had arrived while others were comiug from all quarters,
At Il o'clock we were called to order by Worthy At 11 o'clock we were called to order by Worthy
Vaster Soller, and the Grange opened iu duc orm. After the minutes of the previous mcet ing werc read and approved, a report was
received from a committee on the death of a received from a committee on the death of a
worthy sister. The yeneral order of busines
was passed over, and the was passed over, and the Grange closed in the
fourth degree and opened in the third, for the purpose of conferring the degree on a class o
three. The Worthy Master invited me to con fer the degree, which I declined, knowing tha he was well posted in the work and I had not
worked in that degree for over two years. At Worked in that degree for over two years. At
the call of the Assistant Stewart, but two candidates being presented, the Worthy Maste
conferred the degree on two. At the close the
third candidate put in an appearance, and was decided to confer the degree on him, so
that he could take the fourth with the two that that he conld take the fourth with the two that
had just taken the third. The Worthy Master then insisted that I slould had gone through it with the previous candi dates. Being acknowledged as the Deputy, regalia and took the Mlaster's gavel and con menced, I can assure you it seemed like old degrees at every meeting also had the pleasure of conferring the fonrth degree on a
class of three, after which we were invited to the harvest feast, where all the bounties tha could be desired were spread before us, of which we partook with a good relish and had a goo time generally. At 2 P. .n., we were callcd to formed by your humble servant, assisted by two very efficient brothers.
Washington Grange deserves the credit of being the "banner Grange" of San Joaquin connty. There are now about io active mem
bers and more on the list to join soon. After installing the officers and listeuing to a fey remarks from Bro. Lerned, we left tor home, it
being about $4: 30 \mathrm{P}$. M., feeling obliged to returt home, to be on hand, Saturday, at

## Stockton Grange

or installation, harvest feast aud to listen to lecture from Prof. Hilgard, on alkali soil tunate to have beeu able to secure his scrvics Our installation being public, quite a number of persons besiles the menbers were present.
We were called to order by Worthy Maste We were called to order by Worthy Master
Clliot, of Lodi Grange. Our Master having been re-elected, could not well perform that
luty. The officers were installed by PastMaster Phelps in a very able manner, afte hook we repainuteous cining-hall and par arived just in time to partake of the feast with s. At $2 P$. M., all
well filled, the lecture commenced and wa istened to by au appreciative audience and well Oak Home, Stockton, Jan. 6th, 1878.

## Election of 0fficers.*

Healdsburg Gravge, No. 18 , Somoy W. N. Gladide, I.; J. L. Mcelish, S.; J. Far
ley, A. .; W. W. A. Alen, C.; Aaron Hassett, T.
E. H. Kraft, Sec'y; F. M. Laymance, G. K.; Mrs Josie Hassett, Ceres; Miss Luella Wolcott Flora; Mrs. D. F. McClish, Pomona; Mrs.
Beeson, L. A. S.; S. Beeson, Trustee.
Point of Timber Grange, No. 14, Contra
Costa Co.-Flection Jan. lith: S. M. Wills, Costa Co.-Flection Jan. 12th: S. M. Wills,
M.; C. J. Prestou, O.; J. E. W. Carey, L.; Geo V. Smith, S.; Calvin Carlton, A. \&.; A. Plum ley, C.: Geo. Cople, T.; Volney Taylor, Sec'y,
A. Vernon Taylor, G. K.; Mrs. A. E. Gal
lagher, Ceres; Niss Lovina Plumlcy, Pomona, lagher, Ceres; Miss Lovina Plumlcy, Pomona
Mrs. H. C. McCabe, Flora; Mrs. J. E. W. Car
Watsontlle (irange, No. 124, Santa
Cruz Co.-D. M. Clough, Ni.; Owen Tut RUZ Co.-D. M. Clough, M1.; Owen Tut
the, O.; Mrs. O. Tuttle, L. Bates De.
Lart, S.; A. Kerr, A. S.; D. Tuttle C. Miss Lottie Roadhouse, Siec'y; M. B. Tuttle, Ci. K.
Mrs. N Uren, Ceres; Mrs. Rob't Boland Mrs. N. A. Uren, Ceres; Mrs. Rob't Boland,
Pomona, Miss V. Ferguson, Flora; Mrs. J. C Drew, L. A. S.; Mrs. O. S. Tuttle, Treasurer.

* Officers of Granges are requested to send list of off * Officers of Grancca are requasted to send list of offt.
cers eleet, date of election and day set for installation, to
ins office direct. Modoc Gravars.-Sylvester Daniels writes us concerning the Granges in Surprise valley,
Modoc county, as follows: "There are four iranges in the valley, three Good Templar lollges, one Odd Fellows, and one of Masons,
ald have a good steal
work in the spring
hat and Gpume
J. W. A. Wright and Grange Resolv-Tross.- We decline inserting several well-writ
ten articles in response to Bro. Wright's comten articles in response to Bro. Wright's com We have already publishcd more on this sub ject than our space
personal injusticc.
Confinfnce Grange-Ehitors Press:-A he installation of officers of Contidcuce (irange Lecturer, and we elected Bro. A. J. Pichle fill the place.-JAMEs Monsk, JR., Sec'y
Signal Service Meteorological Report.
Week Ending January 22, 1878.





Rainy. | Fair. | Rainv. | Rainy. | Clo'dy. | Clo'dy | Rainy

An Extra Edition of the "Pacific Rural

We have in publication an Extra Edition of he Pacific Rural Press, which will contain in full the proceedings of the last meeting o the California Dairymen's Association. It will be the most important publication, from a dairy his coast. All the matters advanced made on men practically engaged iu the dairy business, what is believed to be the best dairy practice in this State on the differeut subjects which were under consideration. Among other matters presented, we notice Mr. R. G. Sucath's acxperiments with New Zealand rye grass as odder and pasture plant in this Statc. Mr. I . Hoag, of Yolo county, gives a sketch of prience with alfalfa Mr Sherinan Day Coutra Costa county, contributes an exhay, of casay on the dairy adaptations of the tule lauds -these vast fertile tracts which are now being Robert Ashburner, of San Mateo county, gives the results of his wide experience iu choosing
good dairy cows and in breeding, feeding and good dairy cows and in breeding, feeding and porats in his successful practice cheese mak importaut coutributions to the dairy literature n the different subjects brought forwarl, the list of the officers of the Socicty and the condiform for membership in it. These are in good have wide circulation among dairymen here and at the East, where great interest is felt in our dairy practices. The edition contains also an bull, and ground plaus of a creamcry, a cheese factory and a large dairy barn.
All readers of the RURAL who have not kept the issues of their papers containing these mat
ters, or who wish to secure them in collected orm, can be furnished with copics of this ex tra edition, post-paid, for 10 ceuts per copy, by
addressing Dewey \& Co., 202 Sausome street, San Francisco.

## Squirrels Killed by the Acre.

No doubt many readers were interested as wc were in the statements of a Solano connty reader of the Press in a recent issue giving an account of the way squirrels were exterminated from his fields by the (ierow Brothers. We have since received additional iuformation indicating that these gentlcmen have scceeded in doing Their plan is to kill the squirrels by the acre by contract, and they are ready to makc contract or part of a county. The rate charged is five cents per acre and upwards, according to the was done
stand th stand that the Messrs. Gerow will submit a proposition at the mceting of the Contra Costa boar Solano county are mentioned as acguainted with the successful work which they have done in Solano county, and it would be well for the Contra Costa meeting to consider the statements heir work is so which they have to make. If is a thing which should be spread abroad all over the infested districts of the State for the public benetit, and we hope all readers who bave testimony to give abont Gerow brothers
perations will favor us with it

The Way tiee "Rural" Advances Trade
The advertising value of the Rural Press is generally recoguized annong our Eastern adver-
tising patrons. The following nay serve as a hint to those who do not enjoy its aid. Messrs. llunter \& Brewer, of Springwater, Livingston county, New lork, writes as follows:
inclose you a little advertisement, which we wish inserted in the Rural Press nne month August). Last fall, we had a large quantity of ou account of size. Learning, some time ir the winter, that there were some demand for small I'Ress, last March, which brought us custoners from Oregon, Idaho and California, whose trade
amounted to a number of hundred dollars. We hope the Press will be as successful this year ence is similar to that often described to us by Eastern dealers in farmers' sulplies of all kinds.
$\qquad$

The silverware delivered by the National
The silverware delivered by the National
iiver-Plating Co., No. 704 Chestnut street, Philadelphia, is giving entire satisfaction. All
orders are promptly filled, and no one need Total rain during the season, from July $1,1877,12.22$ in.

## Agricultural Notes.

## California.

el dorado.
EL DORADO.
STRABERRES, - Republican, Jan. 18: On
Sunday last Alex. Wonderly, took a walk out in Wolf Bros'. garden, and says that notwithstanding the recent cold spell, that he saw lots
of strawberries in all stages, unharmed by the a stem containing three large ripe berries, a number of green ones, together with two blos soms. He expressed it as his opinion, week of warm weather, a bushel o more of ripe berries could be picked from the
patch. How is that for the middle of January? FRESNO.
Enough.-Republican, Jan. 16: Enough rain has fallen to maintain the growth of the grass and grain, and prospects are now in
of fair crops. Everybody feels jubilant.

Editors Press:-The rainfall from Jan. 10th to the 17 th amounted to 1.33 inches. The
weather is warm and still cloudy.-E. S. Russell, Borden, Jan. 17 th.
KERN.
Work. - A force of 270 men is engaged clearing new ground, plowiug and sowing on the 80 men is at work on their canals. There is no
evidence of discouragement because of the drouth in this section of country. These farms produced their largest crops last year. It is well worth the time to see the progress made so
far this season and witness the moving of the force from the headquarters to the fields. many of whom are without work. It is pleas many of whom are without work. It is pleasa large addition to our laboring population then a large adaition to onr laboring population the
past two months, and Chiuese have generally
been displaced to give them work. There are several farms rum by Chinese on contracts lease, and the gardens of the town are chiefly
cnltivated by them, so that room is made for cnltivated by them, so that room is made for
them when work is needed, without crowding out white labor. The comntry will be benefited by the change
LOS ANGELES.
Good rite Bees.-Outlook, Jan. 16: We
called at the bee-ranches of Messrs. Killgore, Baker \& Cox, and Manville, finding them all pleasantly situated and looking hopefully for
a good honey season. Since then they have had a copious rainfall, which Mr. Killgore tells a good season, the canyon apiaries in the for at least 200,000 pounds of honey. MARIN.

Tomales Cheese Factory.-The Tomales cheese factory, lately purchased by Messrs.
Lang \& Hartling, is running again, with prospects of success. Mr. Lang has lately arrived
from the East, and understands the business thoroughly. He has been the cheese maker for years in Wellington factory, Ohio, the largest stands both the inside and outside business. It will be carried on on the Eastern plan. The dairymen bring their milk in the morning to them. A certain number of pounds of milk makes one pound of cheese, and the factory receives two cents a pound and the whey for
making, taking care of and delivering the cheese at the depot. The selling will done by a firm in San Francisco, under the direction of Messrs. Thos. J. Ables and J. P. Whitaker, and the
returns will be made direct to the Bank of returns will The cheese made during the month
Tomales.
of January will be put on the market on the lst of January will be put on the market on the lst
of March, and as soon as return of sales is made. a dividend will be paid to those having furnished milk duriug Jannary. After March 1st, shipments will be made every month. By selling the cheese and paying in dividend has given the best satisfaction in the East. But by serving all alike it is necessary that the
milk should all be good, therefore it is always tested. They have what is called a cream jar, milk has been skimmed. They also have lactometers, by which they can tell in an instant if the milk is watered. The contract between the dairymen and factory contains a clause,
that if it is ascertained that the milk is not sweet or has been skimmed or watercd, a com-
mittee of five shall be appointed from the patrons, with power to levy a fine, the amount among the other patrons. The contract ing milk until August 1st, with the provision out on the firs dairymen, or all, may draw ting at that time, to continue until August 1st. 200 more. It is intended to make an article of
chcese which will have no United States. They have run just one weck
and have 29 cheeses on their shclves. MODOC.

Surirrise Valley. - Editors Press: We 200 miles from Reno, tho nearest railroad station. We have a good valley to live
we labor uuder great inconveniences by
so far from market and railroad communication.
All news is old when it gets to us. This is All news is old when it gets to us. This is
in Surprise valley. I have only lived here two years; coming from Iowa. As nearly as I can making good homes.-Sylyester Daniels, Lake City. MONTEREY.
Forward Gratn. - Cor. Santa Cruz Cour er, Jan. 16: John Dixon, one mile below Sali-
nas City, has sunk four artesian ten-inch wells on his place, operating the same by steam,
with which he irrigates 40 acres of land. He now has 40 acres of grain in dough, which would ripen in five or six days under a summer
sun. There are 50 acres of grain at Elkhorn sun. There are 50 acres of grain at Elkhorn
slough, now in dough, growing in swamp land. pect never was so bright for a big yield of grain n the Salinas valley. In no previous season has there been so great an acreage under seed, and growing finely. Plenty of rain has fallen anywhere in the valley. Everybody wears smiliug countenance.
SACRAMENTO.
The Bright Future,-EDitors Press:unawares and dispel all fears of the future. So it has proved in the recent rain, not only with the agricultural class but the community at
large. The earth quickly drank in the abundance spread over the state. The new yea opens with auspices far brighter than at
first predicted. With light rains in the
early season, continued with north winds and early season, continued with north winds and dictions; but at the turning point of the latter half the clouds broke the spell, and the delusion vanished. Now all can work with the new year with lighter hearts, wiling hards, with increased fruits of their own production -GEO. Rich, Sacramento.
SAN BERNARDINO.
Riverside Nursery.-Semi-Tropical, Jan. ive years ago, when Riverside was in its ing fancy. He purchased 20 acres of land a mile putting it out in trees. Since his arrival he has sold thousands of trees and has still a stock of
100,000 on hand, all semi-tropical fruits. Mr. 100,000 on hand, all semi-tropical fruits. Mr.
R. has recently purchased 20 acres of land ad joining his original purchase, in order to give budded his rapidly growing business. All hi cided advantage in longevity and thriftiness. Mr. Russell has been to considerable trouble and expense in procuring buds from Florida of there, but has none of them for sale yet. He has also the loquat, Japanese persimmon, guava none as yet for sale. Mr. Russell's place show what can be done by intelligent, persistent effort. He has 2,200 orange trees set out in
orchard and will put ont several thousaud more orchard and will put ont several thousaud more
this year. He believes thoroughly in low train. ing, as the stem of the tree is better protected stocky, and better able to mainselves are mor upright. His trees are all healthy and vigorous, showing that they have been well taken care of, and giving promise of strong growth
and early fruiting. The heavy frosts of the past two weeks have not injured his trees to any extent. Very young trees, or those whose growth
has been forced by late and heavy irrigation have been nipped slightly. Older trees are no injured a particle, although the cold has been more severe than at any time since records hav
been kept in the county. been kept in the county.

## SAN JOAQUIN.

Jersey Bulls.-Independent, Jan. 18: B. Kingsley, of this county, lately purchased com the herd of R. G. Sneath, of San Mateo
county, two full-blood Jersey bulls-"San Bruno," two years and one month old, weighing 810 pounds, and "Prince." one year an animals were brought to Stockton by steamer yesterday morning, and taken to Mr. Kingsley ranch, Mariposa road. Mr. Kingsley has at his are particularly valuable for dairy purposes.
He also finds that a cross betwcen the Durham and Jersey gives to the progeny the form of the Durham and the superlor milking qualities of the Jersey.
Grain Receipts.- The amount of grain received at Stockton wharf station, Stockton and Copporopolis railroad, from June 1st, to De-
cember 31st, 1877, was 12,299 tous or 1,230 car loads.
The owners of the San Jose Mercury, Jan. 12 the San Joacquin river, in leasing their lands for farming purposes, aro required to furmish all the necessary seed, and also feed for the horses used whilo putting in the crop. The tenant performs all the work, furuishes the sacks and
delivers one-half of the grain upon the rivor bank to the owner of the land. Gen. Naglee, of this city, is now shipping scveral carloads a
week of sced grain and ground barley to his

## tenants on the san Joar

Editors Press:- We are having the fincst rain of the scason, and so warm, too! The last and has been coming in beautiful showers since,
croakers will get moistened up, and I think will have something else to talk about now. Our hay and grain are safe, and we think a good prospect of spring crops. Certainly grain and
hay never looked better than now, and have
been growing finely since the rins
been growing finely since the rains in Decem-
ber. We cannot have all the good without an
evil. I hear the wharf at Carpinteria is nearly all washed away, but the extent of damage I do not know. Some cloud-bursts on the sides of the mountains filled the canyons and brought busy some time, but no serious damage that I now of. It looked grand to see the muddy torrent rushing down the ravines, with the
sound of a mighty wind! Where the ground was freshly plowed some of it was washed away, but I think the sediment left will make that during the storm, nor have we had much disareeable wind from any source this season. ourage, as the promise is great for the men harvest. Since writing the above we have had an old-fashioned thunder storm and a heavy fall
of rain.-O. N. Cadweli, Carpinteria, Jan. 17 th. of rain.-O. N. C
SANTA CRUZ.
Prolific Sheer.-Courier, Jan. 18:
Martin Kinsley informed us last Saturday that n the day before a sheep belongiug to his band gave birth to four lambs, the mother being one
year and seven months old. This prolific year and seven months old. This proline birth to eight lambs iu one year-two lots of ing one of the four. All of these large yields
are flourishing, and if this rate of increase will only continue, Mr. Kinsley has a bonanza on his ranch.
STANISLAUS
Low Water in Tulare Lake. - News, Jan 5. We have received a copy of the report
the reconnoisance of Tulare lake, by the civi
engineer of the West Side irrigation district Vm. Hammond Hall Side irrigation district, made by Mr. Hall during the months of No-
vember and December, 1877, with the view of ascertaining something definite as to the wate supply of that lake at the close of the driest
season ever known in the San Joaquin valle by white settlers. He finds that in October 1871 , the base of the water line of the lake wa
195 feet above the base used for the survey of the West Side canal located in September, 1876 He also finds that the level of the lake is only time of the survey lake now, or rather in December last, notwith standing the severe drouth of the past season, square miles. The lake shore has now reached a line where the depth is much greater than the
shore line of high floorls. The lake is now, shore line of high floorls. The lake is now, a
its present standard, a clear open sheet of wate of from 10 to 40 feet in depth throughout its body. The report of Mr. Hall is a clear, plain
statement of facts, useful at the present junct INCREASE.-Last week grain fields on th
ure. Werrease.-Last week grain fields on the
West Side, already sown, could have been pur-
chased for the season at from acre. No doubt they are worth $\$ 10$ per acre to day.
TEHAMA
The Outlook,-Red Bluff Cor. Tocsin, Jan rainy season proving so good. Crops have now a reasonable chance to thrive aud mature to a seen change for the worse does not take place during the spring weather, which often has
more to do with the yield than the winter rains Stock and sheep men ing feed, and assurance of ample grass for lamb
iug, which many are now looking forward to
iug, which many are now looking forward to
with anxiety. Mutton sheep seem to be sellin with anxiety. Mutton sheep seem to be selling off quite brisk this winter. A. C. Owens, fron
Payne's creek, disposed of a fine band to southern butcher a few waing ago at a very fai growers for a rise in the price, which is to be hoped for ere the spring clip comes into market point wad a woolen mill of our own at this turing that wool, and giving employment to hundreds of industrious, hard-working citizens,
who are now idle from the want of something who are now idle from the want of something of that kind to do.

## YUBA.

Oranges.-Appeal, Jan. 11: T. J. Power orange tree at his residencc, which eclipses any thing in this section. Hanging in elusters like grapcs, upon a stcm of 16 inches, are one dozen in circumfercnce and weigh ninc pounds. They aro of bright color, and a beautiful sight to be hold. The trec is a ninc-ycar-old scodling, and this specimen of its fruit may be seen at the a friend in Sau Francisco, with a request a frient in San Francisco, with a req

## Washington.

Wheat Yielins. - Walla Walla Union, Jan. 5 We know of ono wheat field, embraciug 270
acres, that produced an averago yield of 45 bushels of superior w's at to tho acro, and anothcr field of 55 aeres that gave a yicld of 5
bushels per acre, both fields owned and farme
by Henry Copeland, of this valley.
Frozen Fog.- Up to tho present time thor white with fog that has frozen and settled on it

A $\$ 10,000$ fire occured at Virginia City on Tuesday
Europe is anxiously awaiting the peace ne
Furtuer depredations by border thieves in Texas are reported
Nearly a hundred murderers were hanged in Ture

## The terstuous of late.

g temperance movement is still progress By the recent this city
3 persons were killed and 46 wounded
The United States has sued the Erie railroad re 8 ,000, all back taxation. from Vienna went to Berlin, whence he was als Tue
tern Union company has increased its rates to the various points west of New York A bill has been introduced into Congress to
amend the law governing the appointmeut of postmasters.
Recent shipments of American goods to CeyJoen sent for more.
Join W. Mackay and W. S. Keys have the Paris exposition
Jublin, is said to hacharthy, the Fenian, at display since O'Connel's burial.
James Gordon Benvett has purchased the tean yacht Pandora, and it is said she is again An official statement of the Russian Minister of Finances estimates the extraordinary expen-
ses occasioned by the war at $432,000,000$ rou-
The run on several of the savings banks in this city this week was soon over, the deposit-
ors feeling assured that the draw was unwar-
The Southern Pacific Railroad Company of cau find something better. The men are to be paid every night.
The Governing Committee of the New York Stock Exchange have voted to expel Netter and Bonner, who failed after re-hypothecating J. W. Bones, the "Workingmen's candidate," has been elected State Senator from A1emeda county, to fill the unexpired term of the
late Senator Nathan Porter. The Supreme court has affirmed the decision of the lower court, in the case of John Runk,
convicted of murder in the first degree, and he will therefore be hanged.
The Empire pipe hne, which carries the oil
 pipe line for about $\$ 1,100,000$.
Tue Cherokee nation object to the Senate United States. They think the bill is in the lict with the treaty obligation and acts of Con-

The Senatc Finance Committee agrces to recommend the passage, with sundry amend-
ments of the bill introduced by Senator Davis, ments of the bill introduced by senator Davis,
of Illinois, to remit taxes on insolvent savings
Tue House Committee on Appropriations has nished the Fortification bill. It does not dif It appropriateci about the sane amount, $\$ 275$, It app
000.
Ov.

Over 1,000 men applied for work at \$1 per day in digging on the Sontheris Pacific
round on the Potrero. The men are paid every night. This is an indication of tho "hard times" in this city. case of Kearney, Wellock and Knight, on trial
for misdemeanor, for the use of incendiary lanfor misdemeanor, for the use of incendiary lan-
guage tending to riot and breach of the peace uage tending to riot and breach of
brought in a verdict of not guilty.
Prof. Geo. Davinson delivered a lecture last Naturday evening on "Irrigation," berug ne of the courso being given for tho bencfit of
the Oakland Freo Reading liooms. Tho lecturo was instructive, practical and interesting. Trans-contincutal Guid anthor of crofrctt's tour over every railroad in this statc. If re-
turned East this week and can he addressed at the Briggs' house, Chicago, for tho present. A consignment of 500,000 white fish eggs
from the Statc hatehing house at Northville, lichigan, have arrived in the city for consignnont to New Zealand. A shipment has also
becn rcceived for distribution in this State. Thieves and pickpockets are unusually nuirst 20 days of this month sono 30 citizens have been garroted, and either beaten or robbod,
while on the way to their homes or placcs of business.

- Tue funcral of Victor Emmanucl, which took place in Romo on the l6th inst., was very inwas a mile long, and there were also 2,700
deputations from, different parts of the king lom.
Tus solemnity of the King taking his oath is specch, thoroughly upholds ltalian unity, and ho says he will conform to tho mcasures inaugurated by his father. An amncsty will be


The Mystery of Bare Boughs. Ah' how stern Januiry drives the s.ip down to the root
How the trees stand dry and lifeless, aud every bird is

And ruthfuly we listen to the clavlinur of bare bouchs-
Was there ever any sliade in these for summer's last-year Aud thou, my heart, make answer, whose garner is a Of any ruit frum last yearts hopes as these gray branclies
are) Did we 'neath May's sweet heaven hrood amilst the
While the wirgrud tialked to the slender leaves and sunbeank pecired beet ween?
And in the sours sufe garden vow that Spring had naught
But now, but now make answer: For the vines hav
fallen down,
Altery
Then, like a homely sparrow that elirps, about the eaves
After the frosts have fallell upon the loosecting leaves,
Iys spoilted heart responded: "There are buds upon
ith whieh next June shall garlauld the Summer's royal
brows
The hat ereaks life duth slumber through all the showy
weeks."
O. ejes! that are so feshly, go sadly short of seeing--
Thati

For so tenderly our sorrows hold the germs of fuure joys
That even a disalppointment brings us more than it de-

## strovs. Horeard Glymidon, in Independent

## Woodside Papers.-No. 15.

Writen for the Reral Press by Jensir E. Janbsox.]
When the ladies asssembled for their next meeting, at the pleasant home of Mrs. Graham, they conld look upon their week's work with degree of satisfaction, for some of the work had been taken to their homes, and a whole suit
had been finished for James Pike, one partly made for Henry and some sewing done for another family
Mr. Graham had been a wealthy merchant in a large city, but had failed, through the fault of another. His health had become impaired and been brought up upon a farm, he had a knowledge of the work and enjoyed it much better than his wife did the honsework. Their house was well furnishci, but it was not so much the furmiture as the many nick-nacks and treasure from foreign lands that gave it the cosy, home-
like look that it wore. Pictures and ornaments were examined until, at last, the ladies declared mentally appropriated during the week, if they did not go to work.
"I want y ou to remember," said Mrs. (Gra ham, after they were seatec, ', 'that you did not
finish setting the table at our last meeting. Of finish setting the table at our last meeting.
course 1 ought to be poosted on all sucl work, lut dearie me: 1 never took particular notice,
because I did not have snch things to do. Then I am trying to be economical, and, though not lave to piuch real hard, yet, I think, it makes a great ditference what oue has to d "All right," said that question has laid upon the table long
enough. I think we did not mention individual
salt-dishes salt-dishes. I think them very usefnl. Id
distike to see everylooly's knife going into
common salt-dish, and if one has a salt-spoon, it is always tumbling out.",
". Ye-es, individual salts are nice and neat
-e-s, individual salts are nice and neat
after all, I think thiey are a bother; alway slipping about when one carries them to and
from the closet," returned Mrs. Lec. "I have no such trouble," said Mrs. Johnson, dishes in and deep enough to put one above the
other. I set in six and cover them with a piece of paste-board; then 1 put in the others, which
are enough for my family, and leave the are enough for my family, an
ones all realy for connlany."

## ual wonder to myseli because I I never think of

 thesc little, simple things, that are so very,handy when somebody thinks them up for me, handy when so
said Mrs. Lee.
"All that is very nice, but I confess I lik the salt-shakers lest, becausc the salt is kep so clean and is so evenly sifted over the food
It can be rolled, and, if damp, thoroughly
t can be rolled, and, if damp, thoroughly
dried before being put in and it whll , ast sweet
or salt) and clean for a long time," said \$lrs.
osslie.
one common salt-dish," said Mrs. Payson. "Another good addition to a set of dinner-
dishes is a dozen vegetable dishes is a dozen vegetable-dishes. ln then the
squash, onions or turnips is kept warm by each squash, onions or turnips is kept warm by each
plate aud more room is left upon the plate for plate and more room is left upon the plate for
the rest of the food. But there is one great the rest of the food. But there is one great
consolation, if one has not the money to buy these things, they can get along without then
and probably live as long. Time and a that will work well is sometimes as valuable as money. Now, Mrs. Gralham is very fortunate in having all these beautiful ornaments, many of them Deing of double valuc because they are
gifts from frieuds: but, if we cannot have one gifts from friends; but, if we cannot have one
of Lioger's groups in one corner of our sittingof lioger's groups in one corner of our sitting.
rooms, we can make a bracket of a piece of thin wood, cover a box or tin fruit-can with beauti fully tinted paper and lill it with moss, autnimn
leaves and vines, to set upon it if we orna ment the can with pictures, as is fashionable, who will kuow, as they see it peeping out from
behind the gracefully-drooping moss and vines, but that it is a painted and pictured earthen
rasc, costing a dollar or more. "Oh, ladies!" "ried Mrs. Johnson, "I want you to look out and see that mann who is passing
the one witl a traveling-bag in his hand. the one with a traveling-bag ine his he would
would give a dollar, this monent, if come in here, but he probably thinks it is time come in here, but
to leave the place.
"Have you ever seen him before?"
"I have," said Mr. Payson. "He called
Mr the other day and seemed determined to sell me some stove-blacking, but I happened to be
out of change, so he was olliged to move on." o thange, so he was orbiged to move onn.
"Well, ladies," said Mrs. Jolmson solemnly, "I did buy some blacking and I ang going to was washing dishes when the walking humbug came. Before I had a chance to say I would
not buy, he took out a bottle and a cloth, and such a polish as he put upon the corner of my
kitchen stove was perfectly astonishing. could almost see my face in it and it was as smooth as glass to the touch. He talked at the rate of a mile a minute all the time; said it was
his own invention; that it was 15 cents per bottle; but he had been in the place some time, wanted to leave that night, and was closing out the last few bottles at eight cents, where the
people provided a bottle, ete. The reason that iil-blacking. Water was good for some things but not for blacking, etc. Worl, I thought it
was worth eight cents, so I took two bottles was worth elight cents, so I took two bottles
and he took his departure. When I was ready
and to black my stove, I used it accorling to direc.
tions, but it was no more like what he ned tions, but it was no more like what he nsed
than black is like white. If I had only taken than black is like white. If I had only taken year, but $I$ never shall expect to see him again. "An agent," continued Mrs. Johnson, "came a lady, who lives some distance from this piace, and wanted to sell sone wonderful
varnish. He showed her what it would do, and she told hin she would take the bottle, the
contents of which he had began to use. She contents of which he had began to use. She
saw that he did not like the idea; but, as she would take no other, he was obliged to let her
 evcr, for he had to stop work and send to
Boston for a bottle of varnish before he could To on. Of course that proved that the bottles
he had for sale were worthless. Now, ladies, I hope you will rememher, whan agents come case and you will probably get something
able. Next time 1 shall be on the watch."
"Mrs. Payson, slall I press open the seams
of this dress-waist or over-east them together
nquired 1 rs Lee.
making again. 1 believe we were talking dressthe necessity of knowing morc about it at our last meeting," replied Mrs. M'ayson.
" Well, ladies, if I know more than you do making shall be the burden of my song and peceh, for I am always aching to inpart all th knowledge possiblc to others, if it will make
heir work any easier or things more pleasan heir work aly easier or things more pleasan
around them, though sometimes I do not have courage to speak to strangers.
". Th
"The other day, when I
"The that
cars, a lady eame in and sat with riding in th rict the brownest hand-satchel I ever saw; 1 houral think it had been earried ' 'risiting' by
everal generations. Now, I knew if she would take the white of an cgy, some day when she
was cooking, mix some black ink with it and was conking, mix some black ink with it and lon tuite new; but, of course, I could not sa lonk quite new; but, of course, 1 could not say
so right away, as she might not take it kinully It tried to enter into converstation with he and I fiually concluded to punish her by allow ing her to wander along through all the future years of her life, carrying that little brow
satchel and never knowing what she missed. as hat she missed. dress, I shall ouly press open the back seam,
overeasting both sides. The back seans and cross, or hup biases, should be cut quite close,
leaving only what I call a ' wide sean1s' ' widlth.
The under The under-arin seams should be left a full inch
wide, as those are the only seams that should on any account, be made smaller, to 'let a dress
out,' as the sayiug is. Lettiny, out the fron biases will always spool the fit of a dress. These
should be left alout three. wide and stitched aloont three-eighths of an nch from the first seam, lcaving ample room
for a bone to slip in. All these for a bone to slip in. All these seams should
be overcast together. That is what the tirst-
ing,' but I think it is a good thing to know how
to save time and yet have a garment look pretty well. The nice way of finishing the inside of
dress is to press open every sean, overcasting dress is to press open every sean, overcasting
each side or af ter the bone-casing is on) tnrning ing. These ene he casiugs are cross-way strips of the lining hemmed upon the seam or run on apon every gean except the cross-biases, but I do not think it necessary. style she follows them, it would be a six montha job. At the end of that time she might wear
the dress-into an insane asylum. It is well, if one in sobliged to slighth it." a thing well, even
"Yes, marm, I gness we had orter know " "es, marin, I giness "c hat orter know hlock out iny, dresses, and 1 allers git as rile up as a settin' hen." Mrell, now," said Mrs. Johnsou, that of all mortals, except the dressmakers, who
ought to have a knowledge of dressmaking, th ought to have a knowledge of dressinaking, the
woman who lives in the conntry, from one to 30 miles from a dressmaker, should stand the first chance. I mean the one who can't affor to hire if she had a chance. One who is cook washer flomat, table-girl, washer-womanl, dish-wood-carrier, butter-maker, elieese-maker, chicken-feeder, and who must, in addition to all these, be her own dressmaker and, perhaps,
act as tailoress for her husbaud, heside taking act as tailoress for her husbaud, beside taking
care of more or less troublesome comforts and

Oh, Mrs. Johnson, you almost take my breath away. 18 there such a person
face of the earth?" said Mrs. (iraham.
face of the earth?" said Mrs. (riraham. eral. I wonder that they exist, but they do and will until they die and the second 'beloved Comes to have the bencfit of the hard-earne
home comforts. There, there! I have nothing against second wives, but I do pity the poor
creatures who wear their lives out iu such a creatures who wear their lives out iu such a
hard, hard way. But here I have been chattering away and we have not heard enough about dressmaking.
more next time."

## How to Cure a Bad Boy.

Elisha M. Carpenter, who has for more than 20 years been Superintendent of State reformatory institutions for boys in New York, gives the Independent the resnlt of his wide expeparagraphs: During all these years of experience in a re formatory the one thought mplermost in his mind has been: "How is a bad boy eured of his bad habits? how is a bad child changed into a good child?" and he has made corresponding months of observation and experience, it became evident that the mere machinery of a reformatory would not grind a disohedient, dishonest boy into an obedicnt, honest boy; that a system of rules and regulations, of school instruction and labor, rigidy cilforect, would
not, in and of itsclf, clange bad boys, en manse, into good boys. Results demonstrated the fact. sonal cffort on his own part; and this effort he desirat make until he sces, first, Hence, the first step is to seeure his confidenee. If he has your sympathy, and you really desire that he should become a better boy and belicve it possible, he will tind it out in due time; and
then he will believe you and trust in you. Then you can influence him and bring to bear upon him those ideas which will work a change in in his outward life. Then can be brought to bear upon him the fundamental truths of the Bible, which will work within him a completc and permanent changc-the only true and per nanent reformatio
A merely ontward change of conduct, whatever the course pursued and motives presented disappointment. A clange of thought and purpose, basco on Christan principle,
only true reformation. Children lardenel in habits of uutruthfulness aud dishonesty often years, after conversion, before they gain finally settle down into a permanent, upright, Christian lifc.

How Mrs. Hayes Spoled A Joke, -Mrs. Hayes captured Mr. A. liddle, the novelistlawyer of ashington, hy excusing his a1pear-
ance at the White House, one sweltcring hot lay last summer, in a duster, lincup punts and shippers, assuring him that in such weather the proper. A pretty little story is also told of how oct comrates in the Twenty-thin had, one Jins Suunders, up to Colonel Hayes tent to see "the woman whase business it was
to mend the soldiers' clothes." Mrs. Hayes had just arrived in camp at the time, and when the mission, executed the repairs, and won the ment hearts, while unconsciously spoiling their joke.Tere York World

Charles Lamb on the Curse of Drink Charles Lamb was not a sot. A very littl iquor sufticed to upse delicate nerves. Jet he was snfficiently ad cted to drink to have experienced the sensa fons, hoth physical and mental, which result Com the practice. Read the following from his I have seen a print after Correggio, in which Who sits fast bound at the recing to a man ensuality is soothing him, Evil habit is nailin , and same In his face is feeble dclight, the recollection of past rather than perception of present pleasures angnid enjoyment or evi, with ntter imbecility bondage, the springs of the will gone down lik a broken clock, the sin and the suffering coinstantaneous, or the latter fors all this the sented in one point of time. When I saw this, I admired the wonderful skill of the painter but when I went away I
thought of my own eondition.
Of that there is no hope that it should ever change. The waters have gone over me. But would cry out to all those who have but, foot in the perilous food, Could the pouth, whom the flavor of his tirst wine is delicious as the openince scenes of life, or the entering upon some newly-discovered paradise, look into my desolation, and be made to understand what a dreary thing it is whell a man shall feel him self going down a precipice with open eyes an a passive will-to see his destrnction and have
no power to stop it, and yet to feel it all the way emanating from himself; to perceive all able to forset a time when it was otherwisc, bear alout the time when was otherwisc, $t$ ruin. Could he see my fevered eye feverish with last night's drinking, and feverishly look ing for this night's repetition of the folly; conl he feel the boly of the death, out of which I cry hourly with feebler and feebler outcry to b delivered-it were enough to make him dash the sparkling beverage to the earth in all the pride of its mantling temptation lasp his teeth,
$\qquad$
$\qquad$ do 'em."

Decorated by the Czar. - The emperor him wh the houl his personal bearin enlapes the rewarl in erery word, a friendly look, the well-chosen expres sion of praise to suit the individual, go home to the heart of the recipient as much as the highly cherished reward itself. Two hundred offieer of all ranks breakfast and dime daily at his table. From the youngest to the oldest every
eye is fixed on him. Before the meal, in the eye is fixed on him. Before the meal, in the assembled circle, as the Czar appears, it is seen one day that an aide-de-camp behind hin haps, half a dozen sword-knots of honor-the riband of st (icorge, orange and black-to be worn attached to the sword-hilt. Instantly ex pectation is at its hight. The Czar's voice eall the chosen name, all make room for the envied man to pass, he connes blushing and flushed, re-
ceives the prize, bends low to kiss the imperial hand, and retires, bowing at every stcp, a made man for life, the admired and courted of all be hohlers. Then he has to go through the usia embracing and kissing on both cheeks from his this mark of distinction that they wercome by for ten minutes after like children, weeping with the prized decoration in their hands, show ing it round, half dazed.

To Increase Beauty:-There is a divine contagion in all color objects with our fancies and affections or receive from them a kindred hue. This principle prevades all nature, physical and
moral. Let those who would trace an expres sion of serenity and tenderness on a human upon a painting by Claude or Iaphacl. In con templating a finc picture, we drink in its spirit
through our eyes. If a lovely woman would increase her charms, let her gaze long and ardent ly on all beautcous inages. Let her not inbut, cultivate, on the contrary, cvery soft af. one good feeling suggests and supports another. tions, and long labits of thought and feeling leave a permanent impression on the eonntcnancc. Every one belteves thus far in physiognomy, and acts more or less decided beautifully tender and serene when either caressing or becalm, which at times is "the gentlest of all
$\qquad$ Prof. Pettenkofer, at the recent meeting of the German Association of Naturalists at Munich, thus spoke of the
duty of scientific investigators: "Natural sciduty of scientific investigators: "Natural sci-
ence has but to look for facts and truths, and ence has but to look for facts and truths, and
need never lusy itself about the immediate都 of the entire civilized world and the means
necess necessary for its culture and development.

## Chance for Midnight Battles.

"The troops retreated under cover of the darkness" is a seutence which bids fair to go
out of use in the history of future battles The eleetric light promises to make fighting at night as practical as fighting by day-as though there could not enough bloodshed be enacted while the sun is above the horizon. A number
of interesting experiments have been recently of interesting experiments have been recently
carried out at Metz by a committee of engineers carried out at Metz by a committee of engineers
and other officers appointed to investigate the practicability of employing electric light during siege operations, and to suggest any modificain the wich it may seem exp. in use Accordin to the Pall Mall Gazette, on the night of Octo ber 20th, Forts Frederick, Charles and Alvensleben were illuminated by throwing the electric distance of from two to three kilometers, not only buildings but also individual men coulld be
plainly made out. Ou the uight of the plainly made out. Ou the uight of the 27 th o the exercising ground outside the Chambie rate, and the light directed upon a row of tar by a squad of riflemen, and the practice made was nearly as good as that nary occasions when firing by day-a result
which was considered excedingly satisfactory, as thick mist prevailed at the time, and materially interfered with the action of the light. Al together the committee concluded that the elec tric light may in future be employed with adduring outpost duty and engagements at night The London Times says that the parachute light, introduced into the service as a means of
revealing the enemy's position and movement t night, is to be superseded by the newest description of star shell. The parachute light, Which was invented by Cononel, now General Boxer, when superintendent of the Royal La-
boratory Department, Royal Arsenel, Woolwich, is somewhat expensive in manufacture and ather cumbersome in carriage, as it forms,
when closed, a large shell, expandin into a huge umbrella, 15 feet high, when opened, the cup of composition which is suspended beiug designed
to burn four minutes and a half. The star shell is much smaller and more portable, and of comparatively trifling cost. It can be fired into the the enemy's works, and burns with a brilliant light for abont half a minute, long enough to take an observation and lay a gun, but not long
enough to allow an adverse wind to bring the light back over the firing point, and so turn the advantage in favor of the enemy

## Live Jewels.

All nature is made to contribute to woman' ove of self-adornment. The demands vary ac cording to the grade of culture or the carprice of the reigning fashion. The savage is content
with the bones, teeth and heads of animals, the with the bones, teeth and heads of animals, the
feathers of birds, and the shells of snails and fishes, to adorn the head, ears, noes, neck, arms and girdle. With the women of the cultured ol largely to g, pernaps, is mate to contribute birds. Whole birds of paradise and other species, and the feather's of the ostrich, peacock, narabou, and many other birds, are made to generally known that the Miexican women o the wealthier classes use as ornaments, on ex-
traordinary occasions, live fire-flies, which in the dark, They belong to the fanily of leaping or springing beetles, and are called by the Spanish
cucujo. In order to catch these bugs, the Indians fasten a live coal to a stick, and move it to bright point a rival, and, in lisis anger, darts toward it, and finds the grave o haliansty in ready sale for them in the larger cities, where they are bought by the wealthy ladies at about legant little cages, and fed on slices of sugarcane, and bathed twice a day, either by the
ladies themselves or by their maids. In the evening they are put into little sacks, shaped like roses, and attached to the ladies' dresses.
The light these little bugs emit surpasses in brilliancy the reflection of the purest diamonds.
The daily bath they rcceive is absolutely necessary, as without it they would emit no light read by.-A Appleton's Journal.

Beautiful Incident.-A friend relates to us a very interesting circumstance which occurred
at West Point not long gince. It was on one of
the late delightful autumnal Sabbaths windows werc universally left open. Over the pulpit, in the chapel, as some of our readers will remember, is a fine allegorical picture by Weir
A part of it hart of it represents Peace as a female figure,
holding an olive branch in her hand. During
the service flew into the chapel and made several attcmpts upon the fidelity of the artist.

## Young Folks' Column.

## Robin Hood's Miracle.

Fair, fair was the forest of Sherwood in the days of Robin Hood; long were the suminers that garmented the the forcsts with green, and
bright were the autumns that browned the thickets and coverts from which the merry hunters, clad in Lincoln-green, started the deer. The silyer horns of Robiu Hood's merry men divided in the morniug, aud their notes
were lost in the great deep forests but the were lost in the great deep forests, but they
blended again at evening, echoing at first from afar and then drawing near.
Then merry were the tales of the hunters, as the red moon rose in the dusky shadows, and poure.
silver sea.

## silver sea. Robin

perforined a most wouderful
Perhaps, though, you may not think sit
Wonderful after all
We will tell
told it to us. Oue day Robin, being in a merry mood, took it into his head to go into the king's highway
in the disguise of a Friar. He put on hood, own, crucifix and beads, and walked of lowly, looking very demure and woe-begone.
He had not gone far, when he met two lusty He had not gone far, when he met two lusty
priests clad all in black, and riding gallantly priests.
along.
" Be poor friar, who has been wave pity on a morning, without meat or drink." "In on the priests, "we cannot help thee. We've been robbed, and haven't a pelny to help ourselves."
Robin laid hold of the priest's robes, and drew him from the horse. Robin was so stout when he command the other priest to dis when he command the other
nount, he dared not disobey him.
"Xeither say you have no money," said Robin " You know how
"Yos," said the to pray?" said Robin.
"Thes let us all fall on our knees, we three to gether, and for money we will pray earnestly
and we will see what Heaven will send."
The priests knelt down.
"Now pray," said Robin
They prayed very dolefully. At last they began to weep and wring their hands. Then
Robin began to dance. The priests' prayers became more doleful "Pray! Pray"" Robin said:
"Pray! Pray
They prayed a very long time.
"Now put your hands ind
and see if you have received an answered to
The first priest felt in his pockets, then olled up his eyes very solemnly a.d said:
"Let me feel," said Robin
The priests now looked more troubled than ever. Robin searched the pockets of one, and drew
forth a purse heavy with gold. orth a purse heavy with gold.
dhe searched the other, and fous? said Robin purse.
The
The two priests were struck dumb-what could they say? If they had spoken truly at
first, here indeed waspa miracle! The old bal lad says that they "sighed wondrous heavy." ouragingly, seeing their dejected looks "Here are five hundred pounds. Now we wil
And divide it he did. He gave each priest fifty pounds for praying so well, and kept the
rest himself. But the priests did not seem very much pleased with Robin's division and heral present, but rode away looking more
"Always speak the truth," said Robin to the two priests, as they departed; and we have a
sort of suspicion that if they had spoken the truth about their money to the bold outlay, as good priests ought, the miracle would not have been so great.
Wide Awake.
Female Heroism.-"One day," said Mas sena, "being at Buezenghen, 1 perceived a young soldier belonging to the Light Artillery, whose horse had been wounded by a lance. The young
man, who appeared quite a child, defended himman, who appeared quite a child, defended him lying around could testify. I inuncdiately disance, but they arrived too late. Although this action had taken place on the borders of the wood, and in the front of the bridge, this artilsmall party of Cossacks and Bavarians, whom the officer and the men I had dispatched put to
flight. His body was covered with wounds inlight. If is body was covered with wounds in-
ficted by shots lances and sworls. There werc at least 30. And do you know, Madam, what the young man was?" said Massena, turning to
ne. "A woman?" "Ycs, a woinan, and a handsome woman, too! although she was so of her beauty. She had followed her lover to lery; she had never left him; and, when he was of him she loved. She was a native of Paris; laughter of a fringc maker in the liue de l'etit
1.ion."-Memoirs of the Duchesss d'Abrantes.

Good HEALTH.
Why Gum and Pine Trees are Good Neighbors.

## Entrors Ppess:-There have becn many con

 tradictory rumors abroad in this State respect-ing the desirability of gum trees around dwelling the desirability of gum trees around dwell-
ings. We lately were solemely assured that hey were poisonous. No doubt this rumor ha reached nany readers. As I once heard Spurtruth is putting his boots on.
Truth's last new boots then, must be as to gum trees, that they exhale those powerful purifying, antiseptie compounds, peroxide of hy-
irogen and camphoric acid. A Mr. Kingzett, in England, has been paying much attention the subject, and has succeeded in producing
new disinfectant, called "Sanitas," containin new disinfectant, called "Sanitas," containing
these compounds. His methorl consists in dethese compounds. His methool consists in de-
composing water and turpentine, placed in juxtaposition, by a blast of hot air. "sautias a preservative in curing meat; preventing The lesson is, keep your houses salubrious and your meat untainted by encircling your

## Edward Berwick

TThe points made by our correspondeut are
ortified by experience in Africc. It is hardly fortified by experience in Africa. It is hardly
nore than 15 years since the first eucalyptus more than 15 years since the first eucalyptus
trees were introduced into Algeria, yet their growth has been extraordinarily rapid. Some remarkable examples are give of the action
of the eucalyptus in improving the sanitary
condition $t$ wis of nnhealthy districts. Formerly great iron mines of Mokta-el-Hadid to remain there during the summer; those who attcmpted take the laborers to the mines from a distance by train every morning, and to carry them back
every night. From 1868 to 1870 the company every night. From 1868 to 1870 the company
plauted more than 100,000 eucalyptus, and now plauted more than 100,000 eucalyptus, and now
the workmen are able to live all the year
through on the scenes of their labor. The enthrough on the scenes of their labor. The en-
tire works and the railway leading to them are bordered with thick belts of these trees, and garden surrounded with them.-EFDs. Press.]

## Cause of Decayed Teeth.

A writer in the British Medical Journal gives
some valuable suggestions on the preservations of the teeth: The general prevalence of dental caries is chiefly owing to food remainiug on and
between the teeth after meals--from breakfast between the teeth ater meals-from breakfast
time till the following morning - when, accord-
ing to custom, the teeth are brushed; brushed, ing to custom, the teeth are brushed; brushed,
but probably not cleaned, as the brush is more often used to polish the surface merely than to assist in removing what has accumulated be-
tween them. Experimeuts have been referred to that prove the solvent action of weak acids
ou the teeth; and I think it will be couceded without proof that, were portions of our ordinary food, mixcil and moisteued as in mastica-
tion, kept during the night at the higlr tempertion, kept during the night at the high temper-
ature of the mouth, the compound wonld be
sour. It follows that deutal caries must consour. It follows that deutal caries must con-
tinue to prevail as now, while it is the custom to allow the food to remain in contact with the
teeth all night. teeth all night.
The followin
The following observatious show the dependence of caries ou food remaining in contact with
the teeth. When the teeth are wide apart food is not retained, and thy gcnerally remain free
from caries. The lower front teeth are seldom attacied by caries when, as is generally the case, the spaces between are closed to the en-
trance of food by tartar. The backs of all the teeth, upper and lower, being kept frec from
food by the tongue, are seldom affected by caries. Lodgment of food takes place between
the bicuspids, between the molars, in the depressions on the masticating surface of these and these are the chief seats of carics. While mastication is performed by the molars and bicuspids, the upperfront teeth remain free from selves are made to do the work of lost or dissedes molars, and the food gets between them,
easies is certain to follow before long. Further
ear proof cannot be required that, if 110 food r mained in contact with the teeth after eating,
they would be free from caries, nuless acted they would be free from caries, nuless acted
on by acidity from other sources. The only indications, therefore, for the prevention of dental caries are the neutralization of acid applicd to
the tecth and the removal of fool before it has becono acid. The food should be removed after every incal, and all who have not the opit cerery night at ledtime by rinsing as the brush camot be trusted to remove tho food from betwcen the tecth.
Avother Case of Aniline Poisoniva.- Tho fact has recently come to light in Germany that
poisoucd aniline dye is sonetimes used to colve the lining of hats. A lat with a brown leather hining was purchased at Stettin, near tho baltic chemical cxamina tion of tho hat showed that tho brown hue was
imparted to the leather lining ly means of $a$ polysonous substance inte froni coal tar.
work made ont of wood of the lemon tree that
was considered almost as goond as if maide from

## Domestic Economy

## Smoked Goose and Duck.

We do not know how practical the following suggestion may be, but there is interest in it certainly. - Mr. W. M. Ryer writes to the Bulletin as follows: On the continent of Europe smoked geese and other wild birds are to be
found in the provision stores, and are sold at prices considerably higher than ordinary meats,
being considered delicacies. The breast or live being considered delicacies. The breast or liver an epicure, and the whole bird is at all time desirable as a chauge iu the ordiuary routinc o mountains of California and Nevarda among the miners, and upon the plaius among the farmers near the towns. lirom this both miners in or farmers becone consumers of salt and smoked meats, as werl as canued meats and fruits. To these, smoked birds might advantageously be
alded. Sinoked fish, such as herring, mack erel, salmon, etc., and smoked pork, in the form of bacon, ham, etc., and smoked beef and ven-
isou are all excellent articles for food, and why not smoked geese and ducks?
Some may suppose that at the price wild Some may supplose that at the price wild
birds sell for in San Fraucisco, it would not be possible to get them in quautities siifficient for
smoking. This is a mistake, for the birds are more abundant than the salmon in the rivers, and there are plenty of men to hunt them, pro-
vided they hunting grouuds. Hunting grouuds for ducks and geese are rarely ncar towu, railroad depots
or steamboat landings. The hunter of one day in getting his game on the cars; the third day finds his game in the hands
of a commission merchant or middleman; the fourth day one-half or more is spoiled or is not sold, and the return made to the hunter is dis
couraging. Before the lished only enough salnon were caught to supplor export trade. Smoking establishmeuts are not necessarily expensive, nor do they require
much capital to conduct then. Every slough,
river, Iake, and all the overllowed land abouud in cdible birds. If a hunter could send overy
day to such smoke-houses or curing establish day to such smoke-houses or curing establish
ments the game he shoots, he would have profitable occupation, and probably $2,000 \mathrm{mcn}$
who are now idle could thus find a means of living. As it is uow, a huuter may drop fifty
geese or ducks in a day, aud find no available geese or ducks in a day, aud find no available
market for them, but if canning establighments were near his huutiug place he could make sat-
isfactory wages.

## To Tell the Age of Fowls.

If the hen's spur is hard and the scales on the legs rough she is old, whether you see her
head or not, but her head will corroboratc your observation. If the uuder-bill is so stiff that and rough , leav it down, and the comb plump, for some one less particular. A young hen las only the rudinents of spurs; the scales
on the legs are smooth; glossy and fresh colored, whatever the color may be; the chws tende and short, the nails sharp; the under-bill soft, An old hen turkey
An old hen turkey has rough scales ou the
legs, callosities on the soles of the fcet, and long, strong claws; a youug one the reverse of
all those marks. When the feathers old turkey-cock has a long tuft or beard; young one but a sprouting one; and when they
are off, the smooth scales on the legs decido the point, besides the difference in sizc of the
wattles of the neck and in the clastio shoot upou the uose. rough legs, the streugth alivo is known by the larly at the pinions, the thickness and strength when pluckel by the when plucked by the legs, the teinderness of the
skin under the wings, ly the points and the bill and the coarseness of the skin)
Ducks aro distinguished ly the same means but there is the diflerence that a duckling's bil is much longer in proportion to tho breash of its A young pigcon is discovered by its pale
color, smooth scalcs, tender, collapsed feet, and tho ycllow, long down interspersed annong its
feathers. A pigeon that can fly has always red feathers, A pheon that can tyy has aways red-
colored legs and no down, and is then too old for use as a squab.
Stupeng for loultry or hish.-Two
cins of light bread or cracker erumsi cops or hed potatoes; one cery well beaten; but-
of mashe
ter size of an egg; one sull
teaspoonful of sage ter size of an egg; one smine olans oysters chop
and savory; one dozen clams or ped; moisten with warm, rich, new milk, ard-
ing salt and pepper to tho tasto. This is nico for poultry and fish; for duck, gooso or wild
game of any kind, an onion chopped fine and game of any kind, an onion
and added is an improvement.
l'ressen Cucken.-Boil two chickens until droppink to pieces; piek meat of bones, taking
ont ath skin, etc.; chop pretty fiue; put back
into the kettlo with a little of the lig luor in which it is boiled; season with plenty of but ter, peppcr, salt, and a little sagc; put in ${ }^{2}$
dish and press with plate and weighit to be sliced when cold.

## PAC FIC RURAL exernessulis

 DEWEY \& CO., Publishers. 4. t. dewey. W. B. EWerThe strong man awakes from refreshing slum-
The trials he has undergone, and th depressing effect of labor diligently prosecuted but slightly rewarded, are all banished from his thonght by "uature's sweet restorer -sleep.
He awakes with strong arn, clear brain and confident heart, eager for the contest which shall yield him victory. As Tristann sang to
Isolt, le briugs "uew life to neet the newer the weakling from fitful slumbers, but with bound, as sprang the stalwart (ireeks upon the
Troian shores. His labor, thans welcomed to Trojan shores. His labor, thns welcomed to
his haml, is half accomplishell ere it is begun. Not otherwise is the revival of vigor in the
industrial heart aud haud of our commouweath since thc drenchiug storms have come. Whil the clonds were gathering in density we hardly
hoped to see, and the rains descending in nuacand lay iu peaeeful, glad contemplatiou of the generous gift of vivifingy water. Hemory re turued to former prosperous years. The hard
ship of the adjacent past was forgotten. Each
End day was wasting hope restored and waning
strength renewed. Now that the skies are clear gain, and earth shows at every turn of th plow the treasure that has been committed to
it, the general awakeuing of hope, streusth and it, the general awakeuing of hope, streugth and all fields of production, trade and manufacture are awake to the possibilities in their labor, and
the State presses forward to the realization of that prosperity which nuany declare will surpass
anything we have kuown before. anything we have kuown befor
It is sitt ting to remennlber, now that the conditions are so fair for gratifyiug suecess, that he
only will secure it whose effort and enteryrise re commensurate with his thought of prosper
ity. Indulging in words and dreams of success tyil not attain it. Wrapt contemplation of veneral prosperity will bring but sorry indioticidual hares. 11 e who trusts to absorbing fatnes from the general store, will gain little more thay the whater who idly sits unpon the blubbber,
while his comrales, with whetted knives, are delving deep. Pe, success never so general, it
rewards are bestowed upon those who labor fo Inds are bestowed upon those who labor for
In the field of prodnction, the truth of this general observation will shine more and mor
learly as the months progress. Alrealy it is clearly as the monthis progress. Already pushed their plowing and seeding while the
skies were clear for work, will reap a grand reward. Their lands lave stored all the rain which has falleu, and it will lee transformed a early work they have already seeded a wider
area than would have been possible had they area than would have heen possible hat the
waited for the assurance which they now cnjoy waited for the assurance which they now cnjoy
and to them will be credit due for whatever progress our yields of produce show. To th work which has becon thus well begau, there hich a prosperous yaar will bring into all hands, there will be a greater lemand for all the productions of the soil, and he who can tur will find the markets cager for his crops. II elieve the returniug promise and eonfidenc will resnlt in doubled activity iu all liues production. There is warrant for wise invest-
nent in implovel varieties of fruit, both in the orchard, the viueyard and the sinall fruit garden. There is surety for the expenditure
improved kiuds of seed for tield and garden crops. The outlook for tiner cattle and sheel
and swine was never better, and wo one should ail to gain the winning bloot, iu his stable, hi dairy, his herd and flock. The dry year has
swept away a race of "scrub" stock, which, we swept away a race of "scrub" stock, which, w
believe, the future will show we could we fford to lose, if all growers will now use cyer What has bcen lost can he replaced with much better, if all do what they can to secure this lesirable result.
It is a joyful task to contemplate prosperity, wis strong within him the powe effort. Such we feel part we tre just dent of making a more useful and generall successful agricultural newspaper this year than
last, as we are sure that the year itself will be last, as we are sure that the year itself will he
better. We play no laggard's part and all the better. Ne play be on our side. The impulse to
advantages will ber
ncreased and improved production will furnis us abundant material and enrich the writings of all our contributors. Thus our colunns will
catch and diseminate catch and disseminate a thousand progressive
ideas and practices, and at the same time enideas and practices, and at the same time en-
large the circle of our readers and hinit them large te circle of our readers and knit then
closer togetlier in the co-operative effort to anl closer togetier in the co-operative effort to anl-
vance each other in the forward march of California agriculture.
stock has doubled, and in teral. Already li pled its value for lireeding purposes. The feel notably increased, and the desirability of tha cultural investinent and development is now cleared from the clouds of drouth-dust which
lave been blown into the eyes of investors. deed, the year opens well. There is naught $t$ cloud the outlook save the sinart from a littl be speedily cauterizel, aud will no nore innued or advacucement than woutd a wart on the tail
of au elephaut.
Our state is
He goes forward.

##  <br>  <br> ${ }_{\text {San }}^{\text {Jana } 18}$ <br> 

NEW ADVERTISEMENTS


The Week.
Although it is evident from recurring rains that no present measurement of the rainfall
will be more than partial by the time it reaches the reader, still to show how general the blessing has been, aud how much more generou inches of rain, up to a given date at difterent
points. Our information is gained from our points. Our information is gained from our have given the amount received up to this date last year
Locality.

## The Climate of California

The following interesting paper was read at the last meeting of the California Academy o Seiences by Mr. B. B. Redding. The subject is o inportant and is treated with such skill aud thoroughness, that we give the paper in full. Mr. Redding has had exceptioual facilities for collecting statistics on the subject, and has uceu gathering data for this article for the past six months. The highly valuable information it contains is given in a condensed form, aud the paper affiords a better explanation of the ans governing the climate of Califormia thau ins beretofore appeared in print. The article worthy of careful perusal and preservation The temperature of the air, course of th ind, rain and snowfall, are taken daily at A. M., - P. M., ard 9 P. M., at $\$ 3$ statious of the entral Pazific and Southern Pacifie railroads and their branches, extendiug from San Francisco to Ogden, Lathrop to Fort Tuna, San
Francisco to soledad, Saeranento to Redding, sacraweuto to Willows, and Valle jo to Calistog and Petaluma The temperature of the wate is also taken at several points, including five
stations on the Sacramento and San Joaquiu

In addition to the observations made ly the United States signal service, the Coast Survey und those made at all the minititary posts, we thus stations on the Pacitic Coast, exteuding through cight degrees of latitude and 12 degrees of lougitude. These have beeu kept for the use of the companies, and fur the benefit of the people
residing in the vicinity of the various stations As eacls new station is reached in the construction of a rairroad, the agent is suppliel with
proper instruments, aud the record required to proper instruments, aud the record required to
be kept. On all the roads first constructed the be kept. On all the roads tirst constructed the On the new rual over the Colorallo desert from he San Bernardino mountains to Fort of course the record is only for the past year. even 50 stations for 10 years, makes an army of figures that it is almost appalling to attack; yet, wheu reduced, and the nean obtained, the results are of great importanee, not only to the
armer, but to every citizen. As an illustraarmer, but
ion of the
Financial Importance of these Records, That came withiu my personal observation: 869 some gentiemen made an investment truction of sheds over some lakes mider which to cut ice for the San Fraucisco market. They ound it impossible to erect any wooden structure suticiently wide for their purpose that
vould bear the weirht of snow that amually falls at that point. Their structures are in riiu, and every dollar put into the enteruris other than it gave at small army of men eni doyment in the erection of their buildings) is lost. Could the gentlemen have consulted these rocords they would have seeu that the annual verage rainfall at this poiut is more than 1 i soew, and is equal-if the snow that falls did not become compact or melt-to a bauk of suow on their lakes and the roofs of their buildings, ers who heve wade settlements on the west side of the san Joaquin river, and have tried unsuceessfully for years to raise crops mpon
them without artificial irrigation, could have seeu the results in the hari, unyieldiug facts these figures disclose, they would know that they hope in vaiu for rain, and also hope in de live in a section of the Ditate that is an exemplitication of the truth of the law, well stated by Guyot: "That when a mountain chain opposes a horizontal wind the air is forced up arogg the slopes; its vapors are conclensed, and
water the side exposed to tise wind, while on the opposite slope the same wind deseends into the valley dry and eloudless." The western
slope of the Mount Diallo range, in the latiFranciseo, receives about an aunual average of 20 inehes of rainfall. Alis, in the range, has but an anmual averare of 9 and 100 inches. Nodesto, a few miles further south, on the opposite side of the san Joaquin, has but $89.0-100$ inches. Still further south these averages eontinue to clecrease, unti1, on the
wcst side of Tulare lake, the annual raiufall west side of Tulare lake, the annual raiufali point has been kept for so short a period that plying to this section of the State the well-

Laws Controlling Climate.
It will be found in time that this cstimate is terest to coudense soine of the results of all these observations, as they show that considering the elenneuts of disturbance in the facts
that this siate lias on one side, the vast Pacitic ocean, presenting a uuiformly radiating vast tracts in the Colorado, Nohave vada deserts, presenting rapidly absorling and radiating surfaces. Yet California is coutrolled
by the same universal laws that coutrol climate laws and the applieation of them to the records
obtained of the temperature, prevailing wind,
$\mathfrak{j}$ and annual rainfall, it will be seen that until and allows the Gulf strean to pursue its way into the Pacitic, or some other great change takes place in the physical geography of the
earth, the climate of any given section of this State is not excepionat, but just such as these laws show it should be
Prof. Joseph Henry, in his "Coutributions up the

## Mystery of the Winds

And has stated these laws so concisely, that is a pleasure to quote from him. He says: he air cxpauded by the suu's heat at the equat tor would rise up and flow over, descending as where it would reach the earth's surface, and How back to the equator, and thus a perpetual circulation would be maintained. It is further evident that since the meridians of the earth converge, all the air that rose at the equator
would fow along the upper surface entirely to the poles, but the greater portion would pro$30^{\circ}$, for the surface of the sorth contaned be tween the parallel of this legrec the tor is equal to that of half of the whole hemis. phere. Portions, however, in the northern
hemisphere would flow ou to descend at different points further zorth; and of these portions some probally would reach the pole, and there siuk the smface of the earth, and from that poiut diverge in all direetions iu the form of a currents near the equator there would he region of calms or variable wind The rents which over towards the poles, woul descend with the greatest velocity at the cold est point, hecause there, the air would be deusest. Now, the earth is iu rapid motiou or is axis from west to east, and every particle of equator, would partake of the motion of the place at which it started, and would reach in suecession lines of atitude moring more rap-
idly than itself. It would therefore lag behind coutinually and appear to describe on the surface of the earth a slightly cur the northeast trales iu the northern hemisphere and the southeast trades in the south ern hemisphere-where the conditious are reversed, but both blowing towards the belt o greatest rarification. The particles of air approaching the equator will not ascend in a per-
penicular direction, but will rise continually as they advance to wards the west along an ascend iug plane, and will contiuue for a tine thei After they have commenced their return to wards the north, and until they arrive at parts of the earth moving more rapidly than themselves, they will gradually curve towards the east, and mally descend earthward to become again a part of the surface trade-winds from the northeast. The atoms will move westward as they ascend; 1st., on account of the momentum a higher elevation they will have less easterly velocity than the earth beneath. They will also be affected by another force, lirst pointed out by Mr. Ferrell, due to the increase of gravity eling in a direction opposite of that of the ro tation of the earth. The last mentioned cause of ceflection will operate in an opposite direc tion on atoms when they assume an easterly under which the motive power acts in such under which the mo cuits inclined to the west, the eastern portion of which would be at the surface, and the west保 go the earth within $30^{\circ}$ of the equator, giving rise to the trade winds; another portion would flow further north, and produce the southil fot winds, and ould descend to the earth as a worthwest wind The air which descends in the region of the north pole would not flow directly southward, but on account of the rotation of the earth easterly current. It might appear at first sight that the uorth wind which descends from the polar regions would continue its coursc along the surface until it joined the trade-vinds within the tropics; but this could not be the ease on aceount of the much greater western rapidly inereasing rotary motion as we leave the pole. There would herefore be three disbelt of easterly winds within the tropics, the belt of westerly within the temperate zone, aud the belt of northwesterly at the north uniformly if the earth were a perfect operate sphere with a uniformly radiating and absorbing surface, but it is broken by urountain chains, absorb and as rapidly radiate heat: about threefourths of its surface is water, which stowly abforbs and as slowly gives up its heat; the water curre cean is in circuration producing great tion of the heat of the tropics into northern, latitudes, aud the cold of the north into warm-
cr latitudes. All of these eauses interrupt the er latitules. All

Flow of the Aerial Current
Changes its temperature, and give rise, as well
as direetion to local winds. The zones of trop-
ical winds move bodily to and fro with the verical winds move bodily to and fro with the ver-
tical sun, northward during our summer, and
southward luring our winter: southward luring our winter; the belts o
westerly winds in the temperate zone mov north and south with these. As California
within the northern temperate zone, it is prisouth, of this belt of wind, that we are in debted for our dry summers and winter rains,
where, within the tropics, the northeastern and sout calms and rains. This belt of calms and rains, as has been stated, moves northward and south ward with the sulls declination, where within
the temperate zone the northern and northwesterly winds from the polar regions meet the westerly return trade-winds, is a region of
stormis and rains. These belts also follow the sun's declination north and south.

## Applying these Laws to this Coast.

At our midsummer, the vertical sun would be the northeasterly and southeasterly trade winds would meet, create ascending air, consequently calms; this air, laden with moisture, would rise into cooler regions, when a portion of its
moisture would be precipitated, making tropitowards the poles. Confining our view to that portion which would flow towards the north pole, the larger part of it must descend to the
earth within $30^{\circ}$ of latitude, under the law as stated by Prof. Henry; as in going north it continually has to pass over a portion of the earth
which is moving less rapidly than the portion it which is moving less rapidly than the portion it
has lett, it is deflected aud becomes a southwest wind. The greater portion of this upper current, having descended to the earth within
$30^{\circ}$, and returned to join the trade-wind, the $30^{\circ}$ and returned to join the trade-wind, the descending in its course at all points where the rarification of the air liear the earth's surface would permit. These descending currents cause
the local variable winds of our temperate zone, but the aggregate of all of thenn is the prevail-
ing south west return trade wind. The descending currents cannot give rain, as they can only
fall to the earth when they become colder than the air near the earth's surface. In falling they are constantly arriving at places of warmer
temperature than those they have left; they, therefore, change to a condition of taking up
moisture rather than of parting with it. Where moisture rather than of parting with it. Where wind reaches the earth letween latitudes 28
and $35^{\circ}$ must therefore on this coast be comparatively a rainless region.
Other lessening portions of the upper current northerly wind from the polar regions, when northery wind from perature would be lowered and their moisture condensed, and fall as rain. The con-
flict of this descending current with the polar wind would create storns and give rise to electrical phenomena. The prevailing northerly polar wind reaches to about latitude $60^{\circ}$ varie,
by the declination of the sun. This view of by the declination of the sun. This view of
the causes of the tropical, temperate and polar ones of prevailing winds, is in accordance with
the theoretical deductions of Prof. Ferrell concerning the course of atmospheric currents moving on a sphere, and appears to be confirmed by icinities of the equator, and of latitude $60^{\circ}$. The polar wind being colder is heavier than the return trade-wind, and where they meet the tendency is for this polar wind to become a
surface wind and prevent the upper current surface wind and prevent the upper current
from reaching the earth, until it has been reduced to the same temperature.
The operation of these gener

More Clearly Seen on this Coast Than on that of the Atlantic and Gulf States, There, the northeast trade-winds are forced into
the great cauldron of the Gulf of Mexico. The ordilleras of Central America and Mexico form a wall against their progress, they rise, curth as an uper current, and return to he earth as southwest winds. The Rocky
nountains, one great chain of which extends moun ains, one great chantinent northweeterly
from the center of the co
to the Arctic ocean, assisting in the deflection. The great prairies extend in an unbroken line in the same direction from the mouth of the Mis-
sissippi to the same frozen ocean at the mouth of Mackenzie river in about latitucle $62^{\circ}$ Prof. Geography of the Mississippi Valley," states 1,600 feet above the ocean. Prof. Coffin has
shown from the records in the Smithsonian Institute, in his article on the "Winds of the
Northern Henisphere," that between latitudes $60^{\circ}$ and $66^{\circ}$ there prevails a belt of easterly and ho Arctic ocean meet the great claing of the
Rocky mountains, westerly winds and pass unobstructed along this great stretch of prairie land into the States bctween the Rocky momutains. The contlict
noisture-laden southwest polar wind wids, and the moisture-laden southwest wind wrom the the fif
of Mexico gives
of Flowida as 1850 Prof. Espy, in his second rap rat on
metenrology to the Secretary of the Navy, with cause, reportcd, as the result of a long series
of observations, that in the northern part of the
Atlautic States that ind storms set in from the north of east and ter
minated from north of west, and in the south
ern part of the Atlantic States they set in from
south of east and terminate from south of The States east of the Rocky mountains are the great battle ground on this continent of
these hot and cold winds. It is doubtful if the Atlantic trade-winds ever give rain to Califor hrout That portion which passes the mountain tating its moisture on the White mountains and Black hills of Arizoua, which, by the meteorological records of the Smithsonian Institute,
are shown to lave an annual average of 20 inches of rain.
Application of These Laws to California.
That these general laws may be applied ti assume to as the cause of our climate, I will assume to follow a given portion of air along
well-known points on the coast. At midsumner at noon, the sun would be vertical in southern
California, just rorth of Cape St. Lucas. In this vicinit vicinity this portion of air having been a part
of the trade-wind would have become heated, and saturated with moisture. It would rise
until it met colder regions, when it would part with some of its moisture; a portion would re turn to the earth within 30 , again to join the
trade-wind, and another portion return towards trade-wind, and as a part of the greater upper current. the greater part must return to the earth beremainder would flow on towards the poles, until it met the prevailing polar nor hiwesterly
winds; at these points there would be fogs summer rains. Wherever the polar wind forced
its way south of this, it would condense the moisture of these descending trade-winds and
give rain. This they would do until they had give rain. This they would do until they hald
passed so far south that their temperature would be raised to that of the descending return trades,
when, of course, no moisture conld be precipiwhen, of course, no moisture conla be precip1-
tated. It is these polar winds, forcing them-
selves among the descending trade-winds, that selves amning the descending trale-winds, that
give British Columbia, Washington Territory Should they force themselves further sonth, they in their passage have to pass into warmer
latitudes; they would also meet the heat of great valleys and deserts, and become as warm
as our prevailing summer wind, and therefore could not give California summer rains.
But from midsummer, the sun is for six munths moving south, takiing with him the
great belts of the winds of the tropical, temperate and polar zones, until, at our midwinter, his
rays at noon are vertical just north of the northern part of Chile in sonth America. These belts moving south with the sun during six
months, the region of conflict between the polar wind and the variable winds, which in summer ritory and Oregon, has now, moved south over
Oregon and the northern and middle parts California. The tempcrature of the eartl's surface, and the air in contact with it, have been
lowered by the withdrawal of the sun's more lowered by the withdrawa or the sun's more
direct rays, and the polar winds are permited
to reach further to the south without increasing their temperature. The region of calms and
the sonthern limit of the varialle winds have, the sonthern limit of the variable winds hav,
of course also movel south with the suin of course, also moved south. with the sun,
beyond the Tropic of Cancer. At this season,
in the Pacific, the trade-wind is not usally found north of latitude $13^{\circ}$. When in winter the descending returin trade-wind, coming from the sonthwest, meets the coast sonth1 of Cape
St. Louis, it is foreed by the Cordilleras and the
contiguraion of the main configuration of the main eoast into the Gilf of
California, and is defected into a course from the sontheast, or, to be more cxact, as shown by
the records kept by Dr. Gibbons, into a courso the records kept by Dr. Giblons, into a course
from the south southeast. Without doukt, the southwest trade-wind, which strikes the coast
of Lower California in winter north of Cape St. of Lower California in winter north of Cape St.
Lucas, is deflected by the high mountains parLucas, is detlected by the high mountains par-
allel to the shore, and also passes over our coast
counties as a southeast wind. H. L. Warner, in a paper read before the American AssociaBaltimore meeting in 1858, was the first to note nia supply the moisture to the southeast wind that bears to us our rains. It may be objected
that the Gulf of California has not sufficient that the Gulf of California has not sunticient
area from whence could be delivered the great volume of southeast winds that at times, during our winters, flows over this State. The Gulf is
not the canse of this wind, but it is the channel through which it flows and gives to it direetion. When the sun is vertical on the coast of Bolivia, just north of Chile, at our midwinter, he has
carricd south with him the nortleast tradewinds, until, as has been stated, they do not of calms, where the great body of the upper current returns to the earth again to join the
trade-winds, is at this season between latitudes trade-winds, is at this season between latitudes
$13^{\circ}$ and $18^{\circ}$. North of this region of calns, at this time, those portions of the upper current
which pass further north descend to the earth, under Prof. Henry's law, as sonthwest winds.
At latitude $20^{\circ}$, the west coast of Mexico proAt latitude $20^{\circ}$, the west coast of Mexico prothe trend of the coast for nearly 2,000 miles is for more than 100 miles to Mazatlan is north. fornia, a further distance of 600 miles, it is
north-northwest. The Sonora arm of the Cordilleras rises above the table land of Mexico at
latitude $20^{\circ}$, and runs north northwest along the coast
fornia.

All of these southwes
Winds that Strike the Coast, From Cape Corrientes north to Cape St. Lucas, the gulf as south-southeast winds. The United States Coast Survey have latcly completed the
survey of this gulf and parts of the Mexican survey of this gulf and parts of the Mexican
coast, north of Cape Corrientes. When their ecord of observations of the course of the prevailing winds in winter, the barometric pressure published, I feel confident that it will be found that the south west return trades prevail in by the mountains and the coast up the Gulf of California, and so over this State as our southeast winds. It comes from this gulf warm and
laden with noisture and passes over the Cololrado and Mohave deserts. These deserts, as shown by the metcorological records of the
Smithsonian Institute, have a mean winter emperature of from $48^{\circ}$ to $56^{\circ}$. This is not it passes on until it meets the moisture and and Coast Range mountains. In ascending winter temperature of $40^{\circ}$ and gives up some of its moisture. When it flows down into the southern end of the great valley of the Tulare, meets a mean winter temperature of $48^{\circ}$, has just passed. It therefore retains its mois-
ture and passes on, until it meets a cold polar wind and has another portion of its moisture this, passing still further north, until its mois ture is condensed by the prevailing low temper
ature of a higher latitude. It is of frequent wind will blow for days, giving no rain south of weather at the northern end of the Sacrament valley and light showers and rains from Red Bluffs to Oregon. Therefore the norther part
of the State should receive more rain than the southern and the mountains more than th valleys. The least rain should be in the hot
deserts and on those sides of valleys most sheltered by mountains from the moisture bearing winds. The first proposition that the
northern part of the State should receive more northern part of the state should receive more
rain than the southern, appears to be confirines rain than the sontherri, appears
by the following exhibit of the
Rainfall in the Sacramento, San Joaquin and These, in fact, constitnte one great valley,
All of it has the Sierra Nevada on the east and the Coast lange mountains on the west. A
line drawn through its center, in the line of the rain-bearing wind, south-southeast from Fort
Reading to Sumner, would at all points be about an equal distance from the ocean and also
an equal distance from the Nevadia desert. All the stations relatively to their surroundings ar therefore similarly situated and general law
have full operation free from local disturbance Commencing at the north end of the valley, the Rainfall at North End of Valley of California

Mountains have More Rain than Valleys
The second pronosition, that the mountain homld receive more rain than the valleys, 1 have been selected successive stations on a lin
nearly as possible cast from San Francisc as nearly as possible cast from on precipitation thereby avoning any inerease of precipitation
duc to increase of latitude. The law, as stated by (inyot, deduced from experiment and obser cient to diminish the mean temperature of a given place by $1^{\circ}$ of Fahrcnheit; that is to say,
the cffect is the same as if the place were situated 70 miles further north.
Commencing near the centcr of the Sacra-
mento valley, at the lowest elcvation above the sea, the following results are shown:
Center of Sacramento Valley

is confir
stations.
Commencing s outh and proceeding north, the following statement is shown


## The Great Deserts.

Forts Yuma and Mohave, on the Colorado and Mohave deserts, are in the zone where the great
body of the descending southwest return trate boiy of the descending southwe st return trade-
winds reach the earth. It has been shown that these descending currents cannot give rain, as, in falling, they continuously arrive at regions of zone, on buth sides of the equator, that almost and prieat deserts of the earth are situated, and primariy to this cause is their existence
due. The Mohave and Colorado deserts are in the same latitudes north of the equator as the
deserts of Sahara and Arabia. The great desert. deserts of Sahara and Arabia. The great desert
of the interior of Australia is in the same latitude south of the eqnator as the desert of AtaThe stations of War
The stations of Wadsworth, Hot Springs and the region of variable winds, and are made deslast proposition, that less rain should fall on the opposite side of mountains to that exposed to the moisture-bearing winds.

Rainfall on Mountain Sides.
For further illustration of the proposition: ${ }^{1}$
have selected stations in different parts of this tate and Nevada. Fort Tejon, latitude $34^{\circ}$ $53^{\prime}$ north; latitude, $118^{\circ} 53^{\prime}$ west, on the south
side of the Tehachapi mountains, were the side of the Tehachapi mountains, were the
Sierra Nevada and Coast range unite, forming a vall against the southeast wind, has an elevation of 3,240 feet. From a record of five years, it
has an annual mean of 19.53 inches of rain. has an annual mean of 19.53 inches of rain.
Caliente, a station of the Southern Pacific railroad 30 miles northeast, elevation 1,290 feet upon the north side of this range, from a record inches; and Sumner, 31 miles north of Tejon,
with an elevation of 415 feet, receives but 3.92 inches The Tehachapi mountains precipitate some of the moisture from the southeast winds and under the law as stated by Guyot, they de-
and
scend into the valley dry and cloudless. The scend into the valley dry and cloudless. The
Summit of Mount Diablo-elevation 3,856 feet -from a record of two years, receives an annual inean of 20.85 inches. Livermore-in one
of its valleys-elevation 485 feet, from a record of its valleys-elevation 485 feet, from a record
of six years, las an annual mean of 13.28
inches; while Ellis, at its northeastern base, with an elevation of 76 feet, from a record of six years, receives but an annual mean of 9.22 inches. Benicia, at its northwestern base, elevation 64 feet, from a record of 13 years, re-
ceives an annual mean of 13.7 inches. This increase at Benicia slows an interference with the indraft of air into San Pablo bay from the
Bay of San Francisco through the narrow channel, on the bank of which Benicia is situated. Gen. Mycr, Chief of the Signal Service, in his
circular on the practical use of meteorological
reports, says: "That wind which in the ocean reports, says: "That wind which in the ocean
would blow with a certain velocity will have but one-half or one-third of that velocity, when
blowing over a hilly country." While Diablo robs Benieia of its rain, it is, in part, compen-
sated from the currents of moisture-laden air that flow up the Straits of Carquincz, in consequence of mecting with less resistence. The
Summit of the Sierra Nevala where it is crossed by the railroad, as has been shown, receives an
annual inean of 58.48 incles. Boca, 13 miles northeast in an air-line, but 1,484 feet below,
on the eastern Hank, for the same number of on the eastern Hank, for the same number of
years, receives but an annual mean of 14.58 inches; and lieno, 31 miles in anair-line in the
same direction, and 1,510 feet below the summit, and nearer the eastern base of this range of mountains, receives for the samc time but an stations, one on each side of the Sierra Nevada, whose elevations above the sca are ncarly the same-Alta, on the southwestern siche, and
Brown's on the northeastern. The first has an elevation above the sea of 3,612 fcet, the latter of 3,925 feet. Alta recoived during a record of
seven years an annual mean of 47.32 inclics, and seven years an annual mean of 4.32 incl.
Brown's for the same period 3.53 inches.

Moisture-Bearing Winds.
Dr. Henry Giblons has slown from his daily
record of the climate of San Francisco, that record of the climate of San Francisco, that whatever coursc the wind may have near the
surface of the earth at this phace, the upper currents of air, whenever their elouds could be records of the station at the summit of the
Sierra show the same fact. 1 is not not unfe-
quent that the sueramento valley is filled with quent that the sucramento
a soltheast wind, it may bo giving rain, while
cloud bearing southwest wind is liowing at the summit. When this southeast wind becomes a storin, , it lows ip the canyons, ravines, and joins this upper current, for the general
conrse of all the ravines and river courses of the serra is from the northeast tuids, takes the
west, and the wind, like other fluid
course of least resistance. It is believed that Continued on page 60.

## Bremerrs' Directory. $^{\text {a }}$





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A MAILLIARD, San Refarel, Matrin
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 suithe ranch is a large quantity or
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 desirred eieighborhood is as goxtl as could be desired, only
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ions as required ly applibants. The hand being alluvial, well adapted to any purpose of farming or fruit raising. Special Terms will be made for Irrigation. Every portion of the land can be irrigated from the
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of years, their FAlkM, with stock, machinery, implements, tensils, etc., complete, to carry it on, situated on Alder The Complany's fruit-idrying estal) ishments, being now
finshed, the Compruy is now prepared to buy all the finished, the company is now prepared to buy all the
Veeretables, rrnits etc., that can beraised by their tuants.
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 way and nine miles from kingston, county seat of Fresno cointy: I'rice, 15 per aere. For further particulans, DAVID. S. ORR, Riverdale, Fresno County, Cal.

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If tools. Ranch beantifnlly situated, about two miles
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MUSICAL BOXES

The RANDALL PULVERIZING HARROW.


Continued from page 57.
an early fall of suow in the Sierra increases the
rainall in the Sacramento valley. There is rainfall in the sacramento valley. There is
not yet sufficient data to hazard a positive conchusion ou the sulbject. All the moisture-bearing winds pass from the valley over this snow into
the great basin of Nevald, therefore, an early the grcat basin of Nerad,
fall of snow storing up a cold temperature would probably iucrease the subsequent fall on the
Sierra. If it shall be found to increase the rainsierra. If it shall be found to increase the rainthe fact, that the belt of sulow is a store-house
of cold, loweriug the temperature of the adjaof cold, loweriug the temperature of the adja
cent air, which, by incrase of weight, flows down int the valley and lowers the temperature
the air at the lowest places in the valley. Tuthe air at the lowest pacese, nulare lake, which i
lane, lear the of
the lowest point of that portion of the valley the lowest poing or feet above the sea), is at the
(the town being 2 en
base of the highest mountains in California. The base of thc highest mountains in California. The
cold air towing down fronn these mountains re duce its winter tcmperature (December, January
and February) to a mean of $45.5 \mathbf{T}^{2}$, white Auand February) to a mean of 45.57 , white Au-
burn, 158 miles further uorth, and with 1,057 fee greater elevation, situated on the long spur jut
ting into the valley which the railroail climbs to eross the mountains, for the same mouths, has a mean tempcrature of 46.70 , the mean of the
wiuter at Tulare being more thau one degree colder than at Auburn. Chico, 206 miles north
of Tulare, and eighty-nine feet less in elevation, of Tulare, and eighty-nine feet less in elevation,
has a winter climate one and a quarter degrees warmer than Tulare, its mean winter tempera
ture being $46.52^{\circ}$. If it were not for the cold air from the mountains flowing to the lowest places in the valley,
'Iulare would be entitled to a winter tempera ture of $\overline{3}^{\circ}{ }^{\circ}$ warmer than that of Auburn, two being due to decrease in latitude, and three The coast counties are controlled by the same general laws that govern other parts of the
State. There is more rain north than south, more on the hills than in the valleys, more on the soutli side of the hills than on their norththe occan gives them a more even temperature than in the interior, making then cooler in coast to the sumnits of the Coast range of
mountaius, they are also subject to the

Influence of the Japan Gulf Stream.
This stream, according to Prof. Davidson, i imum temperature of $5 S^{\circ}$ sweeps across the Pa cific and about latitude $45^{-3}$ to $50^{\circ}$ in longitude rectly towards the coast of America, is deflected southward and eastward and runs down the
coast of Oregon and California. A branch of this current contiuues direct to the Alexande archipelago, and striking the southern part of ward. Th the causes the high isothermal lines that exist di
rectly on the Alaska coast." The temperature of this Alaska branch, as observed by him in decreasing irrcgularly. The prevailing westgulf stream take from it moisture which is condensed iuto fog and precipitated in rain upon the coast, when they ineet its gracial monntaius
and the cold air and water flowing down from them. The influence of this current in producing summer rains extends as far south as the the Smithsoniau Institute showing that, at the mouth of this river, there is a mean for the summer of six inches of rain, and an anuual "Alaska Coast lilot" from a record kept from 1847 to 1854 and from 1855 to 1864 , the annual
means is 82.66 inches. For the purpose of means is 82.66
ascertaining the

## Effect on our Climate

Of that branch of this gulf streann where it passes down our coast, 1 procured from Cipt. Francisco and Jokohama. These voyages
were betwcen November 16 th, $18 \% 5$, aud De cember 26 th, $15 \% 6$. From these 1 have 1 ered the temperature of the air and water taken at noon for a distance of 900 miles west from
San Francisco, and the temperature of the water for the same distance east from Yokohama.
lokohama aml San Francisco being very nearly in the same latitude. These distances were se10 markel increase or decrease in temperatur either near san Francisco or Yokohana until also been gathered the temperatnre of the watcr in mid-occan between these two ports; one
series for each munth at about latitucle 42 and longitude $150^{\circ}$; and oue series for each month
at about latitude $32^{\prime}$, and longitude $150^{\circ}$. at about latitude $3: 2$ ', and longitude $150^{\circ}$
'The steaners coming from Yokohama to Nan
Francisco usually gong uorth to $\$ 2^{\prime}$, and the steamer from Sin Francisco to Vokohama go-
ing south to $32^{\circ}$. The mean temperature of ing south to $32^{\circ}$. The mean temperature of
the water for a distance of 900 niles east of
fokohama for the year was 65.41 . The mean Yokohama for the year was 65.40 . The mean
of the warmest temperature of the water for
the year, was 6 ( $i \overline{3} .10^{\circ}$. The mean of the coldest the year, was (is. 16 . The mean of the coldest
was $10.30^{\circ}$. The warmest on any day was was 60.37 .
Septenber 7 th, $1876-704$ miles east of loko-
hana, when it was 84 . The collest was Janwas $49^{\circ}$. The meaus of the air and water, for
each month, for a year for a distance of 900 was 49. The meaus of the air and water, for
each inonth, for a year for a distance of 900
miles west of San Francisco, are, as follows:

Temperature of Pacific Gulf Stream

The mean of the highest temperature
ater which is between 600 and soo milcs west Then Francisco for the year, is 60.33 The mean of the lowest which is within 100
miles west of San Francisco for the year is The warmest water on any day was May 3d, was 692. The coldest April $24 \mathrm{th}, 18 \mathbf{i}^{\prime} 6$, in the same vicimity, when it was 4 .
The mean teluperature of the water in midstean for each month, exceptiug July, when the
steaner followed the northern route, was as

| Month. | Latitude about 3 ? Lomi. about Jise | Latitute about has <br> Lomy. "brut $1 \mathrm{sin} 0^{\circ}$ |
| :---: | :---: | :---: |
| January.. | .54 | $44.75^{\circ}$ |
| Februar: | 5s $5 \times 25^{5}$ | ${ }_{\text {c }}^{4.3 .755^{\circ}}$ |
| Marcli | 55, 5 | 43.7 |
| May. | ${ }_{\text {E3 }}$ |  |
| June | ${ }_{61}{ }^{\circ}$ | $44.75^{\circ}$ |
| uyux |  | $55_{5}^{5} .25^{\circ}$ |
| ptember | $6^{67} 2.25$ |  |
| ober |  | ${ }_{50.755^{\circ}}$ |
| December | $55.50^{\circ}$ | 51.5 |
| Mean for | 60.5 | 48. |

The collest water in mid-suminer in latitude
2, wat found Mlarch 17 tho and 18th, 1576 , The cordest 1576 , it was $60^{\circ}$.
The corlest at latitude $33^{20}$ was January 29th, 1876 , when it was $52^{\circ}$, aud the warmest August
$66^{\text {th }}$ and 17 th, 1576 , when it was $70^{\circ}$. From these figures we find that this gulf
tream, from the tine it leaves the equatorial regious until it reaches east of Yokahama, has parten with its heat uutil it is relluueed to a
nuan fur the year of $6 \overline{3} .40$ Traveling to the
northeast, crossing the northeast, crossing the lacifie and turning south aloug our coast, it has eontinued to part
with more heat until when opposite san Francisco, and for a distance of 900 miles, it is re-
ducel to a mean for the year of $\overline{\mathrm{s}} .04^{\circ}$ a dif. ference of $7.06{ }^{\circ}$.
Production of Fogs.
That part of the orcan from which comes our southwcst winds beyond this gulf strean, has
meau temperature for the year of $60.52^{2}$. find that the temperature of the air on this part of the lacitic, rarely varies more than $3{ }^{3}$ from
the temperature of the water over which it is the temperature of the water over which it is
passing. The gulf stream, opplusite San Fran-
cisco water at latitule $32^{\circ}$, lougitude $150^{\circ}$ for the
same time. This difierence, if uniform, would harely create fogs, but it is not uniform. It
frequently happens that the water and air outfrequently happens that the water and air out-
side this gulf stream are warmed to 65 or few degrees higher; the moisture in this air passing over our gulf strean when it is $55^{\circ}$ or
lower, is condensed, and produces the fogs that bathe the sides of the hills west of the summits, of the Coast mountains. If these fogs pass the
summit they meet the heat of the valleys and summit they incet the heat of the ralleys and
are dissipated. It is evident that this gulf
stream where it passes the eoast of Alaska, British Columbia and Washington Territory is very much warmer than the water of the surrounding ocean. The moisture in the air pass-
ing over it is condensel, not only into fogs, lut heavy rains. As this gulf stream cones south, it is constantly arriving at a part of the ocean Where the tenperature more neary approxi-
mates that which it holds. Opposite San Franmates that which it holws. opposite San Fran-
cisco, as has been shown, it is colder than the surrounding ocean. At some varying point north of Sin Francisco, its tempcrature must
be the same as the ocean, and therefore, in that region, fogy cannot be so prevalent. If the va.
riation of temperature between the gulf strean passing this coast and the surrounding ocean Were greater, we should have rains, in addition to fogs, irom the westerly winds; as it is, this
fulf stream exercises a marked intluence on those portions of the coant counties lying west tains.

The Rainfall is More on the Coast
Than in the Sacramento and San Joaruiu valleys

## has selected a series of statio coast south from Nan Farucisco.

## 

San Mateo and Modesto are nearly in the same
atitude. Modesto Inches of rain, while san Mateo has 15.74 . San Wose and Nereed are in the same latitude; the
former has 10.24 inches, the latier 9.36 inches As we go further south the discrepancy between the coast and interior valleys is still more
marked. Soledad and Tulare have the same marked. Soledad and Tulare have the same

Tulare, 4.83 inches. In addition, on the coast, fogs and increased cloudy weather supplement
the rain and prevent insolation. Ten or twelve the rain and prevent insolation. Ten or twelve
annual inches of rain produce crops of cereals annual aches of the produce crops of cereals Joaquin valley, unless very favorably distributed, would result in failure.

The same rule appears to apply Humboldt,
on the coast, in latitude $40^{\circ} 45^{\prime}$, longitude l24 10 , elevation above the sea of 50 feet, from a reeord of 11 years, receives au annual mean of
35.92 inches. Fort Joncs, in the interior, latitude $41^{\circ} 36^{\prime}$, longitudc $122^{\circ} 52^{\prime}$, and with an in creascd clovation or, , 20 , 10 five years, receives but au annual mean of the to the fact that Fort Jones lies north of Mount the town and sod range of south-southeast of Fort Jones, among the foothills, at the south ern base of Mount Shasta, laving an elevation of 558 feet above the sea, from a record of two
years, reccives an annual mean of 42.08 inches. years, reccives an annual mean of 42.08 inches.
I'etaluma, near the coast, from a record of six years, receives 21.50 inches. Sacramento, in the center of the sacramento valley, with a hat-
itude 24 miles north of Petahma, 15.75 inches.

> Influence of the Deserts.

In addition to the effects due to latitude, to the Pacific ocean and its Japan githf stream, ified by the Colorado, Nohave and Nevada deserts, lying south and east of this State. These ating heat on the south and east; the gulf stream giving up, ids heat on the northwest, to-
gether combine to send the isothermal lines nearly as far north as they are in the western part of Europe. Redding, at the northern end of the Sacramento valley, latitude $40^{\circ} 10^{\prime}$, long. itude $122^{\circ} 22$, elevation $655^{\circ}$ feet, has a mean grees as warm as Charleston, South Carolina, according to Blodgett's "Climatolocy," a mean of $66.6^{\circ}$. Iled Bruff, latitude $40^{\circ} 3.3$ ', longitude $122^{5}$, elevation 307 fcct , has an annual mean temperature of 66.22 , the same as Charleston. ture of $62.46^{\circ}$, but four degrees less than Charleston. Coming south through the center of the Sacramcnto valley, from Redding on the mean temperatures of the various specessive sta. tions show the effect of the radiation of heat in this valley and the influence of the wind from the cool gulf strean where it flows through the Golden Gate and up the Sacramento river.

The following is the incan annual temperature

## Redding. Red Bluff. Chico....

Marysiile.
saramento
Stockton.

## .64. $14^{\circ}$ Modesto $.66 .22^{\circ}$ Merced $.6241^{\circ}$ Borden. $.63 .62^{\circ}$ Tulare. $60.43^{\circ}$ Delano.

It will be seen that (for the year), Sacramento is the coolest place in the valley, the temperature ncreasing both north and south from this point The breeze from the ocean in sumach 5 P . perature. It may bc from the same influence that its rainfall is increased above the next stations worth and south. The reduction of temperature at Sacramento by the air from the the Sacramento river, was noted and commented on by Rev. J. H. C. Bonte, in a paper read before the Agassiz Institute, in July, 1576 , on the northerly winds of the grcat central valley o virulent and desiccating in the extreme north and the extreme south ends of the valley, the atmosphere from the Golden Gate and the bays seem to modify the wind ordinarily in the center of the valley." The tables of temperature confirm his inference. 'Iulare is four degrees cooler
for the year than the next station south, aud two for the year than the next station south, aud two
degrees cooler than the next station north, which degrees cooler than the next station north, which
may be referred to the intluence of the cold air may be referred to the influence of the lase it is situated, and to the evaporation from Tulare
ake.
Another effect of these deserts is to create

## Daily Sea-Breeze

From the southwest return trade winds that prevail on the coast as surface winds duriug the summer months. Each clay, after the sun rises inerease the temperature of the air over their surface; this air rises, and as the whole current rushes in to fill the vacancy. A gentle southwest wind may be blowing on the coast at night or in the morning; by clevcu or felt in the Ne vada desert; the gentle breeze has increased to brisk wind and continues until evening after the setting sum has withurawn his rays and the gentle southwest wind resmmes its sway mini high wind is ayain repeated. Dr. Gibbons (in an article on the climate of san Francisco in ever may be direction of the wind in the forenoon, in the spriug, sumner and autumn months,
it almost invarially works round towards the West in the afternom. So constant is this phe-
nomenom, that in the seven months, from April to October exclusive, there were but three days in which it missed, and these three days were
all rainy with the wind from the south or south
southwest." He adds, "I cannot discover that in any other place on the globe, the wind blows octant only six days in the year.
The mean summer temperature (June, July and August), at Wadsworth and Brown's Sta Central Pacifie Railroad, from 1872 to 1877 was for Wadsworth S0.33, and for Brown's, $18.05^{\circ}$. from a record of six years, was $92.59^{\circ}$, and at $92.07^{\circ}$. Lieut. Wheeler, in his report of 1876 , of the survey west of the looth meridian, gives the as $93.06^{\circ}$. Fort Iuma is about 500 miles south south-east from Wadsworth. The country inter vening is entirely desert. The indraft of west erly winds from the Pacific in summer does no appear to be alone sumicient to satisfy the de mands of the heat of these great cleserts. Lieut. "southeast winds are in the sumurer are by far the most prevalent easily observed that th He adds, "It is also easily observed that the clouds and summer rains appear that the deserts create an indraft from the Gulf of California, as well as from the Pacific
I have shown that we are in the latitudes of位 southwest return trades, and that thei Effects of by the
Effects of the Radiation of Heat
From the deserts on our eastern borders. The contiguration of the immediate coast near San Reyes, and the open Golden Gatc cause an in creased quantity of this daily sea breeze to pass accompanying coming directly from ane the cool Japan gulf stream, so lowers the sum mer temperature of this city, that, as have been shown by Dr. Gibbons and by the records of place in the whole territory of the United States, of the same elevation, that has so low a summer temperature; the mean summer temperature of
the Golden Gate being $56^{\circ}$. Another cause affecting the climate of CaliGuyot, is in the fact that the Sierra Nevala and Cascade mountains reach the coast of Alaska, and bend like a great arm around its western and southern shore, thus shutting off or deflect ing the polar winds that othcrwise would flow winds that reach this State are usually from raisel by passing over the Japan gulf strear, raised by passing over the Japan gulf stream,
before that gulf stream has been reduced to the t
It has been shown that this
Northwest Warm Wind.
precipitates the moisture by becoming reduced in temperature where it meets the coast o ritory. It passes inlaud, following the Cascade mountains where they leave the coast. As it comes south it is heater by comine into warme latitudes, its capacity to take up moisture is
increased, but it finds none in its course. The Cascades, which are a continuation of the Sierra Nevada, direct it into the Sacramento valley, where it meets still greater heat, which the
more increases its capacity for moisture. It more increases its capacity for moisture. It
therefore possesses all the desicating qualities therefore possesses all the desiccating qualities
for which it has become famous, and which are well described by Rev. Mr. Bonte in his articl on the subject, to which I have referred. 0 course its influence as a desiceating wind is
only felt in the interior, away from the influence of the oeean.

Value of Systematic Observations.
The forcgoing are some of the principal causes that give to this portion of the Pacific coast its rainfall, temperature, and conrse of the wind in localities, can be ascertained by a series of loca and general obscrvations lasting for a sutficient period to warrant conclusions from the mean densed, would be of value to the farmer, to the merchant, and, in fact, add to the prosperity of every inhalitant of the State. They would also be a contribution to science that would tend to the increase and sprear of knowledge and recorded for a tritling expense. Fiverywhere iu the sla.e where there ale people there are schools and teachers of nore than the average
of intelligence. If the Legislature were to pass throughout the year, it should be provided with a rain that the teacher should note and record at three of the atmosphere, the temperature of the air, and the course and force of the wind, and re-
port these monthly to the County superintend cnt, to be by him transmitted to the meteoro logical department of the University, there
would, iu a few years, alnost without expense accumulate a mass, of local information that
would be invaluable. If this were donc, and also made uuiversal throughout the United

The Wind Controlled by Natural Laws.
From the observations and deductions of
Humboldt, Franklin, IHenry, Espy, Coffin,
estrial objects, yet it is governed and controlled by inexorable law. If it bring rain or dry weather, breathe in a zephyr, or carry destruc Maria" to the discovery of a continent; put in otion a gulf stream, or revolve the sail that rain the marshes of a Zuyder Zee, we now now that each gale, breeze or zephyr is mov sure with the force and speed in the ratio of the exigency of each varying occasion, in efforts to restore that equilibrium for which the atmos phere is always striving and which it never at We Wem that all its qualities of varying mperature, its power to hold and give up moist tso controlled by unyielding laws; that many these laws have been interpreted and are early understood, the others we also know cience, by patient observation and intelligent earch, can discover and interpret

## S. F. Market Report.

Notr--Our trate review and quotations are prepared
n Wednesday of each week (our publication day), and are not intended to represent the state of the
urday, the date which the paper bears.

## Weekly Market Review

DOMESTIC PRODUCE, ETC. San Francisco, January 23d, 1878. Trade is still quiet and transactions few because leading articles of produce are in re uced stock of unsettled value.

Range of Cable Prices of Wheat. The course of the Liverpool quotation fo Wheat to the Produce Exchange during the days of last week has been as recorded in the ollowing table:

## Thursday Friday.... Saturday Nonday <br> Saturday Ionday Tuesday <br> To-day's cable quotations to the Produce Exchange compare with same date in former years as follows <br> $1878 .$. 1877. $1878 .$.  <br> The Foreign Review. <br> London, January 22d.-The Mark Lane Express says: Imports of foreign Wheat into

 the bulk of last week's arrivals was from Amer ica and Germany. Business has been almost at a standstill, as buyers and sellers have beeu Trade, therefore, remains dull. Prices have uffered veryFreignts and Charters.
In freights and charters there has been little latest charter is at $£ 2$ to Cork; $£ 25$ s to continent.

Eastern Grain Markets.
New York, January 29th. - The Grain trad has been a good deal demoralized during the week, owiug to the increasing probabilities of an early peace and the consequent probable Black sea ports in the spring and early summer at Western points of shipment. Prices have declined three to five cents during the week,
No. 2 Spring selling at $\$ 1.25 @ 1.30$, and R R Winter at \$1.34@1.41.
Chicago, January 19th. - Breadstuffs have kept up the precedent of the past fow week and have declined considerable from last Satur break in and is now weak. Wheat is fairly active, with good demand and business. There was a genturn at the close. Closing cash prices to-day were: Wheat, $\$ 1.03 \frac{5}{8}$ for regular and $\$ 1.04 \frac{1}{3}$ for gilt-edge; Corn, 40ㅕ․@41c; Uats, 233c Rye, 51c;
Barley, 52@54c; Pork, $\$ 10.75 ;$ Lard, $\$ 7.30 @$ Eastern Wool Markets.
New York, January 19 th.-The Wonl mar-
ket has been fairly active during the weck. The attention of buyers has been centered chiefly on Fall California, the light supply and compar atively low prices current inducing many to
anticipate their requirements. The sales for the week are: $180,000 \mathrm{fb}$ s Fall California, $15 @$ $25 \mathrm{c} ; 32,000 \mathrm{tbs}$ scoured do, $50 \mathrm{c} ; 5,000 \mathrm{tts}$ Spring ths Oregon, 31c.
Bosron, January 19th. - Wool is quiet. But few large buycrs made their appearance this business doing at unchanged prices. Sales of the week were: $460,000 \mathrm{tbs}$ at $10 @ 33$ che for Fall;
$19 @ 34 \mathrm{c}$ for Spring; 15,000 ths of very ehoice Fall sold at 12@331c, the latter an extreme $16{ }^{1} @ 25 \mathrm{c}$. Total sales of domestic for the week

## aggregate $1,190,700 \mathrm{lbs}$. BAGS_Bags are uuchange

BARLEY-In feed Barley there has been a $\$ 1.50$, gold; 200 ctls Bay feed at $\$ 1.60 ; 2,000$ chis weevily Coast feed, $\$ 1.50 ; 500$ sks choice
Coast feed, $\$ 1.60 @ \$ 1.62 \frac{1}{2} ; 200$ sks Chevalier, $\$ 2$, an extreme.

BEANS-The late advance is firmly held and CORN-Sales
arge Yollow, have been as follows: 75 sks ilver, 640 sks $\$ 1.05$; large Yellow do, $\$ 1.70$, sker; 600 sks good, large Yellow, $\$ 1.57 \frac{1}{2} ; 200$ $\$ 1.82 \frac{1}{2} ; 1,130$ sks large Yellow ou the wharf at

DAIRY PRODUCE-Another decline has come in the Butter market, and the trade is denoralized and unsatisfactory. There are grades of fresh butter which sell as low as 20 c and the best is now worth but 30c. Holders of Pickled and Packed are anxious to unload, becau FRUIT-Prices are generally unchanged, ept Apples. Fine Apples have been sold as igh as $\$ 1.70$
HOPS-W
cr. at 7c; 70 bales choice Russian bis Wash 10c. The New York market is reported fairly active without change of price.
POTATOES-An improvement in Petalumas, Humboldt and Early Rose is noted in our price PROVISIONS-Mutton and Pork are higher, as shown in the table below.
POULTRY-Poultry is generally unchanged. offer for good shipping this morniug was $\$ 2.05$. Buyers are loth to invest unless something turns up in Europe.
WOOL-The trade is quict and stocks re duced. We note sales: $140,000 \mathrm{Hbs}$., 12@16c, heavy and slightly burry lots. Trausactions are few.

fruits and vegetables.


Gold, Legal Tenders, Exchange, Etc.




OwING to a press of matter, our general
merchandise talle is omittel. Prices are unchanged for the articles thereiu enumerated.

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FRUIT TREES,
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TH円 WEE巴EIS AEE FIGE AND SET WIDE APART, Cannot easily upset. Has HIGH and LONG BEAM, with Plow sitting well baek, so it CANNOT CLOG, and LARGE ROLLING COLTER, with strong standard, which together with a LARGE FIN CUTTER on SHARE, euts the SOD and BOGS with ease, making it just the Plow for our Tule Farmers--eombiniug strength and durability. LIGHT DRAFT, and easily handled. ThPROVEMEXTS, made after haring heen thoronghly tested in the worst Tule Land in the State, assures to all that Hill's Improved Eureka Sulky Tule Plow has no equal for Plowing Tule Land. Nade to order of any desired width of eut from 10 to 24 ineh, with light or heavy beam.

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# Pactne RuRMIX 

Volume XV.]

## California Fan Palm.

The California fan palm (Prichardia filifera; Bahea filamentosa) is a native of California and is found along the Colorado river and in some places in the desert in San Diego county. Several Eastern and foreign periodicals and hor ticultural papers have given illustrations of this palm, but none of them eame anywhere near its natural structure. The eut we give above is taken from a photograph from a plant only three years old, grown by John Rock, the wellknown nurseryman of San Jose. The eeed was sown on the 15th of February, 1875, and the plant stands now three feet ten inches high. low growth taking a long time to make a show plant. Often people have planted the Austra ian cabbage palm (Coryha Australis), the most common one found in nurseries, and after a few years nursing they have thrown them out be growth. About 20 years ago a lot of seed of growth. About 20 years ago a lot of seed Prevost, the pioneer nurseryman, cultivated Prevost, the pioneer nurseryman, cuitivater
them and raised abont 50 plants. These wer distributed over the State, most of them having grown
Gov. Latham, of this city; bought two in San Jose, which stood, at the time of purchase, about 25 feet in hight, for the handsome sum distance of 18 miles. Many doubted thark, a growing, but they. Many doubted their ever stand now 30 feet in hight and are 2 d feet in diameter, crowued with a head of fan leaves. They stand in front of a magnificent residence on an open lawn, and present a most beautiful

Mr. Grant I. Taggart, of Oakland, informs us that two of this species of palin are growing County Judge of Shasta county.: They were planted some 20 years ago, they have immense This must be three to four feet in diamcter. ever cultivated in the open ground. At Shasta the ground is often covered with two reet of of this palm. all palms, having tine thread hanging down from nental plant in all subtry valuable as an ornathe fastest grower and hardiest of all palms. Not until the last three years has its native place been known, but upon the completion of
the S. P. R. R., they were found along its line, and even whole carloads of large plants were brought to San Francisco and sold. They may be now had almost at any nursery at a reasonable figure.

A Timely Suggestion to Business Men. A prosperous year in our agriculture, will, of necessity, lead to increased trade, both in prohas to purchase. The bulk of this trade will come to those nerchants who suaceed in best convincing the community that he is an upright
dealer, and that the commodities he sells the best the markct affords. As the year promises large production, so there will arise, at once, new and enlarged demand for farm enterprise in a firir is always appreciated by eustomers, and those who make their machin ery known throush the proper arlvertising me tainly win the patronage, if their apparatus is good one. These are facts, and they are dcmonstrated more clearly every year. The slow coach in trade, who relics upon his past for present success, will find that he is forgotton, advantages of advertising had to be supported by argument. Now, every successful merchant so clearly in his business that he needs no argument Our honest advice to all our trade friends is, that there is surely a "trade wind" arising and those whom it drives forward will for it.

SAN FRANCISCO, SATURDAY, FEBRUARY 2, 1878.

## The New Regent.

Governor Irwin has appointed Mr. John L Beard, of Alameda county, a member of the Board of Regents of the State University. The appointment is one fit to be made and in which our readers will feel much interest. Mr. Beard is a practical farmer, in the full vigor of early manhood, well educated, both in the schools of learning and of practical experience and obser vation. He is a believer in progressive ileas,
but not radical nor visionary. His accession to to the Board of Regents will lead to the repre
sentation in that body of several elements which have hitherto been unrepresented. One of
other near Harrisburg, in Alameda county.
He has been successful in his farming operations and has taken a leading part in irrigation and other entcrprises for the good of his interests and those of his neighborhood. H
has the confidence and good will of the many who know him throughout the state, and will take pride in such eounsels and actions as shal truly advance the interests and usefuiness of
the University. We wish him all success in this work.
The Russian Wheat Crof.-Much interest now centers in the expected opening of the ports of Southern Russia and the exportation of a latest information we have of the condition of
the Russian crop of last year is the following


## THE CALIFORNIA FAN PALM-Rrichardia Filifera

these comprises the graduates of the institution and its progenitor the old College of California. It was chienly in respect to the dcsires of this class for representation that Mr. Beard was se
lected. As a representative also of the agri cultural interest of the State, Mr. Beard wil find opportunity for earnest and devoted effort, and we are confichent that he has both will and
quality to make it. John L. Beard is a son of E. J. Beard, Lisq. of Mission San Jose, one of the pioneer agri
culturists of the State. He was born in Indiana culturists of the state. He was bornin in 1850 He graduated at the College of California in 1868 and began the management of his farm be fore he finished his college studies. The better part of two years after graduation he passed in travel in the Eastern States and in Europe, and made good use of his opportunities for observa-
tion. In 1870 he settled down to the pursuit of agriculture and is now farming about 700 cres in two farm one near Centerville and th
from the Londou Furmer: "The tabulation of the result of the Russian harvest will shortly be completed. It now appears that the brilliant expectations which wcre entertained of it up to he end of summer, are not altogether justined, arthough the crops that. The eoutinuous bad weather that prevailed prevented much of the harvest bcing got in, and it was left upon the fich to rot. Neverthcless, the harvest, as a whole, is above the average, and it is only in the government of Wjetka that it has turned out altogether a failure." 'This wonk indicate that Russia will have some wheat to sell to Cugland this spring, brio we expect that th inglish needs will dispose of it all casily

A Monest Eurron.-A California editor lias rached the apex of inodesty. In describing the lientenant (iovernor of the State, he says: He is about the size of the writer of this

## Squirrel Killing

There seems indeed reason to believe that we e on the track of the pestiferous squirrel We call especial attention to a letter in anothe colnmn from Prof. Hilgard, describing his suc cess with sulphid of carbon. We hope the matter will receive further attention and the desirability of taking steps to secure the material at the cheapest rates be fully dis cussed.
In this connection, we would also mak In that our request for information of the perations of Gerow Bros., in Solano county has resulted in the receipt of testimonials from
men whom we know well and in whom we have full confidence. For the public information, we print the following
Editors Press:-Seeing the names of the in the Rural Press, and a request from th editor for information about their work, we the undersigned, take pleasure in giving thi did for us in killing the squirrels on our they did for us in killing the squirrels on our lands, fulfilled their contracts with us to our perfect satisfaction. Furthermore, that this testimony was written, signed and sent to the lura Press, for pullication, without their rerguest or knowledge.-LSigncd: Joseph Blake, 500 acres
Chas. A. Peabody; Thos. Williams, 332 acres C. Reaves, 375 acres; T. J. Durbin, 800 acres acres; George Ellsworth, 280 acres; J. M Baldwin, 200 acres; Lewis Pierce, 2,000 acres M. Stetts, 600 acres

The above names are a few those for whom they killed squirrels, and of all thom it was presented, not one hesitated to sign it, and I know personally of many who considering it unuecessary to do so, I scnd it as it is.-A. T. Hatcu, suisun valley, ('al. Suism aud six names in Cordelia, who ar ready to give similar testimony. We recogniz. among them some of the foremost men of the county
We have also received from W. W. Smith, oi Vacaville, an account of the operations of
Gierow Bros. in his section. We make the fol Cierow Bros. in his section.
lowing extract from his letter:
They engaged to kill the sfuirrels on you farm eight cents per acre on the hill land They and eight cents per acre killed the squirrels ond. The killed the squirrels on my place of
$\$ 9$, and I do not think that I ever paid out th saine amount of money to better alvantage in iny life. They eanc to my place late one evening and worked abont an hour and a lialf. The stayed all night. I gave them supper and
breakfast, and then they worked motil about nine o clock next morning and said they wer done, and went away-and so did the squirrels artualy. I have sec that they werc on into farm succ, and hefor thick as to be destructive to ut ouly graiu, but also to young trees. They killed the squirrel for most of the farmers in Vaca valley. Some of course could not afford it, but so far as have talked with a goorl many of the farmers in this valley, and also in l'leasant valley, and also in Lagoon and suisun valleys, my huinbl judginent being that it is the most sure and effoctual method of ridding the country of these destrnctive pests that lias yet been introduced They use poisoned wheat with which to kil the squirrels, but what the wheat is poisoncd withl do not know. scuirrels or no ay and they wit until you ar surc the squirrels aro dead before they call on you for the pay. - IV. W. Smiril.

Owneasilf of Water. - In his lecturcs at Sacramento, Prof. Davidson has this to say about water rights as related to irrigation el terprises: "As to vested rights, he would hav contemned as necessary to the State's purpos proposition, but it must be met if irrigation ever beeomes a reality in California

## Gorrespondence.

## Squirrel Killing at the University.

 Editors Press:-I think that much of the difficulty that has heen experienced in obtaining prompt and united action from land owners on the squirrel question, is owing to the many uncertainties, difficulties and more or less danger attendant upon the extended use poisou in the open fiell. Many accidents areliable to happen, even beforc the poisoned grain liable to happen, even beforc the poisoned grain
leaves the house. After it is placed in the tield, leaves the house. After it is placed in the tield, bird, the farmers' friend, that is out to catch the worm; and this, together with the slaughter of game birds, nccurring from the same cause, I consider as one of the cardinal objections to the whole proceeding. We might
feel reconciled to the killing off of worthless curs, the pest of sheep raisers, that follows the consunption of the dead birds and squir
rcls. But the shepherd's dog, unfortunately, is just as likely to fall a victim to an incautious meal; and eveu the sheep sometimes get ahead
of the rodent for whom the grain was inteuded. Chickens, hogs, and even cattle minst be care-
fully excluded from the pasture while the squirfully excluded from the pasture while the squir-
rels are heing poisoned; and this is too fre
quently reason enough why the latter are left quently reason enough why the latter are left
to multiply undisturbed year after year, rendering nseless all that nay be done for their exter-
mination by the neighbors or in other portions mination by the nh
of the same raneh.
Notwithstanding these objeetions, the poison-
ng process has so far proved the only periectly ing process has so far prored the only perfiectly
effectual one on the large scale. Smoking out with sulphur or other suffocating vapors, blown
in from a a cartridge or ly means of bellows, has
proved both laborious and ineficient; and the proved both laborious and inefficient; and the
keen knives with which the squirrels were to commit harikari on entering its hole, were soon commit tarikari on citering it.
Two years ago, in a lecture on the phylloxera
question, I suggested that the use of the same substance which proves so successful against that insect, as well as against the rats of Paris
and other cities, might be sueeessfully used against the California squirrel; also soee Bulletin
No. 23 of the University of California). I could not, at the time, follow up the suggestion by experiment. The knowledge I have sinee acquired, both of the habits on the squirrel and
of the inportance of the problem, has led me
of late to test the applicability of the "bisulphuret of carbon" as a squirrel exterminator;
and the success attained has been so satisfactory that I think it time to bring the matter to public notice.
I should statc at the outset, for tho informa-
tion of non-chemists, that the bisulphuret (or tion of non-chemists, that the bisulphuret (or
more properly bisulphid) of carbon is obtained by burning charcoal in vapor of sul, 1 hur instead
of in air, and condensing the very volatile and lieavy vapor formed. When pure it is a color.
less liquid, of an aromatic and sonewhat pepless liquid, of an aromatic and soinewhat pep--
pery odor, which is not disagreeable, and pro-
duces somewhat the effects of chloroforin on the human subject, but acts as a quick poison
when inhaled loy sinall animals. Ordinarily, however, it is contaninated with other sulphur compounds, which give it the offensive odor of
rotten eggs and onions; and in this condition it is poisonous when inhaled, not only to animals,
but also to man. The very offensiveness of its
vapor, however, is an exeellent safeguard a against cceidents from poisoning. It is highly inflammable, and its vapor, when mixed with air, ex-
plodes, like that of petroleum spirit or aleohol.
Since it boils but a little alove the temperature of the hand, it evaporates very rapidly when
poured on it, profucing a feeling of intense poured on it, proiueing a feeling of intense
cold; poured on danp earth the latter soon
freezes and becomes coverch with hoar-frost. reezes and becomes covcred with hoar-frost.
The vapor so formed is three times heavier than
air, and flows down visibly like air, and flows down visibly like watcr from the
mouth of an open vessel containing the liquid.
 bellows; especially if introdnoced at the higher
end of the burrow. After a few minutes, the odor usually makes its appearance at some of
the other outlets; in one case it becaine scusible at one 25 feet from that into which it was intro
duced, in the courso of five minutes. It is curun out of the holes before the gas; when it
meets it face to face in a run, death secms to be meets ince to ace in a run, death secms to be
almost instantaneous. But in most cases the
aninals seem to retire to their nests and die animals seem to
there in a stupor.
Tho mode oi proceeding is simply this: Select
one or two of the freshest holes in a burrow, one or two of the freshest holes in a burrow,
introduce into it as dceep sown as you can rach,
a wide-mouthed ounce vial full of the licuid, apset the vial, and withdraw it. It is best after
und
this to wait a few thinutes to let the outer air push the heary vapor before it into the burrow,
until the odor appears at the other outlets. But until the odur appears at the other outlets. But
if there is hury the hholes may all be closed at
once with earth, whieh need not be ramined once with earth, which need not be rammed -
the only object being to keep the gas in, and to see if any of the inmates dig out afterwards
Of course, it may happen that holes supposei Of course, it may happen that holes supposeld
to belong o one burrow do not communicate.
so that the inmatcs of one remaiu unscathed so that the inmatcs of one remaiu unscathed.
A little experience soon teaches the right ineas
ure, so that not more than one in two hundred will be open again, unless from without. The dead animal is thus buried out of sight in its own burrow, creates no offence and poisons
nothing ; its flesh would not be injurious even if dug up. No other wild or doniestic animal runs any risk, unless it be the gopher. The
holes retain an offensive odor for some time, and remain elosed and untenanted.
As for the expense of this method, I have
freed the most thiekly pcopled portions of the university eampus (level ground), from every vestige of squirrels, with about a pound of the
liquid per acre; about half an hour being spent by two nen in elosing the holes with shovels. market (pure) at 45 ets. per pound. If manu. ould reatily be sold at half in the crude condition, in whinh it is much more poisonous to the animals. Any laborer of ordi
nary intelligence can use it, without any risk, either of injury or failure.
Probably it will still be needful that the law should bring some eompulsiou to bear upon
those who fail to attend to the destruction of the squirrel through motives of self-interest. season, few can find any valid exeuse for lon neglect; and the comparative ease and cheap. ness will induce a nuch larger percentage than
heretofore to fulfill this duty to themselves and to the public, without compulsion.
University of California, Jan. 24th, 1878.

## Farm and Garden Gates.

Edrtors Press :-A gate is a convenient elltrance for use in prosecuting the labors of the hield. The simplest, easiest constructed, and the best gate for the purpose required.
My experience hit upon the following pattern Two posts, $2 \times 6$ will answer. The small holes都 same way, and then sawed out to receive the square end of a $2 \times 3$ scantling. The right hand After the scantliug is loosely fitted, I nail piek-


## A HANDY GATE.

When finished, the gate, $c$, appears like the lal ance of the fence, and is easily locked by a small you lift out the left, and draw out the right,
yout setting it aside. There is no need to draw it out for a person passing through. Lifting out
the left and opening wide enough for the body is suffieient.
If $2 x 6$ is used for posts, a strip, is necessary to bc nailed on behind tho holes for seantling,
as to keep them in place. If made by comson posts, the hole may extend so far, say two or three inchcs. I have six of these gates, and can make them about as fast as nailing seantling to the post; $2 \times 3$ pieces made iu manner defitted and gate soon finished. There are no hinges to break; no bars to remove, no fear of
wind or aceident opening them. I find them a real or aceident opening them. I find then a
eoneniene and easy of construetion, you and your many readers are welcome to the sam enent without charge, as it is not patented. A space betwixt two buildings suggested the
cessity of such a device. The holes were made in the building boards, and the slip enc to a $2 \times 3$, nailed to the other building. This has wagon and garden gates are made on same plan. Of course in the construction the gate-posts are turned the opposite way from that shown in the
engraving. They are turned sideways in the engraving. They are turned sideways in the
drawings to show the holes. Joun Taylor.
Mt. Pleasant, Tuolumne Co., Cal. $\begin{gathered}\text { John Thyor, }\end{gathered}$
Winds and Rain on the Pacific Coast.
Eurtors Press:- There appears to be two natural laws by which rain may be predicted aitcr long continued north winds early in win
er. One is the law of compensations, roughly indieated in the old sailor's proverb, given in the Press last weck-"the south wind never dies indelted to the norther"-which must have vation. The other is that as our sea breezes are all parts of the great trade-wind system, and containabundance of moisture to even in summer moisture in the form of rain is that the lanil
shall be colder than the sea breeze. Now, in summer, the land being heated by the sun, con-
densation ean only take place on the mountains north of California. In winter, when a nort wind blows almost all the time (the cold air
rushing toward the equator to fill the place of he heated air rising within the tropies, , it to blow the trade-winds entirely of shore, to give us plenty of rain. Thus when the sun was
farthest south, the northers kept the clouds in the southern eounties, but as the sun comes udes, and is pushed upwards by the returnin rades, forming an upper current above them nd condeusing the moisture in abundant rains or two during the month after Decenber 21 s ; which prevails sounth of California, and carric ships to China, ctt.
As sumuner advances the sea breeze become more and more a westerly one, from the heat ing of the land causing a rush of cold air froin
the ocean, and thus the trades become to us northwest wind, though their direction is quite ifferent at some distance from land
The reason why the tables of temperature for wiuter do not show a greater agreement between
the eoldest aud the rainiest seasons, is probally to be found in the same law of compensation referred to. Severe cold, with north wind, is followed by a proportionate warm spell, with
south wind, and thus the averages for each season are brought so near together that the rea character of the weather for that season are no apparent. The trne poiuts for comparison would binter extrenes platis warmin for the vinter to the amount of raiufall Thus the las winter was very mild and uniform as well as dry The present is the reverse
It is customary for people from the Atlantic coast to call these rain storms "southeasters, that being the quarter whenee the heaviest rain storms come on that side of the continent. But
while it does blow thus to some extent near while it does blow thus to some extent near local direction caused by the course of th nountain chains. Its general direction highc up, and when very violent, is from the great
Pacific reservoir southwest of us. A wind from the dry lands to the southeast could only bring us dry weather, unless first derived from the ocean. Most people do not carefully ascertain
he poiuts of the compass and its varintion when recording the ands, Any loeal observ may easily do this by aid of the polar star Tge influence of the law of compensations is ortheasters prevail was made by old Boreas to conquer hissouther dry season in the prevalence of the northeasters which are, of course, just intermediate.

Haywood, Cal.

## The Region About Vallejo

Ebrtors Press:-This portion of the State as the French say) at the hands of the Rcrat I trust it will now he in orler to make our lebut in your colunns. The boundarics of the listrict to whieh I shall confine my remarks re as follows: North by Napa valley, cast by Suisun bay, south by Carquines straits, west by San l'ablo bay; being the south of Napa and est portion of Solano counties, and embracing ically it is nearly the center (north and south), ically it is nearly the center (north and south),
and topographically in the heart of the State. The only outlet to the ocean for all the water the Sacramento and San Joaquin valleys
four-fifths of the water shed of the state) is by he Carqnines straits, whose average width exceed a mile. This narrow passage officr onvulsion, or cut through by the pent-u waters which at no remote period in the earth' history filled the great basin lying between the
Sicrra Nevadas and Coast mountains, transicrra Nevadas and Coast mountains, trans rming the bed of a vast take or gulf into what
re now rieh and fertile valleys. The lofty range which shuts off approach to the coast
rom the east throughout the eutire length of the state, is narrowed and depressed at this atural gateway, through which the water flow, and the products of the interior must pass in order to reach tide water by boat. The trans-continental and California railroad have been compelled to make it the point of
convergance for their entire system-prescuting as it does the only feasible route for eeonomically eonstructing and operating thern. It is the pened to the traffic will eventually pulsate in its eireuit around the globe.

Climste.
In addition to being a great arqueous high of an immenso rerator, through which the comber, modifying the heat of summer in the vallcys east of us, which would otherwise he
oppressive and next to intolerable. Freighted vith moisture, as these wiuds are, which piles and south, and against the highest points of the


The faco Conformation.
The faco of the eountry is diversified by into plains or flats as they approach the shores of the bays on the east and west. At the south where the waters of the straits have cut a channel deep into the bowels of the earth far below the level of the ocean, the bold blutts and tion equaling and in the scenery on the famed Hudson river abov, the Highlands. No stretch of fancy is required to eomplete the picture by crowning these hill tops with villas, and the cosy nooks, with beautiful homes of fortune's favorites and business men of the metropolis, who, in the language of
song, would be "so near and yet so far" from the scenes of their daily toils. Now that the completion of the railroad to Oakland, 18 miles distant, affords a readier and quicker transfer
than by water, this ideal is not so far removed Especially so when it is known and realized that within 80 short a distance from San Franeisco there is a district, limited in extent, possessing scenery as diversificd as it is exceptional in this State or on the Pacific coast.
This valley is well watered by living springs and small streams flowing from them, several sulphur springs of excellence and great volume burst out at or near the base of the main ridge
that erosses the valley from northwest to southeast and good and sutticient water is easily nbtained by digging. A noticeahle feature is that at or near tide water level, deeper wells are required than upon the uplands or hills. Boring ficatiar has proved unsuccessful, water when a proper depth is reached. I shall offer you additional facts in another letter.
f. C. Pearson.
South Vallejo, Cal.

## Notes in Fresno County.

Editors Press:--We have had over five inches frain within the past week. The ground is thoroughly wet, something that hasn't beeu beforc since February, 1876. The horses of my
Arkansas neighhors "bog h'yer now, when they drap outin' the bcat-track;" while my Yankee eighbors' horses "mire whenever they git eout ' the path." Fced is starting finely, and a very ittle more of seasonable rain will insure good crops. We had no crops last year except on irrigated land.

Flowers.
I have read with the utmost interest Mr Drew's several articles on flowers. Have I lost paper, or hasn't he yet written abnut our
oyal queens of beauty, the numerous Gilias? They will soon cover our plains, and they cer-
tainly must have an item in the Roral, if I have to write it myself.
Last spring I received from Wr. B. West, of just on my wife's birthday, so they were, of course, handed over to her as a present; this may account for any extra good eare that may out, 16 ittle, unmarked, half-dry (they were a half-month reaehing us), sprigs of roots, but, oh! what beauties they hecame! Two of them were double petunias, striped, regular eandy stripe, heretofore thought that the plates of donble gerations, hut I now know that no painter's art can exaggerate the inost perfect and beautiful double petunias. They grew to be bunches four reet across and and nearly two feet in hight, and were covered with hundreds of blossoms during ate suminer, autumn and early winter. Three were pelargoniums, one looking so mueh like a golden arbor vite as to be generally mistaken
for one by visitors at first sight. One was a scarlet verbena,

This has been the hardest winter on semi-
This has been the hardest winter on semicounty. January began clear, dry and cold. On the coldest night, January 4th, it froze one horses and setting on a beneh near my well; it froze over three-quarters of an inch in the irriof tho freezing was done between 4 o'clock in the morning and sunrise. I was out most o hauling water from the well and throwing it upon the trees. Another method we use, till
upech cease to necd it from becoming acclinated,
is to cover them with cloth during hard freezes. Another, to stand a row of our big, leafy corn
stalks around each tree and tie them together t the top. Another, to set a bar of iron (any and iron will do) in the ground under the tree, above the top of the tree, thus constantly coneying the latent heat from the ground beueath in the top of a tree, it is said, will prevent blossoms.
My Sargo and Corinth grapevines have been considerably frost-killed, but, I believe, no vine entirely destroyed. Blue gum trees, young tirely killed-some, cven of two years' growth, have been killed. My five-year-old seedling have not been protected and are uninjured. Next eome some of Mr. Garey's sweet-rind lemons. These, with the exception of some of the late fall growth of limbs, are uninjured. Hy fine sequently making a most luxuriaut and pro longed growth, have suffered greatly. I think, however, that I shall not lose the entire wood
of any or them. I had Tahiti, Mexican and Los of any or them. I had Tahiti, Mexican and Lose lime trees four and five years old; these ave all been kille. Some are so far goue that I have given up
from the roots.

## Fence Posts.

I have learned that the heart of large sugar pine trees make excellent fence posts. 15 years, and they are perfectly sound yet. The part set in the ground was charred on the outside lightly before setting
I have also learned that any kind of wood oating of boiled linseed oil and pulverized char coal, letting it cover the wood and get thor-
oughly dry before setting in the ground. But I have just seen a cheaper and inore simple method than any of them, viz: to dip the parto the post to be set in the ground into a strong
solution of sulphate of copper (blue vitriol) be fore setting. Will this prevent decay? Can any of your numerous contributors give us light long to wait if it requires the time it has to prove to the incredulous (and myself among the nnmber) that sugar-pine is our most valuable have no redwood. But if the blue-stone solution is a success, we shan't even have to go to the mountains for sugar-pine, but can nse the wil
lows, cottonwoods, sycamores, etc., found growng, the river bames, we., use an ing along the river bottoms. We can use any
of these successfully with the charcoal paint but that is so much troulle and cost that it nakes them as expen
from the mountains.
I received a letter a few days ago from one of Hour readers, Dr. S. M. Curl, iu New Zealand. RURAL; he proposed to exchange seeds with me, which I gladly accepted, and expect now soou at a cost by mail not exceeding that from New York.
I regret to see Bro. Orr's ad. in the Rural hese, and I wouldn't say anything to help him sell on that account, but his ad. does injustice to his farm and locality. He has left out the greatest recommeudation, that is, the perfect isiting him, in his active, muscular, bright eyed, rosy-cheeked girls and boys, a higher rec anything he has said in his advertisement.

## Hedge Plants.

Has anyone of your readers ever tried the berberry as a hedge plant in the hot interior portion of our State? E. L. Beard, esq., of
Mission San Jose, has a very fine hedge them,
but the climate there is widely different from but the climate
this of the interior
I know a tree that I am certain would be a perfect success for the hottest and dryest por-
tions of our State, and even on alkali land, I mean the buffalo berry (Shepherdea argentea) They thrive in their native valleys of the "Great above $100^{\circ}$ in the long hot, rainless summer and in addition to their sturdy growth they produce a great amount of excellent fruit, closely resembling high cranberries. If any advertiser in the Rural has them, let him speak.

## Kingsbury, Fresno county

Arboriculture.

## Valuable Woods for Carving.

The Crockery and Glass Journal appears to
have examined this subject with care, and the have examined this subject with care, and th results will be of interest in this State, wher
much of the timber mentioned is in vigorou
growth. We read in Calvert's manac that lime wood was almost exclusivel drops and festoons of fruit, flowers and birds, at Petworth, Chatsworth, Burghley, Belton, Mit seats to which his genius has imparted such
charm. Lime tree is soft and pliable to the tool charm. Lime tree is soft and pliable to the tool
and less liable to split and splinter than almos any other wood, which qualities render it of
great utility to carvers for carrying out designs
when lightness and boldness are equally required. It takes a stain well, and a fair polish, or it may竍 varnished without greatly altering the color of the wood, but giving it a very agreeable box-
wood appearance. As well as for large festoons, wood appearance. As well as for large festoons,
it is suitable for smaller works, such as bookstands, miniature and portrait frames, et American walnut is a very good wood, and is much in favor for its dark color. It has, however, a more open grain than line, and therefore
requires more care to avoid accidents. It is used requires more care to avoid accidents. It is used
for many small works where inuch projection is unnecessary, as boot-racks, watch-stands, etc. Sycamore, holly and chestuut are amongst the lightest of our woods. The first is greatly, and in fact, principally used for bread-plates, potato-
bowls, and other articles where a light tiut is a consideration.
Amoug the hardwoods, oak may be recommendec, as also Italian and English walnut. he former from its hard and enduring nature, or pew heads, alms-boxen for executing finials work in general. It is also much used for clock and hall brackets, and for other pieces of solid
furniture. Italian wood is a rich and beautiful urniture. Italian wood is a rich and beautiful
wood for a variety of purposes, such as cabinets, book-cases, frames, etc. It is hard, but the
effect produced by its usc amply repays the effect produced by its usc anply repays the
extra labor caused by the close texture of the material.
When any very delicate designs have to be
executed, and the most minute finish is required box-wood, ebony, or any other equally hard and close-grained woods are decidedly the best to
Pear tree is a pleasant wood for working, and
Peal a good piece resembles lime in its pliability, or which we employ lime.
The wood must be thoroughly seasoned. The proper time to fell oaks, and most other trees, is when they fail to increase in size more than
two feet per annum. If cut down before that period of their existence, the heart will not be period of their existence, the heart will not be
fully developed, and will not be as hard as the other part. When oaks are alout thirty years
old, their growth is mest rapid. If wood be in an unseasonel state, it is sure to warp and twist and split. It is therefore very necessary that the natural juices of the tree be got rid of
by seasoning it before use. After a tree is lopped, barked, and roughly squared, it is left some time exposed to the weather, and may be soaked in
fresh ruming water with advantage, and boiled or steamed. Any of these processes teud
dilute and wash out the juices, and the water
readily evaporates from the wood at a subsequeut period, and the color of the wood will be much improved by this means. Thin planks, if prop-
erly exposed to the air, will be seasoned in about a year, but the thicker the wood the longer the time it will take. Oak loses nearly two-fifths
of its weight in proper seasoning

## HORTICULTURE.

## Coffee Growing.

Emitors Press:-My experience in growing coffee plants on a small scale, from the seed distributed by Rev. Luis M. Bosco, of Santa Clara College, was quite as successful as that of H. G.
given, in the Roral of Jan. 19th. The seed came from Colima, Mexico, and was supposed to be of he famous variety grown in that region, which is unsurpassed in quality by any other coffee in
the world. A quantity of the seed was sent by the world. A quantity of the seed was sent by
the college anthorities to the Morning Call office he college authorities to the 1 orning though they had been kept in a paper box in the ditorial rooms, and were thoroughly dried,
every one of them germinated and nearly all produced two plants each. The seeds were treated accordege, a copy of which is enclosed, except
the coll
that they were plauted iu a box of earth in a that they were plautcd iu a box of earth in a
conservatory, and covercd with a thin layer o consersinstead of "leaves or branches."" The
moss ins, when two or three inches high, were
plant plants, when two or three yeches high, were and had grown over a foot. A part were planted
last spring, in various situations on a ranch in last spring, in various situations on a a ranch in
Sonoma villey. They made but little growth luring the summeryl several of them The partially shaded werc alive at Christuas, but have not since heard how they passed the ordea of the late severe frost, though 1 an inclined to
think that the young plants suffer less from ordiuary frosts than from the glare of our sum mer sun. Protection, however, from both frost
and sun can be easily sccurcd by planting anong large trees.
Mexico is probably the nearest point from
whicll seed can be obtained, and with the facil which seed can be obtained, and with the facil tion, there should be no difficulty in getting any quantity of fresh berries that our cxperimentor
San Francisc
Cal., Jan. 2lst
To which Mr. Rixford refers in his letter, as furnished by the President of Santa Clara Col followed in tropical countries but will not sucpracti
somc
On
form a square bed, nine or twelve feet long,
spread the seed just as it is and water it. Then spread the seed just as it is and water it. Then
spread over it a little earth, but not enough spead over it a little earth, but not enough
to cover it entirely. The seed, still visible on the surface, must then be eovered with leaves
or small branches, and watered every meave or smavi branches, and watered every morning
and evening for a period of 40 days, unless the rain relieves you of the responsibility, After the elapse of time designated, germination takes place, and the young plants must
then be freed from the leaves or then be freed from the leaves or branches that cover then. Fifteen days afterward, and be-
forc the plant has cast off the seed and unfolded its leaves, it must be transplanted in anothe bed, larger than the first, of clean, soft soil,
prepared for that purpose in the following manner: On a line, at a distance of nine inche from each other, the plants are placed in little
holes two inches deep. Before placing them you must cut the extremity of the principal root; then, without folding the root, you put it in the hole and press the earth well against it. This morning and evening during the dry scason. At the end of a year the plant will be two feet high;
then it must be taken, retaining some of the earth around the roots, and transplanted again in holes one foot wide and two feet decp, and
at a distauce of six feet from each other. There at a distauce of six feet from each other. There
it is, taking care of itself, until two or three
years afterward years afterward, when it begins to yield fruit.
One essential thing to be remembered is to kee One essential talways clean, for the coffee cannot tol erate the close proximity of any other plant.

## L1vely Sample.

Edriors Perss:-I have frequently observed communications in the RURAL of the attenpts to ghe greater trouble appears in getting it to germiate. Now I will give you my accidena four
perience in getting some to sprout. Sone pears ago, about this time, or perraps in Feb-
yenary I cane home from Wodbridge with parcel of coffee in a paper, which, by accideut, got broken, and some coffee spilled over the seat,
iu the wagou-bed and on the ground. It cam on to rain that uight and continued sultry and
rainy for the uext three or four days. At th rainy for the uext three or four days. At the
end of this time I went to use the wagon and found the coffce all sprouted and some fully two inches long, and the sprouts resembling coarse
hair rather than sprouts of vegetahles. Perhaps
from thes the seed and thicn place them in growing hoxes
Woodbridge, Cal.
Perley.

## Plum Growing.

Editors Press:--Experience differs. I notice that A. B. Roberts, of Boise City, Idaho, through the Iuval Press, recommends the grafting of
the plum on the peach. While I nust confess that I know but very little about grafting or raising of fruits, at the same time, I have learned from observation that grafting the prune (which is the same family), on the peach will not do
well. My experience is as follows : About three years ago, I bought 100 prune trees of an
Oakland nurseryman. Having had no experience in fruit raising I asked no questions about the kind of stock they were gratted upou. I re-
ceived and plauted the trees, which, by the way, was rather a poor lot. The second year after
they were planted, a number of them suapped they were planted, aumber of them suapped
square off the ground. This I did not and could
not understand. Therefore I spoke to some not understand. Therenore 1 spoke to some
nurserymen about it. They explaiued it by the fact that they were grafted on peach stock, and that they would not do well ; that the peach
and plum would not knit or grow well together. and plum would not knit or grow well together. root of
peach.
pe alvanced, and the tops somewhat heavy, and their bodies are pretty good sizes. The last
year quite a number have broken square off at grafted. In conclusion I would alvise, by all means, not to graft the plum ou the peach.

> Another Grower's Experience.

Entors Press:- I noticeld in the liveral of
anuary 19th, Mr. A. B. Rollorts' cxperience as a nurseryman of 20 years standing with peach on the plunn stock. He says, when one behevcs
anything, he ought to be able to give a reason. anything, he ought to be able to give a reason.
That is inght. He says, he always found the wood on the peach to be in a dccaying condi-
tion, while on the plum he always found the wood lard, finc and seldom blown and decay-
when ing. So much in favor of the plum. In dig.
ging up trees, he lias found kintty ronts with
berers. That must have becn Eaast or on land not adaptcd to the plum. Ncar lludson and
Atbany is where nearly all the plunis are raised Albany is where nearly all the plunis are raised
for the New York market. The soil boing adapted, they would have to go without if they laad to depend on the peach. In lingland it is
the same. They have to put the peach on the plum stoek or go without peaches. In New
Jersey and adjoining States, where most of tho
peaches are raised to supply the large cities, they always have a young tree planted between the bearing trees, as thcy only last a few ycars. wiuter, on liigh land, where chcrrics grow
finely at present, the peaches all dicd out from the affeets of the water.
heavy soil, where the peach would be worthless,
he would plant on the peach root. he would plant on the peach root. That might the orchardist. Then suckering is a nuisance As I said in my last, by using the Tarleton cul
tivator once a month, I kill all weeds ald suckers. Apples sucker and pears sucker as badly as the plum. There is, during the season of pears, twoo and three car-loads per day
shiped East. Shall we go without pears be. cause the trees sucker? Blackberries and raspberries sucker, strawberries sucker and the
runners have to be kept off all the year Shall runners have to be kept off all the year. Shall
we go without such luscious fruit because of we go without such luscious fruit because of
suckers? Better use the idle muscle that wants

Planting pits where the tree is to stand will do where land is $\$ 1.50$ per acre, but would no
pay where it is from $\$ 300$ to $\$ 600$. the peach doing well on alkali soil with a hardpan, a great deal of alkali will kill any kind o ruit tree and the hard-pan would hold the water near the roots and kill the tree without
any alkali. His sandy soil and gravelly ridges
and cosy nooks will do yery well for the plun and cosy nooks will do very well for the plum
or prune on the peach; but when hetalks about having their feet standing constantly in water would rather be the nurseryman than the
As I said in my last, some varieties of plum
and prune do well on peach stock, where the soil is adapted, and, now, what, shall we do
without those varieties that will not peach? They are profitable for home market A for shipping from trees East for table use. A nurseryman of 20 years nust be aware that a the peach stock. In planting out an orchard, select the varieties suitable to your soil and there will be few failures.
San Jose, Jan. 24th, 1878.

## Interesting Plants.

Editors Press:-As to curious plants we may say that we possess one of the most curious,
and perhaps the only one in America. It is the famous Elephantipes, or elephant-foot, o turtle plant. It is about one and one-half fect in diameter, and one and one-half feet high On the bottom it is flat, like the foot of an ele
phant, and shaped and curved like a turtle. Ou the top of this strange looking turtle-shaped trunk appears a vine eyery spring, dying down in the winter. The vine now is about 15 inches high, aud seems to grow very fast. The native
country of the plant is the Cape of Good Hope,
and it seems that this plant even there is getting and it seems that this plant even there is getting very rare.
We have also the Broussonetia papyrifera
or the paper mulberry, out of the bark or the paper mulberry, out of the bark of
which the Chinese make their paper; Benthamia ragijera, a strawberry tree; Diosyyros lotus,
the Italian persimmon, a very fine ornamental pyros Virginia, the Arperican persimmon, and the lotus are good to graf Our Passiffora grenadilla had some seven
Our flowers a short time ago, but none set fruit, but will, I hope, fruit this spring. Our Edulis is a
perpetual fruiter and flowerer, and for 15 months never has been without flowers and fruit. They are both completely hardy, for the heavy frost
we had here did not hurt them.
Los Angeles, Cal.
[We are always pleased to receive accomnts from readers of new plants which they import, and all
Press.]

## Polltry Yaro.

$\xrightarrow[\substack{\text { M. Erre, JR., Napa, Cal,, Corresponding Editor of the } \\ \text { Department. }}]{\text { N }}$
Hatching Eggs and Rearing Chickens.
Au article appcars in the London Farmer,
translatel from a German agricultural paper translated from a Geruman agricultural paper,
which gives the conclusions of Mr. E. Schenck Which gives the conclusions on into tho practice of hatcling and rearing chickens. We shall quote a fow paragraphs that our poultry realders
inay compare them with their experience and observation: A proper selection of cggs for
setting is the first point to be attended to in breeding poultry. To gct good, strong birds eggs by a two-year old hen trom a one-ycar old cock shonld chickens than chosen, as a very young hen hy an old cock. They should be regular in shapp,
and the largest should be chosen, except, of course, where a double yolk is suspectcd. In birds as possiluc, the smaller the egg the better. The notion that pointcl cgegs always yield cock birds is incorrect; this is only the case when
they aro from a hen that usually lays round oncs, and similarly round eggs from a hen that
usually lays pointed ones generally yicld female birds. Where, however, a hen always lays eggs
of one shape, whether pointed or round, the birds will be of both sexes.
In purchasing cggs for the purpose of getting a good strain of any particular brecd of
fowl, it is useless to think of getting them at

## Patrons of Hogsiandri.

## $\xlongequal[\substack{\text { Correspondeuce cordially yinvited from all Patrons for this } \\ \text { departuent. }}]{ }$

## ANNUAL MEETING.

## Office of Grangers' Business Association.

Noticc is herchy given that the Annual) Meeting of the

 San Fraueisco, Jamary
Removal.
 sontinuet, sond their
nia street, as licretofore.

Taxation in New Hampshire.
Euitors Press:- Having unexpectedly reeeived a few letters treating on taxation in other States, and that sulject being a great hobby
with me, I herewith send copies. My letters of inquiry were written in August last, and the answers have but lately come to hand -a long time in which to answer. I had entirely given up ever hearing from any more of them.
give New Hampshire, condensed as mueh as possible, from a letter from C. C. Shaw, Sec retary of the State Grange: "All kiuds of property are liable to taxation-savings banks dein the State. The former and the latter pay direct to the State. All money at interest is taxable, hut fail to get nuch of it. Mortgagel property is generally taxed to the owner, still
our State provides for alatement to the anount of the mortgage, but the money lenders generally manage to shirk the payment of the taxes rower pays tho full amount of taxes assessed on the mortgaged property. All stocks in trade
aud stock in iucorporated companies, all railroad stoeks out of the State the owners of which re-
side in the State; all real estate (except ehurches) is taxable. We have an exemption law proteeting the owner of a homestead to the
extent of $\& 500$. We also had a law by which towns could, by vote, exempt from taxatiou any 10 years. In the cities and larger towns ther are always those whosc iuterest is so large as to lead them to defend such interests lefore the
Legislative eoonmittee, while the lard-working Legislative eonmmittee, while the liard-working
agricultural elasses will scarcely have a citizen agricultural elasses will scarcely liave a citizen
that feels competent to go before sueh committce in the defense of lleirir interests. Thus
the valuation in wealthy places is eontinually have to make up the deficiencies."
State. The wealthy classes find it to their ad vantare to beep astroug lobhying fore to a tain their euds, while the industrial classes attain nothing, by reason of their nou-eohesive-
ness, or inalility to meet the expeuse that ness, or inalility to meet the expeuse that
would necessarily entail upon them, and hence the burdeus liave heen heaperl upon them. I is to be holled that the Grange will use its in-
fluence toward bringing about reform. By huence toward bringing about reform.
using the Girange in the proper channels using the Grange in the proper channels a vast compared to what he is now a compelled to sub mit to.
Potter Valley, January 24th, IS78. Briklow.

## Stanislaus Pomono Grange.

Edirons Press:-The Stanislans County Pomona Crange met at (irange hall, Modcsto ou The firange continued in session two days, delegates from five Granges were prose t, an the attendance was very good, notwithstauding the hard times and the expense neeessarily in-
eurred. But few motions or resolutions were passed, and, judging from this standpoint, but little was done, yet, as the number of motions
or resolutions furnishes but a poor eriteriou as to the quality or the amount of work per-
formed, we still claim that our mectinc was fraught with much good to all concerned. We and the discussions were felt to lo le mutually lowing: "The Squirrel Laww," "Tave the fol." "The Trespass Act," "Salaries, of P'ullic OffiMeans of Keeping up au Interest in our Pomona Granges" The general opinion seemed to be that the subjects bronght forth for discussion in the Pomona Grange should, whenever it was possible, be first discussed and acted ou in the Subordinate Granges.
The installation of officers will take place at
Sur next meetiny in Nodesto on Frilay, the
$\left\lvert\, \begin{aligned} & \text { mittee on Ry-laws is expeeted to make a re- } \\ & \text { port, also the committee on "Address to the }\end{aligned}\right.$ port, also the committee on Ad". ${ }^{\text {Thess }}$ to the Tax.payers of stanislaus County." By request
of the (irange, the Wortly Master appointel Bro. Keyburn and collins to lead in a discusBro. Keyburn and Colins to lead in a discus,
sion on the subject of "'summer Fallowing."
Our next meeting, therefore, promises to be on of unusual iuterest.
Modesto M. B. Kitrafia, Soc'y pro tem.
[The list of officers received with the abov appears in the proper column.-Ens. l'ress.]

## Eden Grange.

Edirurs Press:-Eden firange met on Jam ary 12th, for the purpose of installing oflicers eleet for the ensuing term and to partake of a lunch aut have a good time generally. The
weather was cool but pleasant, and the members, with but few exeeptions, were at their posts A bountiful lunch was prepared in antieipation of having, from neighboring Granges, many brothers and sisters as guests. We had, from Centerville Grange, Brother and sister Moor,
Brother and Sister Farly, Brother and Sister iranger-t
profession.
Installation of officers was celebrated by
Past-Master J. Russell, assistel by Master Past-Master J. Russell, assistell by Master
Perham. Miss Enuua Templeton assisted Perham. Miss Enuua Templeton assisted 1 ,
introdueing officers for installation. After in tallation, reeess was declared, lunch and ood social time was in order. Now, I would
ike to tell you what nice things we had spread before us, but will refrain from mentioning
anything but coffee aud cream. We have eows anything but coffee and cream. We have cows up this way that give crean and asister in our
Grange that can't be beat in making eoffeeister Dennis. After lunch was eaten and the ing members were called on, Bros. Moor, Granger and Farly gave us short aldresses ere followed by a speech from our newly elected Lecturer, J. Russell.

Suggestions for Members.
I cannot see that the officers of any Grange nembers. If all help, it is pleasant and profit able to all.
Patrons should push right ahead. If things io not work as desired at first, perseverance whieh falls drop by drop on roek and soil that evels down mountains and wears smooth the rough, angular rock; so, with persevering en-
The sisters could do more to build up the Order. If we eaunot improvise speeches orally, essays ean be prepared and read or appropriate
elections, made from book or papers, be read in the Grange, and in that way we can do better work than has been done. If we do no
think we are as capable as we would like to be if we do the best we can, we will improve an There is need enough of a different coannel or our minds to run in than the everlasting routine of household duties, which keep our minds in one groove until the rut gets so deep
that it is next to inppossible to get our minds on anything else.
Igs of the anticipate with pleasure the meet ings of the firange, the friendly greetings, the social converse, the loright, intelligent outlork, How much more the lesure would be intensi ied if there was in anticipation brain food seing prepared hy some sister and brother, to have often wondered why there were not Granges established long ago. There has been need enough for such an organization for those that live away from social couverse and have oral the time to devote to making eals and gen
erassip. How mueh superior our Grange ocial and business gatherings. We meet there o advance ourselves in every practieal way, munity we live in as well as ourselves? Our motto should be, ever onward. have got to push with might of brain and
muscle. Our opponents will not only not hel us, but will put arguments as obstacles in our way to hinder our progress.
 We'll lattlo and conquer, thourh thonsands assail,
How strong and how mighty who never say fail."
Haywood, Cal.
Mrs. R. Periam.

## Proposed Constitutional Amendment.

The following is the proposed amendment to Constitution passed at the eleventli session of the National (irange, held at Cincinnati, subjeet to ratification by the several State Granges: Fees for Membership.
ART. VI.-The minimum fee for menlhership
a Subordiuate $G$ fange shall be: For men, $\$ 3$, and for wonell \&l, for the four degrees. A wend Premblc under the head of "Organi-
zation-National (Grange" by addiny the follow-zation-National Crange," by adding the follow-
ing at the close of the first paragraph under said head:
"Each State slaall be entitled to two votes in
the National (frange, and an aulditional vote for every 10,000 paying members in excess of
10,000 .

## Election of 0fficers.

 Eleetion, Dec. Sth: E. Ci. Morton, Sr., M.;
D. W. Taylor, O.; J. T. Wight, S.; Carl Hal Taylor, O.: J. T. Wight, S. Carl Hal.
A. S; M. Mike, C. H. E. Bryan, L.
Evans, T.: E. Gi, Morton, Jr. Secy; ieo. Wells, (i. K.; Mrs, N. Kane, Ir., Ceres;
Urs. A. Calglasser, Flora; Miss M. Corniel, Ponoona; Miss A. Criswell, L. A. Azusi (ikange, Jos Angifles Co. Election
Dec. Mth: J. W. Narshall, M.; J. Shelton, O.; I. S. Thompson, L.; J. W. Casey, S.; S. Pen-
ofl, A. S; C TVaghn, U.; ©, Shorey, T.; H.
Clevelond, Scey; Cleveland, See y; L. R. Thompsou, C. K.; Mrs.
Hattie Baldwin, Ceres; Mrs. S. Penfult, Hattie Maldwin, Ceres; Mrs. M, Menfold,
Pomona; Miss M. J. Reeves, Flora; Mrs. L. V. Maxe
Br
Ist:
 Morris, L.; II. L. Moody, S. ; M. E. Dexter,
A. S. Wi. Sims, C.; C. Covell, T.; Sister E. A. Mooly, Nee'y; G. W. Seely, G. K.; Miss I Mrs. L. A. Siuns, Flora; Mrs. Artie Dexter, L.

Cairto Graxge, No. 202.-James G. Burns,
M.; J. M. Wilson, 0 O., J. II. Clarke, L. W. B. Burns, S. B. F. Case, A. S., R. M. Wilson,
C.; B. S. Burns, T.; J. H. Braden, Secy; G. N. Girubb, (G. K.; Mr. A. J. (irubb, Ceres; Mrs.
M. F. Braden, Pomona; Mrs. M. M. Williams,
F. (loverhale flbayge, No. 63. - Election, Jan. 12th: J. G. Ileald, M.; C. P. Moore, O.; Cink, A. Sooley, I.; Wister E. N. Caldwell, S.; W. D. Wamhold, T.; Sister H. P. Tucker, Sec' $y$; $J$. W. Ward, G. K.; Sister R. Heald, Ceres;
Sister E. More, Pomona. Sister M. Sink, sister E. Moore, Pomona; Sister
Flora; Sister H. Wambold, L. A. S.
Compton Grange, los Axgeles Co.-T. P. West, M.; A. Eddy, O.; J. Sharp, L.; J. J. Coultrin, T.; R. Ranney, See'y, Los Angeles, Cal.; Mr. Smith, G. K.; Miss C. Peek, Ceres;
Mrs. R. Ranney, Pomona; Mrs. G. Hathron, Mrs. R. Ranney, Pomona; Mrs. G. Hathron,
Flora; Mrs. A. E.dy, L. A. S. Coldsa County Pomona Grange.-Eleetion
Jan. 1st: J. R. Totman, M.; J. Myers, O.; H. A. Logan, L; H. D. Stranthus, S.: R. Jones,
 Mrs. J. R. Totman, Ceres; Mrs. S. I. Stomer,
Pornona; Miss Logan, Flora; Miss Katie Jones,
Cosumines Grange, No. 176.-Gillis Doty, M.; Seth Macy, O.; James A. Elder, L.; J. H. H. Hass, S.; R. Nickols, A. S. ; Emeigh Richards,
L. A. S.; John Witt, G. K. Galit Grange, No. 180--Geo. N. Gray, M. S. E. Wriston, O.; Hiram Wiser, L.; A. W. Jiryant, Sec'y; Mrs. Fannie M. Bryant,
; Mrs. Jennie Gray, Ceres; Mrs. Louisa Gates, Pomona; Mrs. Aeenith Vioach, Flora; Mrs. A. F. Chase, L. A. S.;
Bryant, H. Wiser, Trustees
Cirass Valley Gravge, No. 256, Nevada
Co-Flectiou Dec. 22d: Alex. Ilenderson, M. Co-Flectiou Dec. 22d: Alex. Ilenderson, M1.;
John Rodda, O.; J. W: Stuart, L.; Wim. Le Bar, S.; A. Peterson, A. S.; S. J. Alderman,
C.; J. H. De Golia, T.; W. W. B. Stevens Sec'y; R. Berryman, G., K.; Miss Potter, Ceres; Mrs, J errin, Pomona; Mrs. Boynton, Flora; Trustee; A. Peterson, Chas. A. Cills, and Mrs. Rowe, Delegates to Pomona (irange.


Theo. Meyer, Sec'y; B. Fitzpatrick, M, K.
Sister Fields, Ceres; Sister Knapp, Yoniona: Sister Haro, Flora; sister F. S. Shaw
Elko Gravge, No. 9, Fleo, Nev.-Election, Jan. 5th: J. A. Tinker, M.; Janes Brain, O.;
s. S. Sears, L.; Jannes H. Parker, C.; Joseph Cox, S.; Thomas Ilunter, A. S.; Isaae, Yeates,
 Litton, L. A.
Enterphise Grange, No 129, Sarrameyto
Co.-A. M. Plummer, M.; George Millson, $O$.;
 Parker, Ceres; ilrs. Campbell, Pomona, Miss Mary Shaver, Flora; Mrs. A. M. Plummer, L.
A. S.

 Lydia Lee, Pomona; Miss Mary Thomson, Orinstrmba Grange, No. 110, Stanislats Co.-E. P. Bennett, M.; C. Catron, O.; C, C.
Easton, S.; B. J. Nolan, C.; M. Beunett, T.; Robt. Mavis, Sec'y; W. A. Fisher, (x. K.; Mrs.
Easton, Ceres; Mrs. Newel, Pomona; Mrs. Barns, Flora; Mrs. Reaves, L. A. S.
Rustil Grange, No. 83.-Geo. Waines, M.; Jas. A. Shepherd, O.; Jos. Heintz, S.; L. Oilcers of Granges are requested to sen 1 list of offi-
W. Howland, A. S.; H. S. Howland T.; Jas. Mirs, Jose Heintz, Toomona; Miss N. M. Haines,
M. Her Flora; Thomas Wilson, U.; H. B. Dun
Miss C. Dunn, L. A. S.; M. Moore, IL
SA.s Lurs Omispo Gravge, No 28.-Geo.
Steele, M.; W. P. Burnett, O.; J. S. Patchett See'y; Sam'l Cook, T.: J. F. Beekett, Latchett, Mrs A. s. stecle, C., N. Mitchen, A.; J. B. Hazen, Pomona; Mrs. E. M. Day, Mlora; Miss L. Ha Ha
zen, Ceres; Miss Mary Carpenter,

 Thos, Pilkington, Pillsington, Ceres; Mrs. Wardwell, Pomona; Mrs. Alice Smith, Flora; Mrs. Soctal Grange, No. 271, P. of H., gacra igan Rar, California: S. W. Prothero, M.; J.O kinson, S.; Simeon M. Prothero, A. S.; Mrs. Hannah E. Putnan, C.; ( George Atkinson, T. Mrs. M. C. Nichols, C.; Miss Rebecca E, Sump ter, Pomona; Miss Mary F. Sumpter, Flora
Miss Gussie Sherwood, L A. S. Stanislat Pomona firange. - Vital
Bangs, M.; A. H. Elmore, O.; S. M. fallup, L. Murn, C.; F. P. Stiles, T.; Mrs. E. J. Turner Ceres; Mrs. L. J. Brouse, Pomona; Mrs. M. E. Pailey, Flora; Mrs. Julia Service, L. A. S.
 fee, T.; P. P.' Stiles, A. K.; Mrs. C. P. Stiles,
Ceres; Mrs. R. B. Rolinson, Pomona; Mrs Mary G. Baugs, Flora; Mrs. W. G. Buckner Scrprise Valier Gravgr, No. 265.-T. H
Garrett M. I.; Geo. Weimer, S: ; Wm. Brown, A. S. J. A. Diekerson, C.; S. Daniels, T.; J. R.
Sweet, Sec'y; E. Wilkerson, G. K.; Mrs. Mary Daniels, Ceres; Mrs. Mannah na Mrs. B. S. Linseott, Flora; Mrs. F. M na: Mrs.
Clark,
L.
Sutter Mill Cbange, No. 179, Coloma, e Dorado Co- Miortensen, L: A. S. Mosely, S.
 Smith, T.; Henry Mahler, Sec'y; Joshua K. Kesselring, Pomona; Miss Annie Dclory,
Flora; Mrs. James Crocker, L. A. S.; Mrs, Win. Stearns, Trustee
Wheatland Cirange-T. Kirshner, M.; I J. Filcker, O.; D. A. Ostrom, L; C. Holland,
S.; D. Fraser, A. S.; S. D. Wood, C.; I. L. Hutehingom, T.; I. N. Huffaker, S.; G.; Mack Ostrom, Pomona; Mrs. F. L. Dam, Flora; Mrs.

Elliott Grange- - Ehitors Press: On Sat urday, 19th, inst. the offieers of Elliott Grange were installed by E. W. S. Woods, assisted by public their friends. Tho table, which extended the full length of the hall, was loaded with rare dain ties. After doing ample justice to the good things provided by the sisters, wo proceeded with the installation, whieh all present seemed to enjoy to the fullest. After expelling most o
all delinquent members the faithful few seem to have taken a new start, with a full determination to maintain the Grange.-H. Apays, See'y

## In Memoriam.


 removed from our midst Sister NAMCy Livtrk, a worthy
and esteemed member of this Granke, torevers severing the
and fraternal tied of an revely y yond
bitt to
Reoonved, That int the eveath of Sister Little the husband
has lost $a$ devoted wift, al infant the tender care of an has lost a devoted wife, an infant the tender care of an
affectionate monther, the connmunity a genial companion and the Grance a truly worthy member
Reselved, That the lusband and hrot
 memory of one so near and dear to us anl.
Rexpled dine That the charter of this Grange he draped in




## The Welcome Rain.

[Written for the Rutai Press by H. W. R.]

## The farmers in his cozy home, His children round him play; The welcone rain pourin do He's happy all the day.

He waited anxiously and long,
Hisil hope had allosidestiod,
His trials seemed to hard to be
His trials seened to hard t to bear,
His prayers seemed all denied.

His patient wife smiles sweeter now,
Thitough neer had she a dread,
She knew the prom ise lond
She kugh ne'er thad she a dread
"The lungry shall be fored." since
The farmer's not the only man
Whoseloloks proclaim his joy
The tradesman and the liborer
The tradesman and the labo
Are sure to have employ.

## Agricultural Notes.

## California.

## ALAMEDA.

ward Cor. Independent, Jan. 26 :
Grain-- Hayward Cor. Incepentent, Jan. 26 at a rate that would make last year's growth die of aggravation, and is now BUTTE.

Chico stock Association.-Record, Jan. Stock Association held another meeting to elect officers for the ensuing year. The same Board
of Directors were elected, viz: H. Bay, S. L. Daniels, J. E. Shearec, A. Bullard and A. J. Gifford. These gentlemen then elected H. Bay
President; A. J. Gifford, Secretary, and S. L. Daniels Superintendent. The Finance Committee reported that they had $\$ 3,600$ worth of
stock subscribed for toward buying the grounds, stock subscribed for toward buying the grounds,
and $\$ 500$ more had been promised. It will only requird a trifle more to purchase the property, and the
raise it.

Sheep Lost. - Record, Jan. 26: We understand that there has been about $1,000 \mathrm{head}$ of sheep lost on Piue, Deer and Singer creeks
during the late storms. Mr. Finnell, of St.
Johns, also suffered a loss of from 300 to 500 Juring,
head.
colusa.
Crop Prospects. - Sun Jan 26: This season bids fair to be onc of the most prosperous we
have ever had in this county. The first part of the season gave us enough rain to start the
plow, but not enough to prevent work being
done dowe, so there cousty than ever before, and nine-
sown in the tenths of it is so situated as to stand any
amount of water. There has been, it is true, a great deal of grain overflowed, hut much of that will not be hurt, aud much of the remain-
ing land will be sown in the spring. A few showers in the spring will give this county an
average yield of 30 bushels to the acre. average yield of 30 bushels to the acre.
PAsTURAGE VS. SuMMER-FALLOW.- We have
been a firm advocate of the system of summerbeen a firm advocate of the system or whingmer-
fall fallowing land, but pasturage of laud is equal to summer-
that the and we are not prepared to say that it
fallow not so. A number of our most observing farmers say that if land is put to wheat every other year, and pastured the odd season, it will proThis plan has been very successfully tried on the river lands. Of course it is not so favorable
to big crops, for to put iu thousands of acres with success the land must be ready to sow be-
fore the rains, but will not the interest in the price of the land soon cut so considerable a
figure in the account that summer-fallowing will not pay, if the same result can be attained by pasturing. If it should be required to pas-
ture two years and seed to grain one, will it not pay better than to let the land lie idde half the
time? Is not two ears of pasture worth one year of wheat? May not the adoption of this
system finally lead to the cutting up of our large farms?

## CONTRA COSTA.

Danaer of Working Wet Land.-Gazette, Jan. 24: So far as our own and all the section
of the county west of the Diablo meridian is concerned, there could not at this period of thc rains have given us. There is a possibility,
however, that the impatience of farmers who have ground yet to plow and seed may damage their prospects if they are prompted to work on
it too soon. Let them give the water near the surface a little chance to go down where it will
be stored away for good service, leaving the soil and vitalize the seed, instead of packing, pud-
dling and killing it hy wet working, and exposing the water it holds to evaporation, when as down out
ences.
FRESNO.
Grain. - Republican, Jan. 26: It is impossiwheat and barley in the vicinity of and tributary
to Fresno as a market. Though not ncarly so
much as would lave been
part of the season been more propitious, or seed
more abundant, without douht more grain will he shipped from Fresno next fall than ever

## LOS ANGELES.

Price of Stieep.-Herald, Jan. 19: One of our leading sheep men has carried 20,000 sheep of $\$ 1$ a head. He finds now that sheep are worth 83 a piece, while a few weeks ago, he could not have sold them for "two bits" a head. He is
about $\$ 40,000$ ahead as a reward for his about $\$ 40,000$ ahead as a reward for his pluck
and faith in the future of Los Angeles county and faith in the future of Los Angeles county.
A Prolific Orange Tree.-Sant Ana News: A little orange orange tree, about four or five feet high attracted considerable attention on the street vesterday. It was from the nursery of Messrs.
Wright \& Son, Orange, and was on its way to the station to be shipped to Woodward's garden from the bud, and is bearing 54 large oranges, from the bud, and is bearing 54 large oranges,
in various stages of ripening. Messrs. Wright sold this tree two years ago for 50 cents and
lately hought it back for $\$ 50$. Mr. Woodward gave them $\$ 75$ for it.
Bee Feed. - $E$ Ppres
Bee Feed.-Express, Jan. 26: The bee men
in the neighboring eanyons are jubilant. They say there will be plenty of hee feed this season, which assures a large honey crop. Having a
curiosity to know what constituted all this valcuriosity to know what constituted and who lives
aable bee feed, we asked Mr. Buts, in one of the canyons, to tell us the names of they bloom, when he gave us the following: Wild gooseberry, white and red mahogany,
bear-bush, wild coffee, white sage-the latter blooming as late as September. The altilerilla on the plains also yields a great abundance of
feed. When the seasou is favorable there are only three months in the year in which feed is scarce. During this short period the bees find
more or less foraging, but the careful apiarist will always retain enough honey for any emer-
gency. Season before last was extra good, and gency. Season besore rast was extra good, and
the bees were closely robbed, under the belief that the following year would also be favorahle It proved otherwise, and the bee men lost heavily.
future.
MENDOCINO
The Rains.-Editors Press: The rain began to pour down in torrents about the middle of water, according to the gauge kept at Pono in water, according to the gauge kept at Pono in before kuown by white men, considering the
channels are deeper and wider. It has been storming at inter vals ever since. It don't rain It just pours down with real geuuine earnestness. Grain is growing nicely, but I fear so much water
will drown a good deal of it. Grass is also doing fine on the ranges, and in fact everything is lovely. Hope to see California redeem herself
from the blighting influence of the past dry season. If the larger valleys could but have of navigation, we would still have some to spare to others. The mail carrier had a rough time
last Friday (18th). The roads got so bad he had to substitute a pack horse for his little coach. He forded Reussian river, a short distance above
Ukiah, and kept on that side of the river unti Ukiah, and kept on that side of the river until
he reached the lower end of Potter valley, whe he came upon a small tributary which he uuder took to cross. There was too much water for
him to save his pack horse; he lost all the mail. him to save his pack horse; he lost all the mail.
The letter bag was found shortly afterwards, with contents badly damaged but generally read able. Paper bag lost irretrievably. Wells,
Fargo \& Co.'s box laid in the bottom of the creek all night and was found next day.-EE. $S$. Bigelow, Potter Valley.
EDITors Press:-Yesterday we had two and in ten hours. January has gives us 16 inches thus far to this morning, and the total has foot ed up 26.21 inches, as against 21.34 last winter, entire. Some fencing has departed from places
on the river, stages have stopped. Bridge have generally stood the strain. Some low ground usually sown late, was this year put in
early and will prohably drown out, uuless it keeps very warm and favorable.-A.. O. C., MERCED.
Crop Prospects.-Argus, Jan. 26: The co
pious rains of the past two weeks, which have
been general througout this valley, have given new life and vigor to the farming operations, and a larger area of land has been put in cultiTation in small grain than in any former season. The recuperation of the soil by reason of laying,
fallow last year in consequence of the drouth, together with the gentle rains of the early part of the season, has rendcred the top soil light condition and the young grain came up boldy and has made rapid and thrifty growth. The keep the grain growing, without any further fall of rain until the drying winds of March however, for a a continuance of moist weather
until beautiful crops are assured ont patient uutil beautiful crops are assured ont patient
and long-suffering, though cuterprising farmers. MONTEREY.
Agricultural Society. - Democrat, Jan. 26 The regular semi-annual mecting of the M. A. A
Association was held at the office of W. P. L.
Winham Monday last, a respectable number o the members being present. The election of
as follows: J. D. Carr, President; J. R. Hebbron, First Vice-President; E. Sherwood, See-
ond Vice-President; Wm. Vauderhurst, Treasurer; U. Hartnell, Secretary. Board of managers: Abbott, Ball, Kilburn, McGarvey, Sargent and Iverson. Inmediately subsequent to the above the Board of Managers held a session, transacting business of some importance. First it was resolved, in view of the terms by which
the race and fair grounds are oecupied that there hall he held groxt fall the hiennial fair notice being given to the public to such effect. SAN BERNARDINO.
Large Arens.- Colton Semi-Tropic, Jan. 26,
An immense area has been sown in grain in this valley and this season will, if nothing occurs t mar the preseut bright prospects, turn out an
enormous crop. Not only grain but fruits a enormous crop. Not only grain but fruits as
well will help swell the fariners' coffers this
year. There are hright tines year. There are hright times ahead for San
Beruardino valley and all southern California. san diego.
Bananas.- News: We looked in at the
hananas of Mr. Asher yesterday, and found hananas of Mr. Asher yesterday, and found
them doing well. His Cavendish variety is
fruiting in tood style fruiting in good style, and we noticed amon the other sorts one of the largest varieties tha
we have ever seen, but did not get the name
of it. Honey.-The Gaskills of Campo sent yesterday, two loads of honey to go forward hy the next steamer. It is old crop honey, but Francisco, because of a scarcity, they will per
haps hit the market. The article is said to be very good. Very dark honey was quoted at 12
and 18 cents; and strained, 10 and 15 cents on the 21 st.
SAN JOAQUIN.
Extensive Fencing.-M. J. Drais owns
1,400 acres of land near Farmington, and has a substantial fence. The posts are redwoo and the boards Oregon pine. The fence is to be
six boards high, that is five along the sides and six boards high, that is five along the sides and
one along the bevelled tops of the posts. He one along the bevelled tops of the posts. H
has alieady purchased 30,000 feet of lumbe
for the for the purpose. Mr. Drais has fairly teste
and is fully satisfied with the durability of Ore gon pine boards for fencing purposes. In 185 a lumber merchant in this city, a pine lumber at $\$ 37.50$ per thousand feet. With the exception of breakage and wearing in part
from repeated nailing, that lumher, after exposure for a period of 20 years, is as sound apparentios when was first put into use.
OuTLook -Indenendent Jan. 26: On th plains, the early sown wheat is in the best pos gives equally, good promise of an abundan ranges of foothills were in a measure exemp from the blessings that had descended upon left the mountain farmers no cause for com-
Higir Water. - We have been informed tha large numhers of cattle have recently been teamer to San Francisco, on account of the en croachments of high water upon the island,
which is badly overflowed. It is reported that some 500 head have been lost here tris seaso BeEs IN THE TULES.-A little house was bult many years ago by Capt. T. C. Walker in
the tules uear the head of Steamboat slough. Capt. Walker had not for a number of years vis ited the locality until recently, when he wa informed that the bees had taken possession of he attic, which was full of honey, so full that down under the weight. It appears that woodpeckers bored numerous holes through the bees availed themselves of the holes to enter constructed wax cells and deposited honey. ion of the structure, and the quantity of honey the premises is belied to en ermous
or rather barks, the Clifton and the Nemesis,
of 660 and 450 tons, respectively, are being oahed in San Francisco bay with and stockion
wheat, furnishel by J. I. Pcters, and consigne to Capetown, South Africa, by Falkncr, Bell \& coarters of the wheat is in demand in the four
It goes to the principal seaports of Europe; our flour finds a rcady sale
and lively demand in Asia, and cven Africa omes to us for breadstuffs, Our county raiscd the best wheat of the state last scason, and this santa barbara.
Lentils.-J. L. Eddy in Guadalupo Tele graph: Any soil that will produce barley an he poorcst soil they have. Select land, howver, that will ho least liable to be troubled with large wecds, as the plants grow very
lowly at first. The seed can be sown either roadcast or in drills; 1 sow hroalcast. The time for sowing is from the first of Febriary to
the first of April; I sow about the 15 th of February. Lentil is well adapted to this climate It ripens in the latter part of July, and so is ali taken care of beforc the fall rains set in. It takcs no injury from frosts. Thavo seen beans, this plant received no damage. It is of the
same nature as peas. It yieldcd well this year -19 centals spracre-and in an ordinary season
threshed the same as beans or with a machine. Twenty pounds of seed to the acre is
plenty. As an article of food, my family prefe itenty. As an article of food, my family prefe nounce it very palatable. Lentil seed is very valuable for feeding stock, on account of its fat All king qualities, which cannot be surpassed feeding 50 small pigs with barley, but $I$ changed lentil and gave them onc-bettre quantity of have lived on lentil straw and have done well. Santa Clara
The Glikoy Factory.-Advocate, Jau. 19 nakers now men business Machinery and fixtures to make the factory building (just com pleted) a live institution, have bcen purchased, actory that would be creditable to any dairy SANTA CRUZ.
Burn the Stumps.-Courier, Jan. 25: Judge large green or dry stump, four or five inches four our or five weeks with the hole stopped up, so
as to keep the wet out, the whole thing will burn completely up, if ignited, in a very short says it works well. The saltpeter necessary to burn up a stump would cost about six or seven deal to clear redwood land.

## STANISLAUS.

lent: Several artesian wells have lately been sunk near the Mereed river, in Merced county, abundant supply of water er portion of this valley could boast of a sup. ly of water from the artesian wells, but it was bore wells of that kind in Stanislaus county. Messrs. Pike \& Stone, near the old and deserted he first persons near this place, to attempt an ago thise sank the ko wells, in different localities, and at the depth of 320 feet succeeded in strik, ing a vein of self-flowing water. They put
down a five-inch pipe which flows regularly, and the pressure would force the water 30 feet
high, if the pipc could be secured. Wm. C. Turner, near the Merced river, was the next
suceessful man. At a deptlo of 325 , feet hc
found an ahundant supply of water which hes found an ahundant supply of water, which has
been running continuously, through a five-inch ipe for over two months without any abatc-
ment in force or volume. After him, Wm. P Sprowl tried the experiment with equal success, oses, as well as for irrigation. He lives purposes, as well as for irrigation. He lives near
the Merced river. Finally, Col. Stevenson and with even greater success, finding not only pure, but soft water. He has six-inch pipe and
bored to the deptly of 330 feet. The auger assed through two strata of white clay, imper vious to the water, and what is still more sindepth of 330 fcet, the escaping water forced up Temple, lately deceased, of this county, and L .
M. Hickman both contemplate making a test of VENTURA.
Editors Press:-It commenced raining lasit EDTTORS Press:-It commenced raining last
night at 7 P. M. and rained pretty stcady all mer, and the best growing weather $I$ ever saw Good crops this season are no longer a question, or (bcaring some unforeseen blight) they are that the days are not long cnough, for us to rejoice over our good fortune in prospective. -R.
Lyon, San Buenaventura, Jan, 23 l . YOLO.
Grain and Water--Demorat, Jan. 24 ing news of the crop prospect for the coming er the this tim and should the continue as favorable as at present the yield the ccreals in this county will be enormous. A
large area has heen sown, and a good yield is alnost assured
Irrieation Work. - On last 'Thursday Majo Stephens, visited the bulkhead at the point where the canal of the Cottonwood lrrigatin Company water had risen to within a foot and a half of the top of the bulkhead, being scveral inche Much than has leen known for some years. had stood the severe test without injury. The riprap, which consists of an earth embankmen some 300 feet in length, and covered with cob blc stones to an averagc depth of three feet, had also stood the test well, apparently not a
stono having been washed out of place. The entire work may now be considered a success, present terminus of the citch, and a work will repair all the damage done by this storm. The benefit to be derived from the wonder is that an irrigating canal has not heretofore beeu eonstructed along the lino of the
one in question. Major O'Farrell feels very proud of the success of his engineering and well


The Old Man Planting Trees.







"They are not eeven for rou", reppied the ovd tnan, mildly.



 Who knows thise of us four mine shin be the one
To caze last on the glory of the son?

 Share for some sears to, cone thay mitts if heaven
shias: even Tmy vee the mormint luyh hit
The olit man spake a ruth which time revealed


 The old man sculptured ont their tombs
The story I have liere narratel.

## A Plea for Frugality.

Ruttors Press:-Californians are charaeter istieally extravagant, lavish, wastcful, profuse They cal and do needlessly spend more money
aud means than any other class of people on the face of the broad earth. Such a thing as eeouony is ignored in their voeabnlary. Iudeed I believed they would be ashamed to be seen practiciug such plain, spiritess virtues as fru-
gality and thrift. It is uot their style. It docs not flourish in this climate. No matter what a man may have been. when he reaches California
he abaudons all his old habits, his preconceived notions of economy, and becomes as lavish and wastcful as the hest of us. These halits, for
they are only habits, are the uatural results of
the the profusion of money consequent upon the
gold, digggings; they are the legitimate legaey of the '43ers. It was well enough, perhaps, at that timese, it is not well enough now
petuates, it iucreases the hard times. reform should be instituted. up the fragneuts, that nothing be baid: "Gather up the fragments, that nothing be lost." This,
too, by Oue, who by the fiat of his word could instantly ereate untold abuudanee. What stronger proof of the siufulness of waste; what
leetter argument to show the virtues of frugality? fashionable in California to be profuse, and it is hard to stem the eurrent of fashion Still it can be done. Were every right-minded stem this great evil and sin; that he would, in spite of fashion and style and custom, practice wastefulness and extravaganee the thing would be half aecomplished. Times would ease up at eomplaint. We wan live; live comfortably and healthfully on very little. It is the style, the fashion that consumes the greater part of our substance. Fine carriages, fine equipages, fine Fine tlour, when coarser is better and more healthful. Fine liquors and eigars, when none health. Fine dinuers and costly suppers, when ishing, would conduce to sound slecp and healthful digestion.
There ars a thonsand ways where we spend minney when we should save it. Thus we are
in constant want. If we would think twice be fore we spend every dollar, every probably return its dollar's worth; but when we spend thoughtlessly and lavishly we don't get our money's worth. If we would have moncy to buy necessaries we must not spend it in luxuries or foolishness.
able character than a miser is a far more despicable character thau a speudthrift; but I opine there is hittle uecessity of remiuding a Californim of this fact. Little danger of his getting
into the opposite oxtrome, at least for many
years to come. But let us praetiee deeent fru- from zenana to zenana, repeating their Arabian gality, a cominendable economy, at least until
we get out of the slough of despondeney and
no ever attentive fennale congregations, who lishard times. Santa Barbara, Cal.
[There is much truth in what our correspondent writes, but it is too sweeping as applied to the whole people of Califoruia to-day. The tide toward sensible eeonomy, and the proper use of earnings and ineomes las already set in strongly
It is true we need more of this truer method of living and we addnit our correspondent's exhor tation, that all who need may profit by it. But he errs in not giving our people credit for the in this direction. in this direetion.-Eds. Press.].]

## The Zenana.

This is the name which is given in India t the part of the house devoted solely to tho wives and female attendants of a wealthy Mussulman, whose fortune permits him, in aceordance with the tenets of the Koran, to have several wives. In Turkey such a place is ealled the "harcm," a name better known among Ameriean travelers
than its Indian eognomen. Nor is this labitit of seten rapturously to their tales of gbouls, djins
and deeves, and never dream that in the world that moves around them real romanees are ineessautly going on that would stir their hearts, if their life bal not stifled all higher feelings. But their time is generally spent in such agreeable pastimes as quarreling, smoking the hookah or water.pipe, seeing snake eharmers
through latticed windows, who force other dangerous snakes to go through several other dangerous snakes to go through several
performances ly the sole fascination of an ear piercing tune on an instrument whose sound resembles that of a pibroch, and admiring a sorcerer, who will in a few minutes make a sed
grow into a tree and obtain the ripe fruit grow into a tree and obtain the ripe fruit a things seldom seen iu western eountries. Whenver their time is not given ap to tbese subjeets, they pass it in eating eurry and riee, khebobs meats, or better still, they sleep off their coisure hours. Although we might be inelined to pity them, they theinselves exult iu sueh a life, and "ennui" is to them a thing unknown.
The engraving whieh we present on this page
shows a zenana iu a wealthy Mahomedan's house a zenana iu a wealthy Mahomedan's idea how the Iudian ladies while away their time. Since the missionaries have done so muc


## SCENE IN AN EAST INDIAN ZENANA.

cluding womenfolks eonfiued to the Mussulman; both Hindoos and Parsees have also allopted
the eustom of their early concuerors. The latthe eustom of their early conquerors. The lat-
ter, though, being very liberal in his views, is apidly attaining the western standard of eivilization, and ere many years pass on he will
have adopted all the ways of his European master and model
It is very difficult (almost implossible) for a mpty of its occupants, a zenana, nuless it be empty of its occupants, and to hint that a aigh
of it would gratify you, will surely be cousid ered as a grave insult by tho owner of the plaee no matter on what good terms you may be with
him. Gentlemen with au inquisitive him. Gentlemen with au inquisitive turn of mind who are aware of this, generally send-
whether it be to gratify their more likely that of their fair correspondents home-a lady friend, probably a mutus at quaintance of themselves and the Sirdar whose family matters they want to expose to thei wondering friends at home, knowing how much their descriptions, put in glowing local colors, will go far toward establishing their reputation
as graphic writers amongst them. Let secrets are very few anmongst these poor Moslem girls them in disappears before our positive caze They are very benighted and ignorant, the gaze things, aud their most exalted tlight of imagination never goes mueh higher than a new bangle uose ring, a new dress or a bracelet.
Romance is to them nuknowu, further than what they may hear from their a ychs, or nurses,
or from the female inprovisatore that wanders

## Men as Gossip Mongers

Editors Press:-1 saw in the Reral of tbe 5tb inst., a small paragrapb about a Western man's invention to beat the tclephone. "He proposes to station women 50 feet apart in a line, and commit the news to the first as a secret," cte. I suppose that gentleman means to run such a maehine with his own relations, i. wife, mother and sisters, as I do not think that there are many men that wonld be willing to have their loved ones engaged in snch an enter prise; but I suppose that a person mean enongh to write sueh a slur on the wonten, to put in a paper, must certainly be able to find all the re quired material within his own family
I think it would be nothing more than justiee to stop slurring the women unless wo our-
selves set a better examble. The greatest tatselves set a better examble. The greatest tat would feel very much insulted if I were to call them |women. I would be ashamed to think that my mother were a women if I had no bet ter opinion of the sex than such men. No doubt he thinks it witty, but 1 do not see it in that light.
Fish Roek, Jan 16th, 18 GE.
[We do not suppose that the writer of the baneful paragraph, whieh excites our corres pondent's indignation, ever thought of nsing his own folks in his maehine. Donbtless his bosom swelled with patriotic pride like that which nerved A. Ward to offer to saerifice "all bis wife's relations on the altar of his country." Of course the point which our correspondent makes is sound. There has always been, how ever, iu intellcectnal taeties a command against no doubt that many a woman lanched e hav ridiculous idea of the jok $\Leftrightarrow-$ maker nor thought her sex could be wronged by such light raillery If any were offended they have a vizorou champion in our corrcspondent.-EDs. 1'REss.]

Sessible Almost to the Last.-Mr. and Mrs. Mulcahy lived on a farm. They were
shrewed and thrifty, and had the reputation of shrewed and thrifty, and had the reputation of being "close." Finally Mrs. Muleahy sick-
eved and was about to die. Finding herself ewearing the end, she expressed a desire to put things to order before that event occurred, and ol " "om preparell to listeu.
Smith up at the erossing she owes "tere's Mrs. bntter; see ye get it." "sinsible to the last my dear, siusible to the last," said Toul. "In get it."
"Then there's Mr. Jones, up," at the creak, she owes me $\$ 1.50$ for chickens." a moind; she
" Ah ! look at that now, for a forgets nothing.
And Mrs . Br "D'ye hear that? Sinsible to the last; siu-
sible to the last! Go "And-and-"
"And Mrs. Roberts, at the toll-gate, I owe her- "Ah! poor dear? poor dear!" broke in old Tom hastily; "how her moiud does be wan derin': Sure, we've allowed her to talk too
much entirely, so we have!"-Clevelund Ilerall.

Wintrier on Skcts. - Mr. Jobn G. Whittier thanking the Florence Congregational Sunday school for its celebration of his birthday, says; "You do not err in your hope that I may gladly
reeeive this token of your good will. No dif. reeeive this token of your good will. No dif
ference of religious sentiment can make me inferenee of religious sentiment can make me in
sensilile to worls of kindness. In the long struggle of the past I have learned to value above all the orthodoxy of a good aud true life. I have learned, in the same sebool with John Woolman, to feel no narrowness as to seets and opinions, to use my own words in this eonnee
tion, whieh you will pardon me for quoting:

The truth's worst foe is he who claims
To out as Gods averger,
To act as God's avenger,
And dreauu, bey oond his sent
Who setr for heress his trips
And weeds the garden of the Lord
With salan's borrowed dibble.
Of course every earnest man would rejoice to bave all men share the faith and hope which eomfort bimself, but this feeling should always
he tempered by the 'charity which sufferetb he tempered by
long and is kind.

A Good Resolution.-A physician who bas passed his three-seore years and ten writes as
follows : Well do I remember the day and the follows hour when I made, to me, "blues." I had suf fered for a month the most intense mental pain beeause my business did not go to suit me. I found fault with my wife and children, and nothing suited me. Mings were getting most uneomfortable for all of us. I got up one morning as usual and expeeted to have a bad day, had come from the other world, and, straightening myself np to my full might, I said to myself emphatieally, "By the Eiternal, these miserable feelings have got to go ; not onee to-day will I feelings have got to go ; not ond for an instant." I kept my word, and bave done so till now, and
find it easy enough to keep the "blues" at bay.

Chaff.
"A YANKEE editor, in a financial article, say
"Money is close, but not close enougla
"H. How ane
"How are the crops, Uncle?" said a Southerner to an old negro. "De crops are pretty
full," dryly remarked Sambo, who had just returned from robbing a hen-roost.
Farmer (after anxiously inspecting strangers); "What be they gentlemen doing, mister ?"
Visitor: "Sketching your house., They are "Weltists and maybe they will paint it." Farmer wants it and whitewashing, too, mortal bal."
Country Gentleman (to foreign friend): "Hi! there Fire, man! Don't you see that ze poor ting down as it retreat? No, no, my
good saire. Vait till he turn about and face
me; then will me; then I will.'
The following conversation is reported to have taken place between a gamekeeper and a
patient looking through the iron gate of a
French lunatic asylum:-Patient: "TThat's a fine horse, what's it worth?" "Keeper: "Five
luundred dollars." Patient: "And what did that gun cost?" Keeper: "One hundred dol lars." Patient: "And these dogs?" Keeper:
"Eighty dollars, I believe." Patient: "What
"W have you got in that game bag?" Keeper: "A
woodcock." Patient: "Well, now, you had better hurry on, for if our governor catches a man who has spent $\$ 680$ to get a woodcock
worth 30 cents, he'll have him under lock and key in no time, I tell you."
A Small Farm in Italy.-Bayard Taylor, the well known traveler, gives the New York
Tr $r$ ibune a glimpse into the home of a small farm in Italy: I remember once, many years ago, entering the house of a small farmer,
the valley of the Arno, to procure a drink water. It was noon, and the husbandman had just come from the field for his dinner. His
wife was in the kitchen preparing some sort of soup which exhaled the appetizing odor of onions, and two children, a boy of twelve and a ghich of exphressed healthy hunger. The man
went out-for the water, as I supposed; but went out-for the water, as 1 supposed; but was filled with cool wine from the cellar.
plate, with a slice of dark brcad and a pinch plate, with a slice of dark brcad and a pinch
salt, was also placed on the table. In answ to my question, he informed me that the hous
and an adjoining field, olive orchard and vine yard in one, containing some seven or eight acres, were all his property, "Does this give
you a living?' I asked. 'Yes, we can manage,"
said he. 'You see all my faily' said he. year Pigs and chickens, you know, cost nothyear. to keep. When the season is tolerable I have some oil and wine to sell. I do work, (my wife) makes something by her spinning, and if we fall a little behind one year we make
it up the next. Oh, yes, we are well con it up th

Make the Best of Things.- If all would do this the world would be happier for most of us
than it is. Some people seem to do everything than it is. Some people seem to do everything
in their power to make the worst, rather than the best, of what they have. The difference of condition in those we meet lies, in most cases,
just here. It is one thing to earn money, and just here. It is one lhing to earn money, and anothed. Good wages or bad wages make small difference in the comfort of some homes. The more a man who has no idea of thrift or economy earns, the more he spends uselessly. High wages are an injury rather than a blessing to such a man, for they only increase his opportunities for self indulgencies that confirm bad habits. Making the best of things is the art of all arts, without which no calling, trads or profession will ever insure success. It is the secret of order and comfort in our homes. The wife who makes the best of everything her husband's
wages procure, besides being the help-mate she wages procure, besides being the help-mate she the best of his opportunities working faithfully, intelligently and skillfully, and so yetting for his family the largest return for his labor, only fulfills the pledge he made when taking opon himself the responsibilities of a married man.
Ant in Amber. - At the late meeting of the Microscopic Society, Mr. Woodward exhibited a fine specimen of mounting, performed in na-
ture's laboratory, in the way of an ant in a piece of amber. This relic of cretaceous life had the good fortune to drop himself into the
fluid resin as it escaped from the amber-fir, one of the conifera of that age; and thus embalmed, was preserved in the same manner objects are now mounted in Canada balsam, and when we perfect in detail as well as general form. It
was fixed in a slide by Mr. Kinne, and placed in the cabinet for future examination.
"Woman-Farming."-How dreadful, 1
hought, as this side-heading caught my eye in thought, as this side-heading caught my eye in
glancing over my Paciric RURAL Press, but I was relieved when I read on and saw that what the paragraph being the lady who won the
Royal Agricultural Society's first prize for the best managed farm of over 150 acres."-Lon
don Mark Lane Express. We stand corrected.-Enitors Press,

## Youna Folks' Column.

The Grumbling Boys.

His parents were strict, and he never was rested;
He kuew he was wrethen ase wreted could be,
There was no one so wretcheelly wretcthed as he.

## I Can.

Men who do the noblest deeds
Never say 1 cant He who lacks the stren.th he needs,
Tries his best and ne'er gives o'er, ries hirs best and ne'er
will at last suceeed.

The House-Mouse and the Wood-Mouse A house-mouse and wood-mouse once met and invited each other to a visit. The housethe wood-mouse made her house, which was a the foot of a fir tree, look so nice as she could,
and took home some roots and berry buds for and took home some roots and berry buds for
dinner. dinner.
Then the house-mouse came and tapped at the door, and courtesied like a lady; and the
visit began. Of course company must like what is set before them; and so the house mouse tried to eat; but it was hard work, and to do her best,
Next day it was the house-mouse's turn to have company. She lived in a granary, and
had heaped up a nice pile of barley and rye and bits of cake, and pork, and ends of candle. And then the wood-mouse came; and so he visit began.
The wood-
The wood-mouse had never before had such a dinner; and the house-mouse, had to tell how she came to such nice things. She told about the pantry and the kitchen and the cupboard,
which last was so hard to get into. But, just as they were saying how much bet ter it was to live here than in the wood, the
heard some one come slyly over the straw, "Hush, hush! there!comes Sheriff Cat," sai the hostcss. So they sat still, hardly daring to breathe; but, before they knew it the sherif "Who thing right over them.
said he
"On

## 

What are you doing here?"
Only having a little dinner."
Cating up all my grain!"
Oh, no! We have only taken what wa
lying loose."
"I am goin
am going to take you, now." Let me hear it, theu," said the sheriff. Once there was a little bird"
Well, what did he do?
He was going to sweep the floor,"Then he was very neat,",
"And he found a dime,",
So he bought a tiny piece of sausage "hen he had enough to eat."
"Then he didn't eat it raw,"
He laid it on the door-sill to cool"
Then he didn't mean to get burnt
And so shall I snatch you," replied She
But the wood-mouse ran quickly away, and didn't stop until safe under the roof of the firtree. She was so scared, that she did not dare
to come out again until she was so thin and hungry that she could hardly creep; and she resolved never more to visit the granary.
And what became of the house
And what became of the house-mouse!
is for you to guess.-F'rom the Norwegian.
Mother Goose:-Mother Goose was not born yesterday. "Sing a song of sixpence,
was sung in the sixteenth century. "The "Frog and the Mouse" was licensed in 1550, and period. "Pussy Cat, Pussy Cat, where have you been?" was a nursery rhyıne in Queen Play "The was written in the reign of Charles 1 . popular in the days of James II.; and "Little
Jack Horner" is older than the seventeenth century.
A Book has recently been published, "How to Live Within Your Income." The advice is kindly tell people how to live without it, he would confer a boon on thousands.

Good ManNers.-Manners are tho happy ways of doing things; each one a stroke of
genius or of love, now repcated and hardened genius or of love, now repcated and hardened
into usage, they form at last a rich varnish, with the routine of life washed and its details adorned.
"Foregoes" was a word put out at a written spelling exercise, by one of our city teachers
recently. And one little boy handed it: "

## GOOD HEALTH.

About House Drainage.
The Herald of Health has the following in a general article on the health of country
residents, from which we draw the folresidents, from which we draw the fol-
lowing pertinent points: Question-If soap suds and household slops are so dangerous, why do they not al ways produce some form of contaare not always present, or if they are, they may be destroyed by the ozone and oxygen of the
air, or favorable winds may drive them off, or the system may not always be in a condition to receive them. If a thistle blooms and seeds on a grass plot, the seeds are watted off, and only ircumstances and let it seed on a plowed field, and a majority of the seeds will find a place to
grow. The germs of disease are infinitely more grow. The germs of disease are infinitely more tle, and for this reason do not take effect except where all the conditions act favorably
Question -In what way is the sink dangerous
and
 The refuse matter is generally run off into a barrel through a straight pipe. Here lies the dan-
 warms the pipe then the gases flow into the room. The consequence is, the pipe may become
a source of disease and death. If you have diphtheria in your houses, look to your drains before you give up searching for its cause.
Food and Respriation.-The Journal of hr. Speck has lately been engaged in examining the changes produced in the respiratory process by the use of fatty food, of coffee, quinine, al.
cohol, and water, and by the inspiration of air respectively rich in carbonic acid, poor in oxy-
gen, and rich in oxygen. His chief conclusions are. 1. With an increased proportion of hy
drogen in diet the amount of the air inspired and expired decreases. Nutriments, such as sugar, which contain little hydrogen in com
parison with their oxygen, involve more exerparison with respiratory organs than such as are rich in hydrogen, like the fats. 2 . The more to hydrogen, the more air is exhaled in proportion to that inhaled. 3. The more carbon increases in the diet in proportion to hylrogen,
the more carbonic acid is evolveĩ, and the more oxygen is taken up; the richer the diet in hy-
drogen, the less oxyen is required. drogen, the less oxygen is required. An at mosphere containing hive or six per cent. of car
bonic acid could be breathed for some ininute without oppression. At $11.51 \%$ great exertiou was needed to breathe for one minute. A
$7.2 \%$ all the carbonic acid produced in the body s retained in the blood, and $11.2 \%$ a great part Take Care of Yourself.-Hall's Journa
TAKE CARE of Yourselp.-Hall's Journal
of Health gives the following good advice: A
New York drayman or hack driver, his horse a part and parcel of himself, and the moment his animal ceases motion in col weather, that moment he covers him why this care? He knows that i
blanket. Why
neclected, the horse will take cold, and that in neglected, the horse will take cold, and that in
a day or two, he will most probably die of some form of inflammation about the lungs; yet multi-
tudes of people perish every year, from bein tudes of people perish every year, from being
cooled off too quick after exercising. More people die prematurely from want of care in any given
year, than perish by plague, famine, pestilence year, than perish by plague, famine, pestilence
and war. The Duke of Wellington died of an ver-hearty meal of venison in November. Gen grave, by a bowl of fruits and iced milk, on Fourth of July. It is a good omen, that indifferent parts of the country, are beginning to make personal health one of the branches of an
elementary education. Is it not wonderful that elementary education. Is it not wonderful that more efficient steps have not been taken in that
direction long ago.
Tipling Nurses. - There can be no doubt that nurses bottles inay be worse for children
than nursing.bottles. M. Anarien, in the Arcchives de Tocologie, reports two cases in
which children, at the breast of apparently healthy and well-to-do nurses, were suffering from convulsions, and in which the children
wese saved by dcpriving the nurscs of alcoholi wese saved by depriving the nurscs of alcoholic
potations, in which they were found to be potations, in which they were found to be
freely indulging. As the Philadelphia Reporter remarks, it is a pernicious delusion of nursing mothants, they required to be "kept up" by algiven to alcohol at other tines become, for tho noncc, determined tipplers, -this being, perlikely to do most harin and least good.
Egg OIL For Wounds- - Extraordinary sto.
ries says the Drugists' Circular, are told of the
ries, says the $D_{1}$ ruggists' Circular, are told of thc made from thc yolk of hens' eggs. The eggs are first boiled hard, and the yolks are then re-
moved, crushed and placed over a firc, where they are carcfully stirred until the substance is just on the point of catching fire, when the oil
soparates and may be poured off? One yolk wil
yield nearly two teaspormfuls of oil. It is in
gencral usc among the colonists of south hussia as a means of curing cuts and bruises, etc.

## Domestic Economy

## Hints for Housekeepers.

Rich cheese feels softer under the pressure of the finger. That which is very strong is neither very good nor healthy. To keep one that is cut, tie it up in a bag that will not admi flies and hang it in a dry, cool place. If mold ppears on it, wipe it off with a dry cloth.
Picture-frames and glasses are preserved from fies by painting them with a brush dipped in a
mixture made by boiling three or four onions in a pint of water.
Poison of almost any kind swallowed will be instantly thrown fron the stomach by drinking
half a glass of water (warm is best), in which half a glass of water (warm is best), in which
has been stirred a tablespoonful of ground mustard; as soon as vomiting ceases, drink a cupp of
strong coffee, into which has been stirred the white of an egg. This nullifies any remnant which the mustard might have left.
Soft-soap should be kept in a dry place in the
cellar and not be used until three months old Kettles are cleansed of onion and other odors by dissolving a teaspoonful of pearlash or salerFlour in water and washing them
Flour and meal of all kinds should be kept in
cool, dry place. cool, dry place.
The best rice is large and has a clear, fresh
ook. Old rice sometimes has little black in look. Old rice sometim
sects inside the kernels.
Wash your shelves down clean, and, while damp, rub fine salt on them quite thick and let it remain on them for a time and red ants will

Wild Pigeon Pie.-Clean the birds care fully, cut them into four pieces and lay then in salt water for an hour, then rinse in soda
and water and finally in clear water. Put hem to cook in a little cold water, cover close and let them boil for 20 minutes or less, ac-
cording to the tenderness of the birds. Line crang to the tenderness of the birds.
the sides, only, of a deep dish with nice paste, nd when the birds are ready, lay them in we put some scraps of salt pork, or ham, and some in which the birds were boiled with a table spoonful of butter rolled in tlour, the juice of lemon, and pepper and salt to taste; if liked, add some chopped parsley. Let all come to a over the dish with a crust, leaving a hole in gg, and bake for an hour or longer. If the writing paper, and if you wish to make the pie he pastry with a cutter; lay them on after the pie is glazed, then brush them over with the nut an ornam be careful to bake a fine color bake it on a separate dish. . When the pie is
lone, lay it over the hole in the center, or done, lay it over the hole in the center, or,
clean three of four of the pigeon feet and stand them up in the center, with a few sprigs of
parsley laid around them.-Clera Francis in
Prairie Farmer

Orange Marmalade.-A writer in the
Rural New Yorker gives the following: Allow Rural New Yorker gives the following: Allow nn quarter the oranges-cyarcluw peel. Boil the peel in clear water changing the water once, the bitter taste. When tender, I boil it slowly ut into delicate shreds, with a very sharp knife To prepare the pulp, remove the seeds and white stringy outsile part; squcezc out the juicc
and thin pulp into a bowl and pour over the cnder, then popd the pulp in a mortar unti tender; then pound the pulp in a mortar, or cut
into small bits, and with the water in which they were boiled ald, with the shreded yellow peel, to the sugar and juice. Put the whole
nito a porcclain kettle and boil. When it be gins to thicken it must bo tried occasionally by lctting a little cool in a spoon upon ice. Great
arc must be taken that it does not burn. When as thick as desired, turn into cups or
umblers, cover with paper wet in brandy and tumblers, cover with paper wet in brandy and
tic down tightly.

Molasses Cookies. Onc cup of molasses; one cup of sugar; one cup of lard, or butter-
if butter is used tho cup must lee heaped; ono up of lukc-warm water in which one largo spoonful of cloves and one small nutmeg. poonful of cloves and one small nutmeg.
Crean the sugar and shortening; add the moasses, and spices; then onc cup, of liour, stirring
it woll in; then add the water, a littlc at a time, with flour to make it stiff as you can stir it. lioll one-fourth of an inch in thickness and aro nice and moist.
Too Whitre Flour.-Messrs. Mouricz \& Chovrene, chemists, who havo superintencded
the provision of brad for the hospitals, and subjected all kinds to experiments, submitted a report to tho French Academy, in which they
coudcmu tho practicc of making broad too white. It is then, they remark, a condiment, f nourishment to the consumer; the palato and fancy are gratifici at the expense of the whole animal cconomy.

## PAC IC RURAL oxerinsoulis

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w. b. EWER


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 The Scientific Press Patent Agency DEWEY \& C0., Patent Solicitors.

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Saturday, February 2, 1878.

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 sime, 72.
NEWS IN BRIEF on 78 and other mges.

## NEW ADVERTISEMENTS



## The Week.

Where is the man who prophesied a dry
year! Our Diogenes comes in half drowned year? Our Diogenes comes in half drowned
irom the search, and says he cannot find him
with a railroad headightit. Where is the orig. with a railroad headighlt. Where is the original californian who has
sinee the deluge and who shook his head so
oninonsly last December and nnuttered "dry ominonsty last Decelnber and inuttered "Iry
year." These last stars of weather wisdonn
should be discovered. We refer them to the year. . hese
should disso
lick telescope.
Again have we had our figures of rainfalls in
lifferent parts of the State washed away by different parts of the State washed a way by
another sturn. We are tired of giving partial figures, and will wait for a pernauent elear upl.
Int this city the rainall to Wednesday, Jan.
30th 30 th, was 16.15 inehes for the seasou, against
6.62 at this time last year. The same relation 6.62 at this time last year., The same relation
between this and ant last year's rains exists nearly
everywhere in the State. everywhere $i$
better year!
OY FiLE. - Poultry Notes, A. F. J.; "Flora,
culture," W. C.


## The Wool Interest in Congress.

A few weeks ago, we called attention to the tariff from wool, and thus strike at the safeguard under which our wool industry has reached its present high estate. We notice with pleasure
that a resolution las been introlueed in Legislature, asking Congress to refrain from re moving the duty, and instancing the injury whieh would result to our flock masters from the free
entry of foreign wools which are now being produccd in such large quantities in all the eorners of the universe. A similar strong protest has
been sent to Congress from an intluential auriculheen sent to Congress from an inhuential agricul-
tural body in the State of Miehigan, and from
wool wool growers all over the country. It is to be
hoped that these warnings will be heeded by all our representatives who have at heart the pros-
perity of our people, and the advancement of a perity of our people,
grand home indnstry
In our own state at the present time, the re-
noval of the protective duty ou wool would well moval of the protective duty on wool would wel
nigh wreck our wool growers. They have under uigh wreck our wool growers. They have under
tone a severe affliction in the last year's drouth gone a severe a teliction in the last year's drouth. ither by actual starvation or by forced slanghter. The price of woot, too, has rulell low for many
nonths, owing to the geueral business depression, and the consenuent small demand for fallrics.
The people of the United States lave been wear The people of the United States lave been wear
ng their old clothes and old carpets almost since the eollapse in 1873. This fact lrought onr
wool industry to the doors of the dronth with wool heart and faltering step. The harlship
faint sacrifice which the long dry winter and snin-
and sum and sacrifite which the long dry winter and snim-
mer of 1577 entailcel are too well known to need leseription. When it is known that sheep soly
or 12tc. per head in the sonthern counties or $1-2$ c. per heads to mind the thousands which
and yerished on the roads to moun tain pastures, and
sank beneath the sands on the way to the fields of sank beneath the sands on the way to the field of
Arizona and New Mexico, it will not be hard to realize that our woul growers have passed through
alnost hopeless days. Now the picture changes alnost hopeless days. Now the picture changes. The copious and wase reaching rains are bringing wool is on its upward turn. Fiverything in the orth every effort and make every possible in vestinent towarl getting another start in their industry, and toward increasing and improving
their flocks. Our poor sheep are gune; the lessons of the recent past are full of incitement to
breed better sheep, and make letter provision reed better sheeep, and make better provision
for their growth and productiveness. The value of small baulds of sheep on sinall areas is just
beconing to be apreciated by our farmers erally. In short, we are jnst on the eve of place us far in advance of auy results which
have been thus far achieved in California. This In on present situation
roposition to a critieal moment cones the wool. It could not come at a nore fatal time Just at this time our wool growers need all the aid which wise, protective and fostering laws can give them. It is a question of rebuilding,
hitle remains but the fonadation and the will.
Will it Will it be wise to scatter the foundations ani turn the proressive, disposition int a deterni-
nation to abandon: We trust our representa-
tives tives at Washington will see to it, that no
strength of theirs shall be wantiug in the pres ervation of the splendid wool interests of al Weas. speak especially of California and the
Pacific coast, because here our interest lies Pacitic coast, because here our interest lies;
but we are not unumidful of the efferts which have been made dnring the last ten years all wool aud muttou product, and the great treas. ures which have been secured at great cost in
improved breeds of sheep. All these noble ef forts and enterprises have been undertaken in good faith, that measures which have so plainly worked for the industrial gro wh of our coun-
try shonk be maintained. What have been try shonly be maintainec.
the features of this growth? We cannot
describe them better than did IIon. John L. Hayes of Boston, in a receut address upo the subject of which we write: The protection
which Congress deereed in 1577 saved the which Congress decreed in
husbandry of the United states from the anne
hilataion threatened at the tine it went into efhilation threatened at the time it went into ef-
ect thy the tide of the wool surplus of the soutlern hemisphere, which was then pouring
in upon onr shores. It has led to sheeep growin upon onr shores. 1 it has ted to sheep grow-
ing in the traus-Missouri region, and on the
lacic racific slope, the siugle State of California
producing this year over $56,000,000$ pounds of wool, while our whole wool producs
in 1860 was but $60,000,000$ pounds, it hat developed mutton sheep husbandry in the tion of the people. It has inclosed this country, as it were, iu a grand corral, in which our price-
less flocks amd invaluable raees have beens preserver for future increase, from connmercial depredations inore fatal than the beasts of prey
from which the uomadie shepherd shelters liis Hoeks. It has benefited the eloth mannfacturer by causing the prices of wool, throurh inereasel
Iomestic production, to be actually less than before the tarifif. It has beneited the card wool manufacturer also by giving him the almost ex-
clusive eonmand of our own market in the cheaper cloths for general consumptiou, It has aholished the unjust discrimination formerly
prevailing against the manufacturers of hosiery.
It has rescued the worsted
the destruction menaced by the restoration of
the duty on Canada combing wools at the termination of the reciprocity treaty, without neutraizing duties on mauufactured combing wools, in existence here 10 years ago. It has assisted to make onr carpet manufacture the largest iu the world, reaching in 187 i a value of $\$ 19,000$, 000 in a single city, Philadelphia, and over $\$ 32$, 000,000 in the whlole country. It has encouragcd domestic competition in all branches of our industry; sometimes depressing, it is true, to
the mannfacturer, bnt a boon to consumers in the mannfacturer, but a boon to cons
the diminished priees of their goods.

## Straw as a Fuel.

California has never boasted much about her inventive genius, but we venture to say that she can show as great achievements in this
respect as any state in the Union. The successful utilization of straw as a fuel for gener ating steam in steam boilers, and particularly its adaptability for use in threshing engines ions, espec one the most important inven tions, especially for the farming community on
this coast, that las been brought to the notice of the public for been brought to the notice traw engine superseded the horse-power for driving threshing machines, the farmer was enabled to shorten the harvesting season and eheapen the cost of placing his grain in narket and the entire community was benehted. Without the stean thresher, it would be alnost impossible fur our large fariners to complete their thrcshing of one season before the next ip the imnense stacks of yrain in short orde and the saeked grain is hauled direct from the ield to the warehonse, while nothing yut a
huge pile of straw is left to rot on the graund or The hish price of wool to ont of the way.
The highl price of wo of havius to haul it coas over the field, to supply the engine with fuel was a large iten of expense to the farmer and nduced a number of our inventors to try and the thresher, as a fuel. Experiments for this purpose were not limited to California alone. Chroughont the East, and even in Cinrope,
faruers, thresliers and nanufactarers endeavfarmers, threshers and manufacturers endear
ored to ntilize this fnel, but their efforts either resulted in entire failnres or fell so far short o success that straw was pronomecd a
failure for that parpose. The general im filure for that inrpose. The general im
pession seemed to be that the ouly hing required was to devise some means
r device for feeding the straw to the furnaee of the ordinary portable threshing en-
ine. These engiues wore of the ordinary fire gine. These engiues wcre of the ordinary fire box patccru, the lioadey congine, we betieve
being the one nost generally known. The re ult of the experiments, howerer, , irovel, as We have stated, either total or bartial failures
 the furnaee, but the instant the stean wa drayn upon to furnish power to drive the cient pown it would go until inad not smf threshers would lave to stop feeding until the steam was run up to the required pressure again Besides this the tlues of the boiler would be come ehoked ly the cinders of the straw, an the grate-bars would chese dittieulties were discouraging, and could not be remediel, and it abont to become a thing of the past.
Fortunately, however, for the people of this coast, at this point a new sampson came into the field. Harvey W. Rice has been for several
than years manufacturing at his shop, in Haywards,
Alameda county, what is known as the returnAlamedal county, whate is known as the return
flue boiler. This boiler has a main flue passing from the furnace back to the combustion cham ber at the opposite end of the boiler, and smal
eturn flues lead back from tho combustion chamber through the water space of the boiler to a chaunber directly over the furnace, and the smoke-stack is inounted over this chamber, or, in other words, over the furnace end of the
boiler. This style of boiler was not of itself new so that Mr. Rice could claim it as a new invention, although he claims to lave invented
this particular pattern many years ago. One thing is unquestioned, and that is that he was the first person to mount it on wheels-that is, make it portable and place it in the harvest bad success which had resulted from the attempts of other people to burn straw in their
tire-box boilers, Mr. Rice determined to try the effects of straw upon his return-flue boiler, and the resnlt has been that to-lay there are over 200 straw burning return-Hue boilers in nse in
this State, all of them giving the utmost satisfaction.
In or
In order to convert his boiler into a straw or improvements upon it, and these he very sensibly secured by United States letters patent, which were taken ont through the Inining AND Scientific Patent Agency His patent has
Peentwice tested in the United States Circuit Court, and has been sustained each time. Messrs. ML. C. Hawley \& Co., the well-known pirchased the patent and are prepared to osupply
straw burners wherever they will be required.

Queries and Reples.

## Egyptian Corn.

Forrors Prass: 1 ghould like to know about what tine

 The points in growing this grain, so far as the limited experience with it in this State has
discloscd them, hare been fully disclosed them, hare been fully giveu by difficrmonths, and we can but alvise che quat few refer to his back numbers for a full study of the question of culture. The time to plant the to local conditions. This is sown of eourse in the spring like lndiau corn, but just when to dom from frost, cte. Mr. Sanders plants one pound of seed to the acre. There is a getheral conclusion that wide spaces between the plants ehance far a to admit of cultivatid ardly think our correspondent's conditions were favorarlapted to lot, dry crop, as it is especially
climate and llght soil. However, it will do no harm to try it in a smal
There is considerable inquiry for seed of the white variety, and, so far as we know, there is have received any one who has the white seed wonld find quick sale by advertising it in our columns. An Old Hebrew Coin.
EDitors Prass:--The translation ol the inpression ol
the coin sent to me by you is (on the side where appears), "David, sol ol Jessis, King of Israel." On the
other side, where the harp aypcars, thus: "Distinguished


The above is in reply to an inquiry, which we printed, from a reader in Los Angeles
county, some weeks ago. Mr. Samuels has our county,
thanks.
Tarred Seed.
Edirors PrRss:- Ilow is tar ziplied to corn to keep
birds and squirrels from pulling it up and is there a betirds and squirrels from pulling it up and is there a bet-
ter remedy

- P., lacaville, Cal. The seed is first made warm, not hot, with then rolled in plaster and ashes. This treatment will slightly retard the germination. It should not be used when the soil is very dry. Does anyone know a better remedy
California Soils for the Paris Exposition.
Editors Press:- Please state in your next issue, that in collsequence of the delay in the tion bill, there is yet time for the transmission of soil specimens; and that, moreover, they will in any case be exceedingly aceeptable, usenl and important as suljects of investigation and instruction at the University. Let no one, therefore, tire of well-doing,
University of Cal., Berkeley.

Honey Locust.
Editors Press:-I cannot say anything tate, and so far as we have heard in all the tates east of the Rocky mountains and in Can. ada, it is perfectly hardy and does well every. where, neither dry or wet ground being injuri-
ons to it. The seed has to be scalded and when ons to it. The seed has to be scalded and when
portion of it swells it mast be sifted and the alance scalled again nntil all is swollen and oft. We are having a very mild winter here ing weather here.-J. B. Junks, Lake View Nurseries, Rochester, N. Y.

## Essex Swine

Who has the Essex swine, thoroughbrerl? There is inquiry for them, and we shall be pleased to have reply from readers on this coast

California's Climate.-Mr. B. B. Redding's article on the climate of California, to which so mach of our space was devoted last week, ought to be widely circulated at home and abroad. It forms the most accurate and intelligent synopsis of the causes of the varieties of climate experi enced in different parts of this State that has ever been published. In fact, there are few competent to handle the sulject as Mr. Red ding has done, his facilities for obtaining sta tistics being unexceptional and his interest i the matter great. He has had abundant oppor-
tunity for observation from one end of the State to the other, and has spent a great deal of time in collating data, so that nothing like this article has been written in California before. It
will form a nucleus, or grand starting point, for will form a nucleus, or grand starting pof further facts, and we should be $p^{\text {peased }}$ to see any comments or further infor that Mr. Redding would be pleased to get the views of others who are interested in the snbjeet and have paid any attention to it. Mr. Red-
ding is a disinterested, public-spirited gentleman, who las grcatly benefited the State by his many other directions; and that he is a searcher after scientific truths may be seen by reading
what he has written on the elimate of California.

THE PACIFIC RURAL PRESS.

## Sprouting Sweet Potatoes.

 about the way to sprout sweet potatoes. 1 have $a$ new
kind, which 1 hope wili prove seful, , and 1 would like to
know

If our querist desires to try his experiments in the neighborhood of the city or in the colder parts of the State, he may find some method like the following of service to him: Dig a trench, six to eight feet wide, 12 inehes deep, in loose, dry soil, where least exposed to winds, and open to the sun, the trench running east and west, if possible. Put in trench, tirst, 10 to 12 inches of hay or straw, well trodden down; next, 12 to 14 inches fresh horse-manure. It is well to pile this up by side of bed and wait until hot before putting in, as it is not so liable to become too hot afterward. Cover manure at once with two or three inches of fine soil and the soil with prairie hay; theu wait until bed is warm before putting down potatoes, which should be laid about a finger's width apart. Cover immediately with two inches of fine soil, and, when sprouts begin to appear, add another inch of soil. After potatoes are covered, cover bed with hay and keep it sheltered at all times from cold rains, winds and frosts, using hay and boards or muslin cloths. The only danger now (if instructions are observed) is in getting too much heat. About the warmth of new milk or from $80^{\circ}$ to $90^{\circ}$. The bed must be watched carefully when it first heats and examined often by inserting a fiuger. If too warm in places, throw off covering. This may be sufficient or may not. If not, then punch a fel
holes trough into the manure with a fork handle holes trough into the manure with a fork hanclle, and the excessive heat will soon pass off and the holes may be stopped. The bed should be by sprinkling with tepid water, as occasion requires. On warm, sunny days, throw off all covering and let the suu help. A warm rain of $i t$ ), and never after plants are up. When danger from frost is passed, little or no covering is required, and after plants are up, the hay may be dispensed with. We would caution you again about too mnch heat, as many more
failures and losses occur from too much than too little heat.
In the warmer parts of the State, this sprouting in a hot bed is not necessary. It the ground is thoroughly worked, the seed potatoes can be planted early, as it is safe co do so, and when the vines begin to grow, they can be cut
off in lengths of about one foot or more. If these sets are planted, by pushing the middle of the piece into the soft ground with a stick, leaving the ends in the air, they will soon root and produce tubers. These sets should be planted about a foot apart. This plan succeeds very well if the plants get a start betore the ground becomes very dry. If our readers know
better methods than we have described, we should be glad to hear them.

## Periodicity of Rainfall and Its Proba-

 bilities.Again Prof. Becker, of the State University, favors our readers with graphic reports of his studies concerning the rainfall of this coast. We make the engravings from drawings furnished by him, and they and the descriptions of
their teachings contained in the letter which we print below, are worthy of careful study. As he says in his letter, his deduction make last December was that we should have 20 inches of rain in San Francisco this year, and the verification of this prediction is certainly well-nigh realized. Let this fact lead all to follow the Professor in his researches. He writes:
Editors Press:-By referring to the records of the rainfall for San Francisco, or to the diagram published on the ninth page of your present volume, you will perceive indications of what seems to be a 13 -year periodicity, there being decided minima in the seasons of 1850-51, 1863-64 and 1876-77. It struck me that these indications might be tested by representing the rainfall graphically in such a way that the curve would return upon itself at the end of the period. If, then, the curve for the second period were superimposed upon the first, a simwould at fundamental laws governing The experiment succeeded beyond my expectations, Prof Davidson, he pronounced them of decided local importance, as well as of general interest, and advised that they should be published on
this coast. I have prepared diagrams on a large scale for him, which he exhibited at the AcadFurther to test the apparent law, I discussed same way, and obtained results which prove at least that at these places (taken for want o
data from more distant stations, to represent the rainfall for each year, and the positions of the sacramento and san Joaquin valleys) the the latter in the period. rainfall is governed by the same laws controlling th I send you with this note a diagram, in which, for comparison, the observations of the three
places are plotted in the ordinary way on recnearly coincident or that these curves are either intervals ; good or cross each other at short tions from a common mean, or a fundamental

In order to advance toward an empirical de-

## 



Diagram Showing Comparative Rainfall at San Francisco, Sacramento and Stockton
tangular co-ordinates, and on the same scale. A termination of this law, I drew a curve through second plate exhibits the periodicity and the the poiuts representing the mean of the rainfal The latter needs a word of explanation. From and 1865-6-and also through the intersections the center of each diagram diverge at equal of the curves. The figure thus obtained is angles 13 radii. Each represents one rainy sea- shown on the diagran as a full black line. son of the 13 -year period, the distance from the The mean curve thus obtained still showe center at which the curve crosses each radius evidences of a vibratory character, which


## Diagram of Periodicity and Probability

represents the depth of rain, just as the length | sought to climinatc by drawing a line through of the vertical lines cut by the
The barred lines in each figure answer to the period 1850-51 to 1862-3, inclusive. The curve having returned to its starting point (nearly), starts afresh around the same center in the dash
and dotted line, representing the second period, $1863-4$ to 1876-7. I have numbered the radii
from I to XIll, and give below a table, showing
the points at w cone points at which it changed from convexity to
conea enclosed by this curve I have matched vertically, and more heavily than the rest of the diagram. It appears to repre sent, as nearly as possible, the probabilities of the rainfall, deducible from the slort series of observations at our command. The diagram
themselves show within what limits these prob abilities hold, according to past experience.

*The figures from this point on are derived from rail-
road data, funuished me by Prof. Davidson. The only difference of any consequence betwcen these and thos published by the Rural Press is for
Stockton.

| R. | $\begin{aligned} & \text { RAIN- } \\ & \text { FALLL. } \end{aligned}$ | year. | rainFAll. | position 1N PERIOD. | probaBILit's |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1850-51. | 4.71 | 1883 | 7.86 | I | . 50 |
| 1851-52 | 17.98 |  | 22.51 | II | 18.70 |
| 1852-53.. | 27.40 | 1865-66 | 17.92 | III | 23.50 |
| 1853-54. | 21.04 | 1866 -67 | 25.31 | IV | 22.70 |
| 1854-55 | 11.68 | 1867-69 | 20.71 | V | 17.10 |
| 1855-56. | 8.37 | 1868 -69. | 16.35 | VI | 13.00 |
| 1856-57. | 11.38 | 1869-70. | 7.63 | VII | 12.00 |
| 1857-58 | 18.99 | 1870-71 | 6.73 | VIII | 13.50 |
| 1858.59 | 16.04 | 1871-72 | 20.80 | IX | 16.60 |
| 1859-60. | ${ }^{22.72}$ | 1572-73 | 13.30 | X | 18.00 |
| 1860-61. | 15.55 | 1873-74 | 15.20 | XI | 19.00 |
| 1861-62.. | 35.55 | 1874-75 | 11.14 | XII | 18.80 |
| 1862-63.. | 11.58 | 1875-76 | 18.33 | XIII | 14.0 |
| Totals. | 222.99 |  | 203.79 |  | 216.40 |
| 1849-50 | 36.00 | 1876.77. | 7.03 |  |  |
| San Francisco. |  |  |  |  |  |
| AR |  | year. | Rain- | Posir |  |
| 1850-51 | 7.40 | 1863-64. | 10.08 | I | 11.50 |
| 1851-52 | 18.44 | 1854-65 | 24.73 | II | 20.50 |
| 1852-53.. | 35.26 | 1865-66 | 22.93 | III | 27.40 |
| 1853-54 | 23.87 | 1866-67 | 34.92 | IV | 30.50 |
| 1854-55.. | 23.68 | 1867-68 | 38.84 | VI | 28.30 |
| 1855-5 | 21.66 | 1868-69 | 21.35 | VI | 23.30 |
| 1856-57.. | 19.81 | 1869.70 | 19.31 | VII | 19.30 |
| 1857-58.. | 21.88 | 1870-71 | 14.10 | VIII | 19.60 |
| 1858-59... | 22.22 | 1871-72 | 34.71 | 1 x | 25.00 |
| 1859.60 | 31.22 | 1872-73 | 18.02 | X | 28.20 |
| 1860-61 | 19.72 | 1873.74 | 23.98 | XI | 28.50 |
| 1861-62.. | 49.27 | 1874.75 | 18.40 | XII | 28.50 |
| 1862-63.. | 13.62 | 1875-76. | 26.01 | XIII | 19.00 |
| otals | 308.05 |  | 307.38 |  | 99.60 |
| 1849-50.. | 33.10 | 1876-77. | 10.00 |  |  |

I may mention that they iudicate 20.50 inches for San Francisco for the seeond year of the
period, which is the curreut scason. While I do period, which is the curreut scasoll. I hile I do not care to hazard any prediction, I point
this as a hopeful fact, which now seems more likely to find confirmation in the rain-gauges than it did when I first made it out, late in
December. As a fur icity, I may point to the total amounts of rain which have fallen during each period. It will be seen that in San Francisco the precipitation in the two periods is so close as to be far within
the necessary errors of even Mr. Tennent's obthe necessary errors of even Mr. Temnent's ob-
servations. In Sacramento and Stockton they come quite close. The variations, moreover, are in opposite directions at the two places, though the difference at Sacramento is much of the probability curve indications, which, it will be seen, come very close to the mean of will observations, a fact which appears to show that it is constructed on ratioual principles. If, then, I have not been led astray by accidental coincidence, we shall be blessed with abundant rains for four or five seasons to come. But of course it must not be forgotten that the data discussed are too few, both as time and
geographical distribution, for any very reliable geographical di
generalizations.
Observations before 1849 do not, I believe, exist. Observations at more widely separated points do, but I have not been able to obtain Contribution" No 222, contains many data as to the rainfall in California, but unfortunately the precipitation is given in calendar years, instcad of by seasons; yor does the memoir afford any means of separating the seasons. I have written to Washington to reguest data from which to ascertain whether or no the same laws pre-
vail throughout the Pacific States; and shall be vail throughout the Pacific States; and shall be
inuch obliged to any of your readers who may nuch obliged to any of your readers who may have data extending over a considcrable number
of years, and who may feel sufficient intercst in of years, and who may feel sufficient int
this discussion, to transmit them to me.
this discussion, to transmit them to me.
University of California, Berkcley, Jan. 21st.
California Samples for Paris.-It appears that Hon. Johi Bidwell, of Chico, has consented Agriculture, in sccuring samples of California productions for exhibition at the Paris exposition. All articles shonld be forwarded at once. General Bidwell writes to the Chico Record as follows: "The Commissioncr of Agriculture should be seconded in his efforts to make a proper exhibition of Americau products at tho
Paris exposition. Having been asked to coParis exposition. Having bcen asked to co-
operate in securing certain articles, I wish to say that I hereby solicit and will cheerfully transmit to the Department at Washington for that purpose, samples of very choico wheat (say 15 or 20 pounds of each), and of raisins and figs (say onc box of each). Wach parcel should be labeled with the name of the article and of of the producer. I hope to meet with willing and prompt response from those who can contribute and with as little delay as possible."
Tuene are over 300 artesian wells in Santa
Clara valley, Cal.
$\frac{\text { Contlnued from page } 87 .}{\text { a low figure, since no straightforward dealer }}$ a low figure, since no straightforward dealer is
likely to sell the results of tueh time and expense at a cheap rate. If they fail to hatch, it is a question whicther the fault is with the hen or with themselves. And this can bo readily decided. If the hen has abandoned them so loug as to let them get cold, the eggs
will be found rotten, with the perished embryo within them. But unimpregnated eggs, those which were too old for inculbation, be found free fiom any smell and of normal ap. pearance.
The sitting place shonk be well ventilated, dued light, and away from all noises. The dued light, and away from all noises. The be reared in the open air, is from the beginning of April to the midite of box covered with
should have her own siting bo wire-work. The floor must be strewed with
sand, a nest of straw with an imner tining of hay placed iu one corner, a pan of water in an-
other and a trough of food in a third. The water must be renewell every morning, but food enough for several days can be depositec. or the must be carefully cleaned. Many sitting hens get diarrhcea, for whieh a listle tamm or alum eggs are generally mined in these eases, howthe hen then loses all incliuation tosit. No sitting box should be nsed more than once a year; especially in warm weather, it is sure to get tected it will fare ill with both hen and eggs. E.ggs that do not hatch out at the right date
should still be allowed to remain under the hen for a fcw days, for it may be that they are somewhat older than the rest, or have not been so well eovered by her. At the eud of that cousists in placing the cggs in warm water, when those that loat on the surface may be
knowu to contain live chicks. Very often, if the water is a little warmer than the natural heat of the hen, the chicks in the eggs will cry
out when placed in it, and in such cases it is generally weakness only that has prevented The chicken shoull be taken away from the hen as they hatch out as soon as they are dry, for otherwise they disturb her and she is apt to abaudon the remaining eggs, which are conse
quently lost. As the chicks are removell, they should be put in a warm place, in a pot containing so
As regards the young chicks, the great point weeks old, they are kill they are at least sis temperature of about $60^{\circ} \mathrm{Fah}$. When they are about half grown, they may gradually accustomed to every variatiou of weather, so as
to get a strong, hardy race, that in their turis will produce vigorous offspring. hard-boiled eggs, chopped np fine; days is hard-boiled eggs, chopped np fine; it servcs
with them the place of the mother's milk with with them the place of the mother's milk with be continued too long, lest their natural appe tites shonld be depraved. In a few days' time they may have millet soaked in milk. This must not be pasty or doughy, but in good-sized
lumps that crumble down readily under the lumps that crumble down readily under the
finger and thumb. Along with this they should finger and thumb. Along with this they should
have a little fine choppell meat every other day. souped wheat which strensthens them wouler fully and makes then grow and lay on flesh white bread soaked in milk.
Oue point of great importance in feeding
young fowls should never be lost sight of. It is neglect of this that eauses so many failures in poultry rearing. They imst be fed often, lut never have more at a time than they cau take
with appetite, for no animal is more dainty than the fowl. Unce give them too much food at a and they will rarely eat of it again, unless actually driven by hunger, and then only just enough to stave off starvation. Dorkiugs, in deed, will literally die rather than touch food to which they have taken a dislike. Plenty of exercise in the open air is a good thing for th young ones, but crell in a very confined spac poultry breeding yields excellent results, i
only it be carried on with intelligence and zeal

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Richardson's New Method FOR THE PIANO FORTE.
Price, $\$ 3.25$. By Nathan Richardson.

## Two hundred and fifty thousand copies sold. Sales have surpassed those of all other books conbbined. Bo sure to

 surpassed those of all other books combined. Bo sure toorder hy the above fult title, and do not aecept instead o
this, the Modern school, which is an ofder book, by the this, the Medern School, which is an older book, by the
same author. Mr. Richardson's opiniou of the merits of sainc author. Mr. Richardson's opiniou of the merits of
this first effort may be gathered from the following, taken
from the preface of the New rom the proface of the New Me thod
icismas, (by many eminent composers and professors, and convinued that kreat improvencats were obvionsly necded, 1 detcrmined if possible, to remedy the defects
Profiting hy the experience and advice of the best practi cal teachers, 1 commncuced a thorongh and critical cxann-
ination of niy first nuthod, and nation of ny first method, and concluded that the only
remedy would be to bring out a new work on an improved plan."'
This new work, sulstituted for the defoctive Modern
Sclool, was Richardson's

New Method for the Piano Forte, Which las bcen revised and re-revised, until it is the
most perfect of music books, is a groat favorite with the most perfeet of music books, is a groat Pavorite with the
irofession, and is the only true "Richardson."

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Authorized Capital - $\$ 2,500,000$.

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Vice-President and Manager,
.C. J. CRESSEY. Cashier...........ALBERT MONTPELLIER. Secretary. .Frank a. Cressey

The Bank was opened on the first of August, 1874, for the transaction of a general banking business. Having made arraugements with the Importers' and Traders' National Bank of N. Y., we are now prehe best market rates.

## GREAT ENTERPRISE:

-THE-
Sierra Flume \& Lumber Co.
Have over 100,000 Acres of
subar pme, vellow Pne, sprues,
Fir and Cedar Lands,
10 Saw Mills, 3 Planing Mills, 1 Sash and Door Factory,

149 Miles V Flumes,
10 Miles Tramway,
157 Miles Telegraph Line, 13 Telegraph Stations,

Employ 475 Men and 550 Oxen \& Horses.

The Sugar Pine is unsurpassed in quality, and the The Y illow Pine frm, fine grained and any other hard Pine for Flooring, Steppiry, etc. The Sprue has great strength, durable when exposed,
and especially adapted to Bridge and Ship Buiding. while
the purposes.
Last year thirty milllons of feet were cut and the estiLast year thirty milllons of feet were cut and the esti-
mate for 1877 is fifty millions; fifteen milions are now on
hand, thoroughly seasoned by the hot climate of Red Bluff and Chico.
Large orders can be filled on a days
notice for all

BUILDING MATERIALS,
Rough or dressed dry, by which elegrant and substantial
work may be accomplishod without delay at the usual cont for greell lumber. Orders for the interior filled at iess than San Francisco
priees and freights
DOORS, SASH and BLINDS always on hand in large quantities. Address

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As a horse medicine it is superior to any liminent ever
Invented. For Rivoions, Spavin, Swkeker, Callous Lumps, and ahl old sonks, apply frocly so as ato blister,
from three to flve days in succeckion and in four or five fays, if not cured, repeat an at first. Sprains, Srify
 a small quantity so sh not to hiliter. saddle Sorces cuts, iment haff und half with any kind of oil, and apply in
moderation.

WILLIAMS \& MOORE, Proprietors,
STOCKTON, CAL.

## WANTED

By a Scotchman and Wife-A situation to take charge of a rancl. The man thoroughly understands farming, the care of a vincyard, stock rasing or any work appertaining to a well conducted farm. The referches will be given. Address offlec of ruhal Риквн.

## News in Brief

THE Echooner Sarah A. Othens was wrecked
off Mendocino, on the 26 th. off Mendocino, on the 26th.
How. W.
 Geo. P'. Gordon, the iuventor of the Gordon press, died at Norfolk, on Sunday.
THE House Railroad Comnittee ably disposed towards the Texas Pacific. TnE project to put eertain banking housc
on a gold basis is said to be strongly supported on a gold basis is said to be strongly supported.
SINcE the Eastern war began the demand for sole leather from this conntry has greatly increased.
A sEcond unsuccessful attempt has beeu made to rob

## Fe railroad.

TuE Russians, Servians, Roumanians and with great vigor. ommends an appropriation of $\$ 50,000$ for the Howgate expedition.
The Russian corvette Craysser Capt. Nasciuoff, is iu port from
officers and 120 men.
A YOMBER of army officers have be nn appointelto ni the commission
recent Rio Grande troulles
Tues steamer Amador is now ou the ways at
Oaklaud point, and is to be transformed into a double-ender for the Oakland ferry. The yacht Tictal Ware, is stated in a dis-
patch to have been purchased from New Yorl patch to have been purchased from New Yor owners
$\$ 9,500$.
The cigar makers' strike in New York has failed after four months' struggle. The meu are generaly
turers' terms
Several free lunch rooms for needy persons have been established in this city, and the re-
sult shows the necessity of even more of such institutions

Tue Frencl Academy of Sciences has awarded the Lolande prize of astronomy $t$ Trof. Hall, the
cllite of Mars.
clite of Mars.
There has b
There has been considerable excitement in and State jurisdietion in the trial of nembers of the Returrining Board.
The Bank of San Fra
iness. The depositers are already paid in ful and it is stated there are enough assets to settle with stockholiers.
The Emma mine case is to be revived at Chi. cago, Frederick A. Bragg sureing for 8250,000 , audrauded him in the sale to the English party. Griat excitement has been caused in San
Domingo and Hayti by the rumor that Spain Domingo and Hayti by the rumor that spain1
will soon sign a treaty assinning a protectorate
over the islands. It seems to increase the ulpopularity of 1 'resident haez. Consul at Shanghai the United States Vice "Ansul at shalling faniui, isk raging for fundsonghouys four preople are reported destitute. people are reported destitute.
daily sold in the markets for food." Tue ship King Phelip was wrecked just out sile the Golen Gate, on Frillay last, and on
the same day the ships Western Slore and Don
Nicholas, cone plaee. Capt. Blinn of the Western Shore was
killed ty the piaee. by the parting of the tug' hawser in the
effort to get the vessel off the lee shore. effort to toe the vessel off the lee shore.
TIIE Pacific Mail Steamship Company have decided to donble their carrying service be tween Nan Francisco, in order to meet the preseut pressure of freights, which are represented as nore than a semi-mouthly linc of steamers can accominodate. It is proposed to hereafter send Capr. Eads last week received a warrant for
$\$ 500,000$ on acconut of his improvement of the $\$ 500,000$ on acconut of his inp,rovement of the
South Pass of the Mississippi and securing 2 ? seuth Pass of the
feet of water. He had previously received a feet of water. He had previously receive
like amount on the same service for 20 feet. He gets half a million for each additional two
feet up to 30 feet, and therr $\$ 100,000$ a year for 20 years, to keep, it up to that standard. OUT of the 300 persons who partook of a free
lunch at Ir. Jewell's church Sunday; 35 sínei the pledge to alstain from liquor, while at the Greeu street ehurch out of 200 who came to
the dining table as many as 70 took the more general pledge that they would alstain fron the use of liquor and tolaeco and would not
indulge ia profane sweariug or stoel induge in proane sweariug or stoek gambling Tue Sutter claim, whieh has been before
several Congresses, was considered by the Priseveral Congresses, was considered by the Pri-
vate. Land Committee. Sutter clains to be the original discover of gold in California. His
claim is for lands that have been ly the Mexicau Government before California was acquired by the United States. The Com-
mittee of the last Congress reported favorably upon the claim giving him $\sin 0,000$ in lieu of his claim, but the Serate did not consider it. Tuse anti-sulsidy resolution adopted in the
House of liepreseutatives by a vote of 147 to Si. dectares that, in the judgment of the House, no subsidies in money. Londs, public
land, endorsements, or by pledge of the public land, endorsements, or by pledge of the public
credit, should be granted to or renewed by Congress to associations or corporations engaged in
or proposing to engage in public or private enterprises; but that all appropriations ought to
be limited to such amount and purposes only as shall be imperatively deinanded by purplic
service.

Tuere are 300 students at the State Uni ersity at Berkeley. San Rafael, on Tuesday.
ADvices from Samoan group of islands sta AT Santa Cruz, on the 28th, the llacksmith shop and storeroom of the Felton Railroad Company were burned.
THE Garka rebellion (Africa) is spreading and its suppression is improbable before the arrival of reinforcements from England
Tnose deeply interested say the
Tnoss deeply interested say the President leclares he will not ask the present Coingress
to make an appropriation to pay tho $\$ 5,000,000$ to make an appropriation to pay tho $\$ 5,000,000$
awarded to Canada ly tho Fishery commissiou. Ture grand jury of Jacksonville, Florida, alleged timber depredators in that State, involving immense values in lumber, timber, tar, turpeutine and resin.
Tue Caroline Medau
andeared, on Saturday, on isting of a lut of machinery and apparatus, to be used for wrecking purposes at the wreck of Tue l'ostmaster-fieneral has issued an order that the regulation of the Department relative to local papers at letter carrier offices, is mod ified so that paragraph six shall real "weekly
newspapers to transient parties, one cent each, to be prepaid by postage stamps affixed."
Lord DERBY, telegraphed to Lord Loftus, British Annbassador att st. Petersburg, January Sth, states that count chouvalof hat afte noon eonmmuicated a telegrann from Prince
Gortschakoff, authorizing him to affirm categor cally that the Russian government considerer the passage of a man-of-war through the Dar danelles and Bosphorus a European question
which they did not intend to settle by themwhich they did not intend to settle by them

PATENTS AND NVENTIONS
List of U. S. Patents Issued to Pacific Coast Inventors.

By Special Dispatch from Washington, D. C.
Wemk Rending January stif.
Belows Nozzle--L: W. Eitwards Oakland and F. J. (iraciers. F.
GAvGe for
SAWing
Gavee for Sawing Machnex, - O. Bonney Comblised Elifator Track ayd Self Dis.
charania Bucket.-J. A. Bumner and liech, stockton, Cal.
But, FiLks.- WV. C. Bnssey, s.
febjpr for Turesmino Machines, - 1. lis Moore, Hodesto, Cal.
Mill lick. - IV. B. Moris, Collinsville, Cal. Reissues.
Yalues ror Steam Engines.-o. Adams, s. Werk Ending January 15th.

Ore Washing Appakatcy por Hypravlic
Mningo-J. W. Allenwood, Timluctoo, Cah. Trade.Mark.
Hokses.-E. Waines, S. F.
Hedicise for loniss.- - E. W. Hlaines, S. F. Thite patents are not ready for delivery by the



## Notices of Recent Patents.

Among the patents recently obtaincd through Dewey \& Co.'s Scientific Press American alid Foreign Patent Agency, the following aro worthy

## Removing and Destroning Sewer Gases.

 J. Corbett, hos Angeles. This is a novel eneratcd iu the sewers of a city. It consists in leading a pipe from the sewer to each of the de destroyed. Numerous plans have been de ised to prevent the escape of these foul gases hrongh the conduits which lead from sewers
nto houses and into the streets of a city, without alequate means being provided for allowing them to make their escape from the sewer. This compels the gas to accurnulate in the sewers, so that they soon become charged with it, and the
difliculty of preventing it from escaping into the vide a rent phan is intended not only to provide a rent air in the day time as fast as they accumnlate,
put when the gas is lightel at night, cach et establishes a draft through the sewer gas o ent pipe, which draws the gases into the llame Where it is destroyed, thus preventing auy ac
cunulatiou of gas in a sewer. wimatiou of gas in a sewes
Well Bornc: Apparatus.--Joseph Benner-
schidt, Anahein. schidt, Anahenin. This invention relates to an
improved device for sinkiug or boring wells,
and for removing the earth and borings there
from. It consists in the employment of from. It consists in the emploloyment of a hy
draulic stream of water forcibly ejected through a pipe and nozzle against the earth in the bot. tom of the well by a pump. As fast as sinking
proceeds the curl or lining is forced down into the excavation, so that the stream of water has only a diameter equal to the diameter of the
tube or curb to act directly upon The water tube or curb to act directly upon. The water
forced in rises in the pipe and overflows its top carrying off the detached soil loosened ly the iron pipe ou the end is used to carry the water pump. W. T. This iuvention relates to an improve ment in bed lounges, and consists in the peculiar construction of springs employed, together with
adjustable head rests, and the leys in comlinaadjustable head rests, and the leys in conlina-
tion with a band or strap. The arrangenients tion with a band or strap. The arrangenents
of springs is especially adapted for use in bed of springs
ounges.
Fire Brick.-W. P. Prescott and Geo. R. Evans, Carson City, Nev. This invention relates to an improved combination of materials
for forming fire bricks, which will withstand any ordinary temperature to which they may
be subjectel. Asbestos enters largely into the structure of the new fire brick.
New York Dairy Report.- Hon. Jusiah Shull, Sccretary, writes us that the proceedings and essays read before the late meeting of the New York State Dairymen's Association, will be published in pamphlet form and sent to all Who wish thenn, at cost price, 5 cents per copy.
There are 12 essays on different dairy suljects, and nearly all of them are suggestive if not of direct application in this State. They are well worth reading and thinking a
Shull's address is Hion, New York.
Oregon State Falr, 1878.-E. M. Waite, Secretary, informs us that the 1 Sth annual fair of the Oregou State Agricultural Society will
be held at Salem, Oregon, commencing on Thursday, October 10th, and continuing uutil Friday evening, October 1sth, 157 s .

## Publishers' Department

Tue Floral Califorvian.-.This new publi luma. The first issue contains 16 pages, and the following numbers are to alpear once eaeh inree months. The first numbor scale insects on plants, pond lities, mulch lieaps, lawns, and notes for work in the garden, lawn and con servatory. The editor promises inlustrations will
future issues. We trust the publication wil silcceed in its laudable purpose, the adrance
ment of floriculture. ment of floriculture
Giregorx's Seed Catalogut,-Our readers will fiud the catalogue of J. J. H. (iregory's
well known seed house advertised in our colnunns. To handle seel with such conscieutious care as to daro warraut their freshness and purity, is of that class of bold, brave acts which the public appreciate. Though the warranting
is of nccessity limited to refunding the value of the seed purchased, still, under it, Mr. Gireg ory must sell good seed or make a dead loss.
Joun Rock's descriptive cataloge of fruit and ornamental trees, shrubs, roses, plants, etc., is
reccived. It is a very full list of desirable reccived. It is a very full list of desirable
growths adapted to this coast, and slould be consulted by all planters.
"Casil Paid Promptly."-May Bros., Gales burg, 11L., want to hire agents for their late im-
proved Windmills, the cheapest, stroulgest and best in use. Retail price, \$50. Write for

## Important-Farmers.

It is often desirable, when wishing to secure
suitahle Farm Hands, such as Teamsters, Milksuitahle Farm Hands, such as Teamsters, Milk.
ers, Plowmen, ete., to know just where to find them, and so avoid being imposed upon by the
numberless tranus with which thc country alounds. The city is a place where large numbers of men from all parts of the country constrougg able-bodied farmers are to be found awaiting employment. Messrs. Crosett
6.23 and 625 Clay street, are daily receiving app. pilcations from these sturdy yeomanry, con--
posed of Germans, Scandinavians, Anlericans posed of Germans, Scandinavians, Americans
and Irish, who wish to be selt out to work on and Irish, who wish to be sent out to work on
some farm, and should any of our readers wish to avail themselves of the opportunity to procomplished they can address, giving full particulars, Crosett \& Co. 623 and 625 clay street, San Francisco, and particular attention will be given to supply them with good men.

## Farmers 1 Farmers ll Throughout California are requested to send heir orders for any kind of labor to the "Free <br> Labor Exchange," 33 and $35{ }^{5} 0$ 'Farrell Street

 of charges to employers and cmployees.
## S. F. MaRKET Report.




## Weekly Market Review

DOMESTIC PRODUCE, ETC.
San Francisco, January 30th, 1878.
There has passed another quiet week, owing tion of Grain markets because of the transition state of affairs in Europe

Range of Cable Prices of Wheat.

## The course of the Liverpool quotation for

 days of last week has been as recorded in the following table:
## 

To-days cable quotations to the Produce years as follows:
 The Forelgn Review. London, Jan. 29th. conditions of home-grown Wheat on offer in Mark Lane or iu the country markets; but of ferings have been more liberal, and the reserve with which buyers operated tended to reduce prices $1 @ 28$ per quarter for all but a few samdisposed to ace vecially trade has been excessively dull for Eng lish and foreign Wheat, and there aypears to be littlc probability of incroased animation wearisome, and until it is definitely known what action is to be taken regarding the position in the East, it is almost hopeless to attenpt to di rect attention to the probable future cours of the grain trade. At present pacinc ideas are
in the ascendant, and millers holding small stocks have only bought to meet imnnediat narrowest limits, so holders have been seriously tried in maintamiug firmuess, which has been further sliakeu lyy more liberal arrivals of Wheat and Dlaizo. The mild season hitherto has beet adverse to sellers, as imports of foreign Wheat have undergone but little diminution. Should prices rally, the cause of improvement can only
be expected from political influences. In the limited busiuess passing during the past week a decline of ls per yuarter has taken place on all American Maize of wheat. White mixed liberal, has given away $6 d$ yer quarter. Friday's market opened with some signs of excitement and for a short time a free sale was experienced but soon after mid-day peace rumors circulate aud the demand stopped. There was, however some revival of firmness at the close, and 6d o he declin

Freignts and Cnarters.
Therc is a very healthy tone to the freight market, says the Commercual Aens, and rate past. Quite a number of vessels have beeu fixed for Wheat, and as the tonnage on the way is extremely small, while the continual wet weather afords a strong reason for the belief in a heavy crop in July, rates teud upward. 1ron
ships are quotable at $£ 27 \mathrm{~s} 6 \mathrm{~d}$ to Liverpool, and wooden at $£ 25$ s, with the usual advance for Cork, U. K. A vessel has been taken at $£ 22$ bid to Liverpool, but with ouly 10 lay days, and for usual time, 2s 6d additional would probably
be demanded. The following Wheat charters are reported: Slip Occidental, 1,500 to118,
Wheat to liverpool, $£ 22 \mathrm{c}$. 6 d . Br bark,
Dilbhur, 255 tons, Wheat to Cork, U. K., £2 Dilbhur, 1,255 tons, Wheat to Cork, U, K., $£ 2$
is 6 d . Br bark Aglaia, 821 tons, Wheat to

## Eastern Grain Marketa.

New York, Jau.26th. - Spring Wheat las been irregular, selling all the way from $\$ 1.16$ to $\$ 1.34$ 50 © dition and unfit for shipment, owing to wet uess of
Culcago, Jan. 26th. - Grain has been excited a times and unsettled throughout the week, and dealers have anxiously looked for the European to predominate Iheat, the short interest seem prices
$1.06 \frac{7}{8}$. The Cally. Sales of February, and unsettled than Wheat. Salcs, 39 anic 41 d d . Oats have been dull, stale and unprofitable in a speculative sense, having followed the course of
 Corn, 411,000 Wheat, 698,000 ; Corn, 416,000 ; Oats, $223,000$.
Receipts in the same time last year: Wheat,

## 

## Eastern Wool Markets.

New York, Jan. 26th.-During the past fivity, no desire being shown by either mannthe necessities of the present. This state of affairs has long existed, and dealers have come to look upon it as a matter of collrse, showing feeling assured that when stock is actually needed no trouble will be realized in obtaiming Fall California there is a very limited amount arriving, and no very great quantity is expected rom any quarter. The statistical position i only a matter of time when the demand shall improve and when present figures will be considered low, provided Congress does not alter week are: 200,000 tbs Fall Callifornia, at 9@ 12c, for low burry, and $16 \frac{1}{2} @ 27 \mathrm{c}$, for fair to
choice; $10,000 \mathrm{Dbs}$ Utah, $20 \mathrm{c} ; 29,000$ tbs choice; $10,000 \mathrm{Hbs}$ Utah, $20 \mathrm{c} ; \quad 29,000 \mathrm{tbs}$
Western Texas, $13 @ 23 \mathrm{c} ; 1,000$ Ibs (ieorgia, $30 \mathrm{c} ; 5,000 \mathrm{tbs}$ No 1 pulled, 21c; 1,000 Its noils, $50 \mathrm{c} ; 2,000 \mathrm{lbs} ;$ fine do, $65 \mathrm{c} ; 43,000 \mathrm{Ht}$ X and XX Ohio, 43@46c; 13,000 tbs combing 50 bales Donskoi, 6,000 Ibs Oregon, 3,000 tbs Colorado, 6,000 tts Spring California, 3,000 tbs Western Texas, $12,200 \mathrm{tbs}$ fine combing pulled,
100,000 tbs superfine do, and 9,000 tos No 100,000 tbs superfine
do, on private terms.
done during the being largely in Fall and Spring California and Oregon. Fleeces move slowly, and fine grades are still quite neglected. The demand is runaing principally on medium and $X$ grades, and prices of good lines of No. 1 X, XX, and even cluding XX and XXX grades, are now full 3c th lower than at this time last year. Medium and X Ohio and Pennsylvania fleeces, No. 1 X, Hampshire and other Heeces, 37@42c; washed combing and delaine, 45@53c; unwashed combing and delaine, 35c; Oregon, 28@35c; scoured, pulled, 31@45c. Sales of California Wool amount to 715,000 tbs, at 19@33c for Spring and 141 (a 28 c for Fall.
moderate demand January 29th.-Wool is in fine and medium, 18@25c; do coarse, for car pets, 17@18c; extra and merino and pulled, $37 @ 40 \mathrm{c}$; No. 1 and super pulled, $30 @ 33 \mathrm{c}$; Texa fine and medium, 20@25c; do coarse, 14@162 c ; California
$22 @ 27 \mathrm{c}$.

Domestic Produce
The following table shows the S. F. receipts
of Domestic Produce for the week ending at noon to-day, as compared with the rcceipts of previous weeks

| Artiolas. | $\left\lvert\, \begin{aligned} & \text { Wrer. } \\ & \text { Jan. } 9 . \end{aligned}\right.$ | Werk. Jan 16. | $\left\|\begin{array}{c} \text { Wrer. } \\ \text { Jan. } 23 . \end{array}\right\|$ | $\begin{aligned} & \text { Wrre. } \\ & \text { Jan. } 30 . \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 11,2 | 47, |  |
| Wheat, centals | 173,451 | 100,793 | 148,941 | 38,261 |
| Barley, centals | 15,775 | 12,538 | 15,009. | 11,077 |
| Beans, Racks. |  | 466 | 1,190 | 487 |
| Corn, eentals | 5,041 | 4,428 | 2,613 | 933 |
| Oats, eental | 6,319 | 339 | 6,890 | 13,182 |
| Potatoes, sack | 18,612 | 16,588 | 13,121 | 17,631 |
| Onione, sack | 1,377 | 1,283 | 1,784 | 975 |
| Wool, | 248 | 186 | 437 | 95 |
| Hops, | 90 |  |  | 183 |
| Hay, b | 841 | 777 | 782 | 1,20 |

BAGS-Quite a little trade is springing up in Grain Bags, both for use and for speculation.
We hear of several Grain growers who have bought Bags for the harvest, which now seems assured, at 10 c net cash. Speculators also look The Brice ruling to-day is 10 e net cash, and $10 \frac{1}{2} \mathrm{c}$, usual credit.
considerable amounts are pressing for sale. We note sales: 400 sks good Coast Feed, $\$ 1.50 ; 190$
sks dark Coast Feed, $\$ 1.471$ sks dark Coast Feed, $\$ 1.47 \frac{1}{2}$. It is claimed \$1.50, silver.
BEANS-
are very light.
CORN-Large Yellow holds its price Large
White and sinall round drop a point. We note sales: 700 sks good large ellow, $\$ 1.55$; \$1.80; 200 sks large Yellow, \$1.571.
sinall supply of fresh Roll Butter on hand, because the storms have held back shipments. This fact enables the choicest brands to gain $32 \frac{1}{2} c$, but there is no general rise, because
abundant receipts are expected as soon as the weather settles. Cheese is unchanged. excentional lots bring more than 40 c , Oregon Eggs are selling at 35 se
Fceds and Hay, because of the quick growth of Wheat Hay is now quotable at about $\$ 18.50$ per sales: 43 tons poor tame Oat, $\$ 12.50 ; 50$ tons good Wheat, $\$ 17.25$, and a cargo or
$\$ 17.50 ; 24$ tons good Cow, $\$ 16.75$
FRUIT-

FRUIT-Choice Apples are searce and sell high, $\$ 2.50$ per box being reached in some cases.
Mexican and California Limes have advanced considerably, and Cranberries rate about $\$ 2.50$
per bbl higher. Full prices may be found in
our tables. HOPS-There are still small receipts of Hops, but there is nothing new in the city trade. The fow York market is reported by Einmet $\begin{aligned} & \text { Nells }\end{aligned}$ We begin to hear reports of scarcity of Hops in the interior; yet, the receipts into Ncw York
continue heavy, reaching 3,500 balcs this week. The export trade keeps up well, some 2,350 bales clearing this week. Prices remain nnchanged, thongh we sec there is a strong dispoIf Iops are really getting searce as reportcd. if hops are really getting scarce as reported, vance a little; but, we still believe a material advance would check exports, which, at this tage of the season (brewers being well supplied) would not be very good for the trade, as we vould then have no ontlet, and business wouk come to a stand-still. Our local brewers have taken advantage of the low prices, many of wo years. Quotations: New Yorks (choice xport Hops), 11@13c; New Yorks, good to air, 5@7c; Eastern, 5@8c; Wisconsins, 5@8c Yearlings, 3@5c; Olds, all growths, 2@3c; Calornians, 12@14c.
OATS-Oats sympathize with Barley; and milling rule between $\$ 1.60 @ \$ 2.09$ ONIONS-There is but one chan is a decline of 10 cctl on the best Union that The highest price on the wharf this morning was 75 c per ctl. We note an advance of 2 c per
POTATOES- We tl on the best Petalumas; 5c on new Early Rose, and $12 \frac{1}{2}$ on the finest Kidney. We note sales : 400 sks Oregon sold at $\$ 1.40$, and other
lots at $\$ 1.37 \frac{3}{4} ; 130$ sks Humboldts brought 1.75, and others down to $\$ 1.30$. Petalumas sold
for $\$ 1.50 @ \$ 1.75$, and River Reds at $\$ 1.10 @ 1.15$. POULTRY-Young Roosters now lead the price list at $\$ 10$ per dozen. Hens are also im. proved. Ducks decline from the late adva
PROVISIONS-Fresh Meat is now plainly routh the reduction of stack beach 11c pe for choicest. Our prices show an advance in third quality of Beef and in Mutton. Mutton is now so high that butchers report a falling off of sales, only one third as many sheep being called
for as at this time last year. People are seeking or as at this time last year. People are seeking
other supplies of food. The Cured Meat trade quiet and prices are unchanged.
VEGETABLES. - The first notable lot of As paragus com J B Con comprised about 50 Its , and sold at 40 c per b. Mushroons are now exceeding plenty, and bring but 1 to 3 c per th by the box. WHEAT. - Wheat declincs about 5 c per ctl owing to the unsettled market, peacefnl pros Wheat is mercly nominal, and $\$ 2.00 @ \$ 2.05$ abont cover the range of siles of choice. IV e note
sales: 6,000 ctls choice stuck thin Shipping, $\$ 2.10$ 100 do gond Shipping, $\$ 2.07 \frac{1}{2} ; 200$ do Superfine $\$ 1.90 ; 230$ ctls fair Milling at $\$ 2 ; 10,000$ do
choice Stockton Milling $\$ 2.06$. WOOL. There is no change, nor is mucl Spring clip. Stocks are nearly cleared up in

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Volume XV.]
SAN FRANCISCO, SATURDAY, FEBRUARY 6, 1878
Number 9

Improved Varieties of Wheat.
The importance of securing the best seed for their wheat fields is appreciated by many of our progressive wheat growers, and they regard effort and money wisely invested in this direction. On the other hand there are many, who, from lack of knowledge or indifference, seem to think that anything is good enough for seed, and by sowing indifferent seed each year, find their product degenerating in quality and decreasing in amount.

If such wheat growers would think for a moment they would see that in the nature of things it is just as important to sow first-class seed grain as it is to have fine grafted fruit trees and grapevines and that the cereals may be improved by wise and careful effort just as
fruits and flowers are improved. About a year ago we gave an account of the important improvement which Major Hallet, an English wheat grower, had gained by carefully selccting the finest heads of wheat for seed, and pursutaiued a yield and quality of grain far in advance tarued a yield and quality of grain far in advance
of the starting points. We showed how this of the starting points, We showed how this
method of improving seed of all kinds, as well as wheat was open to any grower who would give the subject the requisite care and attention. As with fruit and flowers, and with farm animals, so with cereals, there is another avenue of ing of desirable opinds that is by judicious crosssort whirabie kinds in order to produce a new of both progenitors. Crossing tesirable qualities mals and progenitors. Crossing breeds of anioperation if it be done with an anty a scientific casting of rosults. With an intelligent fore plished by fertilizing one blossom with the polleu of another and the difficulty of the operation depends much upon the character of the blossom with which experiments are made. In the case of cereals the effort is one requiring pe-
culiar care and patience because the blossoms are minute, but the work has been acomplished with very gratifying results by a number of ex-
perimenters. show what has been accomplished in the direcMr. of crossing varieties of spriug wheat by Mr. Pringle, of Vermont, whose skill and judgment as a hybridizer of cereals and potatoes
have given him a wide reputation both in this have given habroad. The sorts shown in this engravings were produced in 1870 and have engravings were produced in 1870 and ha
shown by six years' growth that they are per manent and desirable varieties.
Fig. 1 is an exact representation of a head and single kernels of a variety called the "Champlain." The specimen was grown with ordinary farm culture. The Champlain was produced in 1870 by Mr. Pringle in his elldeavors to unite the remarkable hardiness of the Black Sea with the fine and superior quality of the (rolden Drop. Several varieties were the result of this hybridization, from which this showing greatly increased vigor and productiveness over both its parents. A careful selection from this for the past seven years has now fully established its character, and the result is a wheat bearded like the Black Sea, with the white chaff of the Grolden Drop, free from rust and smut, yielding a lighter colored grain than the former, which makes a flous of superior quality. Its strong aud vigorous straw, growing 6 to 12 inches higher than its parent varieties, stands erect, frequently bearing even in very ordinary culture, heads from five to six inches in length, containing from 60 to 7.5 kermend this new wheat as among the earliest, and than are the give the grow and "run out" varieties now sown.
Fig. 2 shows the "Defiance" in head and ker. duced by ordinary farm culturc. The Defiance is the result of a serics of experiments by Mr. Pringle in 1871 to incorporate superior qualities upon the hardy stock of common Eastern grown Club wheat by hybridizing it with one of the fingst, whitest, and most extensively grown

| great productiveness, vigor and hardiness. It | $\begin{array}{l}\text { acteristics of the soil-whether clayey, alluvial, } \\ \text { is a beardless, white chaff wheat, with heads } \\ \text { or sandy loam-nature of the subsoil, whether }\end{array}$ |
| :--- | :--- | is a beardless, white chaff wheat, with heads or sandy loam-nature of the subsoil, whether frequently five to six inches long, very closely

set with large white kernels, frequently num-
underdrained or not; also, the kind and quan-
tity of fertilizers used, how and when applied, bering 75 to 80 to the single head. Its white, stiff, erect straw, exempt from the attack of rust, its earliness, combined with great vigor and superior qualities, should claim for it universal trial.
We choose these wheats for illustration both because they are new and interesting, and because they are offered to the public on condi-
tions which make their experimental growing tions which make their experimental growing
very entertaining business. The seed is brought upon the market by the well-known seedsmen,
very entertaining business. The seed is brought We should like to see this trial undertaken by
upon the market by the well-known seedsmen, some California growers who have the time aud


A Premium for Agricultural Inventors. with the weight of the crop when harvested and cured, which must be witnessed and sworn to before a Justice of the Peace, Notary, or any one competent to administer the oath, and The to their address betore November lst, 1878 The awards will be made by a competent com and a of agriculturists, and will be printed, prizes will be paid in December, 1878 . We notice that the people of South Australia are thinking of offering a premium of $\$ 20,000$ or a combined machine which will reap, thresh and sack their grain. This problem has already been attacked by California inventors and with considerable success and we hope that the premium will be decided upon and fall into the hands of a Californian. To give all notice of the possible chance for their inventive skill we quote from the Adelaide Observer, as follows: The experience of the past year has shown that South Australia will have much greater difficulty than has hitherto been the case in competiug successfully for the breadstuffs supply of the English markets. Transit has now become so rapid and so cheap that other countries, $n$ nually produse a large surplus of grain, are able from their geographical position, and the abesp rate at which they can grow wheat to send off their abundance to Europe at a price that it is almost hopeless for ns under present circumstances, to attempt to rival. We are glad,
therefore, to notice that Mr. Darliug has brought beforc the House the question of the desirability of offering a government bonus for the invention of the best machine for reaping, cleaning and bagging wheat on the ground. As
poiuted out by him, the winnowing and bagging pointed out by him, the winnowing and bagging
of the wheat at present is really the most costly of the wheat at present is really the most cost the harvest operations, as it takes at least two men to manage a winnower, whereas but one is required for a reaper. Hc considers two nell in plane did the whole be required, the result being the saving of about $£ 70,000$ on the harvest throughout the colony, and the setting free of a number of men for other occupa tions whenever their services are much wanted. Nor would it appear that such a machine is in any way an impossibility, as something of the kind has arready been invented and tried in the colony. There can be no question that when a penstructed its value to the colony will be cheaply gained by the expenditure of $£ 4,000$. We trust, therefore, that the motion of the bonus will be assented to, and that the money will be speedily clained.

Tue San Joaquin Valley.--Wc had a few minutes' conversatiou the other day with Hon. C. J. Cressey, on his return from a visit to his ranches in Stanislaus and Merced couutics. He reports agricultural operations in most active
progress, and the promise of a crop assured. progress, and the promise of a crop assured. since he has farmed in the valley aud that means almost since anybody farmed there. Even with no more rain there would be a good quantity of grain produced. Mr. Cressey has mules to do his plowing as work animals which could have becn purchased for a song a mouth ago are not purchasable now at any fair price, because the improved prospect has brought out such a demaud for them. Mr. Cressey is going to push his plows as long as the moisture will permit turning land to summer-fallow for next ycars' cropping, and when it is too dry to break
new soil he will put the teams at work crossplowing. Thus ho will lay a wido area under tributo for next years' crop. If Prof. Decker's probabilities come as true next year as they have this we shall have more rain than we are
now getting and our far-seeing cultivators will be rolling in coin by the Christmas of 1879 Thus may it be.

Kinsas:- We are indobted to Alfred Gray, Board of Agriculture for a copy of lis monthly reports for November and Dccember, 1877 . It contains a valuable condensation of agricultural information, embracing crop reports, statistics of production, ctc., and is a publication calcilated to lead to a lietter understanding of the agriculture of the State, both by citizens of the state and others. spond c of thotice that the correspondent of the loard in Marshall county is
Ifon. C. J. Brown, a classinate of ours and a Hon. C. J. Brown, a classin
stirring and progressive man.

## the taste for it. There is no doubt that among

 the Eastern competitors the wheat will be given garden culture, and as great a weight of fertil izers as the plant will stand and yet not runto straw. Californians have as good a chance to try the experiment in this way as any one else if they desire to. But we should like also to see the cxperiment tried on some of our finest unworn wheat land, with ordinary cuncurc
The reports which will be made will includc full descriptions of methods of growing, and in coutrast with the resnlts gained by Eastern coddling we should like to seo what our soil will do for the grain with only ordinary good culture. The contest bids fair to be an inter esting one, and one in which all leading wheat

## GORRESPONDENCE.

The Mokelumne Ditch and Irrigation Co.'s Dam.
Edrtors Press:--Thinking that the progress of an enterprise which has for its object the
irrization of 300,000 acres of the best land in the rich county of San Joaquin may be interesting to many, I last Saturlay rode up to the point in the Moctelumne river where the conn-
pany's daun is in process of coustruction. My pany's daus is in process of coustruction. Thy
self-imposed task was a very pleasant one. The recent timely rains had given the air the agree
able softness of spring, and the upspringing grain with delicate shade of green was making the most of present opportunities. The way through a beautiful, undulating country in view of some of the choicest botton land of the Mokelumne, leading, toward the end of my ride, throngh some rough foothill land of Calaand abandoned mining claims. In tbis part of the route the aforementioned spring air was blended with a foreign air, lent by the Mongolian risage of cheap labor employed on its
own account with cradle and rocker in extract.
ing the reot of all evil from neighboring ing the root of all evil from neighboring
gulches. The results are to them pecuniary, and to outside ""barbarians" didactic. The
aield is six bits per day for each man, and the lesson taught is viz: Never cease to endeavo and to labor eve.
Thirteen niiles east from Lock eford I reacher the (The site is near I Plana flat tock a place which in its best days, following the
discovery of gold on Winter's bar in 18.52 pollede 3.50 votes. After taking out inany hun-
dred thousand dollars, the miners sought fresh dred thousand dollars, the miners sought fresh
fields and pastures new, aud the town to-lay numbers less than 100 . The dam is located in the Mokelumne betwcen Westmoreland's bridge
and Winter's bar, at a point where the river narrows between bluffs rising 40 feet above its bed. C. Holman, a civil engineer, residing near his report March 17 th, $15 \%$. The dam is
built after specifications drawn by Mr. Hol. man, thongh they have since been moditied in soine particulars. Mr. Holman is chief engi-
neer and has charge of the construction of the headworks and canals. Work upon the dam commenced Oetober pervision of Engineer Cravens, of San Francesco, and is now being conducted nnder the
direction of Mr. Wallace, of sitockton. Sixt five men were at first employed, and 47 are at present engaged in its construction.
A cofier dam was built and an made in the bed of the river 56 feet in width 7 feet depth on one side and 18 feet on the
other, the whole filled with broken rock laid in cement, forming a solid foundation. The dam
is 270 feet in length, abutting ou either side on a solid rock formation, jiving it additioual strength and sccurity. Ths its width on top eight feet. The slope
feet and
on the inside is 14 inches horizoutal to one foot on the inside is 14 inches horizoutal to oone foot
rise, and on the outside nine inches horizontal to ono foot rise. The dam is huilto of stone and is to be capped with timber sills and faced with
plank. The sills will be secured with iron rods
to girders laid nuler a conrse of stone. The to girders laid nnder a conrse of stone. The
lam is built with a course of stone laid iu cement in the center to prevent percolation of
water, and the inside will silt up with the wakh of the rivar. The rock 11sed in building is solid rock near each cnd of the dam, and is a heary hlue granite mixed with quartz aud
weighs 175 pounds per cubicicoot. It is blastel
out in blocks weighing from 500 pounds to 4 t tons, and is laid in conrse without dressing,
filling in with small stoncs or broken rock. The 6illing in with small stoncs or broken rock. The
weight of the dam when completed is estimated at 7,000 tons, or $14,000,000$ pounds.
Under the artieles of incorporation, the commeanyranent, which is equivaleut to a thow of
1,965 eubic feet per second. At times of 1,965 cubic feet per second. At times of high
freshets the river is said to run $1,000,000$ inches of water, or 19,650 cubic feet per second.
When we reflect uppon the immeuse pressure this volume of water, flowing in a chaunel less than 300 feet in width, must bring to bear on
all obstacles, and know also that 3000,000 feet of logs ie iu the bed of the river above, which,
in the event of a sudden freshet would ride
swift upon the flood threatening all before it swift upon the flood threatening all before it,
over-rending, erusling aud grindiug in their mad career all that may oppose, we may form
some idea of the strength recuured in a work of some idea of the strength required in a work of
this kind to successfully withstand the force that may be lannched against it. The work
was planned by competent engineers and is unwas planned by conpetent engineers and is un-
doubtedly strong enough to meet its requirements. The dam is but two-thirds completed
and should lee finishcd as rapidly as escape the disastrons ettects of nu early rise.
H. ELGE $\mathbf{U}$

## Poisoned Arrows. <br> Editors Press:-Entomological investigation

 is now receiving special attention at the national capital, and at the last two or three meetings of he Philosopical Society here, papers have been read on the subject of poisoned arrows. At the meeting of the Society held on the 22 d oDecember, Maj. Powell advancel the belief that December, Maj. Powell advanced the belief that use by any of the American aboriginal tribes At the last muceting of the Society, Dr. Elliott urve Secretary or remarks on the subject based on his own observations as a surgeon i the army, having, on frequent occasions, while
stationed at military posts in the Indian connstationed at military posts in the Indian conn-
try, dressed wounds intlicted by poisoned rrows used by funs, ontisold and others praced in the form of noteses by Dr. Hoffman, of he Hayden survey, based on his own experi from other reliable sources.
During the time of Dr. Hoffman's residence the military station at Grand river, D. 'I in 1872-3, as Post Snrgeon, he deroted most of
his spare time to the study of the language of his spare time to the study of the language of
the Dacotahs, in addition to observations upon heir customs, ceremonics and the mode o ils. The whole number of names upon the cills at the Agency here amonuted to 13,500 ; and were known as " hostiles." The remaining 0 miles from the agency. As most of thes encampments were permanent, frequent excur sions were made to some of them.
As the custom of poisoning arrows is not in iou of the mode of preparing the poison and its ubsequent application to the arrow points will
The arrow-make
veapons go to onc of the nmmerous prairie-dog owns, in and about which rattlesnakes (Canof the Indians is armed with several sticks, eac from three to four feet in length, some of which
are forked at oue end; likewise the liver of an antelope or deer, usually the former, as they are more easily procured. but securely held to the ground by neans of
one of the forked sticks, which is placed about the middle of the body. The other Indian now impales the liver upon a slightly pointed stick, and by thrusting it at and teasing the suake, the latter becomes enraged and buries its fangs
repeatedly in the liver. When the reptile has repeatedly in the liver. When the reptile has
exhausted itself or refuses to bite auy longer exhausted itself or refuses to bite auy longer,
it is killel. The liver is theu carried back to camp and there placed upon a pole for exposure This usually takes place in the course of a day, the actual length of time depending upon the state
of the atmosphere. After the liver has become putrid, it is carefully taken down, put into a smail vessel, where
it is crushed a and leaten
into are then dipperl into the viscid scum which accumnates upon the surface, atter which they
are allowed to dry. Finally they are placed, point dowuward, into one of the compartments and secured about the top with an extra thong, so as to prevent mistakes in their use. The arrows employed in the chase
A bow and quiver of arrows always forms a nently brought into requisition on account Whe noiselcss inanner in which they can be nsed.
Whether the fatal effects of poisoned arrow wounds are due to the presence of the venom, is a subject that requires investigation. The opin-
ion of Dr. Hoffman is that the very important part. The fact that the Indians application and effects, illustrates that the learned the fatality of the bite of the Canulisona and their ultimate employment of the venom as a toxic agent upon their arrows
The Coyotero Apaches in the vicinity of Camp
Apache, Arizona, are also kno wn to occasionally nse poisoned arrows. The Iudians at this place exnisited many arrows which they said were
poisoned, and it was perceivel that the base of the arrow head in each case was coverell with a dark brown, guinmy substance, which was absent in the ordinary types. Dr. Nilan Sonle,
who was for several years Post Sirgeon at the above named locality, states that this sul. -tribe
af Apaches sometimes use poisoned arrows of Apaches sometimes nse poisoned arrows.
Dr. Elliott Coues, of the U.S. Army, furnishcs, annong others, ("Medical and surgical Kcporter," Vol. xiv, pp. No. 17, 321-324), au interesting case of an arrow wound, which, on ac-
connt of its peculiar progress and fatal ternin. ation, was, very justly, considered by him to have been a poisoned one. This case also was
observed in An to Mr Jo Arizona.
uirvey, states that the Crows, Irof. Hayden's siniboones aud Northern I Iacotahs poison, their
arrows. The latter rrows. The latter named tribe has arready vecn allnded to. The other three prepare their poisoned arrows in the following manner, viz:
A rattlesnake is sccured, and so tantalized or provoked that it will bite a piece of smonth
wood or barls held by one of the Indians, aiter which the arrow points are rubbed npon the
venom, and allowed to dry. The venom, just
after it has been deposited upon the bark, is after it has been deposited upon the bark, is
semi-translucent, and of a glutinous consistency. Frequently the heads of rattlesnakes are kept on hand for futurc nse, when the poison sac can
be extracted, and the veuom utilized as required. Prof. F: Hayden substautiates the abo statement, and in aldition says that these operations could be secn whenever there was any making the gatbering of maiato, s for a graud hunt, or a hostile expeditiou.
The very reason that some of the quivers are hivided into two partitions, one of them as the cient to show that these Indians apply some silbstance intended to insure the death of the subject upon which it may be used
Some of the "Diggers" living portion of California are known to use the uper of the wild parsnip, mixed with the putrid liver of a dog. Mr. W. II. Dall, of the U. S. Coast Survey, has observed that the natives living in northeastern Siberia poison their weapons by
dipping them into the pntrid liver of the white dipping them into the pntrid liver of the white
bear. The liver is said by Mr. Dall, to be poisonous even when fresh. The natives use their poisoned arrows in the destruction of unfit for food, such as wolves, foves, etc.
The use of the woorara poison by some of the schomberkican Indians is a well known fact.
 poison is prepared by the Makoosic Indians
from the pirarira and by the Warpeslanes of the Eonocon monntains on the Orinoco from a new strychnos, toxifera.
strychnos toxifera: acuminatis, 3-5 nervis utrinque ramuligue ferrs ineo tise 3 -5 , bd. Xxxi, 183s, p. 100.) ["The Lond. and Ed. Xxxf, ls.3s, PI 100.) "The Lond. and
E.din. Philosophical Mag. and Jr. of science," ol. $x, 1837, p .72$.
It was at one time supposed that the origin of venereal diseases was due to the poison em-
loyed in the destruction of fish and ganie. In this connectiou 1)r. Rees (The Cyclopedia, or niversal Dictionary of Arts, sciences and Lit under the title of "Anerica,") says: "It has. cated with the cururn, ape and the flesh of the game killed with arrows poisoned with a species of woodhine called woorara, prodnced this con tagiou annong them." This quotation has reference to the West India Islands, the Caribbees,
Florida, Mcxico and Peru. Mr. Rees further Florida, Mexico and Peru. Mr. Rees further
states that "In the Island of San Domingo, states that "In the Island of San Domingo,
where the venereal disease was extremely rife, where the venereal disease was extremedy
the use of poisoned darts was not in practice as among the Caribs and scereral families on 'Terra Firma
sufficient evidence has been obtained to illus trate the fact that poisoning arrows is still prac thed by tribes within the limits of the United States, without having to hunt elsewhere to
show that such customs exist or ever did exist.

## Washington, D. C., Jan. 21.

The Region Around Vallejo.-No. 2.
EDrtors Press:-To conclude my notes on thi region, begnn in last week's Press, I remark that our soil is formed by the disintegration or decomposition of rock, made up of crumbling shale, sand and limestone, in stratas of asfew inches to several feet in thickness, lying at an angle of 4.5 to 50 degrees, dipping to the east and sonth. Here as elsewhere in Califormia, wherever the bedrock manifests itsclf, serious shown by the distorted, broken and corrugated condition, in which all traces of original positions are destroyed. Soils formed of such rocks propertions of the elencents composing them. That of the valleys is a black adohe; upon the hills and uplands a clay loam-loth duralle and excellent for grain or grass. The presence of so much lime and marl renders sterility next to
impossible, for npou exposure to the atmosj| here they decompose or slacken readily into tine powder, which is the best of fertilizers when applied to soils

The Disintegration of Monopolies
The pernicious influence of landed monopoly, either municipal, by associatious or individuals
cannot be denied. Experience teaches it. TV cannory
history of all nations aud commtrics where it has or at present exists, proves it to be antagonistic
to a demoeratic form of government-that is one in whieh the supreme power rests in the
peoule. (ialifornia, prior to its conquest by the United States, was a Nexican province, sulject to laws framed under Spanish despots, who cared not for the people save only as they in-
ereased their power and added to their wealth and that of the favorites of royalty. At the that of recognition by this Government of cer tain Mexiean land grants. Under a looscly drawn, vagucly wortcd incument, scores of hic presented, rendering titles mincertain, alssorthing clusion attention of many of the courts to the ex clusion of other business, supprorting in atllu.
ence a host of lawyers, many of whom have become million-lurirs. The nucertainty of titles has retarded the settlement of the state-he
agricultural and other intercsts remaining nude
veloped to an extent which cannot be recovered Fo a generation. For 20 years after the settlement by Ameri pall over this district, which was known as the Suseol rancho It, which was known as the assol rancho. it wasa period of bitter con-
tests between rival claimants. The soil was recklessly drawn upon by all faction wa robbed the earth to carry on these suits, the into ths of thousands of tons of grain going part of the monkey in the division of the cheese with his feline clients. Ry a special act of Con-
gress these vexatious questions were finally set gress these vexatious questions were finally set
tled. People are now making permanent in provements. Orchards, vineyards, alfalfa pas are springing up where naked fields and appa rently worn out lands marred the landscape, and prejudiced the minds of strangers and per sons who were seeking homes.
As yet, however, farming is simply specila the future in the way of systcm or regard for rotation of crevs, pasturing etc, The same stead of foedigality of burning the straw in that pre vailed in early days when 40 to collowe of wheat was an a verage vield per acre bashel which will not now return over 10 to 15 bush els. This will change when small farme are the whe, and not as at present, the exception the PACIFIC RURAL PrEsS is taken, read and paid for by every farmer or landowner in thi valley
Taking into consideration the contiguity to San Francisco; accessibility to market which is
virtually at the door; immunity from drouth or extreines of tomperature; soil water health and sundry minor advantages, this will compare favoratiy with any portion of the State In concluding 1 will give the amount of whea and flonr which have been shipped from this point direct to Europe during the last 18
months: There were 143 ocean ships loaded at our mill and warehouses with 0 h1 3 Sh tons wheat and 221,734 barrels of flour. Thes figures in no way include that taken to sa barges or steamers which agreyte a larg amount.' It is not claimed that these ship. ments represent the production of this district which is the point of shipment for Solano, Yol and Napa connties.
South Vallejo, Jan. 31st.
What to do with Over-Rank Barley
Eimpors. Press:-I'ossibly some of your readers who, like myself, believe in taking time hy the forelock, find their early sown grain making a very rank growth this moist, mild weather, and threatening to smother out.
There are several ways to avoid so unde sirable a catastrophe. On sandy loams turnin on sheep or cattle would be bencficial. Som
clip with a mower and let the clippings remai on the ground, lut this leaves latches hauled off the land, to be thoroughly effective Those who have no stock to feed and whose land is ton mucky to allow of clipping and rak ing will probably find it the most profitable
conrse for themselves and their land, to plow under the rank growth as mannre and sow again.
about 14 fainf for January was nearly ? inches
 Carmel Valley, Feb. 1st, 1578. nything to say in the subject. If so, say on -Fins. I'Resas.]

## Rotting Straw Piles

Emirons Press:- I find in the Press of January 19th, 157s, an article headed "Rotting Straw I'iles." 1 have given attention to this business for six years, and tind that my greates success has becn in stacking the straw in sinal stacks and turning my stock onto it in fall and down, breaking and tramping it quite fine. The do it to for decomposition. It takes two years, or the rains of two winters, to make good manure.

## Gerow Brothers' Operations

Since our last issue we have received further testimony in answer to onr call for infornatio f fierow Brothers' operations in squirrel killng, and we give the following:
Fintons l'ress:-At the time of Mr. E. S. ierow's (the squirrcl poisouer) passing throngh a trial at destroying the squirrels. What he destroyed has lween a great benefit. The next had thrown his socen every where dead where there has not been one where there were hun-解ds before. If every propicrty holler would siles clearing the country of these pests. Buena ista lianch, Sonmma, Cal.
Enrolsis I'rfis:-1 lave been requested to


## Horticulture.

## The Diospyros Kaki,* or Japanese Per

 simmon.Edrtors Press:-The common date plum or persimmon (Diospyros lotus) is called the European lotus and the date of Trebizond. It is a tree of 20 to 40 feet high, with oblong, shining leaves, small reddish, white Hower,
a native of the coasts of the Caspian sea, Mauritania, etc., but cultivated and naturalized in the south of Europe. Its fruit is the size of a cherry, and in favorable climates larger, yellow, sweet and astringent. It is eaten
when overripe, like the medlar, or is used for when overripe, ise the medar, or is used for stantinople, and in that part of Europe it is fruit abundantly in the neighborhood of Loudon. The Diospyros Virginiana is the well-known wild persimmon of the Southern, Western and Middle States. It differs very much in size and in the quality of the fruit. Some of the varieties are said to ripen without frost, and I am informed that a very large specimen of this fruit
is now being propagated in Texas, having reis now being propagated in Texas, having
cently been discovered there by Dr. Durr, Washington count
Durr persimmon."
Durr persimmon."
The tree grows from latitude $42^{\circ}$ to the (fulf The tree grows from latitude
of Mexico. It grows well at Cleveland, ohio, in
southern Michican, and I have been told is southern Michigan, and prefers a a soft, black
at Lynn, Mass. It at Lynn, Mass. It prefers a soft, black
soil. The tree averages about 30 to 40 feet in
hight, but sometimes attains a large size. One hight, but sometimes attains ar Phe size. One over 70 feet in hight and 2 feet in diameter.
Another in the Kew gardens, England, is 40 feet high. The heart wood is brown, compact,
strong and elastic. It is used in Philadelphia for shoe lasts, in Baltimore for wheel hubs and mallets, in Charleston for shafts to carriages, and is regarded a
this purpose

The fruit is used for puddings, and is some times paciked in sugar, when it loses its astringency, and is much prized for conserves. It is
pounded up with wheat bran, forming cakes, which are dried and kept to make beer
The Diospyros kaki grows in the same varieties of climate and soil as the wild persimmon.
It is found in the greater part of Japan in abundance and also in China from Canton to Pekin. Large orchards are to be seen in the
vicinity of Pekin, which has a climate similar to vicinity of Pekin, which has a climate similar to
that of New York. One of the trees has borne that of New York. One of the trees h
fruit in the open air at New York City.
feet and are said to live 100 years. They are very hardy and prolific and a failure of the per-
simmon crop in Japan is unknown. The blossimmon crop in apan is unknown. The blosappear in May or June. The Diaspyros vir-
giniann is diaceious and some of the trees do not
produce fruit produce fruit. But the kaki trees have prob.
ably been changed ly cultivation, so that all are fruitfln. At least such is the case with the
grafted varieties. ally in sizize, llavor and quality, according to soil, climate, and culture. There are saiding to to
190 varieties, varying in size from that of common grape to over a pound in weight.
Some, also, are solid like the apple and ripen on the tree, while others are rendered more pal-
atahle by packing in hran or in tight casks for a short time to remove the astringency. An.
other method is by dipping in hot water and then allowing them to liea eew days before eating.
Some of the choicest fruit is ripened in this
way and they way and they con
not to be obtcsined. The names change with
different localities agree as to the relative value of the varietics.
From careful comparison I have selected the *Pronounced Kah-kee
followiug as the most desirable and the descrip.
tion is the hest that can be obtained. On some tion is the hest that can be obtained. On some
points there is a disagreement, but in general the conclusions are probably correct.
Nihon.-Slightly oblong or round but some-
times nearly tlat; color, yellowish red, with times nearly Hat; color, yellowish red, with
black spots on the surface and also in the flesh. black spots on the surface and also in the flesh.
It is not as large as some of the others but early and very productive. The flesh is solid and it keeps a long time. It ripens on the tree
in September and is particularly sweet and highly esteemed for its flavor. It is grown in the Dainity of Tokio.
Daimio-Slightly oblong, reldish color with
dark point; medium size, flesh soft; ripens in dark point; medium size, flesh soft; ripens Taikoon.-Round, of a pale or greenish yellow color; fair size; ripens in October; a great
favorite in westeru Japan, where it grows to a large size.
Royal.-Similar in shape to the Taikoon, but more yellow in its color; large size ; ripens on Mifkudo.-Flat or like a tomato ing shape, medium size, bright, yellow color. This is a
very common and popular fruit in the vicinity of Yeddo. It is not much used for drying.
Some of the specimens have no seeds and eome of the specimens when the trees are young.
Imperial or Yamato.-This is shaped like an acorn or minie ball. It is very large, and with
red and sometimes dark stripes on the surface. The flesh is soft when ripe and particularly sweet The flesh is soft when ripe and particularly sweet
and fine. When peeled and dried, it resembles figs in appearance, being covered with sugar
that exudes from the fruit. It will ripen ou the
tree tree, but is usually picked and ripened in tuhs. Season, later part of October to January (or
probably later in this country). The most popprar variety among the Japanese. It is grown in Koshiu, but originated in the province of
Mino, in Central Japan.
Goyen, -Like the Imperial except in size, but
it is said that the trees are more prolific. Used for drying.
Kanosan.-Color yellowish red, oblong, goo one side. Mat or the tree. The apex is bent
Mameraki. This is quite small, and is good for eating, but is useful for making paint. The timber is very beautiful, being white with heavy black tracings or mottled in appearance.
Some specimens are black and exceedingly val. Some specimens are black and exceedingly valA small variety is found in southern Japan
that is seedless, but it is used only for drying that is seedless, but it is used only for drying.
The so-called "sseedless" variety advertised here The so-called "seedless" va
is undoubtedly a mistake.
The variety called Emo
The variety called Emony or Almong is not ugaki in Japan, from the fact that it is usually packed in casks (taru) to ripel
The Harthiya (which som
The Harhiga (which some have called Hat siya or Haychuya) is one of the best, but like Henry Loomis.

## Flopiculture.

## The Culture of Roses.

Editors Press:- So many potitions have come to me for more information about roses
(and for cuttings to grow), that I will try to answer all the friends, with your permission, through your paper. I am so glad to have people grow flowers, especially roses, that I would
prune my plants as long as they will bear it. I think 1 have giveu away more than 1,000 cuttings in the past three months, but very few that do have to watch them quite as close as a mother would a sick child. The best way would be to get good cuttings and take one or tw
buds from each one and bud into any kind rose-stock that is in good growing condition.
have often used what is called hybrid perpetua) have often used what is called hybrid perpetual,
those that hloom but one season, and find them a very good stock to bud into, but the Castilian or California rose is best, especially for running roses. The cuttings are just as good to plant Then if both cuttings and buds fail, 1 would Then if both cuttings and buds fail, 1 would to luy them of trustworthy florists. I fully ap preciate the song:

Make your home beautiful, bring to it fowers,
Plant hlemaround you to bud and to boom,
The will ririur jov to your loneliest hours,
'rom my three years' expcrience, I like rose
lirom my three years' expcrience, I like roses
that arc budded into strong growing stocks bet ter than grown from cuttings. They grow faster and bloom more abundantly. Some rose grow ers advise plantiug them in nasses or circular
heds, but all that I have seen grown that way have hecn very unsatisfactory. They are harder to cultivate, prune and cut flowcrs from.
plant climbers around arbors, at trellis
Plant climbers around arbors, at trellises and
veranda pillars, and always where they get the sunshine all day. Plant lush roses about two feet, not lcss, from the edgc of walks, and all of four feet or more apart, and the same distance
from all other plants. They grow fast, and nced the sunshine at the root to kecp them
healthy, and plenty of space to draw sustenance from the soil. If the ground has never been cultivated it will noed plenty of old stable ma dust and iron filings from blacksmith shops give the petals a substance and high color otherwiso unqttainable. I added about one pint to eac
place before setting the plant. If planting in
dry weather the first two weeks after getting them of a flor ist, and they will bloom very soon. In puttin out plants or euttings it is necessary to beat the
earth down quite firm around the stem, and leave a little depression around it also to hold the water until it soaks away. My best wishe are for your success in rose growin
and readers of the RURAL Press.

## Santa Barbara, Cal.

## Poultey Yaro.

## Poultry in Stanislaus County.

Editors Press:--Your favor asking my experience came to hand Jan. Ist, and I hasten to reply. I would have written ere this, but I felt as if I had nothing new or interesting to writ about. There have been so many good and
valuable notes on poultry in the Rural that I felt like advancing my experience and method with poultry. But if it will encourage or as sist even one reader of the Rural Press, use it thoroughbred hens was not very satisfactory The Brahmas I found poor layers and too large and clumsy to make good sitters or good mothers, The Spanish were good layers but non-sitters, and I found it very hard to start their chicks The Leghorns I think very much like the Spanwhen eggs were 20 to 25 cents per dozen, bu
not well that fall and winter. I think them no hardy enough to stand our trying summer o

## the plains.

lay when egges are 40 pleasaut to have my hen get but 20 or 25 cents per dozen. The fowls
have now are the Polish Hamhurg's crossed have now are the Poish Hamhurg's crossed
with Brahmas, and $I$ an very well satisfied with them. I will give you an account I kept las
year of seven dozen hens. They did not do so well as in 1876, I think owing to the drouth hens on 132 dozen untis hens on during that time. From March until August I sold 260 dozen eggs at 25 to 30 cents
per dozen. From August upto Decemher 1 sold 388 dozen at 40 to 45 cents per dozen.
In the early spring and summer I feed very little, say four pounds of wheat in the evening,
From August to January I feed well. In the morning I feed two gallons of sour milk stirred
thick with "shorts." In the evening I feed eight pounds of wheat. While they are moult ing I give one cup of sulphur, one tablespoonfil per twice a week in the morning feed. I I have
lime, charcoal, and plenty of clean wate line, charcoal, and plenty of clean water acces.
sible at any time. I sometimes give water that
scraps of iron have laid in until it is red with scraps
rust.
I hav
have brush wigwams put up at intervals
a 10 acre patch to induce my fowls to scatover a 10-acre patch to induce my fows to scal-
ter out, and also for them to take refuge in from
hawks. I have their houses and coops cleaned hawks. Thave their houses and coops cleaned
out once a week and ashes thrown in. In my
five five years' experience I have seen no
among them and very seldom have one die Breeding Months
Three months in the year I devote to raisin oultry. I prefer Jauuary, February and March eggs has dropped; second, in that time I can many as I can accomodate; third, yeretation well up so that one-half the feed will do; fourth, I ean keep the chicks clean with less trouble fifth, and last, they appear to thrive better, so
that in about 12 weeks they are nice, plump chickens, ready for market, when the price is

My Method of Raising Chick
Is as follows: I get the hens to lay and to sit best pullets and of alout the same age. I sc off once a day to have a run and take a dust bath. A few days before the eggs hatch I dust all hatch ont I the the all hatched out I take the hens off and give then head of each chick very sparingly with mercurial ointment and put them in a box into which I have put dry dirt. I now pick out the hens
themk will make the best mothers and put
apiece, according to the capuhility of the hcu.
ect; hight of back two feet. They are built up at the back. I lave windows in some o
hen and chickcus out on the grass in the thay
ime, when the wather will pormit. I fee
threc when tho weather wimes during the day soft feced
until they are three weeks old. I give cracked wheat tho last feed in the
healthy excrcise to tho gizzard.

## Turkeys

Ahout the iniddle of Febrinary I commenec year, and find the rase from 100 to 30 every
nire lery little feed after thcy arc a month old
aim to have all the chickens out of the way
the timo the turkoys hatch, as they reguire
extra care. I keep the turkey and her chicks boiled milk box for a day or two and give them out in the grain where they will be well shel. tered and feed once every two hours, bread and milk, egg custard, milk curd and cracked wo wceks old I let them go where thcy please, but see that they are warmly housed at night. 1 tried ducks one year and succecded in raisug four dozen from three ducks, but I consider There are two reasons that I think
mportant bearing on my success with beve an mportant learing on my success with poultry.
One is my love of the business and the other is the shade of the timber.
In answer to Mr. Dakiu I would say that I use kerosene cans sometimes for corner nests. cut the can in half and make two nests of it.
na two of the sides I nail strips of lath, the ther two sides I nail in the corner.
Dry Creek, Stanislaus
[Thanks. What have our other lady poultry eepers to say?-Eds. Press.]
Influence of Organism. on Egus.-MM. M. ggs may remain for loug periods in a medium ing the shell and penetrating the interior. The shell, however, allows the passage of micro-
scopic mucedinæ, which make their way through the lining membrane and devclop very abun dantly on its internal face. The membrane sur
rounding the yolk presents, however an isur rounding the yolk presents, however, an insur
mountable barrier to their further progress, but mountable barrier to their further progress, but m alteration takes place, which is a true

## Arboriculture.

Annular Growth of Trees.
Edirors Press:-It is claimed that the hisory of our rainfall can be demonstrated by the xamination of the annular rings of our large aks and sycamores growing on the plains of the Santa Barhara, etc. The trees thus subjected to examination should be on the plains, away from springs or gulches. From the ring growths or instance two dry seasons occurriug in succession, the first wet season thereafter would not, from the nature of things, show such a were ang as the succeeding year, although it dry year. But such au examination would let is know the general condition of California
rees of 200 or 300 yeare of age, I have no doubt rees of 200 or 300 yeare of age, I have no doubt
an be met with. I make thcse suggestions; it is an interesting subject; if you give place to our able men, and thus have their out some of

In an article in the Press of January 26th, r. 1. C. Woods speaks of trees as conservatora osprings and water, but the writer did not trees; coniferous, such as pincs, and deciduous he growth of a willow, for instance, growing ear a leep well. I have seen them and only was growing 50 feet from the mouth of the well ave an inmmense mass of roots therein 25 feet in planting around springs the trees ought to be and not the kinds that penetrates a great depth fter moisture. ${ }^{\text {Rustices. }}$

Tine Inpluence of Forests on the Atmos. pherre.-M. Fautrat has communicated to the
Paris Acalemy of Scieuces the results of his thermometric observations during the past year on the influence of forests on the elimate, and their general tenor, as detailed below, appears
on The London farmer gives the following summary of his conclusinus: During the progress
of vegetation in June, July and August, a treo in full leaf, imbibing its nourishnent from tho atmosphcre, producos a movement which is reflected in the air by a slight decreasc of temperture can always be uoticed alove fir trecs, swing to the solar heat retained by the vapors this moist and warm mediun that tho vigorous egetation of resinous trees in poor soils inust observations made in forcsts and away fron cvel, M. Fautrat arrives at the following con lusions: In consequenco of the differences temperature which are observed underncath the oliage and above the suminits of trecs, a cur-
rent of air from telow npwards is cstablished in forests, and also lateral currents around woods These currents cause a healthy brecee in weather. The ascending current carrics off alove the forests the vapors from the soil, puts this latter in communication with the clouds, csts owe their re markable property of kecp

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## Removal. <br> Thtil further nutice the otfice of the Sceretary of the State Grange, will he at 106 Davis street, in the sture of State Grauge, will he at 106 Davis strect, in the stare n the Granycrs "Buniners Aspciation. Correspondent wil continue to seul their comnumicatious to No. 40 Califor

 ANNUAL MEETING.Office of Grangers' Business Asseciation


Enterprise, Golden Gate and Social Granges.

Editors Press:-Saturday, the 19th, in company with Bro. Fassett and wife, $t$ wo of the most earnest and devoted (irange workers in this State, 1 attended the installation of officers of Enterprise Crange, some nine miles southeast of Sacramento. This Grange is one of the best examples to be found in California of the steady progress that can be made by a firm devotion to the principles of our Order and an unselfish per-
sevcrance by a good majority in a Grange, in sevcrance by a good majority in a Grange, in
spite of all the unfraternal conduct aud machin. ations of an unfortunately misguided and discordant element. When I visited them 10 Inonths ago, they were meeting in a small and
iueourenient private building. Now they have large and well built hall, 30 by 60 fect, and two stories high. On the occasion of this in-
stallation both sides of their long hall were stallation, both sides of their long hall were
well tilled with the members, visiting Patrons, well their bright, happy chilldrell of all ages, rom babes aut I ever attended, was spread on three long Bro. E. G. Morton, Master of American liver Grange, was their installing officer, aided by
Bra. Fassett. and accompanied the ceremony Bra. Fassett. and accompanied the
with an excellent and timely address.
After our thorough enjoyment, in company
with the little ones, of the good things of the with the little ones, of the good things of the table, the time came for my lecture, as requestcd.
About an hour was occupied ly dwelling in brief Apout such themes as the general progress and upon succh hemes as the general progress and
prosperity of their (irange and our Order for the past year; the still greater work we yet have
to do; the specific: objects of the Order, as laid lowu in our Declaration of Purposes; what th Grange has done for us alreauly, socially, edu-
cationally and in our business aud political incationally and in our business aud political in-
terests; the value of primary (iranges, illustrated ly the beautiful and instructive ritual and exereises of Youthful Grange No. 1, of Alhambra Grange, at Martine, the importance o
imitating which was earnestly recommended for all Granges where chilldren from 3 to 16 years are numerous enough; the vital necessity of farmindustrial interests, seeing to it iu time tha good aud true delegates are selected throughout our State for
The Approaching Constitutional Conven-
The importance, when we select Grange memLers for this or other positions of trust, in the name ing neel of devising meanis to secure the faithful fulfillment of the pledges and duties of repyresentatives of the people, not by any violent
means, of course, but by petitioning them to resign, or, if that won't do, demanding laws to
punish with imprisonment punish with imprisunment or fine, or both, those
who clearly and defiantly betray the sacred trusts of the pleople, and ignore their crying wants, their persistent appeals. and earnest gathering, I I could but wish that all our memblers really could but wistood as thot those
present appeared to understand, the true purposes of our noble brotherhood, were equally
working for the real good of our great Order working for the real good of our great Order,
and "the grastest good of the greatest number," rather than for mere selfish ends, and could forevcr shake on the dead weight and ever disor-
ganizing influence of that hideous and hlind
monster monster, prejucice, whether personal, local, sec
tariau, partisan, sectional or uational Oht that all the disorganizers, all the unfra-
ternal members of our (iranccs, could live to a jnst conception of those gould and true
words, "Bchcold how good and how pleasant it Words, "Bchold how good and how plensant
is for bethrent do dwell together in unity."
Because of the heavy storn of 'Tuestay, 2.2 ,
 the othicers of Gotlen Gatc (iranyc, in San
Francisco, wcre not installed until the next diay
at l P. . . I., when the ceremony was duly perat l P. Mr, when the ceremony was duly per-
formed ly Worthy secretary Adams of the
Statc Grance Statc Grange, assisted by Worthy 1, octurer
Pilkington. It is to be hopel that the offieers Pilkington. It is to be hopell that the oftieers
and members of this Grange, which cau be made
a source of much good to the Order in ('alifor nia, will exert themsel. to ald to its strength aud efficiency the coming year.
Saturday, 26th, accompanied Bro. Geo. W. Hancock, Past Master of Sacra mento Grange, aud Presideut of the very flourishing "(rrangers' Co-operative, Business Associ-
ation of Sacramento Valley," I enjoyed the atiou of Sacramento alley,
pleasure of installing the officers of

Social Grange, No. 271,
Near Micligan Bar, on the Cosumnes river in Sacramento county. Very inclement weather
and the sal ravages of that terrible scourge, liphtheria, prevented as large an attendance as we would otherwise have had. A list of their
newly installed oflieers accompanies tlis. Their Grange is not large, but they have a memberGrange is not large, but they thathe purposes of the Grange.
ship fill soon receive from them for publication ome pointed resolutions passcd at this meeting ou the loeation of mining lands, and on toll
bridges. More anon. J. W. A. Wricur. bridges. More anon.
January 2sth.

## Santa Rosa Grange.

Eorrors Press:-To the multitudinous duties Grange Secretary, by resolution of Santa Rosa Girauge, has been added that of being an occasional correspondent of the Pacifie licral
Press. In pursuance of that resolutiou 1 am about to write you au account of our installation of officers. It is not my happy privilege o boast of our numerous membership, or of he prosperity of onr Cirauge; but 1 do clain that among our nembership we have some
"the salt of the earth, anointed of the laud." Our installation had been appointed for the 26 th instant, and Past Master N. C'arr, of Bennett valley, had been invited to ofliciate, hut tine to serving on a jury, Iu the midst pluvial outpouring so copious as to excite vivid odl in number, assembled at our tirange hall, accompanied, of course, by their baskets and
boxes well filled with tlose good things so grateboxes well filled with tloose good things so grate-
ful to a hungry Giranger. After waiting a reasonable time for the arrival of those of our zeal, or had the prudence and care that forlade zeal, or hadd the prudence and care that forluale
them to face such a storm as was then, and still is prevailing, the Grange was called to order,
 the oully member present who was qualified to
install officers, and not elected to some office, in pursuance of the request of the Grange, pro-
ceeded to install the officers elect, except the ceeded to instaila the ofticers elect, except the
Steward, Assistant Steward and Giate Kecper, who were alsent.
The new offieers have entercd upon the duties of their olfices with a firm determiuatiou
to make the Grange more successful and useful o make the Grange more successinl and useful
in the future than it has been in the past. This may be attained, and the Grauge may be made abundantly uscful not only to its members, but also to the whole farming community and the country at large, if within its meetings the
members will so school thenselves in the art of intelligent thinking aud speakiug as to enable then to go out in the world aud compete. successfully with the men of other pursuits in the discussion of the questions of politieal economy
and governmental policy that are sulmittel to the people from time to time for settlement. The evils to which the votaries of agriculture are subjected are owing in no small degree to the
act that farmers have neulected to qualif themselves to take such an intelligent part in the discussion of these subjects as to command the respect and confidence of the people, to such
a degree as to secure the influence in the management of the affairs of the state and nation wody politic entitles them.
bod members of the
Santa Liosa, Jan. 27 th, 1878.

## Stockton Grange.

Editors Pkes:-I wish it were possible for those who are deprived of pure air, and most everything else pure, to come into the country and have a visit with nature. The most stupid miud could not help expanding. There is some
thing so grand and ennobling to be able to rear God's great and beautiful truths, written upon all nature. There is such a feeling of rest as youl look upon the rich green carpet, and hear the variety of birds siuging forth their praises.
We can have all the music, grandeur aud leauty frec. There are other attraetions. Yout cannot make any pretensions about your appetite. Y'o you want to be delicatc, don't spend too many tions of the farm are ton well known to reunire repctition. I ann not a farmer's wife or danghter. That does not prevent my appreciation of
rural life, as I found when I attended the harvest feast of Stockton (irange, and unticcl the
general good feeling that existed, and partook of the bountiful repast. It was good to b ization that icre the Grauge is the only organ of man. I am sure that is cvidence of enlight cmment. I liṣtence with interest to tho addres of the lecturess, and wish I could hear he weekly. That is impossible, as I am an

## Grange Progress.

Once a year is not too often to recall the oljects which the founders of our Order had mainly in view, and in view of the sifting proeess which our Granges East and West have recently undergone, the following senteuce gathered a new and more forcible meaning than it has ever before carried to our mind: "We their fellow join us who cannot see ged their fellow beings; but to all those who have needy, raise the fallen and arc willing to aid in making the labors of this life cheerful, we say welcome to the Grauge
The Willamette Farmer (Nalcm, Oregon), so well expresses our ideas in this comnectiou, that "The faet that quote:
The faet that visionaries aud selfish enthusiasts have lost their zeal and eveu withdrawn of the Patrons of Hushandry has not far more of the Patrons of Hushandry has not far more
than realized the expectations of its founders We believe, on the contrary, that the willest anticipations of the remarkable minds that con-
ceived and elaborated the wonderful system of the Order, uever reached to what it has solidly attained and now permaueutly renains.

The only question is, if the solid portion of
farming conmunity will do their part faitlthe farming conmumity will do their part faitl2fully to sustaiu its interests and maintain the
usefulness of the organization, and we unhtesiusefunness of the organiza
tatingly believe they will.

The material that has fallen away from in alnost every case. It is possible and advis. able to begin and lay foundations broater and stronger for the future, discouraging wild schemes, depending only on common-sense
i.leas, good social maxims and true business principles for still greater succes.
We believe the Girange to be capalle of a great and permanent work, if the iuterest can
be sustained and intellectual culture aud social intercourse be considered in great part so the intercourse be considered in great part as the
objeets to lee attained. Those objects are prac objeets to lee attained. Those objects are prac
tically within reach, while the work of remodel ing and purifying the business of the world
(which stands as the result of all man's experience), must necessarily be slow, and whaterer reforms are needful and attainable, will come as the result of comlined practieal elfort, exer-
ciscl as the result of mature experience." ciscle as the result of mature exp
Sister Carrie A. Colby, in Patron.

## Election of 0fticers.*

R1o Yista Graxae, No 159. J. H. Gard cner, II.; John Johnson, O.; E. C. Dozier, L.
 Chas. Peterson, (i. K.; Sister J. W. Cameron,
Ceres; Sister M. Mienzies, Pomona; Sister L. L. Alsip, Flora; Sister Aliee Glenn, L. A. S.
 Coulter, Sec'y; Sister Raehel M1. Coulter, Ceres Sister N. Mills, Pomona; Siste
Flora; Sister M. Nash, L. A. S.
Table Blefr (frange, Mourolidt Co.ney, L.; Wm. Terrotte, S.; S. R. Niles, A. A. Pollard, Nec'y, J. C. Foss, G. K.; Mrs. M Muyatte, (cress Mrs. M, Tierney, Pomona Mrs. Jessey Dixon, Flora; Mrs. Hanuah Pol

- Oficicrs of Granyes are requested to sens list of offi-
eers elect, date
this office direc


## In Memoriam.

Walnut creek grange, No. 119, Contra Costa
conty.

 Mand we lender our heart felt symprathy to her hustand and
relatwes in their bereavennent. Rexected, That our charter bo draped in



Amout the 2,5th of February we propose print ing a Grange Directory in sheetform, to contain the name and number of each crange in the state, together with the names of the Masters
and secretarys, and their post oflice address. We have to request that each (irange that has nat already sent in a list of their newly elected names of the so immediately, will be givel in the directory. - P'atron.
ThMber Lisis. -The House Committee on al delegates in advoeacy of their various liills for the sale of timber lands. The Commissioner
of the Cieneral land Office was also prescut, at of the (ieneral land Office was also prescut, a
the instance of the Committec, and explained and advocated the reeommendations on this
sulject contaiucd in his last annual report. The prospectas arc that the Committee will ro dance with C'ommissioner Willianson's recon mendations, the nain features of whieh are um
loodicd in the bill introduced by l'acheco, now before thein.

## AGqicultural Notes.

## California.

Butte.
Outlook,-Mecord, Feb. 2: Reports from all parts of the country give cheering The growing grain looks excellent, aul should the season continue as favorable as at presen the yield of cereals in this county will be enor grain, and a heavy yield is almost insured.

## COLUSA

Crop Prosplects.- Sun, Feb. 2: Never in
the histury of the county have we hal rop prospects the county have we hall such low is, in fact, too large for the sime of year In many places it is alrealy eight inches high. better to mow rank grain than take the chance on having it fall down. It will not hurt it to
mow it down any time iu February or March. It it down any time iu February or March. It will make all the better grain. Our observa-
tiou has led us to conclude that it is best to now it when the indicatious are favoraile to rain, especially if late in the season. An im we think we can anticipate a prosperous year CONTRA COSTA.
Rarn Erocgir.-Guzette, Jan 31: It is the want for the present we have had all the rain we would do us no soo It will suit us exceed ingly well if we can now have three or fou weeks of plcasant sunny weather for preparing
and sowing the ground not already seeded That sown before the rains of January is coming up better than was expeeted, thongh much o
that cultivated in dry is very weelly and has a much thinner stand of grain than would be tool but its early start will give it chance weather, with indications of which Felruary opening, are fulfilled, the chances are gool that
the grain well put in during the month will turn sut as good crop as that sown earlier.
FRESNO.
Firebadgins. - Cor. Repulilican, Feb. 2: Grass ay back on their oars and watch their can Hourishing without the aid of the canal. The season has been very favorable for putting in work. The San Francisco market will certaiuly hear from ns this fall. The San loarquin ha ing is knocked on the head for this season
Irrigation. - The owners of the King's river and Fresno irrigation canal have made arrange ments to enlarge their ditches. The estionat and this would come heavily upon some of the maller farmers who are owners of water stock. As there is no disposition on the part of the sa ass the farmers, the proposed improvement have been lessened, and so arranced as to bea lightly upon all.
Impact. - E.rpositor: I esterday morning A. J. Law lost a valuable horse, presumably from alfalfa poison. Yesterday the horse's stomach found in the stomach except medieines that had been given the auimal, but in the upper bowe as solill as stone, which on being broken up was found to be eomposed of half-digested alfalfa. become packed in the intestine HUMBOLDT
Fitors l'ress:- Wre have had a great deal of wind and rain for the last two weeks. Th ycars. Liel river is out of its banks. A good had to the settlers on the Negro head Aotheor houses to keep, their feet dry. We have had 2 inches of rain this winter. I wish some of the ower counties had a portion of it, although w county looks tine and the grass in the hills still, times are hard and money scarce, but Pollahin, Table Bluff
LOS ANGELES
Hay Makivi.-Santa Anna Times: James Jasper is engaged cutting aud putting up hay
on his ranch in the swamp. ILe says he will get about three and one-half tons per acre Wheat Ani Baliek. - It is estimated that re seeded in Los Angeles county.
SAN JOAQUIN.
Farmint in the Tules- - Independent, Jan.
30 : A force of uen are actively engaged put-
ting iu wheat aud barley at the rate of 100 ) eres a day on the upper division of lRoberts island, which is fully reclaimed. Mr. Fishe will probably get in 2,000 acres more. 'Tlris ing beun plowed and thoroughly pulverized las year. The crop now growing will be the firs is preyed upou so eagerly by wild geese and shooting these predatory visitants.
santa clara.
Tus Gilroy Factons:-Alvocate, Feb, 2:
The (iilroy Cheesc Factory is now in running


No. 108, and along the river frout above Kuiglit's
landing, and the damase the
rily rily be very great. The chief sufferers in this
sectic section are A. H. Rose, Che F. Reid, W. H. aud
J. C. Welch, J. P. Bullock and others. J. C. Welch, J. P. Bullock and others.
Novel Irkigation.-Mr. B. Peart,
owns what is known as the Yerby place, has about 50 acres in alfalfa, and as he has no facil-
ities for irrigating from the Woodland ditch not ities for irrigating from the Woodland ditch, not
being able to conduct the water therefrom his ranch, has devised a novel way to supply
his the wher his clover ground with the much needed water Commencing at a point on the rreek bank he of about 300 feet, the upper end of the ditch being 10 or 12 feet below the top of the creek bank. 10 this ditch he laid a hnge irou pipe 40
inches in diameter, with which to conduct the inches in diameter, with which to conduct the water to the land above. When the water rose
to sufficient depth in the creek to cover the end of the pipe it naturally flowed through the to of the bank, the fall being sufficient to carry it
clear over the land adjoining. The experiment clear over the land adjoining. The experiment
proved a success, and Mr. Peart has thereby got his clover nicely flooded, aud with comparatively little expense.

## Nevada.

Agricultural Society.-State Journal, Feb.
The annual meeting of the stockhollers of The annual meeting of the stockholders of Mechanical Society was held at the Court House, yesterday, and a quorum being preseat,
was called to order by Alvaro Evans, VicePresident. Secretary Borland then submitted hresident. Itecretary borland $\begin{aligned} & \text { his report. It was theu determined that Trus- } \\ & \text { tees for the ensuing year should be elected, and }\end{aligned}$ tees for the ensuing year should be elected, and
Messrs. Beck, Duck and Richardsou were appointed guardians of the ballot box. Messrs.
J. Babcock, C. C. Stevenson, H. G. Parker, M. Lake, George Alt and W. S. Bailey were placed iu nomination, and the election resulted in the choice of Messrs, Babcock, Stevenson,
Parker, Alt and Chamberlaiu. Mr. Alt arose and tendered his resignatiou. The meeting then adjourned

## Oregon.

Itens.-Letter from Weston, Umatilla Co.: The weather is delightfinl; the farmers are plowrange are fat. It is estimated by persons who have an opportunity of knowing that there will
be 15,000 acres of new land broken this season in this part of the county. Many persons are taking up claims along the rivers flowing into
Puget sound. In 1844, Rev. Gustavus Hines, who was then stationed at Oregon City, planted some apple seeds in the parsonage yard. A tree
produced from one of these seeds is the largest apple tree in the State of Oregon. It forks feet four inches in circumference at the smallest place below the fork. Its fruit is large, yellow palatable. It it has been christened "Hiues' Long Keeper."
Live Srock for Howoludu, -The bark Edwarl James, loading with lumber for Honolulu, is about completed, and will sail for her destina
tion in a few days. In addition to the lumber the bark will also carry hence a considerable
the number of live stock. Mr. J. C. Mackay, who
owns an extensive rauch on the island, a short distance from Honolulu, will ship hence 20 blooded bulls, (Durham stock), oue young stal lion, one dozen fine chicenens purchased from
Dr. J. C. Hawthorne of East Portlaud, and four dozen Oregon quail. With these he proposes
to stock his large ranch. Mr. Chas. Kuhn, who paid a visit a few months ago to Honolulu, has, since his return here, collected a large number of cats which he proposes to ship over to his Majesty, King Kalakaua. Assisted by Mr.
Wash. Allen, of East Portland, Charley has collected by actual count fifty-ight cats.

## Washington.

General Notes.-Union: Henry Long, Lewis county, is going to start a cheese factory in the
spring. He has received his apparatus. The factory will have the milk of 150 cows. During 1877, there was carried over the railroad to tons being plows, seeders, reapers, threshers, wagons and other agricultural implements. Iu addition to this great amount, there were sev-
eral thousand tons of like freights carried up eral thousand tons of like freights carried up for distribution in thc Palouse country. For the purpose of showing that the country tributary to Walla Walla city is in a prosperous con-
dition, we mention that, during 1877, there was shipped from this city to Portland, 19, 884 tons of wheat and 4,653 tons of Hlour, equal to 885, 022 bushcls. There are many bushels on hand yet to be shipped to market. During the same
period there was shipped 917 tons of oats and barley, 320 tons of flax seed, 81 tons of wool, 172 tons onights. Messrs. Lang \& liyan informs laneous freights. Messrs. Lang hyan informs
us that up to the present, this season, their
frm have purchased 12,000 head of cattle, at arm have purchased 12, ,ooo head of cattle, at
firm average of $\$ 13$ per head, being a total of an average of $\$ 13$ per head, being a total of
$\$ 156,000$ disburscd by them since the first of last October. The greatcr portion of the cattle
were bought in tho Yakina and Crab creck countrics. They expect to commence colleeting
their cattlc about the first of March, and to drive then this season to Coloracio. Frunn
Colorado, all leef cattle will be shipped to Missouri, where they will be fatted on corn and sent to market. The rest will be driven to
Missouri next year. They propose to luy,
yearly, all the surplus catite of this country.

## News in Brief.

Tue steaner Metropolis,
31st ult., and 150 lives lost.
Tut., hand 150 lives lost. Easteru States.
TuE public
TuIE puble
$\$ 1,668,076$.
THERE day for violation of the Excise law.
Tue Chicago Academy of Music was burned on the 4th inst
he peace prelimiuaries.
-Tuer rebelliou at Cas is ber
ver, the insurgents laving been defcated
The German corvette Elisabeth, 18 guns, is expected here from Japan waters, en ronte for entral America
Ain has been burnel, aud over 2,000 persons perished in the fire
Tue Legislative Committee to investigate
the matter of the labor movement in this city as been in the labor movement in this city Tus steamer Pelican lias been sold to parties
in Central America, and will be turued into a in Central
gunboat.
The Central Branch Union Pacific railroad is now running regular trains to Couchordia, 155
miles west of Atchisou.
Every preparation is
sound and approaches to Copenhagen with torpedoes, in 24 hours if necessary
this port and a revenue cutter has gone in scarch of them.
O Leary completed his 400 mile walk in Cincinnati at 10:15 o'clock Saturday night, an hour Nive minutes ahead of time.
Nine miluions of people are reported desti-
ture in Northern China. The Foreign Relief Committee appeals to England and America or aid.
TwE
Twesty thousand tons of lead were pro-
duced in Nevada last year, nearly one-thirrl of The suit of Hall $v$ s. Truworthy for infris ment of patent on rubber type marking wheels,
was decided in the United States District Court in favor of the plaintiff
A sTre has been chosen for the Cleopatra
obelisk on the Thames embankment, at the top of the Adel, hhi steps, between Charing Cross Thd Waterloo bridge
The British war vessels Albatross, Amethyst
ad Faniome, of the Pacific, have le, home to be paid off and go out of commission. IN consequence of the armistice, the garrison
t Widin has been ordered from Constantinople to surrender their arms, after which they will be quartered in neighboring villages. Capr. Tinklepacta, long known to California travelers as a steamer commander between
here and Aspinwall, died recently of pneumonia, here and Aspinwall, died recently of pneumonia, aged 68 years.
All the wheat vessels which cleared from this port in July and Angust last have arrived out, except one. Three of the september ves
sels have arrived out. There are only 59 car-
goes afloat.
ports at san rancisco last month numberen was unusually light both ways. There were
600 from China and Japau, against 288 depart ires to those countries.
Forty thousand bids have been received for carrying mails during the next four years
in-uearly all that portion of the United states in-uearly all that portiou of the United states
lying west of the Mississippi river, aud extend ying west of the Mississippli river, aud extend-
ing to the Pacific ocean. Awards will be made by March 30th
Ergit cargoes of wheat, aggregating 297,700 centals, and valued at $\$ 699,800$, were cleared have cleared 72 wheat vessels, carrying 2,746 , 700 centals, valued at $\$ 6,441,800$. During the corresponding period in the previons scasou exported 255 cargoes of wheat and flour.
Trie secretary of the Treasury will not open
the Mint at Philadelphia for the coinage of the Mint at Philadelphia for the coinage of trade dollars, and will place such restrictions on
Western Mints as will prevent their coinage for Western Mints as will prevent their coinage for
shipment East. Coinage of sufficieut amount to shipment East. Coinage of sufficient amnount to
nieet the actual demand for export will be anhave acted upon tlie coinage of the silver dollar have acted upo
or circulation
Hirirr hundred of the Red Cloud Indians have left the agency, going north. Tho Indians will cut loose early in the sucks at that agency will cut loose early in tho spring aud follow the
benoral northward trail. Spotted Tail Indians are secretly loying fat ponics, and making other suspicious moves.
Tine bill agreed upon by the House Committec on lacific railroals for the benefit of the Northorn lacific railroal cxtends the time of its completion ten ycars and reduces the land grants in Washington 'Tcrritory, taking away such
portion of the land as was before embraced in he appor the oad from l'en d'Oreillo to Puget sound.
A bilL has becn introduced in Congress providing for the incorporation of a company to
build a railroal from Cheyenne, thence to Fort Laramie, where the road divides ng to Deadwoon, and one to Fort Fetterman, of tho Big Horn, and thenco by Helena to the Pacific occan, with such other hrunches as may
be decmed necessary. No daud grant is giveu but the nsual right of way and land for engineslops, etc

PATENTS AND NVENTIONS
List of U. S. Patents Issued to Pacific
Coast Inventors.

By Special Dispatch from Washington, D. C
Tobacro brying Macmine.-W. B. Isaacs,S. F.
Whip-Socket-A. H. Law, S. F.
J. C. McCollum, Los Angcles, Cal.

Bollers.-A. W. Vandorston, Aalem, Oregon. Trade-Mark.
lemonane-Powners. - J. A. Fotgor \& Co., S.F TEAS, - J. A. Folger \& Co., S. F. For \& Coo, S. F:
TEAs. J. A. Folger \& Co., S. F.
slevester's Cure for Neuraleia and Dipil--The patents are not ready for delivery by the Patent Nots.-Copics of U.S. and Forcien Pat ents furnished
by DEwE \& Co, in the shortest time possille (Dy tel rayh or otherwise) at tich lowest rates. All patcent herpi

Meteorological Summary for Janeary. he report of the U. S. Signal Service officer of Sau Francisco, for the month of January is
summarized as follows: The mean hight of perature, $53^{\circ}$; mean humidity, 75 ; prevailiug perature, 3. ; mean humidity, 75 ; prevailiug
wiuds, southeast; ; highest barometer, 30.315 ; lowest, 29.437 highest tennperature, $62^{\circ} ;$ lowest,
$39^{\circ}$; monthly range, $233^{\circ}$; greatest velocity of wind, 33 miles per hour; total number of miles
traveled by wind, 5,500 ; total rainfall, 11.97 inches. Rainfall in Jannary during former ears: $1871,14.36$ inches; $1872,4.03$ inches;
$187,1.58$ inches; $187,5,66$ inches $; 1875,8.01$
Berperps Mr Saxe makes his

Berksilires.-Mr. Saxe makes his appear-
nce agaiu on our pages with his beautiful advertisement of berkshire swine. There is a
ood deal in having fine stock and advertising it generously and wisely. Mr. Saxe tells us
that he has sold 22 thoroughhreds since his ad ertisemeut appeared before, and can still fill orders for choice animals. The Berkshires
have demonstrated their alaption to our climate have demonstrated their alapption to our climate
and other conditions; they are favorites with the pork mene, and we are glad to see the stock
widely disseminated.

Angora Goats in tiel Sandwicin Islands.-
A Mr. Lowe, from the Coast, came down on the steamer St. Paul, with a few choice specimens of Angora goats, for the purposc of experiment-
ing in this climate with these animals. Mr. Lowe is desirons of obtaining an eligible location, with sufticicnt and for the purpose. The
hope lie may obtaiu what he wants, and that his experiment may prove a success. Success
witt the Angora would be a big thing for thesc
islands. IIcuvaiunn Gurette islands.-IIawaiian Gazette, Jan. Oth.
The rule of charging for a singlc word above gone into effect over the lines of the Western Union Telegraph Company. The change is a
very satisfactory one to the public, and docs way with induccment to pack 11 or 12 worls into a ten-word message to avoid paying for 15 . larch, when reductions will lee made ou most of the ligher rates on the P'acific coas
Storra Harrison it Co., Paiuesville, Ohio offer iu another colunn a very attractive list of
plants at surprisingly low priccs. The firm
have always becu found attentive to busincss and their plants firsi class and just as reprcsented. They are worthy of patronage.
Vines Wanted.-Those having Muscat of
Alexandria vines, rooted, to dispose, would do Alexandria vines, rootcd, to dispose, would do
well to read the call for a large quantity of them, which way be found in an advertising

Signal Service Meteorological Report.
Week Ending February 5, 1878.




$335|283| 135|87| 106|179| 363$
Fair. | Fair. I Clear. I Olear. I Cloudy. I Fair. ! Fair





Earth.
Of the earlier
Ellizabeth Baems of the pirted poetess
Browning, worth
 are the forlowing lines, entiued






















Home Song.

 Weary and homesies and disircesed


$\qquad$


## Facts and Fancies.

iWriten for the Reari Passs by Jony. Tastoon.,
The storms of winter are upon us. The rain comes down in earnest. Every iudieation is toward a bountiful supply of the precious 1 llud.
Beauuse water is free and generally abundant, we are apt to think lightly of its great benefits and blessings. The past season shows us our weakness in times of drouth, and should evoke a spirit of prayer and thanksgiving when heaven opens her wet windows to refresh the parehed
and thirsty soil. The man of herds and flocks feels warm at heart, while the rain drenehes lis scanty covering, Rain means feed, and feed means much more than a hasty thonght ineludes: The comforts and necessaries of home; the wool for the back; the beef for food. A thousand ueeds of business and social life supply of precious rain.

And still will be sung again and amain,
The wealthand the health of the drizzling rain
Tis the death and the life of the gulden grain
When in of mer the telle
When ins summ ful refrain If stoek of any deseription is yetin the neigh
borhood of the high Sierras they will have a poor ehance of ever finding their way out. losing their lives in the face of such a storm Snow is of a blinding, benumbing uature, and
renders uevigation amongst the rolling hills disrenders uevigation among
agreeable and dangerous.
It is easy speculating while sitting by the warmth of a glowing fireplace, but to be almost
lost annidst the blinding snows of the rivers, is a eondition which requires fortitude in the enjoy shelter and homes. The workers in all
grades of being should be the honored of men, for it is their indastry, genius and perseverance
that supplies the world with the materials for
civilized life. The frozen herdsman may never
be heard of exeept when his bones are recovered be heard of texeept when his bones are rece
heaeahed by stormmuuwept tand unsung. write the heroie deeds perfurmed by the poor
Poor they may be in parse, but rich in perfor ing their share of labor towards the world's wealth.
The storm without and comfort within call up these reflections. Our sympathies naturahly go out to the unfortunates who may be exposed
to its fury. The rich man knows not-and too often heeds not-the sufferings which the poor lahorer cndures so as to provide for family and
home. Scanty indeed is many a cupboard of the good things which the world has in abme dance, and whiieh are enjoyed mostly by those whe reap the reward of others' labor. But the
time is drawing nigh when man in all detime is drawing nigh when man in all de
grees of life shall be. recognized and treated as
arother. Then the laborer shall more fnlly a hrother. Then the laborer sh
enjoy the fruits of his industry. enjoy the fruits of his
Tnolumne Co., Cal:
The Humming Bird of the California Waterfalls.
One winter morning, when the Merced river was blue and green with unmelted snow, I ohserved one of my ourels perched on a snag out in the nidst of a swift rushing rapid. He sang eheerily, as if everything was just to his mind,
and while I stood on the bank adniring him, he sudflenly plunged into the sludgy current, leaving his song broken abruptly off. After
feeding a minute or two at the botton, and feeding a minute or two at the bottom, and
wheu one would suppose he must inevitably be swept far down stream, he emerged just where
he went dowu, alighted on the same snag, he went clowu, alighted on the same snag,
showered the water heads from his feathers, and at once continued his unfinished song, splicand at once continued his unfinished song, splie-
ing it together as if it had suffered no interrupThe ouzel alone of all birls dares to enter a
tion. white torrent. Aud though strictly terrestial
in structure, no other is so inseparably related to water, not even the duck, or bold ocean alba tross, ur storm-petrel. Ducks go ashore when
they have done feeding in uudisturhed places, and frequently make long overland flights fron lake to lake or from field to field. The same is
true of most other afluatie birds. But our ouzel, horn on the very brink of a stream, seldonn standing he is often on the wing, he never thies
overland, but whirs with rapid, quail.like beat ahove the stream, tracing all its winding modnlations with great minuteness. Even when the stream is quite smahl, say from five to ten feet
wide, he will not try to shorten his flight by erossing a bend, however abrupt it may be; and even when disturbed by meeting some one o dodging out over the ground. When therefore
his flight along a crooked stream is viewed end wise, it appears most strikiugly wavered-an
interpretation of every curve ingeribed with lightniug-like rapidity on the air.
The vertical eurres and angles of the most
precipitous Alpine torrents he traces with th same rigid fidelity. Swooping adown the in clines of the cascades, dropping sheer over dizzy falls amid the spray, and ascending with the
same fearlessiness and ease, seldom seeking to lessen the steepness of the aeclivity by beginfall. No inatter how high it may be, he hold straight on as if about to dash headlong into the throng of booming rockets, then darts abruptly upward, and, after alighting at the top. of the precipice to rest a momeut, proceeds to feed and
sing. His flight is solid and impetuous without any intermission of wing-beats-one homoge neous buzz like that of a laden bee on its way
home. And while thus buzzing freely from fall to fall, he is frequeutly heard giviug utternotes, in no way connected with his song, but corresponding closely with his flight, both in - solin Muir, in Scribner for Februury.

Russtan Entrohs. - Russian newspapers ar conducted on an economical basis, and the pub-
lisher tells no lies. The Moscow Teatraitnaia Cazeta recently incurred the dizpleasure of th was sent to the ofliee to arrest the Proprietors. The only person in the establishinent was the etch the editor. The publisher went up stair and returned speedily with a large pair of seisofficer was rather diseoneerted, but soon re-
covered himself, and exclaimed more sternly than ever, "No nonsense! feteh me the sub editor." Again the publisher departed, and again returned, this time with a pot of paste
and a brush., "These, sir," he said, "are the and a brush;
sub-editors." $\qquad$
Pay Your Debts.-Clean hands in matters be the indispensahle condition of gentlemanl ness. Xo man who borrows and does not pay, and does not eare whether he pays or not, is entleman, no matter how witty, or gay, or fine
he may le. To speak in good plain English he ma:a who dresses himself at another's ex pense, not knowiug how to pay, not caring et such things are done by grod-natured folks,
by kind-hearted people, by persons who never probe them morally to ascertain what their ten dency is, and what they lead to

Evening in the California Mountains. Mrs. Mary Hallock Foote, the artist, writes
 usty August burns into bre of dustier :iep. joys take possession of one's thoughts. The thump of oars in row-locks, the smell of apple blossoms oll danp spring evenings, old mill-race mossy and dripping, the bleating of frightene lambs at a sheep-washing, and the hoarse, sti the rushing of the stream mon sounds and sights hannt the memory. ms fade almost out of sibl against a sky whieh is all glare without color or any lingering drop of moisture the sun may lave lcft there; Gut morning and eveuing stil keell a spell which makes one forget the burden
of the day. At sunset the dust-eloud in the valley beeomes a bar of color stretching aeross the base of the mountains, deep rose and orange,
shading by softest gradations into cool blue. remember oue sunset especially. The clouds o dust rolling up from the valley helow were trans formed hy the light into level bars of color like vallcy; above it the mountains rose : a wonderful variety of constantly changing hues male
then look like something unrcal. Then there eame a sudden darkening of the lower part the mountains so that the sun-lit peaks scemed
to float in the air above the bars of sun-colored to foat in the air above the hars of sull-colored
dust, with a strip of cool shadow hetween. All is quiet; as in the.morning, no birds ehirp and broken by the dull throbbing of the engine like the stifled breath iu the distant shaft-house. Every eveling repeats this silent symphony
of color, and every day it seens like something one has dreamed of. The rose aud orange and
blue have faded into the same dull, gray pall, whieh, to the valley stretehed bencath, is never anything more; only those who see it from the
hills know that sometimes this pall is a role of glory.
bare hills, home one evening across the low; luring the earth call those last, dry, lurid weeks before the carly rainfall), and one of the dult, red sunsets, peculiar to that season, had been flaming on the sky
and mountains; its lingering glow colored the edge of the early moonlight. The soil here has a vermillion tinge, which is stronger after sun. lown; it was intensified that evening by the
lush in the sky. There was no positive liflt flush in the sky. There was no positive light
or shadow, only a pink glow spreading over all the wide landseapc, except where the canyon sowly brightencd in a sky of twilight hlue. It was in sentiment like Williann Norris' poetry. I always thiuk of it as the "land east of the sun,
aud west of the moon." While the moon is young and her light faint and pale, one can searcely mark the time when the lingering twiight passes into the soft, dim radiance that
spreads like a spell over the valley, across part of which lies the shadow of a monntain. I cannot see the moon itself, only its light. The mountains opposite remain always shronded in or the full moon the place is a paradise; in the foreground the winding trails with llack masses of shadow from the clumos of live-oak crossing them, the dark mountain lines rising on every ights of the Alexican camp scatterel over the hills, the closer clustered lithts of the Cornish camp on the lower rauge, the wide, dim valley below, and the far-off barrier of mountains.
on Relative to Watcues. - The balanee of a watch beats five vibrations per 000 per day, $157,784,700$ per year ( 36.5 days a hours, 49 minutes). If a wateh should go for a century, as sometimes is the case, its balance
would execute $15,77 \mathrm{~S}, 470,000$ vibrations. To give an idea of the magnitude of this number since the How many iudividuals earry their watches thrce, four five years and more without ever having them cleaned. If we take, say tive vibrations, and people expect their watches, after this enormous work, to correctly indicate the hour, minute and second. If wateh wearers reflected a little they might be som
what less exaeting towards the watehmakers.

Tue Two Heaps,-The Rev. John Newton uee said: "I see in this world two heaps-one of human happiness and one of misery. Now second heap and add to the first, I earry a point. away its tears, I feel that I have done something. I should le glad, indeed, to do great
things, but I will not negleet such little ones a his,", such little offices lie within the spher of every one.
Moniment to Linw.fes. - It is proposed to reet at Stockholin a monument to Linnaus, surrouuded by allegorical figures of the four botany, zoology, mineralogy and medicine.

## Aerial Telegraphy

We have already given itens concerniug the system of telegraphing without wires, which is put forth ly Prof. Loomis. Doubtless a fuller description of his experiments and results at tained and anticipated will interest many readers Prof. Loomis ias leeen in the mountainous regions series of experiments with his proposed aerial elegraphy, has demoustrated finally that tele graphy without wires is practicahle. Jis man ner of operating eonsists of running a wire up
to a certain altitude, reaching a particular cur to a certain altitude, reaching a particular eur rent of elcetrieity, which, according to Prof
Loomis, van be fout at various hights. At an distance away, this same current can be reached by a wire, and communication call be had ediately. The apparatus necessary to brin It has heen fully ascertained that tele graphic communication does not take place over or through the wires, but. through the ground This same communication continues when these electric currents applied hy nature are used
Prof. Loomis has telegraphed to parties elever miles distant by merely sending up a kite at each end of the distance, a certaiu hight, at tached to which, in place of the ordinary string was the fine copper wire. Whin hoth kites
touched the same current, comnunication was had hetween thein, and inessages were sent from one end to the ather by meaus of the oriinary Alorse instrument in conneetion with the instru ment invented by Prof. Loomis. This showe that the theory on which he had worked for
many years was the correct one, and that hy th many years was the correct one, and that hy the
proper means, such as stationary wire arranged fron natural or artificial eminences, could be operated suceessfully at all times. It is true that acrial telegraphy may not be much of a certainty during violent storms or electic showers, but it will not meet with more obstructions than the ordinary wire telegraphing, which is not at all sure during the periods spoken of. It will he a long time before aerial tclegraphing a short distance apart, if indeed it ever will In such eases the wires will continue to be used though for long distances, such as for telcgraph
ing from one side of the ocean to another, the aerial telegraph will take its place entirely series of experiments from a point on one of the highest peaks on the Alps, in switzerland, to similarly situated place on the Roeky mountaina on this side of the world. If this suceeeds, of
course his invention will rank in importance with that of the electric telegraph itself, and b even greater than that of the telephone. All $n$ has already heen promised, and it will not be many years, if it turns out to be a success, which, having played its part, will he laid aside The eost of aerial telegraphy will not he ove one cent when the other is $\$ 1,000$.

## Attractive Homes.

Country homes should not be tolerated simply,
but made so attractive that the din and dazzle of but made so attractive that the din and dazzle of
the town will have no power to eharm those wh have tasted their sweets and breathed the pur air of the fields and mountains.

How shall we keep the young anong 18 ?" is a problen1 not yet solved by many hard work ner once aptly said: "If the American farmer wishes to keep his children near him, he must learn the difference between living, and getting a living." It would seem to a farmer of small means and large responsibilities that living and getting a livingare too neariy synonymous toallow rarely do we find oue too poor to afford his family some of the attractions that render
Extracting a large amount of happiness from small meaus is one of the fine arts, and should be as carefully cultivated in a farming cominuu ity as fields of corn or orchards of fruit trees. Luxuries and elegancies may be cheap as well as expensive, and in a climate so genial as onrs, We have only to steal a few hours each week from less inportant duties to give a tropical greenness to the garden, and embellish the humblest eottage. Nature has seattered her
bounties with a lavish hand, and left us the choice to make a paradise of our California homes, or leave then f
In getting a living and laying up money for the future, we are too apt to overlook the im-
portance of present enjoyment. The last earned hundred dollars goes to buy more land, when we have already too much, as the young people
well know, as their longing eyes feast on the rows of books and piles of magazines when they friend's house they look with delight on the those of their own home look more bare and unattractive.
"Tritles light as air" make the sum of human exild hood's hoone, whose eheap, bright pietures
and sweet scented lilaes have tinged with a sunset glow all these changing years.
Men and women should work together in this nuortant wis which they preside may receive the care so im. portant to aceomplish the gr
home. -Florn M. Kimball.

THE PACIFIC RURAL PRESS.

Indecision of Character.
One of the many canses which hinder men
from attaining success, indecision is undoubtedly one of the greatest. Without any deter-
mined course marked out for the mined course marked out for themselves, the
majority of young people set out upon the great any fixed law, whereby a definite result may b btained. Thinking to-day, perchance, to amas easily change it for some other. And so they spend their lives, continually varying, always
discontented with the present, and ever looking to the future for brighter days, which their inmany young men there are, who if settled in their purpose of obtaining a livelihood, would ultimately be crowned with success. How
many old men there are, who if they had not lightly and frequently changed their vocations would now be in the enjoyment of happines mbittered by want and penury, and their home embittered by want and penury, and their home
the work-house or asylum. It is the curse from which no one is exempt, that "man shall earn his bread by the sweat of his brow." Such bein nevitably the case, let us not be over-fastidious be honest.
If we feel dissatisfied with our lot, which in fact we all do, the king as well as the beggar, ourselves with the pleasing certainty that soon all our troubles, and toils and privations will end. Let us not too readily try to divest ouras with. Whatever our condition or state in
ife be, let ns discharge its duties, and if we calmly submit to the All-wise Creator's good will, rest assured our allotted span will be more happy and less troubled than if we day after day seek an evasive way of obtaining that
which Croesns, with all his fabulous wealth, could only possess-a living.

## Chaff.

"Ir was simply an informal affair," wrote the editor, of a little strawberry party at a neigh-
bor's house. "It was simply an infernal bor's house. "It was simply an infernal will never get any more invitations from that "Doctor, my daughter seems to be going
blind, and she's just getting ready for the wedblind, and she's just getting ready for the wed-
ding, too! Oh dear, what is to be done?" "Let her go right on with the wedding, madam, by all means.
They were at a dinner party, and he remarked that he supposed she was fond of eth very well, and the doctor had told her no except oranges
"She may be a very good woman," gasped tightness of his new shirt, while the wrists were all; "She may be a very good woman, but sh topographical engineering to a fine shirt." Some one tells of an Ohio tavern-keeper, ap
pointed collector of interual revenue, who go one day, in an envelope addressed to him offi which was written : "Conscience money." He put the bill in his pocketbook, without debate simply remarking ; "I always did suspect that
barkeeper." arkeeper.
A. Scortish divine happened to meet two par-
ishioners at the house of a lawyer whom he conishioners at the house of a lawyer whom he con-
sidered too sharp a practitioner. The lawyer sidered too sharp a practitioner. The lawyer I ask do you look upon them as white or ; may dryly, "whether they are black or white thine dryly, "whether they are black or white sheep; pretty sure to be well-fleeced."

Old Letrers, - No two words could well be
brought together, out of which a more meaning might be gleaned, than the above. OId letters! The very intonation of our voice, up we utter them, startles us. They summon out of which we have passed; till, rising boldly before us in this, our later sphere, like severe rebuking specters, come all buried joys, dead
loves, sworn and forsworn friendships and
irreconcilable hates, among the cobwebs that have gathered about it for 30 mortal years; take down the rusted key it grate and jar in the unused locks? What of son with the sound is significant, in perfect uniheart's most secret that shall vibrate through the lid is lifted and the indwelling spirit invoke and the hollow sepulcher laid bare. But cour the accumulated rubbish for the long-hoarded one before you, the motely muster-roll that Pal, a smell as of damp mold hangs a bout it unloose the string; the knot resists, as thongh
it felt the mercy of delay. But old men lack
patience, and so you cut the Gordian knot. Now, loo

## Young Folks' Column.

## A Valentine.









## 


 $\qquad$

## Game of Fagot-Gathering.

There is a jolly in-door, game for the winter, called "Fagot-Gathering," which has been des hat inany print before, but it makes so much fun lad if we tell about it here

## First you take some slips of paper, as many as

 "Fagot Gatherer," on each of the rest you write Fagot Gatherer," on each of the rest, you write three times as many "good woods" as "snap-pers." Of course, anybody who knows about wood fires will see that this is because some others will burn quietly and brightly, while east warning. You put the papers into a hat, written on it Every one then sits nody what middle of the room, and the player who has chosen the "Fagot-Gatherer" slip proceeds in a He, or she, chooses four or five girls and boys,
tanding thein together to represent a fagot, standing them together to represent a fagot,
and then makes similar gronps of the rest in other parts of the room. This done, he begins each group, making with his arms snch motions are quiet until the binder lets his arms fall, but then comes a suddeu change, the "good woods" "binder," and try to touch him before he can begin to bind another "fagot;" failing in this, they have to go and mourn among the "good
woods." Then the binding of the second "fag ot" goes on like that of the first. But when takes the place of the "gatherer," who goes "fagots" have been used up in this way, and is from the hat. The fun is in the frights and surprises of the "fagot-gatherer," who, o and who a "snapper;" and all do their best to avoid betraying themselves. If you have a good, big room and lots of players you will find Nicholas.
The Smallest Boy.- Master Frankie Flynn, of Norwich, N. Y., is probably the smallest specimen of a boy ever known. He is four and correspondent of the Utica Observer: "We
went to see him, expecting a Tom Thumb or Com in as one would a cat. He is not so large him of Tom Thumb's legs. In Tom Thumb's car mane he would look as lonesome as an ordinary of Tom Thumb's easy chairs would be to him what it is to the ordinary boy to perch upon a gate post when the spring comes. He is smaller
than any one can conceive who has not actually seen him. Yesterday he had on two pairs of stockings, and the smallest sized baby shoe were too large for him. His wrist is the size of an ordinary man's thumb, his ankle bist a slight nerease. He stands 23 inches in his shoes, aud
weighs, clothes and all, 12 pounds. That is the most he ever weighed in his life. Still, he is a very lively, sprightly boy, very active, climbwith his hands behind him, like his grand pa and talks and laughs, and is as cute as any boy of his years. He is no larger than when he was one year old.

A LADY riding on a slow train handed the conductor a half-fare ticket for her boy. The con-
ductor looked at the young Anakim, and said ductor looked at the young Anakim, and said
"Rather a large boy for half-fare." "Ycs," re Rather a large boy tor mother, "So he is now. It was all right, thongh, when I bonght the ticket; but The conductor passed on.


A good thing to put in practice: a yonng

## Good HeALTH.

The Physician.
The following is a translation of an epigram
written by Cordus in the sixteenth century: The physician like an angel seems, When he in the sick-room brightly beams When he's removed the nalady.
But in a different light we view The Doctor when his bill is due;
Our alter' eyes we at him level,
As though he were the very devil.

OUR Digestions,-When proper, natural, simple food is takeu into the healthy stomach, no more is felt of it. If it be of the nature of soup or beef tea, it is absorbed, as it were, by the coats
and veins of the stomach. If it be meat, it is, by the movement of the stomach, carried round and round its cavity and mixed up with the gastric jnice, which oozes into the stomach
whenever food is put into it. This gastric jnice is a clear, colorless, acid fluid, which flows
freely into the stomach, as we have said, whenfreely into the stomach, as we have said, when-
ever food is taken into it. The free acid pres-

 infinite length of time in a common glass bottle
without developing any putrescent odor. without developing any putrescent odor. The meat, boiled white of egg and such like snbstances. It does so even outside the body, but
it does so deest inside the body, assisted by the high temperature of the stomach and by its peculiar movements. Gastric juice does not
lissolve all kinds of food. It does not dissolve fat, nor starch, nor oil. Its proper duty is dissolve meat, glinten (the most nutritious part of bread), caseine (the most nutritious part of
milk), albumen (white of egg), etc.-Canada

Sound Sleer. - Hall's Journal says: Any
man who can bound out of bed as soon as he wakes of a mid-winter's morling is worth something ; no fear of his not making his way through the world creditably, because he has the elements
of a promptitude, decision and energy, which of a promptitude, decision and energy, which
guarantee success. To invalids we make a comfortable suggestion worth knowing. If you
have force of will enough to keep you from tak ing a second nap-and it is the "second nap" tudes-it is better for you to lie awhile and passes ont of the limbs which you so commonly eel. But to sleep soundly, and to feel rested four things are essential :-1. Go to bed with feet thoronghly dry and warm. 2. Take nothing
for supper but some cold bread and butter and or supper but some cold bread and butter and
a single cup of weak warm tea of any kind. single cup of weak warm tea of any kind.
Avoid over fatigue of body. 4 . For the hour preceding bedtime, dismiss every en grossing subsomething soothing and enlivening in cheerfu something soo
thankfulness.

Carrot Ointment.-It is convenient, if not
bsolutely necessary, says a writer in the Rura New Yorker, to have on hand a sure remcdy for burns, flesh-wounds, chapped hands, etc. This
demand is supplied in many fanilies by patent demand is supplied in many fannilies by patent remedies, in ours one medium-sized carrot, well
follows: To washed and thinly sliced, allow one fourth pound
of freshly churned, unsalted butter. Place them of freshly churned, unsalted butter. Place them ogether in a spider or other iron vessel, simmer ing care not to bnrn it, then strain through a thin cloth and keep in a tin box or wide-mouthed
bottle. As a healer it has few equals. bottle. As a healer it has few equals. A few or cracked hands, provided the hands are well washed with castile soap and soft water, and
well dried, just previous to its application. Afer applying the ointment rub the hauds, warm ing and rubbing them until all is absorbed. will speedily heal burns after the fire is extracted.
Indeed, we use it in all cases where a lealing Indeed, we use
agent is needed.

Heat of the Brain.-M. Broca has recently laid before the French Medical Association some
curious facts concerning the temperature of difcurious facts concerning the temperatire of dif
ferent parts of the skull. By numerous experi erent parts of the skull. by numerous exper
ments he has found that while at rest the temperature of the surface of the hcad is $2^{\circ}$ Fahr. the brain is active, equilibrium is established Wheu continuous but moderatc mental effort has been maintained for ten minutes the temperature is raised about $1^{\circ}$ Fahr. The temper-
 regions of the skull are also diferent, that higher than that of the occipital.
Morpilinism.- This name, says the Drug-
ists' Advertiser, is given to a new form of vice, which seems to be increasing. The vicious indulgence consists in the hypoderinic adminis-
tration of morplia for the sakc of the stimulating effects produced. Thic evil results are entirely removed for the time by the arlmiuis. tration of a new dose of the drug. The habit ths patient in a state but little better than

## Demestic Economy

## Beans for Sunday

"Pipsy Potts" tells how they get up a SunI am writing, the girls ask what they will pre-
pare for our Sunday dinner. Without looking pare for our Sunday dinner. Without looking up, I dreamily answer: "Baked meat and beans,
a corn meal pudding, and some rice boiled in a corn meal pudding, and some rice boiled in
plenty of water, with a mere seasoning of salt plenty of water, with a mere seasoning of salt
in it. Don't fix much; get all done by noon, so
you can sit down and read and rest, and not be tired out before Snnday comes."' The beans were cleanell and put to soak in warin water last night.
To
with them a pound of pork, part fat and pait lean; when done, put the beans in the pan or
baking-dish, lay the meat on top, rind side up gash it, pour in the broth, with tw molasses, put it in a hot oven and let it bake
until the meat is nicely browned. Set it away for Sunday, and just before starting to churcl the oven a little boiling water, and put it is the oven, where it will heat gradually.
The meal pudding we make this way on Saturday: Take one pint of sour cream, or very rich
sour milk, one teaspoonful of soda dissolved two and a handful of raisins, currants or any othe kind of dried fruit-raisins are preferable-
thicken into a batter with two-thirds corn meal and one-third Hour. Pour the batter into buttered cake-pan, and steam it two honrs. It
will puff np lightly, and eaten with sweetened
We make ours on Saturday, and steam it over

## Orange Dishes.

Orange Salad.- Peel eight oranges with a
sharp knife, so as to remove every vestige skin from them; core them as you would cor apples, and lay them whole or cut in slices in a deep dish; strew over them plenty of powdered brandy; keep the dish covered close till the time of serving.
Orange Fritter
Orange Fritters. - Take the peel and white
skin from three or four oranges; cut them acros Skin from three or four oranges; cut them across
into slices; pick out the seeds and dip each slice of orange into a thick batter. Fry until
nicely browned and serve upon a napkin with nicely browned and serve upon a nap
powdered sugar sifted over each slice. powdered sugar sifted over each slice.
Orange Tartletts.-liemove the pulp from
two or three oranges; boil the peels until very tender; beat them to a paste with twice their weight of sugar; add the thin pulp and juice of
the orange with a tablespoonful of butter and beat these ingredients together. Line some
little pans with puff paste; fill with the orange little pans with $p$
mixture and balke.

Head Cheese.- After the heads have been properly
nose), and soaked in cold water (two days a least) to extract the blood, wash them in warm water and put on to boil; cook them in plenty
of water till the bones drop out, then set off to cool, pouring all the liquid into one vessel and the meat in another; as soon as cool enough
pick ont every bone with your fingers, then chop pick ont every bone with your fingers, then chop
the meat fine, the same as though making hash, season with plenty of pepper, salt, and pulver-
ized sage. It is an improvement for those who are fond of high seasoning to chop up a good large red pepper with the meat, and put just,
pinch of ground spice and cloves in with the pepper and salt. Skim all the grease you can
off the liquid and put it in and the meat bact in the pot, let all boil together a few moinents, then pour it in a pan to cool. If there are pig's
feet to pickle, boil at the same time and pnt thic water they are cooked in in the head-chcese.
Preparation of Tripe.-Cut a slit in the may be emptied, and turn it inside out. Then sew up the slit, using a large daruing necdle, ficient water slacked lime about twice as large as a man's fist. Move it occasionally to briug every part
in contact with lime water. (The limo dissolves the interior coat.) In about an hour it will be ready to scrape, which will take but a few min-
utes. Rinse as of ten as necessary, then cut into small pieces. P'ut it into a pot with cold water, add a tablepoonful of salt, and as the water Then set it on a lish to cool for the table: Fry in butter till it is of a nice Other fats will answer, but do not give so rich a color or so nico a flavor.
Loose Stoppers. - To prevent tincture stop the bottle, Mr. ILans M. Wilder recommends a slight coating of paraffino to the stoppers and complished by rubbing the of paraffine and giviug them a turn in the nock o tho bottlo, so as to distribute a thin coating all

Rice Custaris.-One ounce aud a half o ground rice; threo ounces of loaf sugar, and milk, adding the sugar, a piece of cinuamon
pour into custard cups, in which a little fresh pour into custard cups, in which a little fresh
butter has been meltod, and bake in a slow

# PAC FIC RURAL expritsomile 

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Saturday, February $9,1878$.

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The days are charged with stirring topics,
cach competent to eonmand a colunnil of sug. cach competent to eommand a column of sug.
gestions had we space to marshal then. Livery
Worker in the tield of a criculture is awake and gestions had we space to marshal then. livery
worker iu the theld of agriculture is awake and eager to plant himself squarely on the vantage
ground of the favoring geason. Effort for proIuction, inguiry for agricultural investment,
contidence in agricuitural eredits, trade in contidence in agricuitural credits, trade in
farming machines and supplies, values of stock farming machines and supples,
for labor and for growth-all these are on the
onward, upward course. The result of this onward, upwari course. The result of this
ๆuick and general change upon the countenance
of aftairs is a widespread activity among rural of aftairs is a widespreced activity among rural
workers and a disposition to press all available Workers and a disposition to press all available
material into the march of progress in farn
work. We know a city banker who left his work. We know a city banker who left his
desk, rushed to the plains, broke in six green mules to draw the garig and a green man to
drive them, and theu rushed back, against his drive them, and theu rushed back, against his
will, to his accustomed place anong his loans and certificates. Nor is the spirit of enter-
prise in the pursuit of assured abundance a
whit the Whine the less with those whose greater fortune
it is to duell anlid the scenes of active labor in the fields. Theirs is the greater promise, for
cach day their own eyes note and their words each day their own eyes note and their words
direct the work. The ppanting and seding direct the work. The planting and seeding
of tree and plant which is yct possibe; the
breaking of the land for ncxt summer's fallow; lreaking of the land for next shmmer's fallow;
the manufacturc of the milk, which will flow the manuiacturc of the milk, which will ilow
in eopious stramins; the dnties of the lanlbing
season, to whicl the sheell come, tye.deep in season, to which the sheep ${ }^{\text {c }}$ come, tye-deep in
rich feed and strengtheneed liy fredon from cold
storns, storins, and each new hoof worth four times as
mmeh as it would have been a month ago-all the varied labors which these facts inply are
pushed with heart because they all will be pro-
ductive of reward. ductive of reward
But while we glorify the general good we has beeu loss to some by unexpected rise of water, ly the wash of hillside Howds and by the
break of levees which were thought strong and break of levees which were thought strong and
enduring. To such we extend the hand of
sympathy and the hope that anticipated iujury may either prove greater than the fact or else be inet by future compensations.

## Rainfall and Percolation.






 We quite agree with our correspondent that
it woulld le exceedingly desirable to know just it would he exceedingly desirable to know just
how much effective water, if we may use the
term, is received from each year's rainfall. It term, is receivel from each year's rainfall. It
is true that such measurement as we toow gen-
erally make does not show it. Althongli the erally make does not show it. Althongl' the
method of our correspoudent would be simple and easily practiced, it would be so liable to
arror that one woull hardly trust the results error that one would hardly trust the results
gained with it. If it be grantel that the average of soil, both in quality and condition of
density, and the average of slope could be censity, and the average of slope conld
secured, there woull still be some chances for error, especially in the iten of evaporation by
drying winds, which our correspoudent proposes. A box of earth on a p pathorin scale,
where a dry wind would have free course to play all around it, would, of course, lose far nore by evaporation than would the same mass of earth in its natural position, and tit is prob-
able that a recerd of effective water thus taken would be nearly as minch too small as our measlarge. For example, this earth in a box would be dry as a powder horn, when the nitural earth
would show abundant moisture by merely scraping with the fort. Nor would the sunn
enjuy less opportuuity for drawing off the moisture this the wind.
There would also be doubt as to whether the box would show enorgh moisture, because
therc would be loss ly leakage from the hottom during prolonged rains, unless the strata of and this would require a depth of earth which would tax a hay scale to weigh it. Nor could he sulstituted, locause then, in prolongeld
lains, there would be sulpersaturation and the rains, there would be sulpersaturation and the
surplus woukt How off as frum an overtilled surplus
basin.
Although we finul fault with our correspondent's apparatus, we do not undervalue his idea expect better results in a clamsy, practical way each storn and recorling the inches of tion in connection with the measurements in the raingauge as the season progresses. Bunt
n taking up the inquiry iu a more scientific way, there are deviees for measuring the amount of water precolating through a strata of soil
and analyying its contents alrcady in use among agricultural experimenters at the East and in Europe. At the liothamsted agricultural expe-
riment station in England, there have bcen constructed thrce large "draing ganges," each
reuresenting the 1, ,oouth part of an acre, for representing the, ,ooth part of an acre, for
the deternination of the quantity and composition of water percolating respectively through,
20 inches, 40 inches and 60 inches depth of soil, with its subsoil in a natural state of eonsolidation. They are made by sinking a shallow
shaft and then excavating a subterranean shaft and then excavating a subterranean
chamber beneath the desired area of the soil and putting in proper arrangements for sup.
porting the strata and catcling the water which porting the strol it the shaft is whic percolates through it. The shaft is stoned up
nul the affair is made permanent in many way and aflords a constant record of percolation to compare with rainfall. There is also a similar
contrivance, callel a lysimeter, now in use apon the farm of sturtevant liros., at south Pramingham, Mass.
youd the expense and dime which an ordinary observer would be realy to give to a determina respondent properly suggests, that such expicrirespondent properly slygests, that sinch expicri We doubt not that if the necessary fumls wer supplied, the Professor of Agriculture would
not be slow in carrying out this and nany other experiments which promise valuable results,
We hopc they We hope they may not be long retarded, for
there are a hundred directions iu which inquiry should le pursued at the State expense for the
henefit of our great agricultural interest and its enenerit of our great
devoted adherents.
We shoullid be glal to know if there he simple the results our correspondent and many other desire to know. The nethod which we have
lescribed as in use alroad is olviously the truest way to note the exact resnlts produced
under natural conditions, but approximation more easily securel wouki be desirable also.
Heary Wisinste of soln.- - Iu conversation
with Mr. I. C. Steele, we learn that grievous work has heeu done by the heavy rains upon the hill land at some points on the coast in san
Hateo and santa Cruz countices. In many places where it has beeu usual to seed in the spring, seeding was done last fall becanse of the
fear of a dry season. When the heavy storns came upon the loose soil on these slopes there that it seemel washiug ant gulley-making, so teast, one quarter of the surface soil and grow-
lity graiu was earried down. This is an unforsunate resnlt to spring from attenpts to be fore handed with the season's work.

## The Rainfall,

We seize the opportunity to compare the igurcs of the rainfall this scason and last, up to the dates named, at the differeut poiuts in
the State. There have leen two other raius, which are uot caught in the tigures above, except in San Francisco. In arranging the table we have taken a eonrse from san Francisco northward
arouud the heall of the bay, then to the sacra mento valley, thence up the sun Joaquin, and
return along the coast and coast valleys to the return along the coast and coast valleys to the
starting point. It will he seen that the contrast shows favors from twice to thrice as great a last season, and it must be remenhlered that a
good part of last year's rain fell in Octoler and was of little value. This year the great amount tribute to January and will be all sitate and the confort of our citizens:


## Protection to Dairymen.

The bill lately introduced in the Legislature or the protection of owners of cheuse factories against imposition by watered milk, has passed
one Honse and will probably become a law. As we sait on a former occasion, the measure is one which has proved indispensable in carrying on and as sncll factories are now springing up in our Ntate, it is proper that they shonld be simi. larly protected against dish
such be found in this state.
Another inceasure of even greater importance has been introduced in the Asscmbly by Mr. Abbott, of Montcrey, making it a crime to sell ing it plainly branded with its lroper name. In anyoue who attempts to deceive the public by selliug the sulbstance as genuine butter. This is right, for thongh the substance has been showu to be cleanly and harmless, it is clearly barine, or "hull hatter." as it is oonarsely hut expressively called at the East, is incrensing
eery rapiclly. At present the weekly produc. tion from the factories in New York and Jersey City is between 250; 000 and 3000,000 pounds per week, the groater part of which is exported to
Engliud a months aums there was reason to believe that the manu facture was to be attempted again on
this coast, luot we are not able to learn whether this eoast, hut we are not able to learn whether lonbticss come soon enough, for it has been lic less field for it here, becansc our people generally are more accustomed to the use of choice, fine. flavored butter. It is fit, however, that
the bill for guarding the genuine article shonld become a law forthwith, and that all producers
nd dealers in true butter should
be watchful and dealers in true butter should be watchful
that the artilieial substance is not allowed to that the artilieial substance is not allowed to
steal their livery. W'e shall watch the matter steal their livery: W
as closely as loossible.


## Queries and Replies.

## Hungarian and Red Top



Hungarian grass makes fine hay if it is cut at the to cut auy fodder plant to sht and a wrong nutritive hay from it. This is eminently true of alfalfa, and not less so of Hungarin gmas. If cut just as the blossom appears, and befor the seed has time to form and the stem to hard en, it makes excellent hay. If left until the plant ripens, it is very poor feed, as the stem is woody, and more than this, it has been found to fiect horss and issue of will prove best for sowing in the different regions flis state, as there are few experiments to speal with the time for sowing grain. Alr. O'Brien sowed it as late as June 31, and with irrigation sccured a fine cutting of hay by October lst.
Mr. Clark, of sonoma county, sowed it about May lst, cut hay the first wcek in Augnst, and
sccured a second crop almost as good as the first by October. He grew the grass on ordinary npland without any irrigation. We are not in-
formed of the amount of seed these experimenters sowed per acre, but the guantity recomrich land and rather more on poorer soil. lied top is not in much demand among Cali good on the tules and on moist places elsewhere.
in the northern parts of the State, as for instance the moist meadows of Siskiyou connty, is in more general use, and in northern Californi and Oregon is highly recommeuder. The con-
clusion would be that here, as in the Fastern states, it thrives lest on wet lands.
tcemed grass in wilely separated regions callcl "Burden's grass" in New England, "herd"'s sometimes goes nnder the name of "linglish bent grass." Butauically the plant is the same There are, however, applent diverse habits in
its rrowth. For example, in New Jork State it its growth. For example, in New lork State it
is fonnd to thrive leest on wet, heavy lands, but in Eugland it is considered best for dry sands, stand serere lrouths. In Fngland it is pre scribed as the proper plant for rablit warrens, and for the ontskirts of blowing sauils. In wet, swampy meadows in New York its thick interlie a firm footing.

## Preserving Pampas-Grass Plumes

## Editors Press: Will you kindly give directiuns fur preserving panluas grass jlumes?- Cosntast lisalien,

The fol
The following easy process was made known by Mr. Henry Vilmorin, of l'aris, in the London
fiardeners' Chronicle: "I have always found the best plan for preserving the spikes of pampas grass in perfect eondition to be the following: Cut the stems before the spikes are half out of the sheaths, store them in a dry place and leave move the lcaf which partly envelopes the spikes the latter will appear perfectly bright aud with a silky gloss on them, only they are rather stiff nither in a well-heated oven, or, better still,
eill before a brisk fire, when eaeh tloret will expand and give the spike the feather-like appeard by that process will not drop one of their glossy pistils and will kecp for any length of time i llas anyone a hetter way

Death of Senator Angney. - Again death has entered the state Senate chambcr and called hence a worthy man. Senator Augney, of Santa Clara, died at his home near Gilroy, on Sunday night, January 27 tha, and was buried on Tuesday; Janmary 29th. The deceased Ncnator was serv ing the latter part of his terin, having been elected in 1875 as a Denocrat. 11. IA Augney $^{\text {was }}$ d'ennsylvania, and came to California in 1850
die was edncated at West from New Ilexico. IIe was edncated at West
Point, and was Captain in the United States Point, and was Captain in war. At the conclusion of that struggle he settled in the city
of Mexico, where he married and engaged
in the practice of law. He subsenuently in the practice of law. He subsequently from Ciilroy, in Santa Clara county. He there devoted his attention to agricultural plursuits. wine making. In his legislative carcer, Mr. Angney gained the respect and esteem of all his colleagnes. He was assidnous, attentive and

North Canolina. - Those desirous of in formation abont North Carolina will be interested in a new paper publishod at Raleigh, under the auspices of the State Board of Agricul-
ture, entitled the Farmer amd Mechanic. The first issue contains many valuable artieles on the re-
sources of the State, aud the publication will sources of the,
doubtiess do mu

THE PACIFIC RURAL PRESS.

Adulterated Alfalfa Seed in Europe.

We hope our dealers in alfalfa have not learnedthe evil practices of the Europeans, but as evil ideas spread faster than good ones, it will be well to have an eye npon what we buy and make tests of germinating percentages before we invest too heavily. We learn throngh our English exchanges of the most shamefaced frauds practiced by the Bohemian dealers who furnish lu cerne (alfalfa) seed for the German markets. A sample of this seed was examined and it was
found to be adulterated with not less than 10.$374 \%$ of small, artificially-prepared stoues. These are so cleverly turned out that even a
skilled expert wonld only detect them with skilled expert wonld only detect them with cially, are most deceptively like lucerne seeds; and abont $12 \%$ through a one-millimeter open ing. They are made from broken quartz re dnced to small fragments, passed throngh sieves of the proper size, and colored with chrome to give them the desired sulphnr-yellow tint. The grey stones are obtained fron grey quartz, and Nobbe, to whom the eredit is due of having first drawn attention to this system of adulteratiou, the samples of seed thus tampered with, came
chiefly from Bohemia, where there are special chiefly from Bohemia, where there are special factories for the preparation of the colored
stones. Besides this percentage of stones, a not incousiderable proportion of chaff and foreign

Wednesday, a la to Sacramento is under water and a great loss of agricultural property will be occasioned. Re ports say that the levee on the east bank of the Sacramento, a mile and a half below the city,
lroke at 3 o'clock Tuesday morning on Flint' rauch. This has been for years a weak place but a new levee was constrncted and a wing
dam put in last summer to keep off the current. The water Tuesday morning broke in the ne soil. This break will flood all the land between the river and high land on the east for 20
iniles down. One account says: 1 t is impossible miles down. One account says: It is inpossible
to correctly estimate the danage already done, but it may safely be said that it will reach at
the least half a million of dollars. The conntry the least half a million of dollars. The conntry which the eity derived its supply; also a large portion of the slaughter-houses, cattle ranches,
feed yards in connecton therewith, stantial mansions and at least 1,000 small homes. It was also a favorite location for hopyards and nursery gardens, all of which have been
ruined. It is feared that a large number of cattle have been drowned and large fields of well. advaneed crops inevitably danaged. No loss of
life is reported np to Tuesday night, but there life is reported np to Tuesday night,
are grave apprehensions.

The Redding Rancu.-During the past two weeks we have spent several days in visiting the well-known Redding ranch, located on the upper waters of the Sacramento river. This
ranch contains some 21,000 acres of land, the first extensive tract of agricultural land watered by the Sacramento after it leaves the mountains, and is one of the finest tracts of land in the
State. It is located iu a region where drouths are never known, and where, consequently, the
crops never fail. It extends for some 20 miles along the west bank of the Sacramento, is beautifully diversitied iuto bottom aud gentle rolling
lands, well wooded, and yet snsceptible lands, well wooded, and yet snsceptible of
ready enltivation, even in its natnral condition. This property has recently cone into the hands of Mr. Etward irishie, of Hal ejo, who is now
dividing it up into farms. He has already nuade several sales, and will soon make arrangements for placing it more prominently before the peothorough cultivation. With this end in view, make further and more particular mention of make further and more particular
this interesting portion of the State.
Dried Persimmons.-Mr. Loomis showed us, the other day, a box of dried persimmons jnst received from Japan. They were of the Imperial or oblong variety, and when dried and length, one and one-lalalf inches in width, and three-quarters of an inch thick. They were
packed with exceediug ncatness in a box holding 50 of them. The box had a slatted bottom,
and there was a layer of coarse ser and freit and between the laycrs. The eover was raised above the fruit to admit the air. These precantions are fonnd. necessary to pre-
vent the fruit from molding. The flavor is tine, and taken with the handsome appearance, will
nake dried persimmons a favorite article in the make dried persimmons a favorite article in the
market. They were dried without the addition of sugar, and yet they were coated with a bright coat of it derived from their own juiees.
Harvard.-We have received a copy of the
annual reports of the President and Treasurer the latest information of the prescnt condition, aims and metliods of this famous institntionThe reports will be sent to every graduate of
the University who sends his address to Secre.
tary of Harvard University, Combridge, Mass,

## A Rain Gauge.

Enrors Press:- What is a rain gaure? 1 measure the
Rinn in a lard-tin. 1 had, during the storm of Junuar

Our correspondent's lard-tin will give a meas nre of the rainfall accuratc enough for all prae-
tical purposes, although it is liable to some "true" in sides and bottom Accorling t exhanstive researches, carried on for 15 years, by Mr. Syynons, of London, and snummarized in in a standard gange, the collector may have any diameter from three inches np to three feet, Jut
a diameter of eight inches is preferable. It must be of thin sheet metal and of cylindrical form and have its axis truly vertical. The month o than one foot nor more than three feet from the surface of the gronnd. A uniform hight of one foot fron the snrface is preferred. Gauges set Reclus in bings are objectionable. According t has been ascertained that the quantity of water
falling on the terrace of the laris observator bnilding, at 91 feet high, is always less than the quautity of water colleeted in the courts sitn-
ated below. At the summit of the buildin the annual depth of rain is 19.7 incles, while a the base the depth rises, on an average, to 22 inches. At Berlin, the quantities of rain which
fell on the roof and in the court-yard of the observatory are a little less, bnt the dincrence not apply to great elevations, such as mountains, for they have altitude to enable them to condense the higher strata of clonds and secure The water collected in a gange should flow at once into a receiver or holder, with the least
possible loss, and where it will be kept safe rom evaporation and the quantity should be measured as soon as possible. Sone gauges


## the Latest fraud-the

as to allow of measurenent once each month the collected water may be measured according t convenience. The nsual method is to give only ered by the raiu which fell thereon
When snow falls it is considered best not only to melt and measnre that which fell iuto
the collector, bnt also to dip the inverted col lecting cylinder into those places where th snow has fallen evenly and thus take np see-
tions representing the averase snow fall. By tions representing the average snow fall. By
melting these and taking the average resulting quantity of water, we deduce a better resul than could have been given by a single gauging.
Rain ganges shonld be placel at a distance from trees, fences, buildings or other local disturbing eanses.

Grazing Lands.-It is telegraphed that Representative Page, has reintrodnced his Grazing Land bill, which was originally offered by him in the 43 d Congress. It recites in the preamble, that there are in various parts o cultural nor timbered, bnt fit only for grazing purpd comparatively little pasturage, and that they are mostly in posscssion of persons who have improved them for purposes of pastnrage States citizen who at the date of enacturen slall be in exclusive possession of grazing lands of the foregoing deseription, may purchase not
exceeding itio acres of the same at 50 cents per acre, upon making oath bcfore the register and reeeiver of the districts in which the land i situated, that his pnrpose is not speculative,
but in good faith, to appropriate it to his own exeline use, and that he has not directly or indirectly
of title.
Frutt Dreer Burnie,-Wednestay morning of last weck, between 12 and 2 o'clock, the large four-story frame building of the Alden ad by Herman was destroyed by fire, the origin of which is
unknown. Loss, about $\$ 12,000$; insuranes $\$ 6,000$.

grouud boucs, clay, plaster, blool, eggs, and
other materials were used in forming this ther materials were used in forming this image,
which was then laked six months in the kiln Hull spent much time and several thousand dollars in experiments. He said he had perfected
himself in the necessary scientific knowledge, and that he would not inake a figure again.
Hüll unluckily broke his first giant iu getting it out of the kiln, but succeeded better in his second venture, and had the satisfaction, early had a financial interest in the giant. A pic of a man's skull was put in the head, and bones
were insertcd in numbrons places in the limbs.
"I think "I think," says Mr. Cox, "that Hull must have spent molding aud baking his giaut."
Hull had succeeded in making a stone giaut,
for the baked composition was just like stone; had no money to plant it with. This led him port, Commecticnt. Barnum said he was not going to buy a pig in a lag, and he would send
out a nan to look at the invention. Mrr. Barnum sent Geo. Wells, who came quietly and
stopped at the Elkhora hotcl as a horse-trainel who desired to look at Hambletonian stock in he neighloorhood. In the evening he was taken to the icehouse whicre he viewed the wonder,
expressed astonishment and delight at IIull's exeellent workmanship, and said he believed finally agreed to pay buy, $\xi_{2}, 000$ downe to share the expenses of planting, and to own a certain the giant was wrapped with cotton cloth and put in a stout box well bound with iron, which
was provided with a falso lining, and directed was provided with a alse liming, and directed
to Bridgeport, Comnecticut. At midnight it was put in a wagon and taken to Addlison, I miles distant, on the Erie road. Hull made a
seeond trip to Bridgeport, where, on March 26th, an agreoment was drawn up and signee
by the stockholders of the diant Company nim, Hull, Wells and ('ase. The first intention was to bury the giant in some isolated Conlo, and valley, whit batmum said it woum never changed their plans and wers going to plant the wiant in the Rocky mountains. He went to
New York onlApril 8 tha and joined W. A. Con-

$a$
s
rhipped the was in Barnum's employ. They reshipped it as local freight to Pucblo. Hult was absent abont six weeks, and on his retnr
said that the giant was successfully said that the giant was suceessfully planted.
Couant went as a professor in1 charge party in search of geological specimens. He remained to watch the deposit. When Hull re turned East he said the giant was just as ready to dig up them as it would be in five ycars, bnt that Barnum had gone to Larope and would no be back till August. The lifting of the giant was therefore delayed until Barnum's return, when he went to Colorado, ostcnsibly to look after his
stock farm, and lecture on temperance real object was to be near at hand when ther giant was exhuncd. Hull knew it would the do to have the Cariliff giant man recognized as haviug anything to so le assumed the uame of George H. Davis cut his hair short, slaved his mustache, put a
hump on his back, and disguised himself as stoop-shouldcred farmer. Cox meantime was
yetting auxious to know what share of the getting auxions to know what share of the obtain only vague promises from Hnll. To pelled to conceal from the showman Cox's knowl edge and interest. Cox told Hull he would have his pay or he would talk. It Hll returned niet soon bronghe him backs, and he then ciliated Cox ly offering him oue twenty-sixth of his own interest. A contract was drawn np to
this effect, and Hull then returned to Colorado. When he reached Hebl, he found that Conant who, as he expressed it, had been fooling with the giant, lad broken ond the heal and one leg. Hull was enraged, and a quarrel ensued. How discovery was made according to the 1 and the nnm appeared on the ground and offered $\$ 20$ nnm appeared on the ground and offered $\$ 20$,
000 for the fiud, which Conaut refused with scorn. The peoplle began to laugh1 at Barnum, who would prove that the $\$ 0,000$ to any man chisel, Then came the test. Barnum pai解 Hull had lent an attentive ear to the talk of
scientific men, and was astonished to learn that kind of crystal ought to be found anto the armo of the petrified giant. Hull ob-
ind tained crystal to correspond, and by sleight o
hand exclanged it for the dust of the borin implement, which was first handed to him by Prof. Taylor. When the giant arrived at
Quincy, Illinois, Barnum, who was then in Waslington, ordered it to be brought to New
York, aud its sulsequeut hito Cox has recei ved uo share of the proceeds of
the exhibition, and decided on that account to make his knowledge public. The entery rise has been a losing one all arnum should involve himself in this wornont scheme of humbuggery. The giant was ex-
hibited in New York, at the aquarium for several weeks, but it failecl to draw. Conant has other fossils. The giant in now stored anong
the curiosities of the New York Nuseum of the curios
Anatony
Our Shid Bearing Frcit. - We find the following in the Orangethorpe correspondence
of the Anaheinn Gazette: "Wheu Mr. Metcalf began to improve his ranch six years ago, therc was not a tree on it, now there are over 3,000 speaks well for lis enterprise, good taste, and speaks well or his enterprise, good taste, and citizen. I must not forgct to mention the
algaroba tree, seven of which are in bearing. some years ago the editor of the Rural Press informed the farmers of California that he had in his office a supply of algaroba seed, which
had been imported from South America. He offered to distribute this among the patrons of his paper. Mr. Metcalf sent for sonic, planted and these trecs are the result of the experihas tree, when in full bearing, yields
pods, which are very nutritious, and are largely fed to cattle in south America and pain. Prof. Hilgard, in a recent add ress before tivation the tre mended it as being peenliarly adlapted to dry soil which would not produce alfalfa without Carob tree of Spain and the Oricut. The pods re eight or uine inches in length, and are said to furnish excellent feed for dairy cows.

Proprection of the Colembia salmon.-
bill, which has lately been introducted Congress by Scouator Mitchell, prohilitsted the tributaries, by any meaus whatever, hetween July 26th, and October 1st, of each year, and impose penalties of at least $\$ 1,000$ fine for the imprisonment for sulserpucint offences. Minute regulations are prescribed concerning the tak ing by gill-nets, seines, weirs and traps be-
tween Alril lst, and . July 2lith, and similar heavy penalties are imposed for a violation.
The bill also prohilits throwing into the streani saw-dust from the mills or waste liquils from factories, tameries, etc., between July ist, and
leecember 31 st , of each year, under penalty of $\$ 500$ for each oflence. Onc- half of the fines are the propagation and preservation of fish under direction of the Commissioner of fisheries.

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## S. F. MARKET REPORT

Mork.-Our trule review and quotations are preparee
on Wedhesday of eesch weck (our publication day), and are not intended io represent the state of the
urday, the date which the paper bears.

Weekly Market Review DOMESTIC PRODUCE, ETC. Trade in supplies for the eountry is waking up, as our advertising columns this week bear testimony. l'roduee sales are, however, rather
light and with a downward tendeney in nost prices. Range of Cable Prices of Wheat. The course of the Liverpool quotation fo
Wheat to the Prolluce Exchange during the days of last week has beeu as reeorded iu the following talle:

## 

To.days eable quotations to the Produee
Exchange compare with same date iu former Exchange comp
years as follows
 The Foreign Review Lepreses says: The eoldition of the Markin Lan lias, however, undergone some implurovement although neither a better eonlition nor light supplies have tended towards au improvement
of values. In spite of paeifie rumors current a the commeucement of tie week, politieal influences are still paramount in trale, and, until
the question of peace or war is definitely settled it is in vain to expect millers to operate with any amount of freetoml. Although almost eerned, trade is nevertheless in an extremely the hopes of the peace party be dispelled th reaetion in favor of higher prices would be
severe. Freignts and Charters.
Wheat charters lave lieen active and firm
Qnite a number of vessels have been taken for Wheat at $£=12 s$ gid for iron and $t 210 \mathrm{~s}$ for iron
Ehipstern Grain Marketa.
New Yoik, Hebruary ?al. -There has been
a lively outward movemeut of Wheat, Corn and Rarley during the week, mostly for Gireat Britain
but the market closed, very dull at $\& 1.1$ 'ful for iufaior to ehoiee spriug growths; Vo Torlinicior to ehoiee spriug growths; No.
selling at $\$ 1.25(a) 1$. 28 . Corn was lower, elosin at 51(cisc for mixed shipping. Barley has sold
frecly for export at 69 foc for sitate, and soce Sle for Canada, in bond, Comnon extra ship piug Flour has lial ready sale at redueed prices, Culicaco, February 2 d . Wheat is at the
lowest eblb that it has touched for several mouths, lowest ebb that it has touched for several months,
and there is no indication that the narket has been largely oversold, as las beeu statet. Price Barley were dull, iluctuating and weake
 P'ork, $\$ 10.60 ;$ Larl, 5.2 .21 .

## Bostos, Pelruary od. -The Wool sales of th past week foot up a fair average lonsiness amountiug to $1,413,000$ polnuds, hat complaiau

 is made about dullhess in the market,iness, on the whole is musatisfactory arc low, with moderate stocks; yet there is n
animation to the market. Transactions formia show some falling off fron previous Sales of 431,000 liss at 15 (u' 2 S for Fall and Is 33 for spring.
business in Wonl at the present time ing exeed ingly dull, a feeling of eontidence is witnesse everywhere. This is due in a areat measure $t$ t
the sunall supply of desirable descriptimus offer ing, the light stocks in the hands of interio
dealers, and to the oul the hottom. The attention of resting turned tollower grades, particularly Fall Cal has been doue. sales for the weck includ
 pounds Oregon, 24 a $32!$ le.
Domestic Produce. The following table shows the S. F. receipt of Domestie Produce for the week ending at
noon to-lay, as compared witl the receipts of previons weeks:

on (irain Bags, because of the prospeets and the
increased ingluiry. Sales are reported coveriny
 for their own use. There is no doult tha many Bag dealers who have hat a slow and unprofitable business for the last two seasons,
will somu begin to corner supplics, and it is doult tfill whether (iraiu growers, who can now get lags for 10 efe cash, will be able to get them
so low again during the senson. At all cveuts, mauy farners are hayiug in their supplies now, sales: 2,500 sks gool Coast Feed, in two lots,
$\$ 1.40 ; 1,100$ do poor tule Feed, $\$ 1.37$ t. 100 sks goor Coast Feel, \$1.3i;) 800 ctls ehoice Feed, \%1. 40.
BFA Beans sold at $\$ 3.30$ gend unelianged; 60 sks Pea Beans sold at s.30 gill.
coll -1 large Yellow is lower. We
note sales: 2on sks large White, \&1. SJ; ; $i 0$ sks DAIfi PRoluUcE-Butter is arriving in ample amount and prices for lresh tioll arc a
point lower. The New Vork market affords no outlet this wiuter. Nothing but favorite
lrands liring over 30e. California Cheese is now selling at 20 es fll for the hest.
FRT1T - Fruit is renerally Choiee Apples are searce and reach extreme rates. Oranges are becoming inore abundant.
HOP'STrade is dull; 160 loales Waslington Territury solil at 5ull 1 . (O) her sorts are Territury soll and sales few, although more aetivity is expected. Fiumet Wells reports the New OATT Oats are stationary. We uote sales l40 sks poor (Const Feed, $\$ 1.4 .5$; 62 do dark
Humboldt, do, $\$ 1.50$; 140 do good Coast do, Hunl
81.60.
ON
ONIONS-There is no change in prices.
POTATOES D'ctalunas POTATOES - Petalumas and Humbolltt have dropped about 10 e per etl. Early Rose,
new, advance, $\$ 2.50$ leeing gained by the best. Sweets are now $\$$ per cti.
phovinioni Fresh
resh Meats take another bad emdition of the roads provents delivery and short supplies are occasionch. The Cured Meat trade is ruict.
1F: $1: T A B L E C$.
agus have Beets and Carrots are her higher; ' 'abbage and WHEAT Shippers insist on breaking the
seeond dollar, and $\& 1.9$ is now uffered , "hoice lots loring 8 ? The top price for Milling on Change to-tay was 8.0 .1 . 1 . 300 etls gool shipping, s2; 20,000 do Sotoekton to a shipper, \&2; 241 do finir Milling, \&2; 280 do

 hool-The stock is reduced and there will be little to report for the next six weeks,
note sales: 311,000 \#th Fall, $12(a 16 c ; 60,000$ ths Oregou, private.

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amount of cruelty. The records of all humane societies amount of cruelty. The records of all humane societies whelmning majority refer to the horse, and a large proportion are for working horses, while suffering from cases, hat in one fors have conch must result from some specific cause. Convinced that much suffering results from the want of knowledge as to the anatomy of the foot, the use of inferior nails, and search amongst the horse-shoers, to discover if possible the cause of this rapidly increasing evil. Various reasons were given, such as
Stone Bruise, Corns, Sprains and Fast Driving, Etc.

But as these only applied to the roadster, while all are alike afflicted, something else must be the eause. A cause of much of this lameness. "During the past eight machine pointed nails, cut from

COLD ROLLED IRON.
By this process the fiber is destroyed, and the iro
in thin layers, as represented in this drawing.

"When the nail is being driven, the horny fite:s which the hoof is composed separate these thin layers a the point of the nail, causing one of the thin blades

to enter the inner parts of the foot, the othe passing out through the wall of the hoof, and clinched.
Inflammation and lameness ensue, and the horse rendered unfit for scrvice; unless the nail is withdrawn dered unfit for scrvice; unless the dockjaw and death are the inevitabte result. Should the farrier break the thin blade in removing the nail, as was the case in the results of which were fatal.

"Figure 3 represents one of these Cold Rolled and Cut Nails; in withdrawing this nail, blade A broke at B, leaving A in the cortin bone, into which it had penetrated. All known remedies were unavailing, and the life of a Rolled and Cut Nail. Since I have confined myself to the Rose of

## HOT-FORGED NAILS,

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ing to the animals, as well as time and money to themselves, as the remedy lies with you, hy choosing what kind of nail shall be used.

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Round barrels, plain and set, 24 inch-blued. Octagon barrel, plain, 24 inch-blued. Oetagon barrel, se 26, 28, 30 -extra finished, case hardened and check stocks. Oetagon barrel set extra heatagon barrel, set, 24 extra finished-C. H. \& C. S. Oetagon barrel known as "One of One Thousand." Octagon barrel, set, gokl, silver and nickel plated and engraved. Carbines blued, also gold, silver and nickel plated. Military rifle muskets, model 1873. Rifles, muskets and carbines, model 1866. Reloading tools, primers and parts of armis.
A heavy stock of Cartridges Manufactured by the W. R. A. Co., for all kinds of Rifles and Pistols, constantly on hand and warranted the best in the market.
Sole Agent for Dupont's Mining, Blasting, Cannon, and Celebrated Brands of Sporting Powder.
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## 1878.

## 


#### Abstract

At the commeucement of auother season we congratulate our friends and patrons on the l'acific c'oast on the inereasing popularity of the reliable "Champion," and we are sure those who have purchased these machines, will heartily rejoice in the immense sale the "Champion" has attained, and the brilliant outlonk for future sales of these most perfect machincs.

The scvere tests to which our machines were put during the extraordinary scason of $15 \pi \bar{\pi}$, and the uniformly perfect and satisfactory work perforned during that and following harvests, down to the present, by the "Champion," undeniably prove the assertion that the


## "CHAMPION" MACHINES TO-DAY STAND UNEQUALLED IN THE WORLD,

In three important points to the farmer, viz: lightness of draft, durability, anl perfect work. One reason of the great success of the "Champion" machine over its numerons competitors, lies in the fact that only the very best material of wood and iron is used in its construction, and this, while making the machines far more durable than other machines of this elass, obviates almost entirely the amoyiug and expensive breakages which otherwise would oeenr in the midst of harvest, when not a moment ean bo spared to replace broken parts. Those who have bought eheap and poorly made machines can inderstand how dear the investment proves in the end.

The work done by the "Champion" during the past larvest has only been a repetition of former suceesses, and this is true, not only throughout this country, but in Europe. The season of 1878 promises to he even more brilliant than its predecessors.

We ask every farmer on the lacific Coast to earefully examine the alvantages of the "Champion" before purehasing any other machine; and base our claim of having the best machine in the World, on its being the simplest, most durable, lightest draft, best ennstrueted of the best material, and eapable of performing the most perfeet work iu any condition of grain or grass, wet or dry, down and tanglell or straight and standing.

The large number of Champion licapers and Mowers now in use by the farmers on the l'acitic Coast, evidence how popular these machines have beeome, and to all farmers contemplating the purchase of a reaper or mower for use this season, we commend the "Champion" as the machine to he relied on.

We keep a full stock of the Extra parts for repairs, and as they are cither wrought iron, malleablo iron or stcel, they cost more than Cast Iron, but as they last threo times as long as the east iron extras, they are the cheapest in the end. Hon't be deceivel by the ery of rival machines who advortise and sell " $C H E A 1$ liNTRAS." The ILLUSTRATED CHAMPION for 1878 will be mailed to all who give us their address.

Sole Agents for Ames'. Engines, Pitts' Buffalo Threshers, Van Diver Corn Planters, Star Moline Plows, Bain Wagons, Gorham Seeders, Grain Drills, Etc., Etc. Send for Catalogue.

## BAKER \& HAMILTON,

Nos. 9 to 15 J Street, Eacramento, Cal.
Nos. $\delta$ to 19 Front Street, San Francisco.

## RICE STRAW-BURNER ENGINES. Caution to Frarmers and rhreshermen.

RICE versus HEALD and ENRIGHT.

We call your attention to the injunction suits which have been instituted by us, to restrain parties from infringing on the Rice's Patent; and to the late decision of the United States Circuit Court sustaining said patent. It was decided in the suit of Rice versus Heald, and in the suit of Rice versus Enright, that their engines were mfringements on the Rice's Patent.


AND SOLD BY HEALD, of Vallejo, ENRIGḢT, of San Jose, BROWN BROS., of Salinas, And the AMES' ENGINE, Sold by

## BAKER \& HAMILTON,

And using Return-Flue Boilers are lnfringements on the RICE EN. GINE, and we hereby Caution Farmers against using them.

Unless the farmers controlling said Engines arrange with us for their further use, or have the parties from whom they purchased make settlement with us for Infringement on the Rice's Patent, we shall be compelled to stop their Engines in the field and thereby cause trouble. It is absolutely necessary for us to pursue this course to sustain our rights.

Parties wishing Steam Straw-Burner Engines should send their orders in early, as there is no probability of any Engines being sold this season with Return Flue Boilers except those manufactured by us.

## Sole Manufacturers and Agents,

#  (1) $)$ 

Volume XV.
SAN FRANCISCO, SATURDAY, FEBRUARY 16, 1878.
Number 7

## A Famous Jersey Cow

The engraving on this page represents an animal which has become famous throughout the country for her unusually large yield of butter. Her record has attracted no little interest among California breeders, and we have secured
her portrait that all may know of her quality and her doings. Her name is "Jersey Belle," and she is owned by Mr. Chas. O. Ellms, of Scituate, Mass. The State Agricultural Report of Massachusetts for the year 18
tains her likeness and gives her record six years old; color fawn and white, and she weighs 952 pounds. She is recorded as No. 2,463 in the "American Jersey Herd Book." which made 511 pounds in one season without extra feeding, and has the blood of "Dick
Swivelker," a noted bull of his day. Her dam Swivelker," a noted bull of his day. Her dam
and grand dam were great yielders of butter, remarkable for its deep yellow color. The
deeds of "Jerscy Belle," show that her butter
qualities have been transmitted to her and her progeny.

In the Massachusetts Agricultural Report is

Culfivator, said: "A society which could slow
such a cow as "Jersey Belle," might well be such a cow as "Jersey Belle," might well be
proud for such an animal could not be matched proud for such an animal could in this country if in the world."
"Jersey Belle's" butter is of a deep golden color in winter as well as in summer, and doe not have to lie colored artificially. The editor
of the Massachusetts Ploughman, printed at Boston, says: "We have received from Chas,
O. Ellms of Scituate, Massachusetts, o. Ehms of Scituate, Massachusetts, two liant yellow color and delicate sweetness that the term gilt edge seems imperfectly to decalled solid gold." Her bag in the first of the
season measured five feet and one inch on a season measured and, the width of her escutcheon, between the thighs was 18 inehes.
These facts, vouched
These facts, vouched for by gentlemen with whom we are acquainted, will be read with inter est by our dairymen. They show what can be
done in the way of develop ing desirable qualities in animals by securing good blood and increasing its productive power lyy intelligent breading.
Fish Farming.-We have often urged those
who have ponds or the facilities for making

Education and Manhood.
It is well to pause, now and then, in our puruit of industrial success to reflect upon those regard to our development as individuals and in the quality of our citizenship. Though such eflections generally tend toward humility rather than self-exaltation, and convince us of short-comings rather than of satisfactory As we look back and perceive how our course has heen turned hither and thither by the rocks of error; how it lias been at one time pent
up by the narrows of contracted ideas, and, at up by the narrows of contracted ideas, and, a of supericiality, how the honcst heart yearns for the effective progress which speeds through generous channels, impelled by sound and vig-
orous thoughts and made effective by energies wisely directed. No right-minded man reflects upon what he is and what he has heen, without his long for a higher manhood; and as he see
the following by Hon. C. L. Flint, O. Ellms, of Scituate for the admirable cut of his pure bred Jersey cow, Her sire "was "Victor;" ( 1,256 ) dam 256) grand dam "Fannie" 2,460, inported. "Victor ( 1,256 ) sire was "Pilot" (163), dam "Minnie" $(2,461)$ "Dutchess" imported. "Jrand dam Mr. Ellms says she made in March, $19 \frac{1}{2}$ pounds of butter per week; in June, 16 pounds; in September, 14 pounds per week, and in December, making one pound per day. Of the richness of her milk it need but be said that five quarts made one pound and in December, four quarts and one pound of butter. Her feed ein summer was common pasture. She was kept in the barn over night and
had two quarts of shorts. In the winter she was fed on rowen hay and markable yield
"Jersey Belle" calved again the same numbered day of the month, February 25th, 1877, and made,
March 5th, three pounls and six ounces of butter. The three days following she made nine pounds and nine ounces; that week 21 pounds pounds, and she averan days 3.2 19 pounds per week. One morning's milk of butter; up to July 1st, she made 400 pounds; to August, 472 pounds; to September 32, and up to January lst, 1878, she made ( 65 pollms writes his: "She is now making on pound per day giving ten pounds of milk. the first of the season it took $12 \frac{1}{2}$ pomuls of milk to one of butter; later 12 pounds to one of "Jersey Belle's" milkings of Neptembe 29 th, and 30 th, made 3 pounds $14 \frac{1}{2}$ ounces o feld Agricultural and Horticultnral fair held a Marshfield, Massachusctts. There were also shown the cow and her progeny, consisting o Mareh 12th, 1877 , and inade in one week ten cheon and bids fair to be a superior cow here was also a bull 18 months old, a lull cal and one of the heifers. These comprised the group shown by Mr. Ellms. Their yellow
skins, fine escutelieons and forms were as the editor of the Plymouth newspaper said: "The miums at the dinner from the President of the society and distinguished speakers, who were in a position to know to what extent blooded o


JERSEY COW, "JERSEY BELLE," OWNED BY CHAS. O. ELLMS, SCITUATE, MASS.
able by stocking them with fine fish. We thought is for the budding manhood of his know no enterprise which will yield a better is many a little poud or stream of idle water which may yield breakfasts for a whole commuwity and money for the man who owns it. The is unquestioned. As an instance of what may he done in this direction, we quote, from the Petaluma Argus, the following account of Mr. Levi Davis' operations with carp, at Forestville onoma county. He says: "Aecording to romise, on the 27 th ult., I drew the ware rom my carp ponds and gave the first Ameod of ight-seers, who enjoyed it higely. I drew the water from my brecding-pond first and the sight was grand. Besides the five old oncs, there were two yearlings, that were about one foot ong, and 2,671 young ones-fine little fellows, rom two to four inches long. Just think, 2,671 fish, actual count, at one sight. But this fell
short of my expectations, owing, in part, to short of iny expectations, owing, in part, to
there being two bass left in the pond last year, ne of which was full of young carp. Also a king-fisher had been using the pond for some time, which has made away with no telling how any. I then drew ofl the pond where the carlings werc. es in that pond-a thing unlooked for by
thought is for the budding manhood of his
children and its possibilities. Here is his opportunity. In them lies the chance to develop failed of attaining. In them he may bring honors to his name. In them the state may find the truth and power which its exigencie
Wo

We have been iceply interested in reading series of lectures delivered before the student of the State University by Prof. G. F. Becker versity as one of its official "Bullctins." The subject is "Education: Its lielations to th State and to the Individual and its Methods. As the publication is for distribution among those interested in education, we earnestly ree aycm all into. whose hands the pamphit most straightforward and eloquent argument in favor of liberal education and opportmities for the highest eulture which has been lately framed. Its langnage wins admiration; illustrations rivet attention; its logic carrics vigorous expressions. More than all these, its chord of sympathy in the mind which, has longed for its own advance:nent and which perdoubled power of mind over material, the doubled power of mind over material, the
secret of individual and national progress i
industrial suceess, and the road to the rule of the right in communities and in governments.
Sucl being the general claracteristics of Pro Beckereng sectures, it is clear that that they should
Bere Seckers 1 ectures, it is clear that they
receive public attention and careful study

We have not space to follow the writer in his os we believe that all who desire may in full. We cannot refrain, however, from pre senting a single paragraph, which, perhaps
strikes the keynote of the whole and defines the writer's position onthe general question the "higher education." We quote: "Whether, then we regard the question from the point of view a justifiable patriotic amlition, or from that o purely tinancial interest; whether we seek to conomy and perfection of its political machin ry, or to raise the standard of morality and ncrease the intellectual capacity of the com munity, we are alike led to the conclusion that no public edueational system will answer ous unity for the deepest, broadest and most varie to get as much of it as he has time and strength or. The turbid flood of ignorance is only kep the levees of education, whose cause and of humanity. To refuse to keep this system, whose bulwarks are its profounder portions, in an efficient sary, is to suppress progress and to invite disaster. Yet education ha many enemies, some open and some
secret, some willful and some only mistaken; there are those who hate it because they love darkness rathe stand its nature, and there are thos who oppose it because it involves an
outlay of money. There are men who to save a plank, well risk a forest he labor of years; who, to save but the frnit of their counsels is no prosperity. Let the community nar ver plea, have designs upon its in elligence, and let the enemies of ed oppose it not only at their own peril which is their right, but at their chilat their country's peril, which is

In tracing the intimate relation between the industrial processes and
achievements of everyday life aud the studies which form a plart of the "higher edncation," the writer shows close analysis, and a wide acquaintance
with both the science and the practices of the productive arts. These enable esent his views forcibly, and bring him wealth of pertinent illustrations. The conclusion is, of conrse, that any sclicme which atattainment and symmetrical culture places a barrier in the way both of individual and general advancement, and, by whatever specious argublighting in its tendency, fter discussing at length the relations of ed ucation to the state and to the individual, I'rof. Becker enters upon a carefnl consideration of he methods of primary instruction which are he considers based upon more rational or more natural principles. His position on this queslthough instructors approval in its general idea, its details of application. Prof. Becker is in ympathy with the enlightened efforts now heing made to mprove onr elcmentary instruction, and the thonsands who fecl the need of this iteness of thourht from his lectures. We trust this "Bulletin" of the University will be widely circulated, and as widely read uine in onr educational diseussions and institutions.
'Tue town of Kinght's Landing has beeu un
er water during the whole of last week,

## Gorrespondence.

Notes on a Southern Tour.-No. 1. Entrons Press:-Leaving San Francisco o January "-th, per steamer semator, the sun
bright after the heavy rain of the previous day, all seemal peaeeful at the wharf, and the 50 cabin passeugers wcre expecting a fine pleasure trip. The Senutor, rebuilt in 1575, is a firm and steady eraft, with gooll accommodations aul could be desired; but the best arraugements for njoyment are liable to be spoiled when old Madame l'acilie is onc of the factors and happens to be on a bender, or, as in this ease, was
just sctting over her stormy eareer of the previous day's rioting, and she met ns before we reacherl the fatc and tricd to intimidate us, eausing some to come suddenly to the ship's,
side aud exprcss themselves yery inarticulately, aiter which some of then retircl, and were in cipal roughness was experienced passing over
the lar just beyond tho Goldeu Gatc. IVe east nelor in Sau simeon bay, leaving a few pas sengers and freight.
superintendent Clift, an old Girass Valley
niner, now in charge of the (leean quicksilver miner, now in charge of the evean quicksive Through his efficient management, this one mining elaims located in this vicinity arsaitin capital for develupment. the port of san Luis (Olispo, couuected by $1: 2$ miles of narrow gauge railrond, that, by gooil
wharf, comes to the steamer's side. We anchored at 9 . 3. 3., 2 tha, near the
end of the broken wharf of Santa Barbara. Here they have been intcrested, not in "what the
wild waves are saying," but what they are wild wares are saying," but what they are
doing-making a lreach of 1,000 feet from the
midnle of their long wharf. The surf boat midule of their long wharf. The suri boat
now takes the passengers to and from the ship. now takes the passengers to and rom the ship. with sea water, and their trunks thoroughly it recorded, not one of them kuew how to seold or indulged thereing: A young lady expresse
her sentiments lyy: "(Oh! we hal lots of fun; her sentiments ly: "Oh! we hal lots of fun; as any of $u s$ s." An elderly lady said: "It just
took nyy breath away, it wet me soquick!" But took niy breath away, it wet me soquick: Sut
for this ruination of trunks and contents, they mign kindness pospessed by passengers, but morc man kindness possessed by passengers, but more
especially by the lady eaptain, sonetimes called stewariles. Gur ship soon put on the appear-
ance of a French laundry, and before night they were alle to replace in their truuks the injured goods. 'anta landed at S P. M, at the railroad wharf of "the Long Branch of the Pacific eonst." Being late, we were obliged to stop
here over night. Solicitors from the three hotel.s quielly invited our patronage; this air of eivility in reception is pleasant, and precurses The town "is beautiful for situation," and to which it stands is about 150 feet above the
water, with a straight-line and perpendicular water, with a straight-line and perpendicular
front wall of gravel; yet you enter the town frum the wharf harilly percciviny the rise. The
town plat, coverimg onc mile wide by two miles In length, is alluost a perfect table, sloping
and enongh ior drainacie, and the anple strects and
avennes are cntirely free from any nnud, and without work equalit to (rakland s ehomicest drive and will soon equal her also in in sla le and orexcellent spring water, bronght froul the hills in pilpes to the residences. The popmlation, now
estimatel at tion, has a full representation of the
various brates churches; a large poblic school housc, now using siding over the story: Stepher Mren Mullcrson pree numbering about (i0. After passing half an hour in the schools, Anl not passing the hehavior
of the pupils beyond the school yard, 1 consider that Santa Monica has a good school, one
that dloes thorough teaehing and does not neg. lect the culture of gooll manners. I will no
attempt to half eruminerate the natiral local ad attenpt to half enumierate the natural local ad as a sannitary retreat, where the invalid may
attend hisa apinary (ive or sereen nilies back iu
the hills) and yet enjoy his eity society at home by the sea.
The last season has been a trying one to this

 neglect in feerlin's results in the destruetion of some weaker eamps, ly the stronger taking all
their fond. He will make froma his present
stock a workine force of 300 , aavorable seasong woult of have given hivim 1,000
hives. tne every, canyon there are from two to
early and later rain for their sweet harvest.
They have lost heavily, and some have lost al. They have lost heavily, and some have the fall
most their cntire stock of bees; but the of aloout tcn inclese of rain, and the plensantstrengthens their faith for the future
Onc of the great checks to the rapid advanee ment of Santa Monica at prescut is, the high rice asked for the alljoining rich tillable land,
100 per acre a price far beyoud what the home seeker or speculator cay afford to pay If this policy is aulhered to by the town com pany, the place, though unsurpassed
The community were greatly saddened by the aveidental death of old Unele Tllos. Booth, who on New Y'ear's night, ly making a nistake,
as is supposed, walk co up Ocean Aveme guided by a line of trees similar to those leading ont toward his home, and when he supposed he had
gone far enough, turued to go toward home, gone far enough, turued to go toward home, and fell 150 feet, producing instant death. He was muel1 respected by all and espeeially by
the eliildren, and the whole eity hourcd his The lands near
wed and near town are now being rapidly than it was any time last year. Live stock has greatly ad vanced in priee; prosplects generally considered favorable. coneral taneock, an of resident, pleasantly located in the suburbs out
the eity, is engaged at his asphaltum beds, out ahout nine miles Has usually produced about 1,200 tons per year of refined asplhalt; bit her streets with the thbott noiseless and lasting
pavenent, these asphalt yields could be greatly mereased, as the supply is large. Now work ing down about 30 feet, on a horizontal strata, hat extends over 800 or more acres.
State of devala, has lately localeral of the tate of Nevala, has lately locatell a 0 -acre home here and is now boring for artesian water:
is down 1 iso feet, with enconraging prospects of

Tri
I sings run twiee a day to lons Angeles. At single trip, or commute 60 fares for 810 for
for one inouth, and family tiekets, 10 fares durng three months of an entire family, for s. They hope to see senator Jones or some other sexes, as the loeation greatly favors its snccess must leave Santa Monica, hoping and fearing, and hasten to the orange groves or the angels,
without calling on the live ellitor of the fianta Moniea Outlook or the bath palace on the beach.

Kanta Moniea, Jan. 29th, $157 \%$.

## Bi-Sulphid and the Squirrels

Bimrors Press:-By way of a general answer many iuquirers, will give a few alditional de tails regarding the use of bi-sulphid of earbon s a squirrel antidote
First, I nnderstand that the purehase lately made of the article by the University has swept the market, but a new supply will soon rrive from St. Louis, the nearest point where it is manufaetured, to the hands of Mr. Justinian Caire, who will also be then informed as to the price at which the more eflicacions crud article can be supplied to farmers. But there is no reason why it should not be manufactured here, thus saving the eost of trausportation, so
soon as the prolable demand shall justify the soon as the
undertaking
I remark that the charge of ten cents per
aere, at which rate Bros, (ierow propose to aere, at which rate Bros. Gerow propose to ex.
terninate the squirels of Contra Costa county, is probable chapaper than it can be done on a average, by the bi-sulphid process. But
think any method working with poison, on a large seale, fundamentally oljectionable on ac and to the fricndly birds, upon whom we must depend for safety yagainst inseet pests. The latter are rapislly increasing to an alarning exteut,
and we shall have gained little if we exehange the squirrel for the grisshopper, or other
plagues of Egypt, such as now infest the liastern States. The carbon bi-silphid can le
kepten oul land in the house without danger to any one, and can be uscd against gophers and rats as well. In any ease, it will he very de-
irahle to have it eheaply accessible to our farin-

I have before stated that the bi-sulphid can he used with equal facility at any season. The
only limitation to this convenience arises frou mly lamitation to this convenience arises fron
the fact that, as it is heavier than water, it must thot he uscd when water is standing in the
holes, the more, as muler such circumstanees, the burrows arc likely to be divided up tent the diffusion of the poisonons vapor.
andways be where the animals may not have been reached),
it slould be kept in mind that the lignid poured into the burrow must not be coverci np ly the earth put into the opening. in the opening or else use of the loose earth jut in the opening, or else use a sol, inverted, or a
his, elod, or in stomy sround, a slat, of roek,
The heel of a hoot will in manl. Must as well as the shovel to do all canses answer
jis neederl,
viz : to prevent any rapyid access of air to the Thterior. Tamping is quite umperessary
In loose rock viles, where the nests
In loose rock piles, where the nests are some.
tincs open to tlie air, it is not always possible
to reach the squirrel by the bi-sulphid method but they are so rare as hardly to detract from the general nsefnlness of this thoroughly safe mode of dealing with these pests.
I remark as a postseript that the
a fresh supircl hole will afforil examination In leresting light in the observer lea-brceding and the unaceonutable preferences shown by the little animal for certain loealitics, to the great discomfort of human dwellers. The apt to by the carbon li-snlphid method
the course of his campaign.
F. W Irnc.

## Poisoned Arrows

Emitors Press:-The account given by you rres arrows poisoned by the American "'Vardy" "ravels in Mcxico" (London edition of $18 \% 9$, p. o!s), of the seris Indians, who inlabit the island of Tibmon, in the fiulf of California, a short distance north of Guaymas:
"They lirst kill a cow, and take from it its jons entipedes and tarantulas, which they eonfine in a hole with the liver. The next pro cess is to heat them with sticks in order to en rage them, and being thns infnriated they fas cach other and upon the liver. When the whole mass is in a state of corruption, the women tak the arrows and pass their points through it: they are then allowed to dry in the shade.
This addition to the information already fur nished by your eorrespondent, enlarges the area
within whieh this horrible device was practiced, within whieh this horrible deviee was practiced, at least 1,000 miles in a southwesteru direction, nnodus a firther interest to the curious faet Another fact, cqually interesting, is that Cortcs, Mexieo by the Spaniards, make poisoned arrows, whiels they conld not have ponitted to notice, if they had met them; yet the Aztecs could not have been iguorant of them, for their knowledge of everything within thou sands of miles on each side of their capital was not only preeise but very minute. Had they,
then, rejeeted poisoned arrows as instrmments of warfare, from the same scntiment whieh prohilits explosive bullets at this day

## Lan İranciseo, Feb. 9th

## the Garden.

## The Germination of Seeds.

Entrors Puess:-My wife has called my at tention to a statement which she has found in Harper's Magazine, for September, 1870 ins cluded under the head of "Editor's Seientific Ree,rrl." I have read it with some interest, to your readers, have copied it for you. It is as follows :
"Some curious statements have recently been germination of segard to the extent to whieh the ieal ayencies, especially by ammonia and oxali acid. By placing them in a solution of the lat-
ter substanee, they will leegin to gerninate within one or two days, even after having been kept for forty years, and are then to be planted
out in the usual way. Coffee seeds, which are out in the usual way. Cotfee seets, which are by placing in a covered vessel, eontaining ellual parts of water and of spirits of sal nnmoniac at the ordinary temperature. At the end of and cven the young leaves ean be discovered by careful inspection. In 1834, wheat was exhibited to the German S'cientifie Associatiol, raisel fron seed found in an Egyptian tomb, $2,(1 \times 1)$ to 2,5u0
old This la lid been soaked for a considerable olld. This had been soaked fo
time in fatty oil before planting
We were among those who wrote you for the favor of some of the conec lerries. They were duly half of the luerries were plantell in the usua way of sceds. After patient waiting and watehing, without ressllts, she placed the remaining ones in tepid water and allowed them to remai soaking for $2 \neq$ hours before planting. Fron
these latter one solitary berry germinated, bn unfortunately down, thus making a failure of the trial Had we kuown of the above statement at the We have the rest ing therer seeds is watcr to which few drops of ammonia had been alded. They gerininated in one night in the water.
trials.

## Selecting Seed.

The value of gond sced is universally almitted How to obtain the best is a sul, ject worthy of proved succesaful in horticulturc, eonlli easily male ayailable in the culture of the ripe grain and plant it under the most thorong ripe grain ald plant in inder the most thorongly
culture; select the next sason and plant in the


#### Abstract

same manner, and contiuue the process from year to year, using what is left after the selec tion to be sown in the field. This process new varietics of great ex cussion of this subject by thence. In the dis a short time since, Bro. Hayward stated that he discovered some cars of wheat in a ficld of oat to length of ears and size of grain. Ite expressed mueh regret that he did not save and the light he now views it, and did not do so Who knows but he missed the opportunity o prodneing a new variety of wheat exactly adapted to this section that would have alded pleasnre. Such opportunities are of frequent made available In the sclection of seed grain, long, limber rields inferior grain with increased expense aresting. Every practical farmer knows that and a large yield of superior grain, Sueh field are most profitable to cultivate.


## The Apiary

## The Honey Seasons of 1876 and 1877

 Editors Pliess:-The year 1876 was, all things considered, as prosperous a season as th apiarian ever had in this state. In most parts of the country, more than the nsual crop was gathered, while in others it fell somewha behind. Bees had increased rapidly for a num er of years previous and the number of stand in Los Angeles and sian Diego counties wa great, consequently the harvest was correspond ingly large. One drawback that prevented larger crop was the long and, in some respeets, wet winterFurther north the season was much worse not only did the above impede the earl earing of lyrood, whereby the hives would hav been lilled with a strong stock to gather the prineipal honey crop, but the elimate being colder and more damp, many bees that venture dashed to the ground by sudden and violen inds. The wis we old bees or working force were beiug daily llare in
llere, in Alameda county, bees were quite slow in producing brood and swarming was enerally having east the first swarm ly the atter part of llareh, that year sent the first orth near the end of April. Neither were th number of swarms so numerous. Some of the bives had two,
thers had none thers had none er very per the flowers then in bloom, which consisted for
the most part, of Chinese mustard, or kale and wild blackberry. After swarming, wild blackberry and sumac or poison oak blossonis uality was good but the quantity was limited The Californa bekeye secreted nectar, whic was gathered by the leees. The color of this onld le of little detriment to the sale of it it was not for the faet that it has a disagreeabl aeh to atand it person with a strong stomwith first-class honey, it will spoil the sale of the latter. At some future time we will say more about this tree and the honey gathere therefrom. As it is quite common here an blooins at a time when other honey of a bette rade is coming in, the beekeeper should be on he alert, and, if an extractor is at hand, thi or nut this tree is found in tho lower countie ann not informed.
The early fall honey-producing plants secrete quenee, but later in the fall or rather early in the winter the red gum was in hloom, which
was followed by the blue gum, and ere Christ mas the hives were well stacked with prorisions, both honey and pollen
The season of 77 opened favorably for th ious year started the early honey-producin plants, and these rains and tho pleasant weather uriug the two months that intervened before the trains, brought outa number of honey-yieldin plants, of which wild gooseberry, wihl enrrant. alfilerilla, encalyptus, mignonette, and hore honnd. Flowers at this time were the most in
portant. Fut the seeond week of Jamary har were beginning to become blighted. After the gan to ruvive again. In our vicinity larger and better rerhaps not to the farmer and gardener ches of kale or mustaril were never secn before.

they seemed to foretell a drouth and but little
honey was stored, and brood rearind wa on very sparingly, An Anstinct must have told
them, that if large quantities of honey and bee. them, that if large quantities of honey and beematernal duties, would proceed, to fill the cells with eggs, whence a large end of broor hond bees pollen would be used up to feed this large and
useless force, as we suppose the wiser bees considered them. The above appears to be better sustained, when we see that no preparations
were made for swarming, and of all the stands in this valley that
swarm has issued.
The year was noted for the depredations of
various kinds of moths. Household goods and agricultural productions have suffered greatly in some sections of the State. The bees also did wax moth. About half the colonies having died of starvation, while the remainder were left in them, fell an easy prey to its depredations. We managed to keep them under subjugation and we expect to see them less plentiful the mostly hybrids, but this year all will be purel Italianized, and it is generally conceded by moth traps or excluders "invented." For thi reason it is evidence enough that the moth doe not hold such
would expect.

The honey crop of the coming season can be justly set down for the year just closed as an eventful year for the apiarist is befor him. Already, the ground is saturated to a extent to warrant a thrifty growth to all vegeta tion, and the honey-producing plants will be
well advanced by the time the bees begin to swarm. All that is wanted is showers at inter vals to keep this growth in a flourishing state,
and if so, the honey that will be gathered this year in this State will be nearly equal to that of any previous season. We wonld say that it
would surpass that of other years, but for the fact that the number of workers that will be on hand to collect it will be much less than there Besides the stands are so depopulated, that it will be well into spring before a strong force can be in the field to gather the harvest. A remedy for this, to a great extent, can be obtained by
stimulating the bees to raise early brood by breeding, etc
Much more presents itself that we would wish
to say, but will defer it for a future time. In to say, but will defer it for a future time. In the meanwhile, we hope the present prospects
will not in the least diminish ; but that we shall have one of the most glorious
to the bee-keeping fraternits
to the bee-keeping fraternity
U. K. Lyptus.

## N. Temescal, Feb. 4th

## FLORICULTJRE.

## Answers to Inquiries.

## Oleander

Can an oleander be made to bloom in winter? When
does it bloom in California?-M Ms. G. W.
The oleander is a sub-tropical plant and can only be flowered in a very high temperature.
In a hot-house it will bloom constantly, but in any ordinary conservatory it would be imposoleander grows into veritable trees, 10 to 20 feet high. It eommences to bloom early
June, flowering constantly to November. Fuchsias.
What are the best fuc
house?-. S. S., Californi
There are only four or five varieties of this popular flower niseful for winter blooming.
"Mrs. Marshall,") a fine variety with whit sepals and brilliant carmine corolla, will Hower
the best. "Speciosa" will the best. "Speciosa" will very seldom be withthe corolla a fine erimson. A single plant will give you 200 to 400 flowers in the conrse of the whiter. "Carl Holt," with white sepals and best for red variegated eorolla, is one of the bart or winter flowering; the flowers are very
large and semi-double. 1 can only speak of the above from experience. "Corymbiflora" and "Syringiflora" are also stated to be fine winter
bloomers.

## What is "Cyclobothera Elegans."

The Cyclobothera elegans is one of California's
nest bulbous plants. The bulb is small. The flower is a pure colden yellow, cup-shaped in form, the perianth being cpmposed of three large and three small petals; the large petals the laside. It blooms in April and May, each
bulb producing three to six flowers. The whol plant never attains a greater hight than nine inches. In cultivation it will be very valuable;
for borders to beds of larger growing bulbs it is Anemones.

Yes, it grows readily in this statc, produc-
ing finer blooms than they ing finer blooms than they do in the East. I
have had thent with fowers over three inches
in diameter. It should be planted in the fall,
in very rich, light loam, placing a handful of
ting about half an inch of soil between it and ches deep, and water freely when in bloom. To Inquirers
Please make your questions as short and ex-
plicit as possible, and they will be promptly answered. The answer will ou address as below
EI Dorado

## A Flowering Shrub

Editors Press:-The following may interes ome of the Rural Press readers. It is an ex tract from a letter which I recently received rom A. G. Bisbee, Esq., of Willoughby, Ohio He writes:
You will remember, perhaps, that last yea he 25 best hardy the 25 best, hardy flowering shrubs, and vote
No. 1 was conferred on Hydrangea paniculata. Now, I want to give you my vote for the one know, and I have Hydrangea paniculata, yet it is a manufactured shrub. If you have in locust, and can find some sprouts about as larg as a broom handle, then if you can find any o the moss or rose acacia (flowering locust), tak
grafts of the latter and graft on the former and you will have a plant that will put the Hydrangea in the shade.
The grafts must be set rather early, as soon as the buds begin to swell; if set late they will ing locust is worthless on its own roots; the lo root as it will when its owu top is growing. The umbrella iocust is a fine foliage plant (or hardy shrub), but it never blooms.
Will some of the PRess readers who hav made similar experiments, sen them to th Editor or to
El Dorado, Cal.

## Horticulture.

Orange Culture in the Sacramento Valley
Editors Press:-The January issue of the Southern California Horticulturist coutains an
nteresting discussion on semi-tropical fruits, in whicb a committee makes a report on an inves tigation to the que stions of irrigation, fertilizers, budding, diseases, pruning, etc. The subject of tropical fruit growing is becoming more inter esting each year, and there is scarcely a family and use throughout our wide-spreading valleys, foothills or mountain ranges. As to profit, few f any, expect to compete with our souther counties, which is the home of semi-tropical .
The irrigation question is becoming an interesting one and its application to auy one object,
is food for thought. In the committee's report, referring to the orange and lemon, some growers
cover the entire ground with water, without cover the entire ground with water, without
regarl to cultivation. Others irrigate less and cultivate more. The opinion of many is that an over-surplus of water is a detriment to the
roots of the trees, as it tends to deeay. This same subject is often discussed anmong those who have propagated tropical fruits in the Sac
ramento valley up, different ideas promulgated and each in hi own practical way has worked, out systems o treatment adapted to condition of soll and its have adopted is similar to that of Mr. N. W
Blanchard, of Santa Paula, Ventura eonnty, who, as stated in the proccedings, has a lary orchard in the Santa Clara valley, but our's is of more of an improved plan.
In the spring, make a deep basin around the
tree, whieln remains throughout the year. Fill it with rotten compost, then fill it with water, but do not cover it each time with dry earth. The compost acts as a mulch, but little evapo
ratiou occurs and the surface is kept cool and moist. Thus the moisture is retained twice the time it would have been had there no mulch that is, it maintains a more uniform tempera ture. The roots remain strong and vigorous.
The water does not scald the tree as by flood

The young feeders extend in every diree seeking food and nourishment for the
The tree perfects its fruit more gradually and is not liable to disease.
ally and is not liable to disease.
I have, perhaps, the oldest
the plains-19 years. They are healthy, stron and vigorous. The greatest drawback is conn-
ing in contact with our north winds. Then they require plenty of water each year I work in the complost left during the past year as a
fertilizer. Make a new lasin and refill it with new compost.
The classif
as to the amount of water whiel is refuircd, in order to provide suflicient for absorption and evaporation and thus keep up a uniform state,
was noted by Judge Laton, of l'asadena dea on the question agrees with min
My oranges are standards from the old stock brought from Los Angeles. The lemons ar
crop last year was small, as the trees were five
years old. This year the trees have made a tremendous growth and produced the larges
lemons I have ever seen. This I attribute t lemons I have ever seen. This I attribute to
water, good mulching and having good drain water, good mulching and having good drain-
age. The situation is on a knoll. Both the lemon and orange skiu are thick at first, but ater juicy and not so sour
are jom
some have budded trees. They come in earlier; but, as far as I can judge, standards
are the best for length of life. My neighbor Mr. Lowell, has a fine orange tree, thornless, lossoms early, fruit large and sweet. Mr. Lee arger variety than anyone else on the plain His hardpan is thin, lying on a marly soil
beneath. He digs through and does not water. beneath. He digs through and does not water.
The roots find sufficient moisture and he has In roit.
ine fruits
In many gardens. The soil is deep, black loam, reat depth The roots penetrate to a healthy, bear heavy fruit and are of good size. On the American river, the soil is sandy loam. What few trees are out are doing well. On the plains, where far the most are raised,
is red, light depth, resting on hardpan.
W,
When young, the trees require the best of
are and protection from the wind and frost. care and protection from the wind and frost. After a few years they take care of themselves.
During the late heavy frost, I do not see that During the late heavy frost, 1 do not see that
the old trees have suffered. Sometimes, when ate waterings in the fall are given, the ends on
he tender brances that have grown out are cut off some few inches.
Throughout the city, the young trees are high stakes, as the frost is heavier there than out on the open plains. In regard to adobe strong and healthy. As the soil is of a stron nature, I do not see but by prudent care and cultivation such soil can be made suitable for
their growth.
GEo. RICH. heir growth.
Sacramento

## Diospyros Kaki Again.

Editors Press:-I was much interested in an article in the last number of the Rural tory, its varieties, and the methods used in Japan to perfectly ripen that fruit. Had the writer of that article confined himself to a rec ommendation of varieties with which he himsel is acquaiuted, without an effort to disparage va-
rieties imported and "advertised" by others, who may have equal facilities with himself for securing the best, I should not have felt called
upon to notice the article, which is valuable upon to notice the article,
or its general information.
The writer of the article to which I allude has, on several occasions, gone out of his way
to infornn the public that "there is no such va-so-called seedless variety, advertised here, is undoubtedly a mistake." Now, the firm with ug and selling trees have imported a variety o the Diospyros which was selected by a very careful aud competent person from a noted nur sery near. "ioto, and named by the growe
"Seedless." We also made a second iuportation of several varieties of grafted trees from the neighborhood of Yokohama. The grower
of these last is a very intelligent man, and was tennial. He sent us with his invoice of trees a luster of drawings of several named varietie "Seedless." This gardener names several others which lie calls best. It so happens, however, that he does not mention one of the varie, ties which your correspondent names as "best." Perhaps this eircumstance may be explained by
the fact, as stated by Mr. Loomis, that in Japan the fact, as stated by Mr. Loomis, that in Japan"
"the names change with different localities." The names change with difierent localities. less" Mr. L. calls Imperial; also, it may be re mimport, as "Ahmong," "Die Die Mauru," and known to Mr L by other names
As further bearing upon this point, it is wor thy of mention that for years we have imported rom Japan the persimmon seed. We always
ordered seed from the best varieties, and alway received seed labeled "Hachaya" and "Ah-
mong," as the $t$ wo best varieties known in the
markets. And when we find this opinion as to markets. And when we find this opinion as to
quality sustained by the gardeners who graft nd grow the trecs, we feel confidence in the orrectuess of our nomenclature.
pinion, the introduction of this that, in my prove a real and valualle acquisition, and all who have been instrumental in disscminating it among our people are entitled to thanks. The
trees will soon be in bearing all over tho State and we ean thon select the varieties that best suit our climate or our tastcs. I rejoice in ant nd should not have asked room for these stricures if it had not secmed needful in self de lucing this tree into the State, we give our best fforts to procuro the lest varieties; we dis lisparaged, even incidentally

Niles, Feb. 9th, 1878.

Western New York Horticultural Society Edtrors Press:-This society met Januar 23d, and continued three days with unabated interest. The attendance was very large and iucluded horticulturists from nearly ever eounty in western New York, with some from Pennsylvania, New Jersey and Canada. A
prominent feature of the meeting was the inprominent feature of the meeting was the in-
creased interest in insect euemies and the determination manifested to subdue them Especial attention was given to the coddlin noth and curculio. There were several inventhe mions exhibited to aid in destroying the larva mination to pursue the enemy with relentless vigor. Vcry fine exhibitions of fruits were made by Elwanger \& Barry, of Rochester, and Mr. E. Heath, of Genesse county. There were also specimens of dried fruits from Reynold's
evaporator. Irrigation received considerable thought, and experiments on a large scale wer Timber protections
Timber prections for orchards was advo Thed and urged as a growing necessity
The new phosphates and fertilizers which had fruit growers or nurserymen. Barnyard ma nure, muck lime, salt, and clover plowed under have proven most satisfactory. plns frnits are proving very satisfactory aud the prospects for fruit growers are more promising apples and pears are made worth about as much for drying, canning, jellies, as the whole erop A growing in
A growing interest was manifest in a copyright or trade-mark law for the protection of
the names of new fruits, thus enabling the the names of new frints, thus enabling the
originator to reap some reward for his efforts in growing it.
It was believed by many that the blight so prevalent among pear trees was on the wane and might very probably be as uncommon in a
few years as it had becu for the last 25 year previous to the year 1875. The past year it
had been more like the apple twig blight, less Among new fruits, the "Brighton," "Lady Among new fruits, the "Brighton," "Lady," and several other new grapes were recommended
as promising. The "Lees's Prolific Black" cur rant was highly recommended as being more
prodnctive, better flavored and larger fruit than any heretofore grown. The crop of fruit the any leretofore grown. The crop of fruit the
past year, althongh lighter than usual, had
been sold pretty closely owing to hish prices, been sold, pretty closely owing to high prices,
and several counties had shipped from 100,000 to 200,000 barrels of apples; while Erie county
claimed to lave sold $1,000,000$ barrels. President Barry and Secretáry Reynolds were re
J. B. Josks. eleeted for the ensuing year.
lochester, N. Y.

## The $D_{\text {AIRY }}$

## Bermuda Grass

Eniors Press: - I notice through the Phess that Mr.
George Rich has some Bermuda prass. Will you please
 Vatividad, liontercy county.
Edrors Press:-I am desirous of getting some roots of
Bermuda grass, to cover a grass ןlat less lian onc-quarter
 Editors Press:-The grass originally came from the South. I set it out for a grass plat.
It grew and remains green. It is perennial. The plat is on a high knoll situated on the plains. I sowed alfalfa with it, after sctting it out by joints and root so as to kill it, but did not sue
ceed. The Bermuda grew faster than the alfalfa. It is a fast spreader. The joints extend from three to four feet in one year, if not eut of
Each ioint will form a root. Horses will eat it , I havo not tried shecp, but have no doult they will. It grows thick. The roots form a mat, and when onco it gets a hood, it is
hard to eradicate. It will stand drouth, but will not grow thriftily if dry. It is hard to kill. After roots are exposed to the air, if thero any moisture in then, thcy will keepalive. never tried it on hilly land, and am unable to say whether it will pay for the expensc. I donbt and kecn alive It does not throw down root and kecpalive. It does not throw down would be good to prescrive lanks or levces. Had oll could not have cut through it and ruin so many farmers. If you do not care what becomes your land, or always keep it for pasture, and

In reply to Mrs. Burdcll: It would not tako very large box full, provided you set tho roots Set out in rows moist soil to make one foot in each row. In a year it will spread and cover the surface, rooting itsclf. But take my advice ;
sow some other yrass. Once in the ground, it will remain until doonsday, and be a plagne the is willing to run their own risk, I can send it by on my shoulder ., but don't throw Geo. Ricul Sacramento, C
[Was thero ever so honest a salesman? May
e live as long as his grass.- EDrtors Press.]

# Parters oz Hopsafarpr. 

## Corregpondence cordially invited frolu all Patrons for this departueut.

Removal


## ANNUAL MEETING

Office of Grangers' Business Association. Notice is hereby fiven that the Annual Mecting of the



Financial Questions.
The Reign of the Bondholder. Entors Press:-Goverunent is or ought th
be the guardian of society. If one of us was appoiuted gnardian for a large family of children, and we should select some of the stronger and most vicious ones as our vets, and allow
and assist them in despoiling the weaker ones of their inheritance and labor, we shonld there by show that we understood and anproved the policy of our (iovermnent. Our Government which are under the control of capitalists. In order to enjoy the benefits of this protective tariff, the manufacturing capitalists has a mo-
tive to limit manufaeture to the wants of the tive to limit mannfaeture to the wants of the
American market. Therefore he will not compete in foreign markets, and help pay the bal.
ance of trade and iuterest on the national deht ance of trade and huterest on the national dent
abroun, because he would therly loose the
benefit of the enhanced prices a protective tarriff gives.
The
The American farmer is supposed to be alle to
pay high taxation and inflate prices, and compay high taxation and inflite priees, and connThis, he is able to do by robling posterity, in
selling the accumulatel ricluess of ages from seling soin. The poliey of makiug farming the
thack horse of (iovernment and society has been pack horse of covernment and society has been
male to work, beeause labor-saving maehincry
has taken employment and bread from thouhas taken employment and bread from thou-
sands, who fron necessity have been forced as the lesser evil to till the soil. The policy will
in half a century, make the great Anerican in half a century, make the great American
desert a a geographical reality, so far as whent
enlturc is concernel enlture is concerne
A Frenchnan is too patriotic to profit by his
couutry's misfortunes. He scorns buying his couutry's misfortunes. He scorns buying his
country's obligations for less than their value, but our (Governuent's greatest pets were the ones who paid 50 cents for the fovernment
obligation to pay a dollar. fiovernment ail mired their patrintism aud generosity. Whencver they took snuff, Government sneezed some
of its brains out. For every 70 cents paid, Gov. ernment promiscd a dollar and interest, till
paid, aud gave then loack 90 cents to lend out paid, aud gave then back 90 cents to lend ont
to the people, or to speculate with. The bond-
holders' interests were to inflate. holders interests were to inflate- -so he in-
flatcd. The inore he lent to (iovernment the more nioney he could lend to individuals, A
public debtt was generally considered a " publie public debt was generally considered a "publie gang of toafers at a frec lunch, with pleuty of It becane difficuilt to find atmongrel pup worth less thanis 850 , or a corner lot, 50 miles from the
first huose, at eess than $\$ 100$. That worthless frrst house, at less than $\$ 100$. That worthless
half billion of Califoruia gold, there was uo further use for. No the grocery man and all the
bon ton sent their fanilies to Hurope. The diseovery was made, they could save enough in
the price of clothing to pay their passage the price of clothing to pay their passage
and enough in price of house rent, to
pay all other expenses. The manufacturer fay ang othat inflation had heutralized the the high tariff, mustly qave up the market to
foreign gods. The railroad buildir kept on for a while with lorrowel inoney aud pronises
The farmer kept ou with his crops, but intlated The farmor kept ou with his crops, but intlated
prices eat then
Thp before they reathed Europe. minding one of the lattle of two eats tiel hy
the tail. Was the fault in the cats, or vicious boys who tied them? Shortly the for
eign finauciers found out that we were a nation eign finaneiers found out that we were a nation
of siendthrits, anl sent us the word the store
keeper sent the minister. The minister fron
. keeper sent the minister. The minister from
the pulpitt wishing to prove his doctrine ex
claimed, "and what says John?' The servant
(auickly answered. "The quickly answered, "Jolnn says, youn shall have
no more goods, till you pay for what you have
no had." "his nild, renaiark of .John Bull set people
to figuring, when it was found it would require to figuring, when it was found it would requir
$\$ 30$ from every nan, woman and ehild, each
year, to pay the interest on the little delt year, to pay the interest on the little debt on
New York ceity of slos,0.000,00, and pay its
oftieers. But then that showing was not so very inost of that can lhe thrown systern of taxate, and he
made to fall ou the Westeru farmer, who is
supposed to be able to stand anything. Lest
any rival city should take advantage of New
and any rival city should take advantage of New,
York, it was managed, Juring the iuflation,
that that they all shoull contract debts of respeeta
ble size-abont all they could earry without ble size-abont all they could earry without
driving trade through Canada. Then many o the Statcs, especially the carpet-bay ones, piled up such Ioads of delit on their people that most
of them regretted that their property had not been confiseated at once. It is certainly more mereiful to cut off all of a dog's tail at once
than to cut a part at a time. There was the foreign debt of all kinds which required $\$ 100$, oou, on to pay the iuterest, and less than that
sum in gold and silver in the whole country to

## This sy

1573, when extensive bankrupteies attested the turning point of the bankers' inflation. siuce
then the nation has heen sobering up slowly The bondholder does not want our silver mine to furnish money to the people, nor for the (iov
ernment to do it. Hle wants foverninent to sell more bonds and releem grcenbacks, whic draw ine interest from Government or the peo
ple, while his bonds and bills draw interest Mom both. The sole power to issue paper
money will enable him to raise or lower the nominal standard of value of property, by mak
ing money plenty or scarce, as may suit his in terests. The corporate power of coining paper
money is the most dangerous, and las been the money is the most dangerous, and lias been the
most damaging of any neasure ever authorize by state or National Govermments. It is lik authorizing nerchants to use India rulber yard
stieks, and weights and measures that contrac stieks, and weights and
and expand at pleasure.
stockton, Cal.

## From Another Correspondent

Eurtors Press:- The money question is just
w exciting a great deal of interest amon ow exciting a great deal of interest among
farmers; more, perhaps, than at any other pe
iod of our existuce as a government. Jus what office moneyen rills (whether paler or muse
allic), in this busy hive of hunamity, but few tallic), in this bnsy hive of humanity, but few
armers ever stop to inquire, and fewer, per haps, care whether it has an office or not, just o long as they get a smail sharc of the precious
tuff.
We know that the Bank of lenice was a very stay of the goveriunent for four or five hundred years.
which have long since passed away. Not so with the banks or hanking institutions whicl fluence, religious and political, until it is hardly saying too much to say that they control the
political and productive destinies of the world But 1 am getting off of what I intended when why our (iovernment should pay such large sums of money to hire the banks to take these bonds (money) and then pay annually many
millious of iuterest to be re-let or loaned to the citizens (the only produeers of real wealth of indiviuale or nations, at a greatly increased
and onerous rate of interest, and this bringing the entire machinery of the fovernment under the direct influence of the banks and incorpo rated capital. Why should the foverument no and greenbacks of equal purchasing power Then issue greenbacks enough to loan to farm have the security to give, such sums as they are compclled to have, at a low rate of interest The thee per cent. per anmum.
The Government would thus
time, be relieved from the great necery shor sorting to so many expedients to draw from productive industry so many millions to pay interest many millions with which to pay th necessary expenses of Government, and at the
same time relieve, encourage and assist the productive industries of our entire country

The National Grange and the Financia
Emitors Press:-To assume that the Granger of California are a unit in favor of the repeal of
the resumption act and the remonetization of ilver, because the National (irange expressch is wrong. I have scarched diligently through the "Icclaration of purposes of the Nationa by-laws of both the National and State Granges and have failod to find anything giving
power to the National Grange to speak author itatively upon any such questions, and any such action by the National crange ean be nothing
more than expression of opinion, simply indicating the opinions of the iudividuals so votiug and having no force of law, and camnot in any
degree lind the aetion of local Giranges or the nsciences of individual members of the Order
Graxixan, CaL

Norl, Grasis.- Mister C. A. Colly writes as Sollows: "At our installation, to-day, we en eel that we have taken a new lease of life in calliug to mind the precepts of our Order an exchanging friendly greetings with each other
Our Matrons espeeially feel that we a hall of our own that we can decorate and which alnost insures suceess to our enterprisc. Mr. Wintney Cirange. - Ehtors Press We are not lead ly any meaus, as you see lyy
our list of officers, anl say never die, -0 . 11 , $\mathrm{H}^{\prime}$,
Duvciy, Sec'y

Resolutions of Social Grange. The following resolutions were unanimousi adoptel January 26 th, on the occasiou of instal
lation of their ofticers for 1885 : Wurreas, An inticqualivy existu in

## nforeement oi laws regulating the location of ninining su


 take possession, and rempe therefrom its minural weath
and then abandon said land without payint he laww

 and for rpeeculative purposes, until sucl land has bee aid for; therefore
Rexalleed, That Social Girange No. 271, of Sacrament
 terishature of Califernia to request Cuyresss to simodit

ande
dierolecel. That these resolutions be bent to the Sacra


 sacramento county:
Rosolutions of Social Grange on Toll Bridges





 Cepisalature. That these resolutions be sent to the Sacre
Rexol
antord



## Election of Officers.*

Ben-Lomond Giraseg, Santa Cre\% CoFritz Quistoy (?), M.; Thonas Burns, O.; John
Burns, L.; James Jones, S.; John Burns, Jr. S.; Robert Canham, C.; D. D. Thompkins -; James Burns, S.; Willian Rarnett, (i. K.

 ter, A. S.; H. Vogt, T.; E. S. Butterwoeth
Hec'y; T. U. Aleander, G. K.; Nlrs. I. Slanghter, Ceres; Mrs. M1. A. Dennison, P'
mona; Miss M. E. Green, Flora; Mrs. H. L
Dow, Li A. Dow, L. A.

 W. J. Berry, G. K.; Mrs. Anna Modges, Ceres; Mrs. Nartha Holges, Pomona; Miss Ritt
Traber, L. A. S. Installation, March 2d. Mt. Whitsey (irange, No. 231, Flecton
an. jith.-0. f. Foot, Sr., M.; IW. Noore
 R. Grayhan, G. K.; Natila Nuncan, T. ; Sister L. A. Duncan, Flora; Sister (iray
ain, 1omona: Sister A. A. Foot, L. A. S.; In stalled, Jan. 19th.
 Walters, S.; C. I. Collender, A. s.; Dr. WF.
Whithy, C; Rolt. Lovell, T.; C. B. Ingalls
 Ceres; Mrs. S. P. Bailey, Flora; Mrs. Robt
Lovell, Pomona; Mrs. Ml. A. Lovell, Lect. Sortil Sutrer Grivak, No. 207...Thomas
Boyd, M.; A. Lhandler, O.: L, B. Ihinnan
;I. I). Marvin, S.; John Jones, A. ;i. H. H. L.;
ic
H. Hudson, Sec y; Wm. F. Iioberts, K. K.; Mr
susau Boyd, Ceres: Mrs. Harriett Harris, P nona; Mrs. Chloe Abbott, Flora; Mrs. Ann Y Roberts, L. A. S. Installed, Jan. 5th, 1878 .
Table Pluff Grange, No. H101, Hembor.in O., ELECTIN, Dec. 29th. Jackson Sawyer
1.; 1. Olouke, O.; Ed. Tierny, L.; Win.
 Sec'y; J. C. Foss, (G. K.: Mrs. M. Buyet
Ceres; Mrs. Ed. Tierry, Ponona; MIrs. C.
Diekson, Flora; Mrs. 13. H. C. Ionlard, L. A. - Onicers of Grankes are requested to sen. list of offi.
cresect, dite of election aud day sel for installation,

Change of Officers.-Emitors Press:-A the last regular meeting of Stoekton (irange
No. 7 , Whin. 4 . Phelps was elected Secretary nd installed in place of Thus. stevens (resigned tate $K$ same Phelps (resigned).- Wm. G. Pheips, Sec'y.
Hon. 1 ster Gravece, No. 11, installed officers
the lirst saturday in February, as follows

Agricultural Notes.

## California.

(Grals.- In lependent, Fcl. S: The is coming forward rapidly and already are the fields beeoming covered with a robe of green giving promise of a glorious harvest the comin autumn
Iteus.-. Record, Feb, 9: We learn that Inr head has neighborhood of 10,000 head of sleep siuce the commencement of the
recent storms. The Nacramento river was higher at Jacinto than ever before known. ${ }^{\text {a }}$ I. Warlield, who has a rauch on the black was in town to-day. He reports heavy rainfal in that section and thinks it has been greater than at chico. Considerable grain in the lower grounds of the black land are under water, and
he is nuder the impression that the wheat will he drowned out. Many of the sloughs are full,
be but to those faniliar with the location, th Baylis, we hear, has 3,000 sacks of grain under water on his Butte creek ranch, all of which is ikely to be a total loss.

## COLUSA

un, Fe p island fowes Floatel A wax.-Co pelled to vacate their houses, and, from all pacounts, will uot be able to occupy them again, as there seems to have been a demand for then at Kinght's Landing. A tule rooster came sen' my house pass here with a picket-rope attachell thereto?" We informed him that we had seen so many houses passing that it was following named are minus homes as near as we can Fearn: J. C. Frasier, fine dwelling house, $\mathrm{x}^{7} 75$, fll finished; large barn, plank hoor 5,000 gallons and all his farming implements ieo Picard, dwelling and barn; (i. (iuild, house
and barn; A. H. Hose, small dwelling, large all farming kitchen from new dwelling, besides and faing inmore Howell, house Lemon \& Wing, house. Besides these there are many others whose farmiug utensils have been swept away
contra costa
Fotl Fiellis.-Gazelte, Jan. 9: Some of our armers find their early sown grain so foul with cheat, thistle aud other weeds, that they think avorable weather for it this month, having confidence that they will be gainers by so doing.
Testing the Ghirow Methon. - In accordauce with arrangements and understanding had , the efticacy of their squir rel poison at several points in the county, beginning at Pinole on Tuesday next, if the
weather is favorable, but if not, then at a future time, of which publie notice will be given if practicable, or personal notice to the com-
mittees if pullic notice cannot be given. The result of these tests will be a waited with interest by many
LOS ANGELES
More Abott the Al.garoba.-Cor. Anaheim Guzelte: I have availed myself of the opportu-
nity to learn a few more facts concerning the algaroba tree. This tree somewhat resembles the manzanita in appearance, and about a hundred I know only two varieties, the thorned and thornless, the former of which is said to be preferable for the reason that it inakes a most admirable hedge, the thorns preventing stock
from browsing it. The trces commence to bear when four years old from the seed, and the yery hard and must be subjected to the action of boiling water before planting. I siucerely believe that the general introduction and wholesale planting of these trees wou
The Mrlping Hands. - Ten teams, with plows, harrows, etc., took eharge of Wm. A. y sundown that estecmed citizen's whole place was put in first-class order. This noble action will doubly repay the large-hearted individuals not have helped, had they known Mr. Mçib tivation of his trees, vines, etc. The voluntee
action of his neighbors will be registered in the only the righteous are rccorded.
Prof, Mlleard's Plenchilition.-N. Stevens, oil, and is fully satistied with gypum on alkal land he tried it on was very strong alkali, and
ncither weeds, beets or anything else would
row or even start on it. Now he las a fin healtly stand of barley, and is satisfied that all reclaimed hy using gypsum. The Co-operative of the stores will get it for parties who wish to use it.
More
ar Vineyards.-San (iabriel Ǎves: Tw from San Ciabriel station in Fastern cars, owned

31st of January. They will go through to destination without ehange. The wine and brandy
is from L. J. Rose to his house, Perkins, Stern $\&$ Co., Chicago. Mr. L. J. Rose is preparing
640 aeres in front of Chapman Bros., and next to Santa Anita ranch for a new vineyard. ${ }^{5}$ He He
has already received from Yolo county 5,50 has already received from Yolo county 5,500
euttings of raisin grapes and over 1,000 of wine grapes from Anaheim; two car loads more are
expected from Sonoma valley. He will also buid six miles incing, has already received 50 ber, which is expected daily MONTEREY.
Tramps Directory, -Slack's Canyon Cor.
alinas Index: In November last I sheltcred and fed a tramp who afterwards wrote my name on trees and gate-posts along the road to
Hollister, and affixed a monogramic sign which hinted to others of their tribe that mine was a good place to get a square meal of-potatoes Gmiv
-Farmers all happy over the last rain, but some of them are crying for it to quit until they ean get their crops in. They ought
to have their seeding doue like the wise ones. to have their seeding done like the wise
Wheat is up everywhere and looks nice. NAPA.
Farming on a Large Scale-Reporter,
Feb. 9: Mr. Abram Clark, of Berryessa valley, has this season, in Colusa county, seeded some 12,000 acres, mostly wheat. Mr. John Finnell, of Yountville, has seeded 19,000 acres in wheat and barley near Chieo, in Butte county. Mr.
Clark and Mr. Finuell both lease the lands thus Clark and Mr. Finuell both lease the lands thus farmed. They summer-fallow as much as practicable. Sinee October last, these two farmers
have disposed of upwards of $\$ 300,000$ worth of grain, and judging from present prospects, they wins pro They have more land under cultivation than any year before.

## NEVADA.

The Rainfall-Editors Press: The rainfall which is below is the fall as measured by my own rain gauge: 1877 , October, inehes,
$1.25 ;$ November, $3.50 ;$ December, $2.04 ; 1878$, January, 16.66; February 4th, 1.60. Total up City, Feb. 4th.

## SACRAMENTO

Lisbon District. - Editors Press: Mr. $G$ win states that the district is all right as yet,
as it is surrounded by a great sea of water. He has great encouragement that it will stand the pressure. The water being three feet from the top of the levees, shows how well it is con-
structed. Those who have been working the land are making preparation as soon as possible to commence spring work. Many who have
waited for the "Golden City" plow have been getting large eultivators made similar to Mr. Slack's. Mr. George E. Duden, ny neighbor, teeth for those who have the woodwork. They are made of pieces 6 by 6 inches and 8 to 10 feet long, bolted together. They havefer them to the "Golden City" plow. It euts the tule both ways, then harrowing, leaves it iu a fine
ashy condition. If the Lisbon district eseapes the flood it will enhance the property double. Some portions near the river are covered with
thiek salt grass; sams as in suburbs of the city. thiek salt grass; samr as in suburbs of the eity.
It is considered worse than the tules; and, by the way, it compares well with my Bermuda grass patch. This cultivator cuts it up fine
and then they use a moline plow, leaving it af terward in a good working condition.-GEORGE Rich, Sacramento.
The Isleton Sugarie.-The sugar refinery has elosed down for the seasou, as the beets
have all been worked and there is nothing more to do, except make some change in maehinery SAN JOAQUIN.
Nilew Trees.-Independent, Feb. 9: G. N of trees, imported from his native land, Dal matia. Among them are a number of Sorbula like anything ever beh and healthy fruit, untate. It is believed that this importation is the first of this kind ever brought to California. The consignment also eomprises a lot of genuine
white fig trees, the fruit of which is very large white fig trees, the fruit of
and some choice olive trees.

## SAN MATEO.

The Season.-Pescadero Cor. Gazette, Feb. 9 Pasture and growing erops are looking fine hillsides, where plowed, are pretty well washed, hence the damage in that way will not be great. before in this neighborhood.
santa clara.
Asparagus. - Mercury, Feb. 5: William Boots,
the extensive vegetoble the extensive vegetable and berry grower near
Milpitas, made his first shipment of asparagus last week. His asparagus erop last year
amounted to 117 tons, sonne of which found market in Chieago
SANTA CRUZ.
ben Lomond. -Euitrors Press: The crops on our mountain are looking well and the farmusual. They also have redwood stuff to haul to result will be prosperity and more plentiful
cash.-JAMES BURNS. SONOMA.
Srock Losses.-Sylvester Scott, the famous
bear hunter, from eight wiles west of Clover-
dale, informs us that the reeent storn caused
heavy loss of lambs and some old sheep in his
vicinity. He has the bears about cleaned outt haviny. He has the killed in one hunt of two weeks iu December Where the mountain roads nsed to be he
there are in many places only ditches now tULARE.
Woodvilue.--Cor. Delta: Things are prosperPlenty of rain, and plenty of credit again. Tule is up brimming full. The Sonth Side ditch is in ruminng order, and the farmers are busy put-
ting in grain. Every man is able to hold lis head up once more, smoke his sheep dip tobaceo and read the news.

## ventura.

Editors Press:-I send you a few items, written by one of our farmers here for the Free
Press. This ranch is on the line between this county and Los Angeles county and is the largest body of land iu Ventura eounty. It is in a
mountain range. with large groves of live and nountain range, with large groves of live and
white oak timber, which aecounts for us haviug white oak timber, which aecoluts for has haviug
twice the amount of rain that they had in Santa Clara valley. We have had 15.12 inches of rain up to February 2 d. -
Newbury Park, Conejo Ranch.
We quote as follows from the items to which our correspoudent alludes: We began three years ago, under many dimiculties, to pioneer in
this goodly land, where then only one man could speak English and there was no farming.
Notwithstanding the loss of erops last year, the Notwithstanding the loss of erops last year, the
farmers, with undiminished faith in the productiveness of the soil, have cultivated, plowed and sown a larger acreage this year than last.
Before the rains of December, full 5,300 acres Before the rains of December,
were sown to wheat, all of which is growing
finely We had in Deeember, five finel We had eighths inches of rain, thoroughly wetting the
soil, which is mostly black adobe aud retains moisture a long time. With one or two good
rains in January or February, we are certain of rairs crops. The grass is now growing rapidly.
lat least 1,500 acres have been and will be plowed and sown since the rain, making nearly 7,000 acres in erops, where three years ago only
Spanish horses, cattle and shcep roamed the country. The "No Fence Law" has been rigidly enforeed, till now there is not an animal roaming at large over any of tecurenejo
acres, and the crops are as sceure as inesed with a five-board fence. A large number of fruit trees and vines will be plana all month Next spring and summer nearly all the large
tracts in El Conejo will be divided up and sold in small farms, affording homes for many families.
Private Irrigation Projects.-AIail, Feb. : Our people do not have mueh faith in legislative aid to irrigation. In the absence, therethe, lead iu Yolo county. The project now on foot will, when completed, furnish water from
Putah ereek to the farmers of that seope of the country lying in Buckeye township, and east, if desired, to North Putah. On the north of
Cache creek, there will probably be a ditch to onvey water to many of the facmest the hills dividing Hungry Hollow from the plain nish water to most of the farmers in East Cottonwood, and the Moore ditch already stretches its arms in every direction in and around Woodgion known as West and North (irafton will be furnished with irrigation, except the northern
portion of Hungry Hollow, whith can possibly portion of Hungry Hollow, which can possibly do better without it than any other section.
They generally raise fair crops there in dry seasons, when other parts of the county fail.
TIIE RaN too Late. -A.
The rain too late. - A. H. Nixon, of Fair vew, tells us that the rains came too late for
him and some of his neighbors. He says he him and some of his neighbors. He says he
has 200 aeres of wheat which was dried out and died before the rains came. We are sorry to ear of this for that valley large amount of wheat for export. by Mr, Jennings that the ramie plants set out by him some time ago are, since the raius, beginning to grow finely, and have now got such
start that no doubt exists of their maturing in a start that no doubt exists of their maturing in
due time. Mr. J. has unbounded contidence in the suecess of his experiment.
Alfalfa,-The advantages of clover raising, when su of the same may be illustrated by growth of the same, may be illustrated by a acres of alfalfa. Upon 10 acres on the home place he cut an average of 10 tons to the aere, ores of alfalfa on the Oghurn nlace which net ted him $\$ 350$ in hay and seed, thus bringing him in $\$ 1,000$ clean eoin off 20 acres, bes
some 40 tons of hay put up for his own use.

## Oregon.

The RanNFall in Oregon.-Cor. Stockton
ndependent: Dropping into the United State
Independent: Dropping into the United States
Signal Service Office one day during our stay in
Portland, we were somewhat astonislied to
learn that the rainfall of the scason of 1876.77
learn that the rainfail or bee scasoun out
was 72.11 inehes, distributed throughout the year, the heaviest fall in any one month being
12.45 inches in November. Our astonishmen was even greater when we were told that at Astoria the rainfall for the season was 109
nches, or over nino feet! Californians would be more than satisfied if they could get that
much in five years. The greatest recorded rainfall
vein

Kohler \& Chase's New Building.-A handprising building for Kohler \& Chase, the enterare familiar to our readers, has just been completed on the corner of Ninth and Washington ptreets, Oakland. It is the most conspicuous buildiug and the only full four-story structure yet eompleted in that city. The building is constructed of brick, iron, stone and wood, is as far as possible earthquake proof, and has been put up in good as well as substantial style. dmirably in planning the building for its spe cial requirements. The cellar runs out to the
edgeof the sidewalk, and affords au excellent place for storage. The store on the corner i used by Kohler \& Chase as a music store, and i very handsomely fitted up. The upper floors arpanged in suites. The arrangement of the rooms is such that each suite is independent of
the others, so that the oceupants have more eclusion than is common in such have more these rooms are handsomely furnished, and are
now oecupied. A feature of the building is the now oecupied. A feature of the building is the great number of large, bow whiows, making it ight and warm. The edifice issurmounted by an ornamental tower, which affords opportunity
for an excellent view of the surrounding conuor an excellent view of the surrounding conu
try. The entire structure, externally and inter the owners and arclitects. It cost about $\$ 75$,
the 000.

Fireman's Fund Insuranee Company.-The
annual statement of the Fireman's Fuud Insur ance Company, which appears in this number o our paper, is worthy of elose scrutiny by prop
erty owuers. The past year has been a very trying oue to institutions of this character the shriukage in value of securities accepte when irredeemable paper curreucy was the While the Fireman's Fund, as a home institution, claims the confidence of residents of the dealing and its methods of busiuess are wel knowu, it also elaims credit for adherence to that prineiple in good underwriting which dis-
tributes its fire through which it may enjoy a large premiun ineome without so crowding its risks, as in th
event of large fires, as to render its polieie valueless. In this respeet it claims a speecial distinction among our home companies in doing
a general insurance lusiuess. The company recognizes all transactions East as well as West and that is the gold dollar. There is no depart ment of human affairs in which Darwin's do trine of the survival of the fittest" i
more elearly illustrated than in the insuranc business.
Photograpie Matrrials.-E. $\&$. H. T. An thony \& Co., of 591 Broadway, New York, are
among the largest manu acturers of phote among the largest manimacturers ors. Their
graphic materials in thel United States.
goods are furnished to local dealers everywhere and their nanes are familiar to all photogra phers. The illustrated catalogne of this tirm, of articles manufactured by them, which would astonish one not knowing how many accessories
are nceded in a first-elass photographic gallery. are incelded in a first-class photographie gallery
It includes eamera boxes, lenses, presses, back grounds, cottons, collodions, varnishes, head
rests, back supports, chairs, negative boxes rests, back supports, chairs, negative boxes,
photographic tints, retouching frames and penphotographic tints, retouching frames and penand one things used by photographers. They also manuf fact which has brought the firm's name to the position it occupies.
A Generous Californian, - We find by
reading the reports of the last meeting of the Ayrshire Breeders Association at Hartford that the society is considerably indebted to th ger Treasurer acknowledged that he had reMaytield g It This is the Pend Coutts, the like amount that this gentleman has gener onsly presented to help on the good work of the association. The thanks of the society were
voted to Mr. Couts for his continued generosity.
Shear the Sheer and Rivg the Hog:ee Baker \& Hamilton's illustrated advertise neut on the tail board of this issu
Signal Service Meteorological Report.
Week Ending February 12, 1878.


## News in Brief.

No successor to Pope Pius IX has yet been
The Prince of Wales has entertained Stanley dinner.
for the dead Pope have been did all over the country
Large nhmbers of persons are still being fed Tire beet sucar refinery
Town for the season
Tue miners in the Sal Claude Bernard, the eminent French phys Giden Welles, ex-Secretary of the Navy,
died at Hartford, Conu., on the 11th instant. hed at Hartford, Conu., on the 11th instant.
Fort MePmeston, Nebraska, was burned the llth instant
Wm. Welsin, President of (Girard colloge Seven burglars were captured on Sunday, in low groggery on Jessie street.
Sour 250 reeruits for Gcn. Miles' command ave gone to Fort Buford and Tongue river.
Tne building belonging to the Albauy ( N . Y .) Times was burncd on Sunday. Loss, 200,000 .
TIIE Presilent has appoiuted William A. Howard, of Michigan, Giovernor of Dacota.
STANLEY was entertained by the Royal (icographieal Socicty on saturday crening. the Municijal Court room of this city, this Montcomery Queen, of circhs notoriety, has filed a petition in bankraptey in New York.
Liabilities, $\$ 166,000$; noninal assets, $\$ 31,223$. A NUMBER of the overdue coasting vessels have arrived in port, after having expericncced
heavy gales. Several are yet to be heard from.
AN armed lody of men prevented a delin. uent tax sale in Steuben county on Monday.
the poor in the clurches last Sunday. A great many families had food supplied to them at their mes also.

## Chathan Dock Yard, the whole force, num-

 bering 4,000 men, will begin working extra Chas. M. Conrad, Member of Congress, under 1rresident Fillmore, died in New Orleans on Monday, aged 73.
## IEs of deep sea researches after the of the Challenter investigations, is

 manner of the Chinenger investigations, isbe instituted toward the e eiose of next year, in the Bay of Bengal and the Indian oeean.
THE contested election case of Wiggington vs. Pacheco, has beenr decided by the House in
favor of Wiggiugton, so that Pacheco has been A strong tidal wave has swept the coast of
Peru. The Callao mole has been severely dainaged. There was not a ship at the gnano de The persons who bccame sureties for Knight, Wellock, Kearney and others, have been re-
lieved of their obligations by Judge Ferral, who has allowed the aceuscd to go on thcir own THE President has nominated Charles Silent, Justice of Arizona Territory, in place of Judge expire. SEvator Pierson has introduced a bill apporopriatiug $\$ 25,000$, to be used with a like sum lonated by H. D. Bacon, for constructing on
the State University grouuds a Library and Art College.
News from Cape Town says: A general ad-
vance was made vanee was made against the cnemy January
15th, which was completely suecessful. Tci 15th, which was completely sulecessful. Tcn
thousand cattle and fifteen thousand sheep were thousand cattle and fiftcen thousand sheep, were captured. The kaffirs lost heavil. The Postinaster-(feneral has issued new rule Postmasters for small towns and for conntry districts will hercafter De appointed on lie rec-
ommendation of the Postuasters of the larges neighboring cities. Some Western Members of Congress fecl indignant at this loss of patronage. THE bill introdueed in the House ly Roberttoetion and security to shipping, trade, com-
sond merce and alhwial lands of tho Mississippi river, provides
000 for that purpose.
Up to saturday there have been introduced in this Congress 3,940 bills and joint resolutions, fifths of them were introduced by nembers of the House, and of tho entire number more tha
Secretary schurz has affirmed the deeision of the ieneral Nance in the matter of survey of the Jarupa Raneho, eomprising 39,-
000 aeres of land in San Bernardino eonnty, coul firmed to Abel Stearns: This decision ap-
proves the recommendation male by the sur veyor-Gencral last Oetober, for the erection of southern and eastern boundarics.
Pore liws LX. died in the Vatiean at Rome, year of his aye, the 51st of his episcopate and He was the 275 th P'ontiff, and not out of his predecessors in that long list served the churell
over as extensive a period. IIe clothed with scarlet nearly all the Cardinals now living, and named more than two thiris of the Bishops of


A Farewell.












The Two Angels







## Washington as a Farmer.

Beiore another issuu of the Press reaches the
eader, the national holiday, the birthday of
 Washiugton (Feb. 22 d. will have come and
gone. How can we better acll the attention of our readers to the interesting event, than ly
liviug au account of the rural life of our coungiviug au account of the rural life of our coun-
tryys father. The following was writen by
Hy ajor Poore for the $A$ merican Culturatar

- Mount Vernon," the Farmhouse of George

George Washington was lorn ou the fertile
farm then cultivated by lis father, situated farm then cultivated by hy father, situated
where Popese creek elupties into the O Otomac where Popes creek enipties into the
river, neary 100 mites below where the uational mietropoois now stands, ald he was reas
auother homestead, near $F$ Frelerickslurg. (iuiua (as well as Marylaul, the Carolinas and of their dessent from the cavalier aristocracy of
England, or of their couluectious with the de. feated Jacohins of Seotland, or the Huguenots of France. Their large estates were hell by by
royal grants or "patents,"
 acres, and they also owned large numbers of
indentured $w$ white servants and negro slaves. indentured white ervants and negro slaves.
TTide water was near every door, ant ships round
England brounht the caval er
 supplies of merclaudise in exchange for his croy
of tobaco, while smaller crafts came with the Producto, of the New England diaherees, and of
the West India plantations, to barter for lis

 While in the woods was an abundance of game. onial oificer, had, whilo a young man, an excel
lent opportunity of inspecting many of the best estates of Virginia, antl wheu at the age of tlirce

 tew years iater his marriage with the wealthy
widow Custis gave liim an abundant supply of
 to the merchant or manufacturer. His bride was a good manager, well versed in the domestic
economy of plantation life, and with her aid he adopted a system which was at onco novel and
profitable. Martial rule was virtually estal, lished, with overseers as subaltern officers.
Orders were giveu in writing, and obedience to them was imperatively exacted; reports of what regularly tiled; an extensive correspondeuce was established, and was kept up, with the leadsystematic method of Monnt Vernon resenbled the automatic operations of an intrenched army
counts, which are a record of his rural life, and
even during liie absence in the revolutionary even during hie absence in the revolutionary
war, he tirected the agriciultural operations at war, he directen the eagricultural operations at
Ilount $V$ ernon as arereuly as he did his cain-
 Irying "has rural was intervoven with hits
nilitary career, he agriculturist was mingled with the soldidier; aud those etrong sympathics
with the honest cultivators of the soill aud that with the honest cultivators of the soil, aud that
paternal care of their interests, to be notel thronghout his military career, may be assribed, in a great mearure,
of Mount Yernon.
The Mount Vernon estate sovered 15 square
 ing oak trees of the origiual growh show, while Alout two feet beneath the surface was a , hard
dlay or marl, and the land was too stiff to be
 manure, as thie owner virovel by experimeut.
After careful survess, Washington invided the 3,250 acres of his estate which were under cul-
tivation, into five farms, which he named the

 farms were subdivided into fields and orcharis, each one being numberel on the plan, and its
araea stated. only four days before Washing.
ten ton's death, he wrote a leter to this head man-
agker, on the importance of a methodical system in a, griculture, and alluled to a plan hie had just
completed, which made 30 - folio pages of his completed, which made e30. folio pages of his
close writing, for the oultivatiou of hiis estate. A general rotation of crops was established,
and the manner in which each ticld of eacli fann and the manner inw hich each hith or eacli farnn
was to be cultivated for several years to come was minutely laid dovn. To carry out this
 generally regarded his agricultural reforins as
visionary, and the relatives often courl hained that he was squandering the Custis property at Mount Vernon.
Indeed, while there was much that was com-
mendable in the habits and domestic manmers mendable in the habits and domestic mamers
of the Virginians of those days, their system of cultivation, farm buildings, stock and implements were alike inferior, aud there were strong was almost of practice. The rotation of crops little regarded; labor-saving inplements were
never thonght of, and the undersizad horses, cattle and sheep, were so badly cared for during the winter that they cast but faint shadows iu
the spring. The son planted his corn and the suring. The son planted his corn and him had, in the old of the moon, and the best farmers knew as little of the chemistry of agriomy. He was not over-popular among the those along the banks of the Potomac, who slaves. They would purchase the stolon produets of Mount Yernon, kill the deer which he
took so much pains to keep a herd of, and cut took so much pains to keep a herd of, and cut
his timber, often thus provoking him to use emphatically profane language, and to act in an
undlignified yet decisive manner, not exaetly in undignified yet decisive mamner, not exactly in
accordance with our recognized ideas of the The nume
reconstruction of diffieulties attendant on this region where neither method nor improvement
hai loen known, prevented the profitalle realization of Washingtons plans, generally speak-
ing. But his books show the extent of his op-
erations. In the year 1786 he slaughtered 150 erations. In the year 1786 he slaughtered 150
hogs, weighing 18,560 pounds, for the use of his family and servauts. The next year he had
500 acres in grass, sowed 600 bushels of oats, 500 acres in grass, sowed 600 bushets of oats,
100 acres with wheat, as much more with corn, He kept 140 horses,
He kept 140 horses, 112 cows, 235 working Washington's correspondenee with Arthur Young, of England, he complained that his land acre, the market price of which was Sl a bushel, while cradlers demanded $\$ 1$ lur day wages. He
had heard of a threshing macnine, and he wanted to obtain one if it would not cost ove S75. He also wanted 10 good plows,
variety of seeds carefully enumerated.
Writing to Thomas Jefferson, he alluded to lucerne, red clover and peas, and said: "Of all
the improving and ameliorating crops, none, in my opinion, is equal to potatoes, on stiff and from a variety of instanecs, that on such land a crop of potatoes is equal to an ordiuary dress
ing. In no instance have I failed of good wheat oats or clover, that followed potatoes, and conceive they give the soil a darker hue.
shall thank you for the result of your proposed experiments relative to the
ueas, when they are made.
When Washington returned from the Presi dential chair to his rural home, he devoted his whole time to its management. We are told break in the winter, when the nights were long.
On such occasions he lit his own tire, and wrote On sueh occasions he lit his own tire, and wrote seven in summer, and at eight in winter. Tw cal repast Immediately after breakfast he mounted his horse and visited those parts of his estate where any work was going on, seeing to
everything with his owu eyes, and often aiding
with his own hands. G. W. P. Custis, the
grandson of Mrs. Washington, said that Waslograndson of Mrs. Washington, said that Wasli-
ington, while on those daily visits of inspection nssally moved at a moderate pace, passing
through his fields and inspecting everything but when belind time, the most punctual men, would disllay the horsemanship time, so that the sound of his horse's hoofs and a quarter to three o'clock. quarter to three o clock.
The drawing room at M
namented with a climney piece of polished Simnanted with a chimney plece of which was sculptured agricultural devices, and there were many other objects of interest of a rural character about the culture and agriculture on the library shelve The gardens were large; and laid out in the for-
mal English style, with large green-houses, eontaining exotic plants procured from the west hicl Weforing, to bed at nine oclock, ng " "good-night" to his family he invariably recorded the agricultural operations of the day in a plain handwriting, Some of these entries are curious, and the last one reads as follows. " Wec. 13,1799 . Morning; snowing, and
bout three inches deep. Wind at northeast, about three inches deep. Wind at northeast, one o'clock, and about four it became perfectly clear. Wind in the same place, but not hard.
Nercury $25^{\circ}$ at night." Alas! the at night.
rought on sickness that night, and snow storm rought on sickness that night, and death soon
came. "First in war, first in peace, and first in the hearts of his countrymen," George W ashington, was also the first systematic American farmer.
The Backward Habit of the Japanhse. The Japanese habit of reversing everything, if we may regard our own way of doing as the
proper way, is very curions, and in some of its details, very interesting. Mr. (Iriffiths, in his man is planing. He pulls the plane towards him. I notice a blacksmith at work. He pulls the bellows with his feet, while he is holding eral irous in the fire, and keeps his dinner-pot hoiling with the waste flame. His whole family like the generations before him, seem to get their living in the hardware line. The cooper down while they work l'erhaps that is an im portant difference between a European and an Asiatic. One sits down to his work, the othe contrary wise to the Japanesc? Are we upside down, or they? The Japanesc say that we are
eversed. They call our pennanship "crab-writ ing," because, say they, "it goes lackward.
The lines in our books cross the page like crawtish, instead of going downward properly In a Japanese stable we find the horse's Hank where we look for his head. Japanese screw left, ours to the right. The baby toys of the Tryan race squeak when they squeezed; the apart. A Caucasian, to injure his enemy, kills him; a Japanese kills himself to spite his foe. Which race is left-hauded? Which has the
negative? Which the positive of truth? What is truth? What is dowu? What is up?
Nothing New Uxper mes Sun.-That events ccurred long ago quite as they do now seems some of our readers to peruse a copy of a verbal translation from the oldest journal known, Consul Sicinus was the acting judge to-day, There was a heavy thunderstorin, and the Velhi. In an hostelry at the foot of the hills of James there was a fight, in whinch the land.
lord was badly wonnded. Titinius punished which had not been inspected; the money thus paid was usel to erect a chapel to the (roddess Laverea. The broker Ausidius fled from towu to-day, taking money with him that belonged
to other people; he was caught, and had to refund the money." This record of affairs made more than 2,000 years ago would suit tho present day, except that instead of capturing our asconding brokers and bankers, and recovering the woney, we lose one and let the other go
free. We have something to learn from the old


## free. times.

Plain Talk to a Mirl. - Your every-day looks like a "fury" or a sloven iu the morning is not to be trusted in the evening. No mateight things it should contain, viz., a mirro tonth brushes. These are just as essential as your breakfes, parents who fail to provide their children with such applianecs not ouly make a great mistake, but commit a sin of the dinner work is over improve your toilet. llake it a rule of your life to "dress up" in the afternoon. Your dress may or may not be anything better than calco, bament you ber an air of self-respect and satisfaction that invariably comes with being well dressed.

There was a reward offered for the r
"a large leather lady's traveling bag."

## A Lecture for Our Grandparents.

Some one has truly said, that "To ridicule old age, is like throwing cold water in the morn-
ing into the hed in which we must sleep at night." Old people have a right to demand that they be treated with respect; but are they agreeable, and-as far as possible-cheerful? Failing in this, is it any wonder that neglect and disresplect sometimes follow? Old people cially if there is any thing worthy of reverence about them; but each man and woman should see that as they grow old in years children and grow out of all syn cause he is old, has a right to be selfish, sullen, and morose. said a little hoy, "دla, will grandpa go to "IVes, my sou, I hope so; but why do you ask that question? Because, ma, if grandpa goes to heaven, I whew! what is this boy bothering around her A short time since I read a long article, writ people That was our duty to love old for an aredl a minute description of him, investing him with so many virtues that not to love him-or any impossibility such as dheribed would be an person would be more of a pleasure than a duty Every neighborhood has its old person who, al though bowed down with weight of years, still has a warm heart for the young and a kind No need for the word "duty," to cause such people to be sincerely loved and respected. Again, every neighborhood has its representa-
tive, from whom the children instinctively tive, from whom the children instinctively
spring away, as from a plague. I'ersons that spring away, as from a plague. a wide berth to, aud whom no persor arte in which all the cell a long sewspaper the word "duty," will fail to cause such unsympathetic poople to he respecterl, much less loved.
Let us all, therefore, resolve that whatever be the number of our years, we will be true to the right, kind and sympathetic to all, espeecially towards the weak ones of earth, whether
they be in their first or second childhood. Doing this faithfully, we shall be loved aud respected all along the pathway of life. And says Nir Walter Scott in his vivid description of "King Rene:"

## "A mirthful nan he was: the smows of age <br> Exch in lips closing, touahed his teeming br With succh wild visions as the etting sun <br> Raises in front of some hoar glacier, Paintink the bleak ice with s thousand hues," -Nelson Ritter, in Rural New Yorker.

What a Wife Can Do with a Mortgaize, Mrs. . "' Th. T. writes to the American Culti homesteads nortgaged than there are free from causes of this sarily so. Being able to take a farm or buy a
house with a mere tritle of money, the value of the rest being represented hy a mortgage, is a loan to a man which he could not obtain in any with a mortgacge on it than to be a clerk ar a laborer in the city. A wife can help a mau to lift the mortgage or at any rate she can help pay the interest. Sometimes the husband is
too sanguine about the interest till the last minute, whell he has to raise the amount by a ruinous discount or doing without some neces sary article of farm economy. If the wife is troubled about this, do not be despondent (that will do no good), but first find out how much quiet way save little here and a little there sell a little bacon, a few eggs, putting by a dollar or two from ever butter crock which is sold. till the is a call for interest money and then you can show what a frugal wife can do." idea goes forth that Californians do not know what economy is.-Eds. I'ress.]
Friends.-Never cast aside your friends if by any possilility you can retain them. We drop off through inattention, or let one push through wetty jealousy or heedless slight or roughuess. Would you throw away a diamond because it pricked you? One good friend is not
to be weighed against the jewels of the earth. to be weighed against the jewels of the earth.
If there is coolness or nukindness between us If there is coolness or minkindness between us
let us come face to face and have it out. Life is too short to quarrel iu, or to carry black
thoughts of friends. It is easy to lose a friend, but a new one will not eome for calling, nor make up for the old one.
Tus Arizona Miner tells a story of two friends Who were recently attacked by lndians in that
State. They were both on mules, and the arrows were whistling by them in clouds. The mules were of unequal powers of speed, and the foremost man sung out: "doe, why don't you
eome along?" Joe, whose arms and legs were
Hying in the air like a runaway windmill re-
plied, as an arrow Hying in the air like a runaway windmill re-
plied, as an arrow grazed his ear: "Do I act
like a man who is throwing off?"

## True to the last: $a \overline{\text { well }}$-made boot

A Kxioht of the Bath: a rainy night.
A fuzzled pupil: a bewildered eyesight.
Foots and their back hair are soon parted.
If you don't want to be robbed of your goo
name, do not have it painted on your umbrell
What is the difference hetween a hungry man and a glut
too long.
THERE is a good reason why a little man should never marry a bouncing
called "the widow's mite.
You can get a very good ilea of "natural
selection" in its practical workings by viewring selection" in its practical workings by viewing
a celery glass after it has been once around the table.

A gevtleman fond of good living, refuses start his colt for the "two-year-old stakes,"
the grouud that if he wins them they won't worth the eating.

Some Indians use scalping knives of tortoise shell, probably on account of the old fable in with the hare.
Upright legislator: "What, sir! You take me for one who can be bribed? You insult my sense of honor-but in case I really we
man, how much would you give ne?"
The following is rather equivocal: "Maria Shewn, wived with her husband 59 years, and died in the confident hcpe of a better life.
The publisher of a weekly paper in Illinois prints being ridiculed for it by his contempora ries, remarks editorially: "We "publish nothing
A New periodical for women devotes 18 pages to fashion and ouly one to cookery. Falstaff strous. But one half-pennyworth of bread, to this intolerable deal of saeque
A lady that would please herself iu marrying was warned that her intended, although a good
sort of a man, was very singular. "TVell, replied the lady, "if he is very much more unlike other men, he is much more likely to be a good husband
A Child's sympathy. - A child's eyes! those clear wells of undefiled thought-what on earth
ean be more beautiful? Full of hope, love and curiosity, they meet your own. In prayer,
how earnest; in joy, how sparkling; in sympathy, how tender! The man wloo uever tried the companionship of a little ehild lhas care-
lessly passed by one of the greatest pleasures of life, as oue passes a rare 1 wer , without pluck understand you, you think; speak to it of the holy things of your religion, of yourgrief for the fear will not love in return; it will take, it is true, no measure or soundings of your thought; it will not judge how mueh you should believe, whether your grief is rational in proportion to your loss, whether 'you are worthy or fit to at-
tract the love you seek; but his whole soul will tract the love you seek; but his whole soul wilt were, on the feeling which is your feeling for
the hour.-Hon. Mrs. Norton the hour.-Hon. Mrs. Norton.

A Mother's Influevce.-The late Thomas H. Benton, who was so long in public life and
surrounded by temptations, paid the following surrounded by temptations, paid the following
tribute to his mother: "My mother asked me tribute to his mother:
never to use any tobaceo, and I I have never touched it from that time to the present day; she asked me not to game, and I have not, and I eannot tell who is winning or who is losing in games that ean be played. She admonished eapacity for endurance I might have at present,
and whatever usefulness I may attain in life i attribute to having complied with her pious aud correct wishes. When I was seven years
of age she asked me not to drink, and then 1 of age she asked me not to drink, and then 1
made a resolution of total abstinence, at a time when I was sole coustituent member of my own body; that I have adhered to it through all time
I owe to my mother." Nevr Music.-Oliver Ditson \& Co., of Boston, One song, "A wake," is evidently by an early riser. Another, "What Are They to Do ?" by Randegger, contains capital advice to lone
lovers, and the third, 'If You Want a Kiss, Take It !" by Richter, has a still better suggestion, which, unlike most advice, is pleasant to
act upon. For the piano we have a gay galop, "When We Laugh We Live," by Eay galop, a quadrille, ineluding lively French airs, ealled
"Ta Marjolaine" and a pretty "Farewell Schottische," by Mueller.
Chavgr is in the Man.-Husband says: it does not taste exactly as mother's did." langh within myself as I think, "Of course it does not. Who could make a pudding or pic
for a grown man which would taste onc-lialf so fop a grown man which would taste
good as those he ate in ehildhood?'

## Mamma, where do the cows get the milk ?

 "Where do you get your tears $\%$ ", was the an-wer. After a thoughtful silence he out:
spanked?

Young Folks' Column.
The Little Girl who Would'nt Say

 "Hand ne butter "'" "Cut me some che ese
So the enaries, this was very ruie alaughter to
Once blew her away in a powerful breze, Once blew her away in a powertul breez,
Over the meunains and ower the seas,
But down with the ants, the wns But down with the ants, tere wasps, and the bees,
In the woods she must live till she learns to siy licase.

## A Cat Hospital.

On Division street, about midway between Essex and Norfolk streets, in this city, stands a city. The outside appearance of the house i far more inviting than the inside, with its rick ety stairs, bare floors aud walls, and dirty eeilhouse. On the ground floor lives a fierman Jew, who makes a living by selliug cheap cig-
ars. The first Hoor is occupied by an Irish family. A Germau has the rooms on the second
floon. The third floor is given up to Mrs. Ro salia Goodnan, better known by the children in devotes much of her tine to the comfort and relief of persecuted and neglected cats.
administering to the wants of some 50 cats, of all sizes, ages and conditions. She oceupied two rooms, one on each side of the house. The ing purposes, while the back room is used for tients. Mrs. Goodnan is a widow, and, with
thay the exception of her cats, lives alone. When
the reporter called she held in one hand a puny kitten, with a large bandage over its left cye,
while with the other hand she was engaged in stirring some compound in a pot on the stove the stove, were cats of all descriptions. Some probably of prowling around at night. Others looked as if they had been clipped, being with our heir fur. Mrs. Goodman receives no pay
for her attention to the eats, only the satisfac. tion which it gives her to attend to the maimed,
neglectel animals. Her idliosynerasy is so well neglected animals. Her idiosynerasy is so well cat is found that is in want of food, or is in any way injured, the uufortunate sufferer is withont
delay placed in her charge. $-N$. $Y$.

How to Be Beautiful.
"How can I be beautiful?" Every boy and Here is Mr. Emerson's beauty recipe: "There is no beautifier of complexion, or form, or bepain around us." wo you sappose joy and no
will will work? Think of the nost beautiful people
you know. Ah, I knew some one would say "mother." Do you uot think these people ar
those who try very hard to make others happy I know very many beautiful people who would have remained very pl
to please themselves.
We want to try Emerson's rule for beeoming beantiful, so it wilh not do to forget that "There is no beautifier of complexion, or form, or be
havior, like the wish to scatter joy and not pain around us.
But we would like to have him tell us what things last longest.
He is all ready to tell whoever wants to kndure. In a house that I know, I have noticed a block of spermaceti lying about elosets
and inantle-pieces for 20 years together, simply beeause the tallow-man gave it the form of ragged about unchanged for a eeutury. Let an artist draw a few lines or figures ou the baek of a letter, and that serap of paper is rescued from
danger, is put in a portfolio, or framed and glazed, and, in proportion to the beauty ,of the lines drawn, will be kept for ceuturies." And there are beauties of heart, mind and character, that do not ineet the eye, but are none the less
powerful in "making to endure."-St. Nicholas.
The Exporit of Toys. - In former years, large portion of the toys usethl way, and the Old World is buying largely from America, not only the peculiarly America inventions, but also the toys which fornerly whieh amounted last year to over $\$ 1,000,000$ began five or six years ago. Then E. (t,
Williams, the agent of a large exporting firm, says a number of bankers sent some Americanmade toys to Cuba and South Anerica. The
trade then extended to London and thence to trade then extended to london and thence to
Hamburg and Paris. Now nearly every for Hamburg and Paris. Now neary
eign stcamer earries large quantities.
"Have you got air clock to sell-somathin' noice for a present to my sisther "" "We have
all kinds of clocks," repliel the jeweller; ‘"24hour elocks and eight-day elocks, from $\$ 1.50 \mathrm{up}$
to $\$ 200$ in suit you-a fine French clock, worth $\$ 15$. ." "Goo
'way w:I yer French cluck! Cive ns wai that
, 'way wid yer French chlck! Give ns wan that
me sisther kin understhand whin it sthrikes!"

## GOod HEALTH.

Conditions of Health in Rural Homes In a recent lecture, Prof. Kedzie said: Mueh depends upon the sitc for a house. Choose for which you must wearily climb. Let the ground How of with a gentle declination to the south or southeast; avoid swanps and low land. The
soil should le free from stagnant water with Iry sub-soil, aud the soil must be free from uch water to a depth of at least six feet. The honse should face the sonth or southeast. The hiviug rooms should be on the eastern side of
the house, because this receives the first sunlight in the morning and is in the shade in the afternoou. In summer the mornings are often chilly and the afternoons very hot. The usual ud brick. He thonght a brick honse afforded bettcr conditions of liealth because its walls are more permeable by air. By suitable arrangements you can blow through a solid, dry brick,
but wet a brick, and the passage is arrested. Brick absorbs noisture and expels air, and such of a pint of air; if a dry lrick can hold so much of a pint of air; if a dry lrick can hold so much
air, it can permit air to slowly breathe through cause it is impervious to air. Wood is, permome kinds of wood very readily permit the passage of air from end to end, but the air does 11 to make walls secure against rats and nic and this might be accomphished by bringing orward one course of brick so as to touch the
baseboard all round: the rodents could not then baseboard all ound. the ronents cet in a piece of
get through. If woor is usch
seantring between the studs all around at the top and bottom, and lay a tight course of brick and mortar on the top of these pieees of scaut-
ling. He advised not to build any half stories, and, if it was possible, to have a gool fireplace
in the living-room, and use it. No inanimate thing in the house is so cheerful as an opeen fire. plenty of raw material for this purpose; and once breathed is unfit to breathe again, and
should be turned out of the house. Nature has given every one a nose by which to detect in-
pure air. Every house should lave some plan of ventilation, however poor. Cellars also
should be ventilated. Here lies in ambush diphtheria and membraneous croup, the disas.
ters of childhood, and typhoid fever, that strikes at all ages. Do not expeet to preserve suntight. No plant so much as man de-
mands light and air. A good supply of pure water is a fountain of life in any household. To test water fill a perfeetly clean quart bottle
two-thirds full of spoonful of clean white sugar, cork the bottle, days, and if it remains elear and bright you need fear no evil from its nse; but if it turns
milky white and gives off an offensive smell, beware how you use it. Do not throw out or
doors or windows slops to fester and rot, filling

## the house with lies and foul vapors.

Preventable Diseases.- In the report o
the san Francisco Board of Health, made last week, oceurs the following paragraph: More
than one-fourth of the deatlis are due to dis eases that would hardy exist under proper
sanitary surroundings. Diphtheria and typhus sanitary surroundings. Diphtheria and typhus
fever are closely connected with bad draiuage while measles, scarlet fever, cholera infantum, dysentery and other diseases would be of far
less frequent ocenrrence with a proper system less frequent ocenirrence with a proper system
of drainage. Last summer, attention was called to a neighborhood in the northern part of the of illness. There was diphtheria and typhoid high ground, from which the descent was stee and in which a new sewer had been recently wooden drain leading from his house to the cesspool at the corner of the strect. It was
placed just below the surface of the grouud and was not provided with a proper outlet. The consequence was that the soil becaine more or
less saturated with natter from this drain and sickness ensued. One property owner, Whose
family was nearly prostrated by a low form of typhoid fever, had called again and again upon relief, but the little drain was not thought to be the cause of the trouble and was left un-
disturbed. The result was that the fauily lotermined to sell their house at a sacrifice and move away. The whole neighlborhood felt the
depressing effects of the vitiated air and diphtheria entered into many families in the vioin
ty. The eflect of bad drainage is secin not only ni
in the diseases that are duo directly to it, but
thering of the tone of health aud the marked predisposition to general diseascs.

Contamination of Ahr by Cfassools. -Tho Erismann that 18 cubic ineters of excrement, as cubie meters of irrespirable gases, proportioned as foltows, Viz: : Carbonie acid, 11. 14.4 kilos
ammonia, 2.040 kilos; sulphuretted hydroven
0.033 kilos, carburetted iydrogen, 7.46 h.t kilos. ite considers copperas and sulphurie acid
annoug the best disinfectants for cesspools.

## Domestic Economy.

Cooking Quail.
To roast quails, first catcl them, then rinse, When they have been niccly picked and drawn, water, and wipe dry inside aud out. Fill the body, with a dressing of bread crumbs and oys ters, seasoned with pepper and salt; sew them thers, seasoned with pepper and satt; scw them are to be roasted before an open fire, wrap cach quail in a grapevine leaf, then in a thin slicoco of
salt pork, and outside of all put a thin piece of salt pork, and outside of all put a thin piece of
white paper. Put them on the spit before a white paper. Put them on the spit before a
very hot fire, baste often with melted butter and serve on rounuls of buttercil toast that have the drippings. If they are to be roasted in the
 thin slice of salt pork, place in a dripping pan
with a very little water and cook partly then take of the melted butter and the drippsings, until they are
a fine brown. Place each one on a round of buttered toast that has been dipped into gravy from the hirls and serve current jelly
with them. To broil quails, pick them carefully so as not to break the skin, split down the
back, wash clean and wipe them dry. Dip each quail into melted butter, then place it on the gridirou over a clear fire; when partly donc
dip theul again in the lyutter, and repeat the dished once more before they are rcaly to be brown. Scason with salt and pepper, and place toast mader each bird; garnish the dish with jelly, and put a shice of led parsley and currant

Scgar beet Tinegar.-A writer in the A merican Cultinator says: I do not sec any
mention made of the value of the juice of sugar
beets for the purposes of vinegar. Oue lushel sugar beets, properly rasped and pressed, wil
yield five gallons of juice, which, treatel the same as cider is, will make a stronger vinegar,
of as good but different flavor; and in making
cider, oue bushel of sumar beets to nine bushels of apples will make a eider superior to apples alone. hery farmer who can raise
sugar beets, rasp and prcss them, will have
uice enough to make all the vinegar he needs or his owu use and a surplus for sahe, and be
adependent of the off- years for apples in the adependent of the off-years for apples in the would be increasel, as it would enter into many articles of manufacture from which the
priee now preeludes it. When it is found how deap sugar beets can be raised, and their value
for vinegar and food, also their leaves for tor vinegar and food, also their leaves for
stok, they will be grown nore and then be as
staple an artiele in the market as corn.

Custard Pies Without Mhe.-Beat to-
gether thoroughly five eggs, five tablespoonfuls of sugar, and a little salt; pour into this oue
pint of boining water, stirring liriskly while ald-
ling the water; to the taste, and con with spices the pic the pleasing samo as
other custards. This quantity is sulticicut for woo pies. Try them. They are very nice.
And here let me say that custard made in this mamer may be eaten after pickles or any sour
rruit, hy people with weak stomachs without

Cflery Salain, - Take the inner and tenderAt staks of three heals of celery, cut them in young French beans. Inub the salad bow slightly with shatot, or even garic. Mix the
yolks of two hard-boited eggs with three table spoonfuls of salad oil, one of tarragon viuegar
the least bit of flour of mustarl, and pepper the least bit of flow of mustarl, and pepper
and salt to taste. Add the celery to this sauce and salt to taste. Add the celery to this sauce
turn it well over, garnish with the hard-boiled hites and, if at hand, a conple of trulles

Vabisis Putri:- Varnish putty, for filling
the pores of the wood after the first coat of the pores of the wood after the first coat o
riming is made of chniek-drying varnish and Paris white; the aldition of a little ocler im proves it for rubbing down. First-class var
ishes stain more casily than the inferior grales light stains may be removel by rublhng the
pot with rotten stono aud water, and, after spot with rotten stono and water, anl, after
thoroughly drying the part, rubbing it with , applied by the hand.
Mink Toast.-T'oast stale breal quickly and delicato brown; take off the crust, and dip lightly and lay in a covered dish. Boil some new milk in a saneepan, arding a little salt turd taast and cover closely. It will bo ready to serve by the timo you are all seatell and ready to pass the first plate.
pouml; sugar, 2 pounds; milk, 1 tea-cul; but ter, 2 ounces ( 2 tathesploons are an ounce). Whered dripping pan. When partly cool cut into squares of sive to suit.
hionsw Smirk.-Trim, but do not draw the hirds; wrap each in as thiu slice of fat bacon, and roast about 10 to 15 minutes at a brisk fire.
l,aste frequently with butter, kecping a piece

## PAC FIC RURAL derneosula

 DEWA. T. DEWEY. W. B. EWER. ansmane $=$








The Scientific Press Patent Agency. DEWEY \& C0., Patent Solicitors.

## SAN FRANCISCO

Saturday, February 16, 1878.

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## new advertisements

bireman's Fund Insurance Couprany, S. F.; $\$ 100,000$
Fin




The Week.
Rains recurring reassure rural returus, All
ver the state the fisures of the rainall are over the state the figures of the rainfall are
mounting upward. In San Francisco to this (Wedncsday) morning, the gaage marks 21.51
inches for the season, and "rains every day" are inches for the season, and "rains every day" are
the worls we have froun parts that need rain the words we have from parts that need rain
most. Thus far the disasters fron flood in the
interior, thoush considerable interior, though considerable, are less than fears
have indicated, and this we trust may be the experience until the skies clear again and give the much needed opportunity for work.

## The Agricultural Revival.

As we noted brielly last week, the agrienlture of our State is now stirred thronghont it length and breadth by the spirit of euterprise, and all its movements are characterized by most gratifying activity. Never iu our listory has the whole field of the industry shown such gen-
eral action, and never has the promisc of reeral action, and ncver has the promisc of re
ward beeu brighter. The plain prophecy of conditions and of tendencies is that California will surprise herself in her industrial record for 1878 . Already the character of the grain year may be forcseen in the growing phans, and in thin,
moisture which is alrcaly stored beneath thon.
The harvest will not be measured by acres lut moisture which is arcady sored benean che lit.
The harvest will not be measured by aeres hit
by counties. Already the judgment of the by counties. Already the judgment of the
wise has gonc forth that there will be a surphs of 500,000 tons of wheat for export. The gen-
eral belief may be secun not only in the sminiling erai betief may be secll not only in the sming
faces of those whose crops are growing, lut in the sanguine smile of the merchants as they put new fractions to their prices for bags with cach hip mastors raill, and in the sark ship masters as they cliun toward the $£ 3$ mark
for ocean freight to Liverpool. 1t is true that
the recurring rains forchode increased loss to the recurring rains forcbode increased loss
enterprising workers of the low lying lauls; it is true that the victories of peace and the ap proaching harvests in hower latitudes just now
pronise to reduce grain prices abroal, but there promise to reduce grain prices abroand, but there
is really no reason to fear for our general prod uct, nor to antiticipate nurrmunerative 1 ricices.
Thus fat, at least, the general outlook is unob. Thus ar, at least, the general outlook is unob-
surd, and many
vestnents building hopes and investments upon it. In our live stock farming the prospect is fine In our live stock farning the prospectis
indeed. A wealth of feed upon the ranges is
already spriuging forth with aunazing rappicity, already springing forth with anazing rapidity,
and the mouths to crop it arc connparatively and the months to crop it arc conparatively
few. The drouth, with itt m merciless power ha led to wite slanghter. A month ago it might mor the knife ly sppecial feeding. Our neighllbor for the knife ly sprecial feccing. Our neighlibor
Nevala, and the farther grazing lands, held
and control of our city markets. It is plain that
money now lies in the path of him who multimoney how ures his the path of him who nulti-
plies hoofs ulpu his lueadows and hillsides. As the cycle of prospervus years, according to
seientific forcasts and the opiuions of our ob serving practical ncin, has now legma its wel.
eonc course, it is evilent that the reward will be conce course, it it evitent that the reward will be
to him who gathers about hima herl of quickly
maturing animals. it has becu abun
and duanty proved that at least onc year in vantage material which a celntury of breeding
voward this entl has concentrated in the thortowarlred animal. Do not then wait until all graziers have littell their young stock for the
inarket, but strike the luitchcrs a year ahcad ly throwing the early maturing force of the
Short Horn and the licreford upon your herih Short Honn and the licreford upon your herd, and cunt uouths instcald of years by bringing
the Berkstire upon your swiue. It will be a fair race to realize money from the coming yea
and the prize will be to the fastest animal. In the dairy there will be iucteased produc
tion and activity, because the feed will flood tion and activity, because the feed win hood
the vats and clurns. There are signs in the
butter markct, at least, that the production in butter markct, at lesst, that the production in
the State is fnite up to local requirements and does not warrant much extension of this lranch of the industry at present, unless ontlets can
be found. And yet the dairynall has the surety be found. And yet the dairynalan has the surety
that this year's milk will cost him much less thau last year, hecause of its greater quality.
He must also rember that the low prices whicl He must also rember that the low prices which
now lrevail are in part the legacy of the large
surplus which was now preani are pas parked last spring and that
surply which was the cows which dealt that blow to
many of the prices will never come to the pail ayain, because
they fell beforc the lack feed in tlie sumuner they fell leforc the lack of feed in the sumner
nonths. With a dccreased eow-power in nnany months. With a decreased eow-power in inany
dairics and the cheapened cost of milk, there is reason to hope for remuneration even in the
face of an unfavorable market. In cheese there is a good outlook if the jump from the churn to
the vat is not made in too many dairies. There have been fine prices realized for goowd cheese have ing the last few months and there will be in
durig months to come. But the rewarl will be
the the months to come. But the rewaril will be to the goorl cliccse, and those who turn to the
vat now without compctent makers and with out conveniences for curing, will not only lose
their own nimik but will hazard the meneral price. With a few notable exceptions, Cal
ifornia docs hersclf no justice in her chices inrnia Nocs hersclf no justice in her chicese
product. These cxepptions, we belicve, will be
more nuinerous during the coming more nuunerous during the coming year, hecause
of movenents within our knowlcdge which promisc greater uniformity and excellence. Let
The
We ean count sales of raisin varieties of entting and rooted vines by the hundreds of thousands. Nor are the improved wine varietics in much
less dennand, if we jndge from the extensions of vineyards which cone to our notice. The vine
graifter, too, will have to do his work quickly graiter, too, win have to do his work quickly
if le compasses the work which he has laid out for the spring time. There is tield for all this
notion toward increase and inprovement and Themise in it.
The bee's opportunity has come again. Pas
turage will be unusually abundant throughont those fragrant sonthern fiedls. The wankencd stocks will need wisc handling to people the loossons again with workers, but they will re-
ecive it. The loeal markets will take all the surplus hungrily this year, and the Eastern out
look, for the time whin we shall strike it acgain
is full of favor. Honey last year at the East
has bcen a drug. This will work its own care has been a drug. the unprofitalle hives to other work, and the consumption of honey, still increasing, will again call for r'alifornin's liquill amber.
To those tireless mens who have worked for little reward in our orests and sawmins, during
the months of depression, there will surely come a prosperous future. The improved prospect and afterwards the influx of money for our har
vests, will give a sharp stimulus to building vests, will give a sharp stimulns to building
operatious both in city and conutry. New
homes will rise on little homesteads, which city men have held to iuprove when the time changed. C'apital will spread itself in country seats and general improvements ou suburbau property. Country dwellers will feel the purse
trength toward new houses and barns an strength toward new houses and barns and
ences, and will reach ont for the cars and car ocs from the lumbermen.
With such
With such general notes of progress and a gildel outlook for real estate. It will bc tates which have heen listell to a siugle name will come upon the market in available areas This movement is already settiny in, and the division of property upon a truer basis than
Learucyism is at hand. Thus it is a good yea to come to California for all those who can bring money enough to luy and equip small farms.
The promised reward for skillful, progressive The promised and investment in our agriculture is great, we have shown. Those who can enter in cportunity over the wide world so favoring as We want citizens to push onr industries, not to be drarged by them. We want men, and women too, who have the true quality of manhood and
comanhood, and to then1 California extends hand of welcome to prosperity.

## Hardy Eucalyptus.



So far as we are informed, there has nothing been found harlicr thall the $E$.,yobulus. This
tree is proving hardier than has heretofore been
supposed. But there is little chance that it will prove hardy enough for Eastern conditions There is reason to doult whether there is any
hardier euealyptus yct developed than the globulus. It is fonnd in Tassuania, and this island hes farthest away fron the tronis. It
is also found higher on the monntains than the ther varictics. It may be, too, and this view growers of the trees, that the globulus may thoroughly aeclimated to the conditions which prevail on this const. At all crents therc is
reason to believe that the trees will with stand rcason to believe that the trees will with stand
guitc a dogree of coll. (ien. Stratton has young quite a dogree of coll. (ien. Stratton has young wholly unharined by the cold spell about E.5.0. This may le smarl encourageconent to ourr Eastern friends who are looking for a eucalypytns
that will stand zero or somcthin's worsc, but is a diseovery of considcrable moment to those who wish
this erast
Owing to the kinduess of Gien. Stratton, we have some facts conecrning the growth of the
E. glouvulus, in Oregon, where, as will be seen, it has passed, with slight injury, a temperature o $17, \mathrm{ml}$ which iee formed tive inches thic
around the locality, fien. Stratton shows us etter, jnst reecived from Col. 1. 1.. Moore, of following extrant: "There are some eucalyptuns growing here iu the oplen air, which were first
plantel, as nearly as I can leam, about two years ago last spring, and are now nearly three
years old. They have not becn killed by reezing in that time. It must, however, be noted that the last two winters have not been
severe. Last winter we had no ice- 'uot even the color'-while this winter, so far, we have has, but little cold weather. The thermometer five inches thick. The weathcr is now warn again and we shall prolably liave no more cold
weather. I saw one tree, to day, 12 or 15 feet high, all this year's grow th, which shows on the
ends of the tcnder limbs the effect of the frost nds of the tender limbs the effect of the frost,
put the lush is not danagged to any extent. The trec grows herc quite rapidly, but I should be
frail that such colls as we have had sone winters, during my 2.5 ycars' residence here would,
This testimony is interesting and any other evidence which our readers have of the hardi
ness of this cucalyptus or of any other specics, we shall le glay to receive.
Agriculptral Exhbits for Piris.-Th Coumissioner of Agrieulture deciles that agri
cultural exhibits for the I'aris exposition wil eultural exhibits for the Paris exposition will
be reeeived at Washington until larch 31, and uutil Mareh 12 th, if aldressed to the Depart care of the U. \&. stamship Wyooning, Navy
Yard, Brooklyn; aut that in either case one ard, Brooklyn; aud that in either case on
set of duplicate iuvoices should be included it the package, and anotlier sct be scit to the De quire prepayment of freight to either point in
every iustance.

## Queries and Replies.

## Tropical Plants.



 ruit raised there, would 1 be forced 1s. pay duty upon


The cocoanut palm (Cocos nucifera), has been that is, the nuts have been planted, and they have sprouted and growno. Just how far they that our climate is adapted for it, but experiments are interesting. The tree has been con-
sidered strietly tropical, and it delights most in sidered strietly tropical, and it delights most in
coast regions. It has been grown as far from coast regions. It has been grown as far from
the equator as Lucknow, India, $26^{\circ} 50^{\circ} \mathrm{N}$., and in the interior of the peninsinla of Hindostan. away from the sea becones stunted and unsatisfactory. The soils upon which the cocoannt thrives in the tropies are various, and may be either dark colored or river washed; sand mixed with clay or black inold; sand and, clay even When mixed with gravel and pebbles; elay soils
where the under strata consist of sand; alluwhere the under strata consist of sand; allu
vium of rivers and back waters; marshy lands vium of rivers and back waters; marshy lands,
even in brackish soils, but not where salt crystals can be found. Thus it is seen that considcrable variety of soil has been found admis. sible, but it has been shown that stony grounds or those overlying rock foundatious, are to be gencrally seen, has a part of its natural cover-
ing removed. It will sometimes grow in this ondition, but it is better to get the importers to furnish you some of the nuts in their natural
There is a duty of 20 to 30 o ad ralorem on
 semi-tropical, for the purpose of propagation or ably include almost anything coming from the tropics if introduced for purposes of cultivation.
Banaulas are uropayated by bulbs which set out fron the maiu bulbs, and may be easily sep-
arated. They endure transportation (mite well, arated. They endure transportation quite well,
as has l,een shown by the experiencc of Mr as has leen shown by the experience of Mr.
Messenger and others, as related in our eo:
lessenger and olhers, as red except that in the
Ins. Aried fruit. Many have planted these seeds The pineapple plant is tricminial, lut it bears but once and then dies. The tuft of leaves Crowning the fruit will take root if properly or it to rea chared mor, but it takes aud fruit suckers start orth from the roots of the parent plant when it lics, and thesebear fruit the following year. Manure from Straw
EDrturs Press:- $\ln$ answer to your inquiry
or rotting straw piles, I remark that in 1849, for rotting straw piles, I remark that in 1849 ,
while examining the irrigation works of Prowhile exannining the irrigation
vence, a distriet in the south of France, I noticed the node of mannfacturing eompost from straw,
hanus, etc., prevailing there. A layer of the hamus, etc., prevailing there. A layer of the
material two feet in depth was thoroughly wetted, then a layer of earth one foot dcep placed on top; then another layer of straw, etc., as feet high; the last covering was of earth. Very soon fermentation began, and the pile would smuke like a enal-pit. When the steaming had
nubsided, the pite was forked over, ayain wetsubsided, the pile was forked over, again wet-
ted, aidl again topped with earth. In the course ted, and again topped with earth. In the course
of a month it was a good manure, ready for apof month it was a gool manure, ready for ap
plication. 1 have trield it, and find that it works well. The same method is co
Italy.--(i. C. Holass, Lockeford, Cal Tobacco Growing.
Emitos Pspss: Will yer have the kinumess to kive me

 As we have stated before in answer to a
similar question, tobacco growing in this similar question, tobacco growing in this
State has thus far proved unsatisfactory, tate has thus far prove overcome the
leeansc of the failurc to ove adversc conditions which alfcet the curing of
the plant. However, in the hope that some
our will yet devise a way to overcome these oue will yet devise a way to overcome these
difficulties, we hope some rrader will give us a
letter on the inethods which have resulted in letter on the methols which have resulted in
successful growing of the crop in this State. Essex Swine.



What, Manterey Co.
Whater lissex breeders to say


Our Visit to the Redding Ranch
We the Redding ranch in Shasta county trip to the Redding ranch, in Shasta eounty,
with the promise of more full mention this week. The time chosen for the trip was probably the most unfavorable one which could have been selected for many years past. We reached there just as railroad communication with the ranch had been cut off by the washing away of the empties iuto the Sacramento just below. By a temporary portage across the creek, and a handcar upon the other side, we reached Cottonwood tation, from whence we were taken in a car liage by Mr. Edward Frisbie, the present pro
prietor of the ranch, as far as the town of Anderson-a railroad station which has been laid out upon the ranch, and which is rapidly growing up into a point of considerable impor-

The next day after our arrival, the severe
torm of Sunday, February 27 th set in, by storm of Sunday, February 27 th set in, by
whieh the Sacramento river and Cottonwood creek were both so swollen that all transit across either was suspended, and no railroad trains
eould pass northward beyond Red Bluffs. Of could pass northward beyond Red Bluffs. Or
course most of the roads about the rauch were course most of the roads absable, while many of the large sloughs and creeks were quite so. But notwitn to the hotel at Anderson bright and early on Monday morning, with a team mad and water proof, and invited us to take

A Look Over the Ranch.
Notwithstanding the disagreeable character of the day and o, Dhe roads, we the ride we passcd
cepted the offer. During
over quite an extensive stretch of fine bottom land to the east and south of Anderson, after eaving which we role along the table or bench ands and parallel to it, and thus continued northwardly until we reached Clear creek, the
waters of which were anything but clear. Much of the bottom laud was in wheat, which was looking well, but the larger portion was stil
covered with oaks and scattering undergrowth, and had probably never been pot to any other deep slough running parallel to it, was so possible to reach the tall bridge; so leaving our
carriage, we crossed over on the railroad brilge near by, and made a call upon Mr. J. J. Bell near kyeeps the toll bridge at this point, and who
owns what has for inany years been known as Bell's Ranch.
We were received with much cordiality by
Mr. Bell, who kindly invited us to spend the night and next day with him. Having decided o accept his kindly invitation, we bade goo day to Mr. Frisbie, who promised to call for
us the next afternoon. Mr. Bell is well-known us the next afternoon. Mr. Bell is well-known
to all teamsters and travelers who, in aute rail to all teamsters and travelers who, in aute rail-
road days, were accustomed to pass by this route to Oregon and to the "Redding mines,"
which are located on and near this ranch. He which are located on and near this ranch. He
arrived here in May, 1851, purchased 1,300 arrived here in May, 1851, purchased 1,300
acres of land of Mr. Redding, settled down to rauching, built a bridge to accomnodate the
travel in winter, a large hotel for the conven ience of travelers, and in due time became a subseriber to the Rural Press. He is chiefly engaged in stock-raising, and just at this time
is paying considerable attention to the breeding of the Angora from the common California goat. He has now two heris, one consisting of 270
and another of about 730 . His experience shows nost unmistakably that, with proper managebusiness. We propose, in a future issue, to de vote a special article to what we have seen and learned in regard to breading up the Aryorara out of
After discussing a good dinner, Mr. Bell took It over a portion of his ranch, and gave us a
little insight into a somewhat extensive mining euterprise which he has in view upon this ranch, and which we shall allude to more fully when
we come to speak of the mining interests of this locality. The next morning, Tuesday the 29th ultimo, the rain still continued, but our host brought out a covered buggy. with which the
distance to the town of leading, about eight miles, was soon measured.

## The Town of Reading

Is well and pleasantly situated near the west
bank of the Sacramento, where that king river bank of the Sacramento, where that king river
of California leaps out of the Sierra Nevada runge, and passes along the first bottom laud to
the plains of the great valley below. The Califorhe plains of the great valley below. The Calitor nia and Oregon R.R., the great northern rail way Here passengers and goods for the large mining
and agricultural districts of northern California and southern Oregon diverge from railway transportation. Considering the gencral routes of
travel, it is centrally located in the county, aud may some day be fully entitled to the count. The R. R. Co. have a large depot, with com. kept hotels, one near the depot being quite large. The town has a good business appearance, with
large and well.stocked stores. Mr. Frank, pub lisher of the Reading independent, prints a good
local paper, on bright type, in an entirely new
and well adapted building. It is actually the
cleanest printing office in America. (Mrs. Frank is a practical printer, which explains this strange feature in a printing office.) Judge Bush, , a
leading citizen, showed us the town "in brief," stating some forcible
future rapid growth.

Prompt to his word, Mr. Frisbee met us in the afternoon and took us on our return as far as Andersou, where we spent the night, and the next morning, aiter an early breakiast, our
kind friend once more appeared with his carriage and conveyed us to Cottonwood creek,
where we fouud the railroal bridge still unrepaired, and no trains in prospect for some ays to come; and as no teams could cross or
ford the creek, our ouly alternative was to cross in a small boat, which had been hastily constructed, and launchcd while we were there. We were assured that by followiug along, the should probably find a locomotive and tender upon which we could get a passage the balance
of the way to Red Bluft. So starting out, some our miles brought us a point where the road bed and track had been completely washed
away for several hundred feet, and a repair train partially wrecked. Picking, our way arear traund find that the locomotive and tender, which had come up to that point, had returned, and there was nothing lett for us but to
weary "tramp" nine miles further

Curious Railroad Obstruction.
We have frequently read of railroads being washed away, and sinking out of sight in water
or mud, but here we saw the mud actually risor mud, bun below, pushing the track up until r, when the
finally covred the rails and ties completely out of sight. There is here a deep cut through a gravelly hill,
the earth of which is of sucl a yielding uature,

do has beeu brought into requisition for this
purpose, and we learn by letters received at this office that the first regular train since the break passed up from Red Bluff on the 7th instant. The experience of this season-the
first severe one siuce the road was built-lan shown just what is needcd, and the company will, no doubt, so construct their romp and
bridges that there will be no such interruptions bridges that there will be no such interruptions
of travel there in future as we have here chronof travel there in future as we have here chron
icled. Mainly the road appears well constructed icled. Mainly the road appears well constructcd,
and the track thoroughly ballasted with gravel
We tender our thanks to the many friend ing the above trip, and hope at ant early day to embrace an opportunity to revisit this interest ing portion of the state under more favorable

## Legislative Topics.

Among the important topics presented to the Legislature during the week have been proposals from two respected citizens of the State, to give of their wealth to widen the scope of the State University and increase its facilities fo imparting instruction. One is the proposal H. D. Bacon, to give $\$ 25,000$ in cash and toward the construction and equipment library and art gallery building, providing the State will give $\$ 25,000$ to conplete the needed
fund. A bill has already been introduced making the requisite appropriation of $\$ 25,000$ on the part of the state, and it is believed that favorable opportunity for is certainly a very these valuable aljuncts to its edueational
equipment at Berkeley, and the liberality of
citizen should
quipment at Berkeley, and the liberality of
itizen should not fail of State recognition
A Very Wonderful Freak of Nature.
A Perfect and Jively Two-Headed Snake.
[Written for the Press by J. W. A. Wricur.l
All students of natural history and anatomy, and everyone whose attention is arrested by the wonderful works of nature, can but take interest in the subject of this sketeh, and the very truth ul likeness hcrewith, the photograph aud engrav. ing for which, of life size, were prepared in the office of the Press, with no little trouble, from the living and rather too active freak, which we propose to describe in brief. A real two headed suake, healthy, living, and haudsome as any suake can well be, and no mistake, no Barnumlike trick about it! This lusus nature, so suceessfully represented by your artists, was found gauge railroad now being constructed between an Jose and Santa Cruz, at Los Gatos, Santa Clara county, uear the foot hills of Santa Cruz mountains. It was discovered under a stick of
fir wood by a Mr. Connclly aud Mr. J. W. Linden, and is now the property of the latter gentleman, with whom NIr. Woodward, of our noted pleasure gardens, was negotiating for its
purchase. Should it live and thrive, it will be purchase. should curiosities ever introduced Mr. Wis extensive and instructive collection. hip in this city a week after his capture and through his courtesy the likeness and facts here presented were obtained.
young specimen of the familiar species known ss the bull-snake, pine-snake, or, more com monly in this state, the gopher-snake (Pituophis
Wilksei), our Pacific coast species. It supplies ere the place of the chicken-snakes, mon as house-snakes east of the Mississippi
river(Ophiboluseximius north of the 37 th parallel and Scotophis quadrivittatus south of that line), and birds. It is a harmless snake, we having o poisonous one in Califoruia but the rattleThis two-headed one is 22 inches long, old. siuce full-grown ones attain a length of from six to seven feet. Its ground color is a
dingy, yellowish-white, with a dorsal row of chestnut-brown spots, nearly square and 75 in separate, extcnding its full length. On each side arc two lateral rows of smaller spots of
similar form and color. It has on each head the two sets of occipital plates, which help to
distinguish its spccies, one set of three, of nearly equal size, in a row letween the eyes, There are two additional dorsal spots on cach neck, above the point of division. From the necks begins, to the tip of each snout is about
an inch and a half. The two heads and necks re entirely separated for nearly an inch. Both heads and necks appear perfect and entirely
symmetrical in every way. Each head has two ood eyes, equally large and full. It can shoot The two perfect mounths open into one throat. dach throat is equally Hexible and the move The two heads can be placed closely side by or spread widely apart at will, as is shown in the figures engraved.
Each seems to have equal power, and to be like subject to separate control aud motiou. it eats and drinks equally well with eithe nouth. One can but think it would have serious time, when it gets larger, if each head should ever
gopher at once. a double-headed reptile, as California has now
certainly produced in this snake? The myth certainly produced in this suake? The myths
of old aloout hydras, ete., are excluded from the of old alout
sale of Fine Stock. - In March, it is announced, one of the most interesting horse Hesh exhibitions an sales Calicita Although had will take placouy fine importations, the mar ket has not at any time been drugged with extra superior horse-flesh, such animals always finding ready purchasers. The sale we are to have next month is to be of picked animals from Pennsylvania's and Kentucky's choice stock, and comprises 160 head of horses. Anong
them are four fine matched teans, undoubtedly them are four fine matched teams, undoulstedly
the finest ever brought to this state, 50 were the finest ever bronght to this state, 0 were extrafine brood mares, 20 fine yonng trotters,
70 draft and big work horscs, and also 16 70 draft and big work horses, and also rady been shipped by rail, and are consigned ton of them. They are expected to arrive bout March lst, and will he on exhibition 15 teans, trotting horses, brood mares or heavy draft horses, would find it advantageous to attend this sale, which will take place between the 15 th and 20 th of March.
Fabmers, llelp liacti Other. - Farmers slould freely interchange opinions and cxperiricultural paper, such as the Rubal l'uess, that they may get the collective wisdom and experience of a very large number, and see what other sections are doing, and receive valua
timcly suggestions.-Lompoc Record.

The American Pipe Company's Pipe. Some 18 or 20 years ago the Wyckoff pipe was introduced into the Eastern states, and at once attention was attracted to its peculiar adaptation for the purpose of conveying gas or iron, the woolen pipe was not only cheaper but better for certain purposes, and in March last an organization styled the Anerican Pipe Company was organized in this city with a calp-
ital stock of $\$ 250,000$, for the purpose of manufacturing this pipe and thoroughly introducing it on this coast. The oflieers of this company
are liolert $G$. Byxbee, of the firm of $\mathrm{H} . \mathrm{B}$. Tishenor \& Coo, Presilent; John Li. Chalfant, formerly of the Mendocino Lumber Company,
Vice- President; John F. lyxbee, of Duncan Milts has Lumber Company, , Secretary and Trensurer; Calvert Meade, Aulitor; P. T. Dickilssun, who
been for the last 20 years' connected with the been for the last
manufacture of this pearse, conimected with thager On the organization of the company a mill was
startel at Olympia, Puget sound, IV. T., where the lumber is prepared, when it is brounght to pay, on Channel street uear Fourth, where it are employed at both places. The manner of makiag this pipe is peculiar, but may be easily understood by referring to the aecompanying
engravinys.: Fiy. 1 shows a completed pipe; engravings. Fig. I shows a completer ppe;
Fig. 2 the horizontal sectiou and connections; coating of hydraulic or asphaltum cement. It is made in sections of eight feet long, from Puget sound pine or Oregon fir. It is tirst bored,
and then turned in a lathe to a uniform thickness of shell, remioving all of the sap, and
steanleel thoroughly, to avoil any possibility of ehecking, or tasting the water. One end of each pieee has a tenou of about three and a half
inches, and the other is mortised to fit it closely. inches, and the other is mortised to fit it ctosely.
The swelling of this tenon, when driven home, makes a perfectly tight joint. The pipe is now
ready for tyanding. This is lone by winding the iron spirally around it, of a thickness, and tained. The iron is coated on the under side as it is wound upon the pipe, and then the entire
pipe and iron are thickly coated with asphaltum, producing a eondition lest calculated to resist decay in any form. The water piple is eoated on the outside only, as it is a well-known
scientific fact that water, either salt, alkali or scientinic fact that water, either salt, alkah or
sulphr, dees not affect wool, and in this city this pipe is used at the Mint, to carry off the waste acids, while it is as well known that
water will tind the smallest erack in the inside water wil in
coating of ir
ferv mont ths.
O. J. Preston, of Preston \& McKinnon, lumber dealers, Pier :, Steuart street, Sin Fran-
cisco, and Presilent of the Alameda Water Company, says: The pipes laid by this connpany
are the Wy yckoff wood, as manufactured by your company; and it affords me pleasure to say that in every way they give eutire satisfaction.
They are more easily laid, more easily tappend, They are more easily laid, more easily tapped,
cheaper and, we think, the best pipe we have ever known.
Mr. Clans spreckels-the great sugar reMr. Clans spreckels the great sugar reput down ly him near Alptos:
I have now in use abont three miles of your wooden pipe on iny ranch in Santa Cruz county,
giving perfect satisfaction and in perfect order. 1 find it answers the sanue purpose as iron pipe. In fact I consiler your pipe the best,
considering the cost, in use, and clleerfully rec. oummend it.
A very fine endorsement of this pipe is made
by E. Ml Mlorgan, Fsqu., (\%hief E, by F. M. Morgan, EAq., (Hief Engineer and
Superintendent of the Simta ('ruz Water Works, where it has been in use two years. There they,
have 200 feet pressure all over the town he says he can lay $1,2-50$ feet of six -inel, pipe
per day with four men, and that in all tapping, laying, etc., the expense is far less than iron pipe. That this pipe must eventually come into general use, there can be no
doubt, for it possesses the following allvantages over auy pipe in the world: 1st, it is the cheap.
est good pipe; 2 d , it is the unost durable of pipes-praetically imperishable; 30, it neither expands nor contracts, and eorrosion is innpossible; 4th, it is more easily laid -can be tapped with an or linary auger; sth, it is more easily
handeel -lighter in weight, and perfeetly tiglt; 6th, it is not liable to get out of orler; 7 th, it
need not lee laid so deep, and in corld climates neell not lee laid so deep, and in cothl c climates
will not freeze so quiekly; Sth, when nsel for water, it neither castes or, or ean be affected by chemical ingredients, pany, Henry K. Moore, Fst. thus endorses the eompany: $\because$ I cheerfully comply with your request for nuy views respecting the $W$ yck off comhination pipe furnished by your comprany to the
Sinta a ('ruz (Iater compuny Over 11 wiles of santa (ruz Wiater conpany, Over 11 miles of
the above pipe have been taid in the city of nearly is months under a pressure of not less thain Lio pouncls, and has stood the pressure ad-
mirably. We find that it works in every re splect to our entire satisfaction, and we shall most decidedly give your pipe the preference in all extensions to be mall by our company. In our opinion this pipe has deeided advantages
in tapping and making connections, ease in re-
pairing, cleanliness of water flowing in it, and pairulg, eleanliness of water flowing in it, and
great saving in cost and freight. With us the
pipe is ancess ath pipe inmend its use to to can mahesitatingly reeor persons desiring pipe for water works of any
kiul,"
In June last this pipe was introducel upon
the (Jentral lacific railroal and its branches fir atl purposes where pressure is required, and the officers of the road give it their hearty endorse ment. Since that time they have laid about
50,000 fcet, and it is now superseding all other kinds of pipe.
partment this pipe is now beiny nsed at all mil. itary posts, and it has leen hauled over 400
miles into Arizona, to be used at Camp, Nel Dowell. where it gave entire satisfaction
For use in mining
be very eenumieal. It possesses great strength aud durability, and ean lie made to withstand a very healy pressare. is the ge desideratum, ac
knowledgeld by all, is ease with which it can he transported to the mines.
Messrs. J. S aul ( C . 11. Brigys, owners of the Briggs mine, Ceutral C'ity, Colorado, write
"We takic pleasure in recomumending the pipe made ly the American l'ipe Conpany to miner in particular, as we have tried it in our Brigys
minine, at ('cntral City, Colovalo, and found it better in "very respect than we expected. We
would not use iron pipe if it did not cost a cent a foot, if we coull plot the woulen pipe."
The cent The American Pipe Company, as now organ-
ized, is an active company, with ample eapital, and they are entergetieally introducings the pipe in every direction. The ofice is at
street.


Thronghout C'alifornia are regucsted to send
their "rrders for any kind of labor to the "Tree
Lalkor Fixchange," 3.3 auld 3.50 Farrell Street
Lahkir Texhange," 3.3 and 3.30 Farrell Street,
San Francisco. All hands curefully selected free

To the Farmers and Miners of the Pacific Coast.
THE COMBINATION PIPE IS THE CHEAPEST, STRONGEST Most Durable and the Best in the World.


OVER 1,000 MILES IN USE FROM 11 TO 19 YEARS. Send for Descriptive Books and Price List to
American Pipe Company, 22 California St., San Francisco.

## Imperial Egg Food



Wh1 Mrafe Vout Itenis Lats.

0. C. SWAIN \& CO. Agt's for Pacitic Coast

OAKLAND HEALTH INSTITUTE,


Breeders' Directory.
 Our Ratgs.- Six lines or less inserted in this Dis
60 cents a line per month, payable quarterly.

## CATTLE

BARRETTO \& CO, Downey City, Cal, breeders of
thoroughired Jerseys. Bulls and Bull ealves.
A. MAILLIARD, San Rafael, Marin Co., Cal., $\frac{\text { Preeder of Jerseys. Calves for sale. }}{\text { PAGE BROTHERS, } 302 \text { Davis street, san Franeisco, }}$ R. G. SNEATH, San Bruno, Cal., breeder of Jersey
catile. Hat Jersey bully for tale -various ages -at $\$ 00$

## SHEEP AND GOATS.

L. U. SHIPPEE, stockton, Cal. Importer and B. F. WATKINS, Sauta Clara, breeder of thorough--
M. EYRE, Jr., Napa, Cal. Thoroughbred Southdown
shicep. Kans and Ewes, 1 to 2 years old, 800 each; Sheep Kamı
Lambs, 815 eac
LANDRUM \& RODGERS, Watsonville, Cal. fm-

## POULTRY.

BURBANK \& MYERS, 43 and 44 California Jarket M. FALLON, komer Seventh and Oak streets, Oakfrom Pure Bred Fowls
T. A. FREEMAN, San Juse, Cal. Pekin Ducks for A. O. RIX, Washiniton, Alameda County, Cal
 and bree
hatching.
MRS. L. J. WATKINS, San Jose, Cal. Premium
Fowis, White and Brown Lexhorns, Plymouth Roeks,

## SWINE

ALFRED PARKER Rellot, San Joanuin wo, cal Importer, Breeder and shipper of Pure Berkshire Swine,
Asent for Dana's Cattle, Hog and Sheep Labels. A. J. TWOGOOD, Riverslee. Cal, thluporter and

## Poultry.

BONE MEAL FOR POULTRY.


I have many testimnoniafs, froun par-
ies in ever. portion of Califoruias cerEGG PRODUCING




CURED.
MONEY TO LOAN
UPON CHOICE RANCH PROPERTY. JNO. D. HOOKER,
302 Montgomery Street, San Franclsco
BUCHAN'S
CRESYLIC SHEEP DIP CURES SCAB,

相, Botules and Solu Stook.
M. V. B. WATSON, 313 to 319 Battery St., S. F.

Dewey \& Co. $\left\{\begin{array}{l}\text { sansoule st }\} \\ 202\end{array}\right.$ Patent Ag'ts.

## Musical Instruments.

The firm of Kohler \& Chase, of 633 and 635 Clay street in this city, is an old established and trustworthy house, dealing in pianos, orThans and all other kinds of mnsical instruments. They are extensive importers of instruments and instruction books, and have long held an
enviable position in this branch of trade. We enviable position in this brancls of trade. We readers who wish to introduce the refining influences of music to their homes. The firm make a specialty of the Decker Brothers' piano, the Mason \& Hamlin cabinet organ, the Emerson piano and the J. \& C. Fischer npright piano. All of these instruments have gained a wide fame for excellence and won high praise from those who know best what constitutes ex cellence in a musical instrument.
We would speak especially at this time of the Decker Brothers' piano. We cannot do better than present a testimonial of its quality, freely given by a group of musicians whose praise will Centennial there was held in Philadelphia a Centennial there was held in Phical congress, at which the Decker grand musical congress, at which the Decker
Brothers' instruments were nsed, and the result was the following straightforward endorsement:

Priladplpma, June 27th, 1876,
Grand pianos, used by the Musieal
 Congress at their grand operatie eoneerts and musical fes-
tivals, reeently given at the Amerian Academy of Musie, tivals, reeently given at the Ameriean Academy an and
were remarkabe tor their superio quality of tone and
extraordinary power. Finer instruments we never heard extraordinary power. Finer instruments we never heard
Clara Louise Kellogg, Annie Louise Cary, Zelda Seguin, Julia B. Rive, Esmeralda Cervantes, Joseph White, Mux
Marctzek, P. Brignoli, S. B. Mills, P. Ferranti, Frav.z Reminertz, E. Belirens.
A matter which we would make most prominent in this connection is, that the Decker Brothers' name is the subject of attempts at connterfeiting. This is the penalty which the manufacturers of a first-class instrument have to pay for the gaining of a good name, and all our readers should be on their guard against
imposition. Unprincipled parties have mannimposition. Unprincipled parties have manufactured and sold cheap pianos nnder the names Brothers," "Becker Brothers," etc., doing bnsiBrothers," "Becker Brothers," etc., doing bnsi-
ness on the reputation and popularity of the celebrated Decker Brothers' pianos. All genuine Decker Brothers' pianos have their name in front on the pianos above the keys, viz. : Decker Brothers, New York. In all gennine Decker Brothers' square pianos the following words appear, cast npon the iron plate on the inner leftliand side of the instruments: Decker Brothers' patent, June 2d, 1863.
The simplest way to guard against imposition is to deal with those who are well known to be of this character established by twenty years of this character established by twenty year Rural Press, Nov. $1 s t$, $187 \%$

The Best and Most Popular Pianos -ARE THR-

## D円CKER BROS'ァ

The EMERSON and The FISCHER :Upright

A GREAT OFFER

WE WILL SELL THE MAGNIFICENT
DECKER BROS.', Square No. 2 for $\$ 525$, - Catalogue Price, $\mathbf{S 6 6 0}$.
AN EMERSON Square No. 2 for $\mathbf{S 4 0 0}$, - - Catalogue Price, $\mathbf{S 5 5 0}$. A FISCHER Upright $\mathbf{C}$ for $\$ 400$, $\mathbf{~} \mathbf{~}$ - - Catalogue Price, $\mathbf{\$ 7 2 5}$.

OTHER STYLES EQUALLY LOW.

The above Pianos are seven and one-third octaves, in elegant cases, perfect in tone and the most durable of any made in the world. Will sell on the installment plan to good parties if desired. We can furnish bogus pianos for $\$ 250$, such as are generally sold in the country. $\pi \pi T$ Send for Catalognes and mention where you saw this advertisement.

## Kohler \& Chase, Agents,

633 and 635 Clay Street,

San Francisco.

The Largest and Oldest Music House on the Pacific Coast.

## IRA MARDEN \& CO.'S

 brands of
## Coffee and Spices Have no Superior.

## Twenty-Five Years Experience

in the business on this coast enables them to place on the market the very best goods at the lowest possible prices.
Ask Your Grocer for Marden's Coffee and Spices.
In consequence of spurious imitations of
LEA AND PERRINS' SAUCE, which are calculated to deceive the Pulblic, Lea and Perrins have adopted $A$ NEW LABEL, bearing their Signature, ihus,

which is placed on every bottle of WORCESTERSHIRE SAUCE, and without whilch none is genuine.

 -r., © © co, and by Grocers sand Oilmene throukshoust the Worlal
To be obtained of CROSS \& CO., San Francisco.
THE KING PATENT PORTABLE ENGINE.
 FOR ECONOMY, DURABILITY, STRENGTH AND SAFETY IT HAS NO EQUAL.
Large numhers of them are now in use on this Coast for Irrigating, Printing, Foed Mills, Larye numhers of them are nowls, Coffee and spice Mills, Pumping, Cheese Faetories, Suletting, Holsting, Etc Sizes of Engines, Two, Five, Eight and Twelve Horse-Power,
Eight and Twelve Horse-Power Mounted on Wagon for Agricultural Purposes. af send for circular aiving full information. ©ea
KING \& WILBUR, Nos. 250 and 252 Market Street, San Francisco.


IF YOU WANT A

## Wind Mill,

## the most powerful and tile nearest perfection

 of any in use-one that protects itself in a gale, will keep your tank filled with Water Without Waste and Without Attention, EXAMINE THE RECENTImprovements of Mr. Bachelder,
As now Mant factured by the
Bachelder Manufacturing Co., NAPA, CAL.
FRANCIS SIMITHE \& CO.,
THE PATENT CHANNEL IRON WHEELBARROWS,
 Lap-Welded Pipe, all sizes, from Three to Six Inches. Also, Galvanized Iron Bollers, From Twenty-five to One Hundred Gallons.
 Coal Tar and Asphaltunn. Office and Manufactury, 130 BEALE STREET, San Francisco, Cal.


Patents and dinentions

## List of U. S. Patents Issued to Pacific Coast Inventors.

 By Special Dispatch from Washington, D. C. Week Ending Jantary 29tit.
Capprt Sweepers.-B. Figer, S. I.
Umbrella Runsis.-A. Good, S. F.
Umbrella Runners.-A. Good, S. F.
Well-Boring Machise.-J. Haas and
Manning, stockton, Cal. Dryices for Operativa
Frames.
J. Kelly, S. F. Compousds for Pronecing Illuminativg Gas.
L. Marks, S . F.
 Stockton, Cal.
Cueck Valves for Bha Cochs and Faucris. Cueck Valves ror Bub Coch
O. Collier, sacrameuto, Cal
Oscilutive Pemps.-P. A.
oschlating Pemps.-P. A. Clark, Anaheim, Nur Lorks.-L. Landeker and 11. S. Laid, San Luis Obispo, Cal.
Sprive BED AND Fi
Portland Ory
Portland, Oregon.
The Mancracture or Doors, Ett.-J. springer, S. F
Scrubbing Macmines.-A. F. Stockley, Bishop Creek, Cal.
11 ay Cutters.

## Horse-Shoe Nails.

Few owners of horses, realize how much uusoundness of their horse's hoof, aud even actual
lameness, is directly due to imperfect nails. laveness, farriers themselves seenn unaware that Even farriers thenselves aeenc unaware that but the softest and healthiest hoofs. We have known several cases in which valuable horses
have been badly laned by the use of quite a have been badly laned by the use of quite a
fashionable and much advertised horse-shoe nail, but whose reputation for sliveriuy aud
splitiny when driven into any but a soft hoof splititiny when driven into any hut a soft hoof,
is being rapidly discovered hy farricrs and is heing rapidyy discovered hy firsicrs nail several months at our home farm, and though its slape and high finish, we have been compelled to banish it from our shope lecanse we found on repeated trials that it would not stand
the test of being driven iuto a hoof that was not in the best possible condition. In a large
per cent. of cases it would sliver or split. In per cent. of cases it would sliver or split.
future articles we will give our views more a length, with the reasons therefor; but at pres would lay it down as a rule that no farrier wh values his reputation as a safe shoer, or gentle values his reputation as a safe shoer, or gentle-
mau who values his horse, will use any cold-cut nail; for from personal use of them and obser vation of their usc, we know that they ar best nail is the old-faslioned hand-forged nail The hot-forging process, either by hand or ma chinery, is the only sure manner of making a
true-driving and safe nail.- Rev: W. $H . \quad$ II. Murray, in the Gollen Rule, Oct. 31,

Robert Bonner's Opinion.
Office or the levig
Messes.
I PutMan \& Co., Bostor.and hammer-pointed horse-sloe nails, now fo on my horses; and I have no hesitation in say ing that we have never used any nails that eve gave us so little trouble. 1 prefer them to any hand-made nail have ever seen, being superio
in every respect. $\quad$ Yours, etc.,

Flowers and Oryayental Punts -Tle spring catalogue of Storrs, Harrison \& Co., rare plants, including grecnhouse and bedding plants.

## Important-Farmers.

It is often desirable, when wishing to secure
asters, Mande Farm Hands, such asters, Milk suitable Farm Hands, such as Teansters, Milk-
ers, Plowmen, etc., to know just where to find ers, low, and so avoid being imposed upon by the numbuls. The city is a place where large num bers of men from all parts of the country congregate, and among the number many good,
strong alle-bodiel farmers are to be found awaiting employment. Messrs. Crosett \& Co., $6: 23$ and $6 ? 5$ Clay street, are daily receiving a 1 .
1ilcations from these sturdy yeomanry, conpilcations from these sturdy yeomanry, comand Irish, who wish to be sent out to work on to avail themselves of the op our reanity to pro cure such persons for any work they wish ac
complishcd, they can aldress, giving full par
ticulars, Crosett \& Co, 623 and 65 , Clay street, ticulars, Crosett \& Co., 623 and 625 Clay street
San Franciseo, and particular attention will 1, given to supply thenn with good men.
FOR SALE-A Guod Type-Writcr. Price, 850
For further inforuation, aldress "COPYIST," thi

## S. F. MARKET Report.

Nork-Our trade review and quotations are prcpared
on Wedneday of eachl week (our publication dayy, and are
not intended to represent the state of the markct on Sat. on Wednesday of esch week (our publication day.), and are
not intendedt represent the state of the markct on Sat-
urday, the date which the papar bears.

Weekly Market Review
DOMESTIC PRODUCE. ETC As this is a marketiug, conseqnently trade notes are few. It is well that it is so, for our advertising liatpons (may their shadow never grow less) are much zeal, and trade naturally inclines to their ines of supplies and merchandise.

Range of Cable Prices of Wheat.
The coursc of the Liverpool yuotation days of last week has been as recorded in the followiug table

## Thursiday Fridy.... Saturday Houday <br> Maturday Mousday Tuesd

To-day's
Exchange compare with same date in former years as follows:

## 

 The Foreign ReviewLonvon, February 12th. The Mark Lane Express says:
prospective, it can hardly be wondered at that prices are weaker, and apart from political influences, as far as can be seen, appearances
seem to point to an ultinate if not inmediate seem to point to an ultinate if not immediate
decline. Prices will probably not vary much or some weeks, for millers, who, as a rule, are holding little or no stock, will have to supply
their wants, as they have been doiug of late, and at about the saine curreucies, as depressed ralues must follow actual arrivals and not anticipated shipments. The rçuirements of his country must inevitably be large between was unusually deficient and the stocks of English Wheat in farmers' hands have undergonc considerable depletion.
Busiucss has been light, but Wheat rates are rin at $\mathrm{x} 2 \mathrm{l} 12 \mathrm{~s} 6 \mathrm{~d}_{\mathrm{d}}$ for iron, and f 2 L 10 s for ooden vessels. There is in port 22,047 tons miscellaneous. The list of discngaged tonnage in port includes 25,512 tons.

Eastern Grain Marketa
New lork, February 9th. - Wheat, Corn and Eugland appeared imminent, but the improvemeut has subsequently been lost. The range or Spring Wheat at the close is 81.20 a $\$ 1.32$ for nerchantable, with thic price
March delivery at $81.25 @ \$ 1.26$.
Chicar:o, February 9th. - Wheat has heen the center of attention, and prices Huctuated from $1.021\left(\$ 1.05 \frac{3}{3}\right.$ for March-a range which is considerably better than last week's. Corn has uled lower, and very steady. Oats were dull, visions took a decided drop. It is estimated that nearly a quarter million barrels of Pork are now here in store. Closing prices wcre: Wleat, Barley 46 gec Pork, $\$ 10.15 ;$ Lard, $\$ 7.25$. Eastern Wool Markets.
NEw York, February 9th.-Fall California ontinues in request at about previous prices, tacle to any important business in that description. The Oregon recently held in San Fran cisco is now coming forward on commission to his market, and the consignee expects to realze in the neighborhood of $30 @ 35 \mathrm{c}$ for it. Texas the views of buyers. Sales for the week are: , 100 tbs lall California at 14@:2lc; 71,010 ths Boston, February 9th.-Wool is compar ively quiet, with no movement of importance snall lots, and the same indifferent feeling prevails on the part of manufacturers, and the ne Wools are dull and neglected. Fall Calioruia, 15 (u2Sc, and Spring California, 1S@33c ales of domestic for the week aggregate 1, 107,

## Domestic Produce.

The following table shows the s. F. receipts Doinestic previous weeks:

| Articles. | Wккк. | $\left.\begin{gathered} \text { Wrra. } \\ \text { Jan. } 30 . \end{gathered} \right\rvert\,$ | Wesk Peb 6. | Weer. <br> Feb. 13. |
| :---: | :---: | :---: | :---: | :---: |
| Flour, quarter sacks. | 47,715 | 21,309 | 31,195 | 73,995 |
| Wheat, centals | 148.941 | 38,261 | 47,904 | 103,430 |
| Barlcy, centals | 15,009 | 11,077 | 17,267 | 16,221 |
| Beans, sacks. | 1,190 | 487 | 1,058 | 2,431 |
| Corn, centals. | 2,613 | 933 | 2,838 | 3,521 |
| Oats, centals. | c,890 | 13,182 | 6,365 | 8,946 |
| Potatioes, suciss. | 13,121 | 17,631 | 17,857 | 21,233 |
| Onions, sacks | 1,784 | 975 | 916 | 474 |
| Wool, bales | 437 | 95 | 150 | 174 |
| Hope, bales |  | 183 |  |  |
| 1lay, bal | 732 | 1,206 | 1,252 | 1,016 |

bags is now $10 \frac{1}{2} \mathrm{c}$, an advance of $\frac{1}{4} \mathrm{c}$ during the
week.
BALLESY-Barley continnes its decline. We BARLEY-Barley continues its decline. We
note sales: 160 sks choice Chevalicr for Pear Barley, $\$ 1.7 \pi$, silver; 200 sks good Bay Feed,
$\$ 1.40$, silver; 200 sks do do, $\$ 1.30 ; 400$ sks .oast Feed, 1.25 ; 150 sks choice Feed, $\$ 1.35$ BliA good Brewing, \$1.40.
BKANS-A slight decline is noted Hayo,
Pca aud link varicties. Sale, 300 sks good P' Beans, 83.35
CoRN-Large yellow Corn now brings $\$ 1.50$ DAIRY PRODUC'E-Dea
line of 2 c on fresh roll Butter, 30 c being uow the extreme for Fancy. Eastern C'hecse is now
ut of the market. Califoruia C'heese is hardly duotable above 19 c per lt .
EGGS-Eggs are $2 \frac{1}{2} \mathrm{c}$ c lower
FRUIT-Califor
and Lemons ar ing at one lit each
he staudard supplies.
mmet $W$ There is no change in this market week ending February lst, in New York city The shipments to England are considerable and bid fair to maintain general prices.
OATS-The range for feed Oats is now $\$ 1.5$
@ $\$ 1.65$. Milling Oats are nominal as there i o demand.
ONIONS-Our list shows a stationary market. range. Seed demand has pushed Larly Rose upward to $8: .60$ per ctl in one case. tations. The bad roals in the interior have prevented free access for live Stock to the rail
roads. Consideralle inferior Nlutton is beiug offered at prices considerably below highest quotations. The market for Cured Meats,
Lard, ctc., is moderately active and p rices un changed, except ou Eastern Hams, which are wer under large arrivals.
RYE-Kye has made a notable drop to $\$ 2$ for VEGETABLES
$35(a 40 \mathrm{c}$. Beets and llorseradish are a littl
WlIEAT-To-day on 'Change, there was quite an inquiry for Wheat for speculative phr poses and prices seem to tend upward, because Russia. If this should come, prices will go up with a leap. lu the prescnt doubt, we retain made during the last few days at lower figures. shipper, $81.30 \cdot 6,000 \mathrm{ctls}$ chuice shipping, alongside, $\$ 1.9 \frac{5}{3} ; 2,300 \mathrm{ctls}$ fair shipping, $\$ 1.50$ 300 ctls good Milling, $\$ 1.415$.

## of note

domestic produce.


## GENERAL MERCHANDISE.



FRUITS AND VEGETABLES.


Gold, Legal Tenders, Exchange, Etc. [Corrected Weekly by Sutro \& Co. 1



Mining \&Scientific Press
Patent Agency


DEWEY \& CO
Patent Solicitors.

flowering plants and bulbs fruts and ORNAMENTAL TREES, ETC. FANCY WIRE
DESIINSS, GARDEN TRELISES, SYRDESIGNS, IARDEN TRELLIESS, YYR
INGE, aARDEN HARDWARE Comprising the Most Complete Stoek
VER OFFERED ON THE PACIFIC COAST. Priecs Unusually Low.
**"'Guide to the Vegetable and Flower Garden
will be sent Frks to ALL Customers. It entains instruetions on the culture of Fruit, Nut, and Ornamental
Tree Seeds, Alfalfa, etc. R. J. TRUMBULL \& CO., 418 and 421 Sansome Street. S. F.

HEREFORD


## success.

The best Beef Bull in America. The Herefordst the est eattle in the world. For parti
iller, Buchu, Will County, Illinois
For Cotswold Sheep and Berkshire Pigs, inquire of 7. L. MILLER

Buchu, Will County, Illinois.
PACIFIC MAIL STEAMSHIP CO.
The Company's Steamers will sail as follows, at 12 M .: CHINA.................................................... 1 st For YOKOHAMA and HONGKONG.
georgia. February 19th For Pansma and New York, calling at Acapulco,
La Libertad, San Jose de Guatamala, and Yunta

Hereafter the Panam
and 19th of each month.
Tiekets to and
AUSTRALIA........February 18th at 12 o'elock, noon on arrival of the English Mails, for HO
LULU, AUCKLAND and SYDNEY.
810 additional is charged for passage in Upper Saloon.

## DAKOTA

February 20th.
For Victoria, Port Townsend, Seattle, Tacoma, and
Olympia, connecting at Tacoma with Northern Olympia, connecting at Tacoma with Northern
Pacific Railroad for Portland, Oregon. Tickets must be purchased hefore 11 A. M. on day of sailing.
For freigh
WILLIAMS, BLANCHARD \& CO., Agts.
M. EYRE, Jr., NAPA, CAL.


Price List.


Safe Arrival of Eggs \& Fowls Guaranteed.

I never owned a FINER LOT OF BIRDS than I have Thorougnbred Southdown Sheep. ase Pamphlet on the care of fowls-hatehing, feeding,
iseases and their eure, ete., ADAPTED Ea sCIALY TO TME Paclric Coast. Sent for 15 cents.

## BEE-KEEPERS' SUPPLIES

The Bee-Keeper's Text Book, in German or English, is eovers, 40 cents; muslin bound, 75 cents. Langstroth on
the Honey liee, $82 ;$ Quimby's Mysteries of Beekeeping he Honey 13ee, \&z; Quimby's Mysteries of Bee-Keeping
\$1.50.; Bee-Kepers' Magazine, per annum, $\$ 1.50$. Bee-Keepers' Magazine, six volumes, si.50 each. Vol-
ume VI of this series eontains eouplete intuctions ume VI of this series eontains eomplete instructions for sarting an a piary, and the coniplete management of the Clover Seed, Mignonette, Rape and Seeds of all other oney produeing plants. Italian Queens and all apiarian
upplies used in moderns management for sale. For W. A. PRYAL, Oakland, Cal.
$\$ 100,000$ ON COUNTRY PROPERTY.
I will loan oul mortgage on first class country property as follows: In amounts from $\$ 2,500$ to 87,500 , say $\$ 25,000$. In amounts from 87,500 to $\$ 15,000$, say $\$ 25,000$. In amount from $\$ 15,000$ upward, say $\$ 0,00$. Nono but irst-elas security aecepted. WENDELL EASTON,
32 Montgomery Strcet, Opposite Liak Ilouse. ALFALFA SEED For sile in funfite
D. J. STAPLES,

President.
ALPHEUS BULL,
Vice-President.

JOHN O. EARL,
JOHN BARTON,
ALPHEUS BUL,
LEWIS SOHER,


DIRECTORS:
M. LyNCH, Join it cardive HENRY DUTTON

GEO. B. DORNIN, Secretary.
W. J. DUTTON,

Ass't Secretary.
stephen w. dick, D. J. STAPLES,
THONAS S. CHARD.

## DECEMBER 31st, 1877

Abstract of the Fifteenth Annual Statement
-of THE-

## Fireman's Fund Insurance Company,

OF CALIFORNIA.

ASSETS.
United States Registered Bonds.
State Bonds of South Carolina. First National Gold Bank, S. F., 133 Shares Cash in Company's Prineipal Offices. Cash in Bank of California, S F Cash in Bank of Sather \& Co., S F... Cash in Union National Bank, Chicago Cash in Franklin Bank, Cineinnati. Cash in Bank of Laidlaw \& Co., New York Loans on Bond and Mortgage. Real Estate, unencumbered. Bills Receivable, Secured by Collaterals Interest Due and Accrued.
Premiums in Course of Collection
Bills Reeeivahle, for Marine and Inland Risk
fadorstd tos, in settler salve on marine loss paid Taxes, etc., advanced on mortgager
Due for reinsurance on losses paid. Due for reinsurance on
Rents due and aecrued.

[^6]
## LIABILITIES:

## Losses adjusted and in process of adjustment.

8738,63746

Marine Bills Payahle

$$
. \$ 34,55380
$$

| 34,583 |
| ---: |
| 2,19815 |
| 1,215 |

$\begin{array}{r}2,15815 \\ \hline \\ \hline\end{array}$
\$37,963 24
823,01218
$.86,18125$

## RECAPITULATION

Capital Stock
Unearned Premiums Reserve
Reserve for Unsettled Losses, Etc.
Net Surplus over all

## INCOME OF 1877

Net Premiums, Received in Cash
Interest on Investments
Rents, Etc.

## Total Losses Paid Since Organization,

\$3,365,237 85

Report of Examination of the Condition and Affairs of the Fireman's Fund Insurance Company, made by the Insurance Superintendents of Kansas and Missouri:

San Francisco, Decemher 3d, 1877
 ciseo, California, and take pleasure in stating the result, slowing its finaueial condition on the 23 d of Novenlier
1887.



 to state that every investment is entirely safe and secure.
Passing thus in dctail through all the assetts and lialifilities of the Company, suhjecting the samo to all tho usual
tests of official criticism, we find that the results attaincd ly us do not materially differ from the statenet ests of official cricism, we hom pany the our respective departunchts, thus showing that its statements cant be relie and
apon wintiout the necessity of verification from oflicial soures $-a$ fact of tho rare occurrence annong Insuranee Con Wanies.
We
We olserve with pleasure and hearty approval your excellent method and system of business, apparent upon our as evinced hy ite good reputation and business sueccess.
We do not hesitate to recommend It to the putlic as a relisole and well managed insutution.
[sigrued.]


Lands for Sale and to Let. FINE RANCH FOR SALE.

LOWEST PRICE, \$8,000.

The ranch is situated on the direct stace road betwee Mendocino City and Cloverdale, in Mendocinn County Forty miles from Cloverdale, 20 miles from Navarr mile from the Christine Postotic
It Co sists of a Total of 2,000 Acres,
of which 640 are secured by Government title and th alance by possessory titic. It consists of

150 Acres of Rich Bottom Land, Which is adapted to the raising of Wheat, Larley, Oats,
Potatoes, Corn, Vegetables, cte., and will raise as lare Potatoes, Corn, Vegetables, cte., and will raise as large
crops as any land in the count: There is 1,210 a crops as any land in the countr. There is 1,210 acres
of Fine Rolling Land which is A No. 1 pasture land, and capable of keeping 1,000 head of Sheep. or 100 Dairy
Cows. The whole rach is well feneed with picket and post and rail fence, and las eight good wuildings on It,
consisting of a good substantial and comfortable

Dw: lling House of Six Rooms, Two Barns, one of them 100x 40 feet, and the other $40 \times 40$
fect, a Gran ry, Woodshed, Chicken Housc, and a No. Dairy House, new last year. There is a bounteous and
never failing supply of good soft water at both the Dwell ing and Dairy Houses.
On the ranch is a large quantity of Redwood timber witable for all purposes. There is

Fine Orchard of Some 300 Trees, Of the ehoieest varieties of Peach, Apple, Pear and Plum
as well as a large quantity of Grapevines, Currant and Gooseherry bushes, and other small fruit. There is 100 acres sown to Wheat and Barley, which is now up four or
five inches, and promises an abundant harvest in the
The owner has also about 40 head of Cattle, a few Sheep, five horses, 50 heado of hogs, 100 II Ces, and a large
supply of all neeessary Farming Utensils, which he will dispose of to the purchaser at very reasonable terms it desired.
The neighborhood is as goond as could be desired, only
nee mile from to a store and one-half mile to a gooid
 The owner's reasons for selling are his wife's health an
his dislike of the business. At the price at offered it is the cheapest ranch in Mendocino County, as the crop bids fair to be worth when harvested, st,000.
AT Terms are $\$ 8,000$, one-half cash and the balanee seATST Terms are $\$ 8,000$, one-half cash and the balanee se-
cured hy nortgage at one per cent. For full informa-

DEWEY \& C0., 202 Sansome Street,
san francisco, cal.

## RANCH FOR SALE

A ranch for sale, near Riverdale, Fresno County It comprises 160 acres, (U. S. patent,) of rieh botton land, with house and out-buildincs. Grass is green the but six to eight feet beneath the surface. There is irrigation ditch running across the ranch, and three cubi feet of water per second belonrs with the plaee It is the best of tule land and borders on the swamp or overflowed lands. There are a few Fruit Trees, Strawberries and
Blackberries. The raneh house and postoffice; 10 miles from Lemore, on the rail way and nine miles, from Klugston, county seat of Fresuo
county. Price, 15 per acre. For further particulars, address DAVID S. ORR, Riverdale, Fresno County, Cal.

## SEEDS. SEEDS.

## IMPORTED.

Crosby's Extra Early
 Early Canade ) Yellow Flint Corn.
 $\left.\begin{array}{l}\text { Yellow Globe }\end{array}\right\}$ Beet Seed
also, every desirable variety of vegeta-
BLE AND FLOWER SEEDS, GRASS AND
WUOLFSS, ETC., OFFERED
GEO. F. SILVESTER,

## To. 317 Washington Street, San Francisco

## OAKLAND POULTRY YaRDS.

## Cor Sixteenth and Castro Streets, Oakland

Coustantly on hand and for sale, ehoice qpecim
of the following varieties of Fowls:
Dark and Light Brahmas, Buff
White and Partridge Co chins, White \& Brown Leghorns, Dorkings, Polish Ham burgs, Plymouth Rocks, Game and Sebright BanAylesbury and Rouen Ducks.
bale after ianuary first No Inferior Fowls Sold at any Price. Satisfaction Guaranteed.
an For further information send stanly, for llustrate

## Nurserymen.

## J. ROCK'S NURSERIES,

san Jose, cal.

Fruit and Ornamental Trees,
Evergreens, Shrubs, and flowering Plants, ORANGE AND LEMON TREES, american and japanese. persilinow, nut bearing trees in laboe vakiety. hardy palms and ornamental plants.
A Large Assortment of Small Fruits, Etc.
*F For complete List send for a Catalogue
JOHN ROCK, San Jose, Cal.

##  OF EVERY DESCRIPTION, AT THE CAPITAL NIUK SERES, SACRAMENTO. AFULL ASMOTMENT OF EVERYTHING IN THE NLRSERY LINE, OF EVERYTHING IN THE NLREERY BOTH WHOLFSALE ANI RETAH, LOWEST MARKET RATES. Japanese Persimmons, and an Immense Stock of Orange and Lemon Trees, both seedlings and (irusted of the ver   Catalagnes, Prie-Lists, and Printed Directions free application. Addrests, W. R. STRONG \& CO Nos. 6, 8 and 10 J Street, Sacramento

## STOCKTON NURSERIES

 Established in 1853W. B. WEST, Proprietor,

FRUIT AND ORNAMENTAL TREES,
Evergreens, Shrubs and Greenhouse Plants
Comprising everything NEW and RARE in my SPECIALTIES
Raisin Grapes, Figs, Oranges, Lemons, and otiler tropical frutits.
I have imported superior Figs and Raisin Grapes direet
from the place of their nativivty in Europe, and baving propagated largry quantities, can now offer them to the
Trade and public ont Mo Most Reasonable Terms cos Send for
HANNAY BROS'. NURSERY, SAN JOSE, CAL

Large and splendid steck of Fruit, Shade and Ornaluen tal Trees, Vines, Plants, etc. Apple, Pear, Clierry, Peaeh,
Apricot, Almond, Quince, Olive, Fig, Grapevines and small fruits assorted.
Eucalyptus, Cypress, Pine, Acacia,
Pepper, Elm, Poplar, Etc., wholesale and retall.
Our trees are well grown, stalky and healthy, and those
wishing to plant in lare or small tuantitites would do
well to cil well to call Hannay bros', San Jose, Cal.

## L. M. NEWSOM,

Nurseryman, Seedsman and Florist East Twelfth Street, near Tubbs' Hotel, East Oak-
al, Orn
Floral, Ornamental Fruit Tree \& Seed Line. largestoek of Belpian Crmellias and Azaleas,
Honterey Cypress and Blue Gum

PETALUMA NURSERIES. WM. SEXTON, PROPRIETOR.

 WM. SEXTON, Petaluma, Sonoma Co., Cal

## LOS GATOS NURSERIES

S. NEWHALL, Proprietor, San Jose, Cal

 S. NEWHALL San Jose. at REDUCED PRICES
 MILTON THOMAS, Los Angeles, Cal

FRUIT TREES,
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Shrubs and Evergreens.

ARGE PALMS,
LARGE AURICARIAS,
LARGE TREE FERNS,
ORANGES \& LEMONS

ORANGES \& LEMONS A SPECIALTY,
I offrer one sear crafted treess of the following sorts of
Oranges: Naval, Hill's, st. Miehael, Konah, Sarinaretta, Sumillo, Acapuleo, Haltese Blood, Mission, Mediterranean Sweet, Pernambuco, and Sicily and Lishon Lemona, at $\$ 35$ per hundred, with twenty other varieties. bernard s. Fox. San Jose, Cal,

THE DIOSPYROS KAKI


OR JAPANESE PERSIMMON.
Six Best Varieties. All Grafted\& Reliable.

ifte, but anzaller. Daimeo "Yeddo's best fruit"). oblong rounled aplex, color, yellowish red, flesh soft. fine flavored
Mikado, flat or round shaped, flesl more solid, orange oin
or yellow colored, (the same as arown by Col. Hollister) or yellow colored, (the same as grown by Col. Hollister)
Taikhoon, round, quite large, shade slightly green,
a great favorite in Western Japan. SPECIMENS O FRUIT ON EXIIIBITION. HENRY LOOMIS,
At TRUMBULL'S SEED STORE,

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419 \text { \& } 421 \text { Sansome St., San Francisco }
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100,000 Blackberry Plants for Sale.


 | Amer |
| :---: |
| amp |
| 100 |
| 0 |





FISHER, RICHARDSON \& CO.'S NURSERY San Padro St., near cor of Washington,



 J. A. Flisher, C. il meliards N, a.o. seymour THE TROPICAL NURSERY




Fruit and Ornamental Trees.
Evergreen Shrubs and Greenhouse Plants ORANGE \& LEMON TREES
OXE TO FIVE YEARS OLD BAGXOLAS, JAPA HONTEREY PINE, CAMELLIAS, BLLE GU'JH, (by the 100 or 1,000 , very 1 Iow , all tranglant
ed). ROSES. ETC,
RT TIE LOWEST
Agent for the Nurseries of B. S. Fox SAN JOSE, CAL.

THOS. MEHERIN, 516 Battery Street
SHINN'S NURSERIES.
NILES, ALAMEDA COUNTY, CAL
Fruit Trees and Ornamentals,



JAMES SHINN, Xiles, Alameda Co., Cal.
200.000

Australian Gum Trees for Sale at stratton's
Cum Tree Forest Nursery,
Hayward's, Alameda Co., Cal.
These trees are from five to twelve inches hikh, trans-





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1 wikb to call the sttention of thase who expect
plant out fruit trees the coninily winter to the fact that 1 have a few bousand frat-elass trees which onfer for saile for myself, on good land, without inrikation, are stout ani staky, ar
Eucalyype verieties, and true to name. Als,
Monteres Cypress. Callon or address,
w. w. SMITH, Vacaville, Solano County, Cal

## PAJARO VALLEY NURSERIES,

Watsonville, Cal.
For ale this season a larre and eomplete stock
Fruit and Oruamental Trees; Eiverreens; Slurulss


 whileh will be bold at as low rates as can be had elsewhere
in the State. For eatalogue and further information, ald JAMES WATERS, 'Proprietor

## P. S. RUSSELL'S

Semi-Tropical Nurseries, Riverside, San Bernardino Co, Cal.

100,000 Orange, Lemon and Lime Trees At wholesale and retail at lowest market rates Cata. logue on application. 1p. O.
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We uffer a larve atock of very fine plants at fron
$\$ 33$ to $\$ 100$ per loo For catalogut of these, as well
AZALEAS, RHODODENDRONS
R. B. PARSONS \& C Box 98, Flushing, N. Y
GRAPE CUTTINGS,
Seedless Sultana and Museatol Gordo Blance, the tw Zinfindel and many otber varictics at \& 85 per thoususand
H. W. CRABb, OAKVILLE,
napa colenty,


## FRUIT TREES.

## 

 Yerhenas, Carnation, Ete For NEW CATALOGUES of
the BLOOMINGTOX (PH(ENX) NURSERY post free addrese WH. FG. BAIRD (Trustee), Box I, BLooMING:-
TON, LLLNOLS.

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## SEVIN VINCENT \& CO

## GROWERS OF SEEDS

FIELD GRASS FLOWER \& TREE SEEDS
Also, Flowbring lilants, Belbb, Fritit and
Ormamental ragen, Etc.
We call attention of farmers and eountry merebants to
unusually low prices All seeds warranted reah, pure and reliable. ostrade 1,rice list on application.

We have just issined the most complete guide to the it il andsomely $1 l$ lusirated, and contains full deserip. tions of Vegetables, Flowers, Grasses, Tres, ete, with
full Instructinn as to their culture; matied free on appliSEVIN VINCENT \& CO.,

SEEDS. TREES. SEEDS.
Continually arriving, NEW and FRESH KENTCCKY
BLUE CRSSS, RED TOP
VERNAL, MFZZQUITE, and other Grasses.
RED CLOVER, FRENCH WHITE



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My Annual Catalogue of Vegetable and
 not write for it. I offer one of the largest colleetions of ver-
etalle sced ever gent out of any seed house in Anierica, a etalle sced ever sent ont of anyy seed house in Anmerica, a
tarke portion of which were grown on nyy six seed farms.
Printed directions for Cultivation on cich package. All seed vararranted to be both fresh and frue to nonmeis. so far, grath. New Vegetherwise, I will remilt the order
gracialy. As the
orininal introducer of the Huhbard Squash, Phinne. oriciual introlucer of the Huhbaril Squash, Phinney's
Sllfon, Marblehead Calbages, Mexican (iorn, I offer sev.
eral eral new vegetibles this season, and invite the parron-
age of all vho are anxims to hare their seed directly JAMES J. H. GREGORY, Marblehead, Mess.

B. K. BLISS \& SONS, mpirters, Girowers and Doalers in Garden, Field and
Flower Seeds, Duteh Bulhous Roots, Summer Hloworing Bulbs and Gardeu Requisites of every deseriptlon. CataCHUFA SEED FOR SALE

EISEN BROS., 12 Stevenson St.

S


SEEDS GIVEN AWAY.
Ten ehwiee varieties of Flower and Garilen Seeds for 25 cents, or five for 15 cents. Sample paeket on reecipt
of three ent stann. Now York Sced Conpany, Bux

DALTON \& GRAY,
Commission Merchants,
All Kinds of Country Produce. 404 \& 408 Davis Street, San Francisco. sis Consiguments solicited tis

Engraving done at this office.
Notice of Sale.

The property of the Alden Fruit and Vegetable Pre-
serving Comppany, situated in the town of CCenterville, Alameda County, California, must be sold before Feb ruary 23 d , 1878 .
The property consists of one acre of land, a three story Three Alden Elevators, A Steam Boiler, Steam Pump, And the general fixtures needed for carrying on the hus if not sold at private sale prior to February 23d, it wil on that day be sold at pubbice curction to the highest cash
bidder. For further particulars, address
W. A. Yates, Sec'y C. F. P. Co., Centerville, Cal.

GREAT ENTERPRISE:
-THE-
Sierra Flume \& Lumber Co.

Have over 100,000 Acres of SUGAR PINE, YELLOW PINE, SPRUCE Fir and Cedar Lands,

10 Saw Mills, 3 Planing Mills, 1 Sash and Door Factory,

149 Miles V Flumes,
10 Miles Tramway,
157 Miles Telegraph Line,
13 Telegraph Stations,
Employ 475 Men and 550 0xen \& Horses

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Thote Coast can be supplied <br> Whote coast can be supplied. any Ycllow Pine is firm, fine grained and sup The Spruce has great strength, durable when exposed, the Fir and Cedar are as valuable for a great varlety of Last year thirty millions of feet were cut and the est
mate for 1877 is fifty millions; fifteen millions are now o hand, thoroughly seasoned by the hot climate of Re
Bluff and Chie Buarge orders can be filled on a days' notice for all
kinds of BUILDING MATERIALS, <br> Rough or dressed dry, by which elegant and substantial
work may be accomplished without delay at the usual cost for green lumber. <br> prices and freights.
DOORS quantities. Address

## SIERRA FLUME AND LUMBER CO.

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PRINCIPAL OFFICES:
Red Bluff; Chico; San Francisco-corne Fourth and Channel Sts.

THE CLIMATE OF CALIFORNIA
A thoroughly studied and ably writen treatise on thi PAcific Rural Press for January 26th, and also the Miv ing and Siempiric Parss. Based upon facts, figures and careful and extensive ohservations made in various parts reliable information, interesting to every resident of the State. The information is condensed in a paper read leein the Press as read before that Socicty without any terations or omissions. Extra copics, post-paid, 10 cents Address DEWEY \& CO., Publishers, 202 Sansome Strect San Francisco.

## DAVIS \& SUTTON,

No. 75 Warren Street, New York

## Commission Merchants in Cal. Produce

Referkncr.-Tradesmen's National Bank, N. Y.; Ell wanger \& Barry, Rochestcr, N. Y.; C. W. Re
mento, Cal.; A. Lusk \& Co., San Franciseo, Cal

## S. D. BURBANK, OPTICIAN Special Attention to Fitting Eyes.

 OFFICE-NICHOLL BLOCK, NINTII STREET (Between Broadway and Wabmisgton.)WANTED
By a Scotchman and Wife A situaion to take charge of a raneh. The man thoroughly or any work appertaining to a well conducted farm. The reference will hher and housckeeper.

## GRANGERS' BUSINESS ASSOCIATION

Incorporated Feb. 10th, 1875. Capital Stock, \$1,000,000. OFFICERS AND DIRECTORS.

Joun lewelling, (Treasurrr) JOIN LEWEL
G. W. COLBY.

1. C. STEELE.
W. L. overiliser.

DANIEL INMAN, (PRxBiIRRT). A. D. LOGAN, Vice Presibsat
AMOS ADAMS, (SECRETAES) w. w. gray. COMMISSIO thos. FLint SHIPPING AND COMMISSION HOUSE
Grangers' Building,
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Consignments of Grain, Wool, Dairy Products, Fruit, Vegetables, and other Produce solicited, and
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Orders

We do a Strietly Commission Business, and place our rates of Conmission upon a fair legitimate basis that will The the country at large to transact

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The Strength of All its Parts,
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Commend it to the attention of all who use a Rifle, either for Hunting, Defense, or Target Shooting.
The San Francisco Agency is now fully supplied with all the various kinds and sty of Arms manufactured by the Winchester Repeating Arms Company, to wit:
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A heavy stock of Cartridges Manufactured by the W. R. A. Co., for all kinds of Rifles and Pistols, constantly on hand and warranted the best in the market.

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 from three to five cays in sucterssion, inst in four or five


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ninderation.
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PUMPING MLL to a 24 -foot POWER MILL for running All warranted. Address,

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Took the Premium over all at the great plowing Matel, This Plow in thoroughly made by practical men who
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SOLID CAST STEEL SHEEP SHEARS.

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We Send Samples by Mail where they are not Introduced, prepaid, on receipt of $\$ 1.25$
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## Every Shear Warranted.



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ine unless the tag is as above.
Warranted the Best and Cheapest in the World. Made from one solid piece of steel from point to point. They cannot be broken by use, either in the how or at the junctions of shanks and blades. They are as superior to every shear made upon the old principle as steel digging forks are to iron forks. They are unsurpassed for cheapness, durability and utility, which one trial will suffice to prove beyond any doubt. They were only introduced last season, and their increasing popularity is entirely due to their durability. We have testimonials saying one pair has sheared 1,500 sheep.

BAKER \& HAMILTON inform buyers that in future all Shecp, Shears supplied ly them for this market will have the Manufacturer's Trale Mark on one Blade, and the Registered Number 9 I $\mid$ or 11.1 on the other blate; and all sheep Shears su marked may be relied on as being superior and mueh cheaper than any other shear of any other make or brand. One trial will prove this. Burgon \& Ball, since January, lSit, have manufactured the shears on their own premises solely from a speeial Stcel of their own make. No Iron is used in any part of their construction. The Bow heing Steel dispees with and saves the cost of Aprings. As every pair of Shears arc warranted and made accordingly, the price is naturally ligher than if made like other Shears for salc.

## BALL'S SOLID STEEL SHEEP SHEARS.

Size-5, $5 \frac{1}{2}, 6,6 \frac{1}{2}, 7$ and $7 \frac{1}{2}$ inches
BUY THE BEST. THEY ALE: THE CHEAPENT.
ALL'S SOLII) STEEL
$\$ 1300$ Send \$1.25 for sample of Bafl's Solid Cast Stebl Subel Suear and you will be convinced that they are the best, cheapest and easiest shear for the operator ever sold. For Sale ly all prominent Harlware Dealers on the Coast. If they do not kecp them order direct from us.

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RICES.--Hill's Hog Ringer, si each; Hill's Hog Holder or Tongs,
each; Hill's Coppered Hog Rings, $\$ 1$ per one hundred. The complete set by mail, prepaid, on receipt of $\$ 3$.

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## The Anti-Hog Rooter



Is the simplest, cheapest and most effectual preventive ever used on hogs to keep them from rooting--and the only "jewelry" which should be thrown before swine. They are easily applied and last forever.
Single dozen Single Gross. 25 cts
.$\$ 200$
 In Ringing Pigs or Hogs, place the upper point of the $\rightarrow$ int cony former and inmediately brhime the rim on the animal's nose ble on the end when losed of the nose. liy this mcans the figs whe filled quickly, and is not lialle to be torn out. Will not collect and carry rosk, a
Directions. l'lace the sized ring that is desired to be closed in the ringer, and close it; with the set-screw regnlate the approach of the jaws so that the points of the ring will pass each other arenongh for that, with the natural spring of the wire, when pressnre is removed the beveled points shall make a perfect joint. 1 log Tamers, each 81.50. The Hog Tamer cuts the nose and is very effectual. We sell large quantitics to hog raiscrs. it is estimated that longs fatten on tive per cent. less feed, if prevented from outing.
Either of the above sent by mail, prepaid on receipt of price.

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The annexed cuts represent the TILTON PATENT CAI.F MUZZLES.

Wholesale Dealers in Har Champion Reapers and Mowers, Case Single Gear Headers, Baxter's Engine, Burdick Hay Cutters, Etc., Etc.

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Volume XV.
SAN FRANCISCO, SATURDAY, FEBRUARY 23, 1878.

## Planting Potatoes.

One of the most vexed points in potato growng is the handling of the seed tuber to gain the best results. There have been experiments enough, one would think, to determine all the acts and to point out the best practice, but the so wide in the hands of different growers hat one is almost led to believe that suecesses and failures must be attributed o other eauses than the cutting of the eed tuber. We have ourselves participated in experiments in which the seed was eut in every different way or not at numbers of eyes, from one to all ther were in a whole potato, and the results rom all the diferent rows were tabulated carefully, and yet the conclusious were o similar. There are, however experi so simuar. There are, however, exper each are distinct and different euough and might teach something were it not hat, comparing one series of experiments th another, one finds nothing but con tradictions. It is quite probable, how ever, that there is some right and wrong about the number of eyes to put in each hill and continued experiments may bring it to light. It is matter of consid rable importance to the grower, espec ally when the grower is introducing expensive seed, to know which he will gain ingle eye, half the potato or the whole of it to the hill.
A French agricultural journal, the Basse-Cour, describes the result of some onducted by scientific men in Germany The principal conclusion to which these sages have come seem to be two in num of the potato plant is always in direct proportion to the weight of the tube used for sets, a theory which certainly lone, cunsidering that the young shoot lone, considerng that the young shoot ment from the mother potato. The second conclusion is that there is a grea econd conclusion is that there is a great variety in the productive power, not only yes in the same potato. It is found hat the eyes at the top of the potato produce a much more viggrous offspring onsequence is the lower part, and the who quence is that those agriculturist planting them are not well half before utting vertically, but should alway divide them horizontally, planting the pper half and using the other as food for cattle. But best plan of all is to plaut the tuber whole, cutting out, nevertheless, Experiments were conducted in a carden soil by Prof. Gantz, the amount of crop produced by several different settings of potatoes being accurately estimated in statistical tables. It appeared that from tubers divided vertically, only five tons were produced per acre, and from whole potatoes, seven and a half tons. The divided, which are set down as nine and three-quarter however, some of the other professors do not agree with Herr Gantz, but maintain that, other things being equal, the whol potatoes will always produce more than however, all agree, and that is, that the whol potatoes from which the lower eyes have been cut out, produce $1 \frac{1}{2}$ tons per acre, or more than It would he well for some of our potat growers, who have taste for experimental kuowl r refutation of these results. If all who do so this year's planting, which will be made ere pleased to compare them and make known whatever significant facts they may declare


ANOTHER NEW STRAWBERRY-THE CINDERELJA.
as far as we know, we have never had a must have time to find it out for ourselves be State. Thant ripen seed in the open air in this of plants and seeds for this purpose has been of comparatively recent date, and the whole enterprise of coftee growing is altogethcr expcriare imlications that the trees will grow in favor ing localities. The fact is that our baster which grows and fruits well on our foothills. The Department of Agriculture at Washingto seems as much befogged as any one of the agri-
cultural laity, for, after once stating the truth of the matter, as it does in the writings of Mr. issues a special pamphlet in 1877, in which it steps back into the error that "in california
there is found growing iu abundance a wild there is found growing iu abundance a wild
coffee with many of the characteristics of the cultivated plant." We may yet grow coffee
enough for all creation in Califoriui, but we

It is a very muddy dish which our East ern contemporaries give to their readers when they write of coffee in California several times stated especially for their beue fit that we have no pland which we yielding pald prots in

The Cinderella Strawberry.
The Cinderella strawberry, which we show in engraving on this page, is a colleague of the ntinental, of which we gave an illustration in ere originated by Mr. Felton, of New Jerries efforts to secure a variety which should be an improvement on Wilson's Albany seedling for the market and the table. know what hare hesirable market qualities in a berry, for he has a frnit stall of his own in Spring Garden market, Philadelphia, in addition to his fruit farm in Continental and Cinderella strawberries seens to have satisfied his needs in market berrics, and he has sold great quantities of them (one morning's sales to his own private customers anouuting to 500 quarts, and furnished them to other the Spring Garden market to the effect that these strawberries are dceiderlly the best sold in Philadelphia. If we are rightly informed, Mr. Felton does not given this trade to the nurserymen. They are offered to our readers by Ciib-
son \& Bennett, of Woodbury, New Jersey, to whom wo and in securing the handsome cugravings The Cinderella berry is
earlier than the Continental one week large, conical, regularly formed; color, bright glossy scarlet, rendering it surpassingly beautifnl and attractive in aprieh aromatic flavor; and indeed may be said to combine all the essential excellencics of a market aud table fruit. Like the Continental, its plants are of very vig.
orous and robust habit, run well and multiply rapidly; foliage very heavy,
standing up from 10 to 15 inches above standing up fround; fruit stalk very large and the ground; fruit stalk very large and
strong, standing well 11 , showing the blossoms and green fruit above the fruit up from the ground, lunt sometimes bending under its unusual weight. The illustration gives a good iden of the berry, as it is made from a photofrom a single hill of the Cindcrella grown on Mr. Fclton's farin.
The Prospects of thie Territory.Arizona, says the Enterprise, is now graphical division of our free and immense Republic. And why? Becauso
she is young, rich and open to all who she is young, rich and open to all who
are looking for somethiug new-some opening for busiuess, some "work for
idle lands to do." It is known, all over the Union, that Arizona is the possessor of inexhaustill, supplies of the precious metals; that through her rich territory moro than one transcontinental railroad is, ere long, likely to ho lnilt;
that, when railroads are built, tho trado that, when raikoas are built, tho trado herc. Not alone this: the poople of Col-
orado, Califoruia, Utah, New Mexico and a portion of Nevada will bo drawn a portion of Nevada will bo drawn
towards the great eities that aro sure to grow up here, on or near the line of the grand trunk railroads which are to be. rado, the Gila, Salt and other rivers lo devoted to the production of eotton, corn, oil, winc and fruits of every description: theu will her vast forests, her gold, silver, coppér, salt, coal and other mines with millions of pastoral lands wils then teem with millions
domestic animals, while along her streams, domestic animals, while along her streams, fabricating almost everything under the sun. A ribe in New York on Sunday, destroyed
two churches and from $\$ 500,000$ to $\$ 1,000,000$ of property. The Fxcelsior block, costing $\$ 400,000$, was destroyed.

## Gorrespondence.

## Sherman Island.

Eurtors Press:-Until recently, there has been, I think, little tule land in the State to than shernan island. It hass always been something of a standard of comparison by which the late J. Ross Browne, and other writers, were wont to estimate the probable cost of reclama.
tion work, and gauge the probable crop yield when once brought under cultivation. It was among the first tule lands in the State to be brought out of its wild state and made produc-
tive. Dating back to 1861 , when levee building was little understood and the effect of tides and freshets was, for the most part, a matter of
conjeeture, the reclamation of this island, mp to 1875, marks the first epoch in the history of reclamation and levce building in California. methods of constrnction have superseded the
earlier manner of building, reducing the cost eard ins insuring greater stability at the outset.
and After passing through the discouragements of
floods, damaged and ruined crops and levee floods, damaged and ruined crops and levee
assessments, and after growing into the knowledge required in reclamation work, sherman
Islanders remain to-day masters of the situation Islanders remain to-dare now the fornnate posscssors of a fine
and are no in the Sacramento or San Joaquin rivers. The levees have grown stronger by steady accretion,
nntil now when, except in the event of a great
flood like that of 1862 a break in the levee flood like that of 1866, a break in the levee
might be considered the result of culpahle neglimight be considered the result of culpahle negh1
gence. In such a district, one man's interest in another's, and all are too keenly alive to those
interests to jeopardize them by neglecting proper interests to jeopardize them hy neglecting proper
precautions. Trustes are appointed, who
phe "spot" weak places, if any, and repair them
each fall. Another source of security is to be noted in the steadily increasing deposit of sediment each year forming banks and bars the levees, with wider fringes of tules breaking the force of the wash in windy weather. At
this point in the river, I should judge that the this point in the river, 1 should judge that the
continuous sediment deposit has been more bcucficial than otherwise, though nearer Sacramento city, where the bulk of the debris settles, it i
an evil neeessary to be averted as soon as pos sible.
The
The large scale on which recent reclamation
has been projected, and the skill and ravidity with which it has been exceuted on Union,
Roberts and Grand islands, the large yield in cereals reported from time to time in other districts, and the fame of the rich orchards on Old river, have latterly absorbed much attention.
The merits of Sherman island, though less loudly trumpeted, are none the less real. Much of the land on this island is farmed by Chinese,
who pay a cash rent of from 8.5 to $\$ 20$ per acre and tind themselves in everything. owns about 2,000 acres, with two large ware houses, a wharf, store and hotel, a saloon, black.
smith shop, and several dwelliug houses. The warelouses were both filled this season to their utmost capacity with hay, grain, potatoes,
onions, bcans, etc., and much still remains on hand. Messrs. Boggs \& Jordon own a fine ranch
of sonne soo aeres, inuch of it laid down in of some soo aeres, nuch of it laid down in
alfalfa and fenced, with numerous outbuildings, aftording ample room for the shelter of stock,
the storing of hay, straw and tools; the whol place wearing an air of thrift and good management. Among other fine ranches on the islaud
is one of 500 acres, tincly situated, at the npper end of the island. Mr. Uphan, has rebuilt the
house dhring the past summer, nicely furnished house during the past summer, nicely furnished
it, and addel varions other handsome improve. nents.
The actual sales during the last 18 months
are as follows and the purchasers are, viz: I. H. Baker, 200 acres; O. A. Lindsay, 191; Mr.
Sanlorn, 250; B. Palmer, 100; Mr. Brand, 186;
Hanson 13ros., 42. The price han rangel from Hanson liros., 42. The price has ranged from
$\$+3$ to $\$ 60$ per acre; in a few sales of small pieces and building lots the sales were at higher
figures.

Adaptations of the Island.
Sherman islnad is not one which the cultiva-
tion of cereals will prove largely profitalle, it is
not an island on which orclarding can ever he not,an than a sulordhate intiarding can ever he
more that. Nevertheless
it has of its adaptations to certain products and spec-
ial branches of ial branches of farming there lies a rich and
successful fnture. lts situation not far distant from San lrancisco connty, the sofft, yictlang
turf, cool and moist; the rich and rayid growth of alfalfa, and the certainty and the ease with
which it can be irrigated; the facilities afforded for safe and ready tranglortation hy fonr lines
of stcamers which touch daily at the island, of stcamers which touch daily at the island,
makes it the best pasture land that ean loe ob.
tained for horses and especially those drivcu over the rough pavenents of san Franciscu,
Over 300 horses were at one time pastured here last summer by Messrs. Boggs \& Jordan, Rity-
low \& Huston.
Some of the best stock in the State comes up
recrnited and and never fails to return
improved. Pasturage is one business for which the island is well adapted
and oue which will surely grow in the future.

Though orchard fruits cannot be grown here
of such superiority as to warrant cultivation for of such superiority as to warrant cultivation for
profit, an aboundance of very good fruit can be grown for home use. It is an excellent loea-
tion for the growth of nursery stock, as a tion for the growth of nursery stock, as a young nursery trees grown by octor 1 . M.
Perry will testify. I doubt if there are any
local Perry will testify. I doubt if there are any
localities in the State where llackberries can be
more successfully grown than on this island. more successfully grown than on this istand.
Plenty of watcr can be sppplied, and the soil is
pecnliarly adapted to their growth. The yield pecnliarly adapted to their grovth. The yield
is from 10,000 to 18,000 pounds per acre, accarding to soil and cultivation. Strawberries also do well. Few berries are as yet grown here,
but the ease witl which thcy may be successbut the ease witl which they may be success-
fully grown and marketed would seem to indifate grown and marketed would seem will become an important feature The fiue
known to require comment here are too well were sown and harvested herc last season, yielding from 200 to 400 sacks per acre. Something
like 170,000 sacks of potatoes were raised here last season, and so many have been shipped from Emmaton that that place has reccived th
sobriquet of "Spudtown" from the boatmen.

## Growth of Alfalfa

Alfalfa is the product that promises most for
the island. The points in favor of its producthe island. The points in favor of its proluc-
tion are: 1. Its large and alundant yield of rom six to eight tons per acre, under suitable circumstances. at any time and in any season. Cheap transportation by water from the
banks of each ranch. 4. The variety of way in which alfalfa can be turned to account for profit, as in dairying, pasturing, stock raising,
and for hay. Twelve hundred acres are seeded to alfalfa now, and yielded last seasonn from three
to five cuttings. Of this, Messrs. Boggs \& Jortan own 600 acres, which last year carried 100 pasture horses, the ranch teams and many
sheep, hogs, and a small dairy of cows, and sheep, hogs, and a small dairy of cows, and The hay shipped from the island is better than the average, and brings the top price in the
San Francisco market. Whenc uredl with the care given it on this. ranch, it it eagerly sought
after in market by those whose experience in feeding it has taught them to discriminate between good and bald alfalfa, instead of dealing
wholesale condemnation to all hay bearing the name. There is as much difference between good alfalfa hay and the poor brands that go into
the market as there is between good liay and worthless weeds. The alfalfa grown on Shergrowth and less woody than any 1 have seen, except, perhaps, that of Brannan, Staten and
Andros islands, in which the soil and moisture are about the same. Again, the climate of Sherman island is cooler by several degrees, and
the hay when earefully cured, is less brittle, and retains the leaf better than that grown in a very warm climate. l'lenty of water is an im-
portant factor in the production of good hay. portant factor in the production of good hay.
The time to irrigate is immediately after the
crop is removed from the field after which the crop is removed from the field, after which the
snceeeding crop springs up vigorously, yielding another cutting in from six to seven weeks.
Irrication is from the river and the water is let into the ditches inside the levee and is conducted thenee to the fields in ditches of from
two to four feet in depth and distribnted over the ground in shallow laterals, a foot deep and from four to five rods apart, the water seeping
just under the surface. Flooding is always just under the surface. Flooding is always
avoided, as it scalds the plant iu warm weather. With careful management hay can be putinto market at from $\$ 5.50$ to $\$ 6$ per ton.

Dairying,
In connection with swine raising should at no distant day, be the leading interest on this ist
and. The strong advantages which it sesses for dairying are, viz: excellent facilitics for irrigation, its climate, the large variety of
food products which can be grown on this land for dairy stock with green fodder the year rounci. ing permanence to meadows, hy preserving the fertile properties of the soil. This is well known Those who here contemplate itrigation are not obliged to incur the explense of a survey, of darns,
headworks, and a long line of canals on one hand or a water rent of 81 or $\$ 1.60$ per acre on the other.
By damming the inside ditch next the on the boundary line of each ranch each farmer has control of all the water requisite to his
needs, and can use it at such times as may lest suit his own convenience
The climate is very favorable to dairying and
to dairy stock. The trade-winds blow regut larly in sumuner, and the climate, though" "quite
warm, never reaches the excessive heat of the interior or experiences the capricious variableness of midday heat, with the cool raw morn-
ings and evenings known on many parts of the coast. The thermometer ranges in the hottest days of snmmer from $90^{\circ}$ to oceassionally $106^{\circ}$
in the shade, the nights are invarially cool.
Frost in Frost in locember and. Jinuary favor but a
slow growth of vegetation. It is severest in
those month much earlier as well as later. In sone parts of the State within the range where fogs prevail, the elimatc is what milkmen call "sour," and
milk exlibits some unaceountable freaks in its keeping qualities in the face of the lest care.
Fog is rarely seen here and none of its ill effects Alfalfa holds the front rank here in pppular.
favor, though whether by merit. or usurpation
remains to be determined. I believe its merits
will hold it will hold it in its present position above others. lts chief value is its large yield and its nutri
tious qualities for grazing and hay. The grcatest objection that can be urged against it is that and cattle tread it out considerably on th softer ground and in wet weather. Experimints will be made the coming scason with Australian rye grass; this grass 18 believedur and is noted for a heavy sod. A few tufts
growing near a ditch on the sacramento side growing near a ditch on the sacramento sid
seells to thrive as well as any grass yct intro duccd. Iied clover does well
the best plant for wet situations.
Comparatively little
carried on on Sherman islani, Lut cnongh has been done to show that profits a wait those who undertake it. Lyman Ayers, recently removed from the island to Soliona county, owned
dairy of npwards of 60 cows last season. Messrs Piglow comes next with sone 30 cows, and P. H. Boggs has another a little smallcr. One of the
most important advantages which dairymen most important advantages which dairymed
here possess lics in the abundance of green fod here possess lics in the ach scason when the coast mands the himest price in market. To secur the fullest advantage of these circmustances it is the practice of dairymen to bring their cows
due with calf the fore part of summer, and thus get the largest llow of milk when prices ar best. This is no slight advantage in its pecuni-
ary results and as benefits the health of the stock.
Tha
That the present practice of subsisting cows
by pasturing is most judicious and profitable, I do not believe. Foldter can be produced her on land which will donlle in value at the an of the next decade, green soiling must soon suc ceed the present system. The features whic best reconmend soiling, lesides the saving in
land and fencing, are the quiet and comfort in sured to cows, the large increase in milk, an the greater pernanence of pasture. By soiling
at least four head cau le kept where one can at least forn head cau be kept where one canl
now. Alfalfa, green sowed corn, cabbage, squash now. Afalfal green sowed corn, caboade, squassi
and beets, all yield heavily here, and are varieties which cannot be excelled for this purpose Afraifa may be cut eight moths in may be used in the winter months, with bects then or in the spring. such a prograinme
marked out and followed would secure the best results in point of profit, health and close, ex act management.
Cheap transportation, and the good order in Which butter arrives in narket, are further rec this place The experiment of rowing chuf is likely to be tried this season, and if it will succeed here as well as it is said to do elscwhere In conclud augment thc uroits from swine wish to speak of the milk business as one that is not unlikely to come into prominence here at
some day. It is a place that cannot be excelled some day. It is a place that cannot be excellee
for the production of milk in large quantities and its keeping qualitics are supposed to b produced. The coast, whid competition exist anong milkmen now, and he who undertakes to cessfully will have need of unusual busines capacity and a thorongh comprehension of the
difficulties to be met and overcome. The whole question lies in timely transportation. A little inquiry has elicited the fact that nothing can be done now in the business unless among hotels
and restaurants. Transportation would come at the rate of seven or eight cents per three Francisco by the mil coull be sent into sa touch at the island at from 9 to 11 o'clock $P$. arriving in the city at 3 or 4 o'clock the nex families. with the existing lines of transporta tion, consequently no business can be built up
anong them: but when the railroad is built anong them; but when the railroad is buip made for sending it in refrigerator cars that wil ove satisfactory. Fel. 11 th, ${ }^{\text {H. }} \mathrm{F}$. 8 .
Shernan Island,

What a Patermal Government Does for

## the Farmer

limitors Press:-Among the tutelary deitie of the nation, whose Olympus is in Washington there is one to whose care tho farmers of Amer ica are especially confided. I believe som "(iencral" usually presides orer what is com monly known as the Agricultural Bureau. By this Bureau it is supposed that pullicity is already public and a few parcels of secds are sown sparingly among farmers. The Governagricultural community and its desire to encour best of plauts It also professes to allow sceds to loe received through the mails from foreign conntries at the rate of four couts per pound. So far, good! Iut when 1 endeavor to avail myself of these benovolcnces of the (iovernment, kinds of seed, I receive, instead of my packages of seca, a polite note from the eustom officer, confis


## The Labor Problem.

Ebrtors Press:-Every pajer and every individual has somethiug to say of the hard mes and the remedy. Why is it that few or one present the true canse, and only possible cause? He are confronted with these facts: dhe than ever before known; that this state things is confined to no country; and that it rows steadily worse. There can be but one reason: that there is less work than former! for men to do. The introduction of steam an halor-saving machiucry has wrought a fundamental change in human society. Until some forty years ago the number of pair of hands was just equal to the number of mouths, but uperseded one-third of these hands have been to feed. The same old earth yields the sam corn and oil as of old, but one-third her best
and bravest go hungry. Her best-for the and bravest go hungry. Her best-for the
people that were forenost in inventions and progreess now suffer the nost. Ought this to be? If it is the inevitahle result of machinery, both to break up our looms and engines and go back to the old way; but this will not be, for there 2 hours and did a certain work. Now stcal and two men in same time do the same work, while the third man is itle and has to be sup-
ported by the other two. There is but ove portedy. Let the three men work with steam the eight or nine hours necessary to accomplish the work. Or simply, reduce the hours of la and then come down heavily on all idlers if we are ever to see prosperous times again. ation demands leisure The corner-stone o opular government is popular education. How can those who are overworkel or those who are
starving achieve any culture? Human progress is progress in knowledge, and this progres quently more and more dominion over nature to afford that leisure. so the invention of ng civiliza per of the masses. But we must take a new de parture. As fast as unachinery gives leisure
divide that leisure equally among all. A gain here is no limit to the in in the whole world feels the burlen. Soon one man in two will lee idle and starving; then two time. (ae are alreaty oll the brink of a revo
lntion, and it cannot the averted. Revolntious
never go back ward. The efforts of all true men should be to render it peaceful and speedy
Anburn, Feb. 10th, $18 / 8$

## Labor Notes.

Fimtors Press:-It has been a source of no ittle pique to the writer to have some of our nost noted journals declare that we have a sur-
phus of laboring men and women in this State, only now needing persons of more or less capial to develop onr many resources. It appear to me this is only another and polite way of
saying to those thrifty people who have suffivicnt energy, industry and economy to. have are many lazy good-for-nothing louts here who
will take your money a fast as you are pleased
to lct them lmave it, and are willing to do little or nothing in return. As for real goon, lively, oncrgetic, trustworthy men and women, either
cith or without money, the state has never had en favor, though whether by merit.or usurpation $\left\lvert\, \begin{aligned} & \text { confiscated package of seed, taken entering the paternal (ioverument's } \\ & \text { mails }\end{aligned}\right.$
twice as much as the same labor commands in
the Atlantic States. There the usual price is $\$ 15$ per month for the man, and $\$ 6$ to $\$ 8$ for these prices would be an insult; and that where clothing is equally cheap, and no valid reason why more should be expeeted. In Wisconsin I sh per cord, 75 cents was the regular day, s wages, while for $\$ 1.25$ was all that was given or expected, $\$ 1$ and the hired girl did the given or expected, and $\$ 1.50$-all this where a Chinaman was neve seen. Here we have to pay $\$ 1$ for cutting the man's, and $\$ 20$ or $\$ 25$ for the Celestial.
Now, the true and only proper solution of the preseut labor question is to equalize the wage all over these United States, and make every able-bodied person pay with money or labor for whatever he has. The tramp is a nuisance, will die as soon as a proper public opinion is law inaking it a crime to beg.
The really needy are well providerl for in the county infirmaries. All others should work until such diseipline makes them worthy of some pay, and their good work and care for an employer's things attracts attention to them, so their services will command a price. In this State we
could well afford to put thousands on thousands could well afford to put thousands on thousands any surety that they would labor faithfully and or a reasonable price-one that corresponds we want real thorough-going, active, energetic able and willing to work, and in my next notes they will be told how to make a comparatively easy living from our State, and lay by enough to insure them a sufficieucy in old age.

## The Vineyard.

## Throwing' Grapes Before Swine.

Editors Press:-In reply to your inquiry in a recent issue of the Press, I have gathered
the following statement from Mr. James Holland, of our city, giving the net proceeds on his experiment of pigs vs. grapes. I will state that many of his grapes were of foreign variety, and at the time that he put his shoats in his The rest were native. So in averaging the number of pounds each vine had, I put it at 40 pounds. I doubt if it would reach that, still odds were against him) out of four acres. The four acres contained 2,720 vines, and these
yielded, at 40 pounds each, 108,800 pounds, or abont $54 \frac{1}{2}$ tons at $\$ 10$ per ton, the ruling price for grapes delivered, would amount to $\$ 545$.
Instead of selling them at this price, Mr. HolInstead of selling them at this price, Mr. Hol-
land turned in 50 shoats which weighed, when put in, 75 pounds each. When they were taken out at the end of three and a half months was 5,000 pounds of pork. This at niue cents per pound amounted to $\$ 450$, which was the amount which would have hee probable by marketing was $\$ 545$ for the crop. The pigs
yielded $\$ 450$ and did their own pickiug, boxing, drawing, etc.

To learn how much the pigs gained each day on grape diet divide 5,000 by 105 , the number of days they were in, and gives 47.6 pounds, or a
little less than one pound per day for each pig. Incidents.
This was in the fall of 1876 . Mr. Holland left for the East in September. His shoats
were China and Suffolk mixed, and he gave inwere China and Suffolk mixed, and he gave in-
struction to have them put in the viueyard during his absence. He returned in December
and was shown his shoats; but declared in toto they were not his. Had they not been in en-
closure, no argument could have changed his opinion.
His relative, who hard them in charge, stated it was amusing to see the pigs elimb on the
vine and haul in the grapes. When filled they would go no farther, but drop under the vine, give a good puff and sleep till hunger awoke
them.
There is nothing like well bred hogs with good living and sweet pork. They are not like your long, lank, broad side, snout-digging crea-
ture. How much ease aud no expense the owner has when his hogs gather his grapes,
drink his wine and fatten their ribs. sa ved, the soil fertilized, while the owner is off on other dnty, pleasure and ease. Who would not
raise grapes for Mr. lig when he is so accommodating, and when he has done all this you done. Alas, poor Piggie!
Sacramento, Cal.

Normiern Exploration.-The Dutch are
fitting up a vessel to engage in the exploration
of the waters of Spitzbergell and Barentz next of the waters of Spitzbergell and Barentz next
summer. Recent discoverics in these watcrs
make it probable that this expedition will have

## The $\mathrm{D}_{\text {AIRY }}$

## Dairy Practice in Humboldt County.

Editors Press:-It is a long time since have attempted to give the readers of the Press a little of my experience. I have read all the proceedings of the dairymen's meetings, as published in the Press, with great relish, and, if you will allow me a little space, I will state a few points in the treatment of cattle and grasses that Messrs.
First, I hold it to be essential, when sowing grass for pasture, to sow three or four kinds of grass seed, for we know that cattle like a variety of food as much as we do, aud they will thrive much better when they can get mixed grasses. Second, I believe it is better to divide our pastures and ehange the cattle at least onee in
two weeks from one field to the other. Those two weeks from one field to the other. Those
who have never tried this plan do not know the who have never tried this plan do not know the
benefits both to the cows and the fields. It benefits both to the cows and the fields. It
gives the grass a better chanee to live and the cows will fairly laugh when they see you open the gate. I have three small fields, and, by give more milk aud butter than those kept iu large field all the time.
I sow orchard grass and red clover with a little timothy. We have a native rye grass
here that makes very good feed and good hay. This rye grass made its appearance upon our wet lands
Dairymen and stockmen all want to keep too much stock and so they kill their best grasses by feeding too close. Would any man expeeta
tree to live with every leaf picked from it? Why then expect grass to grow when they give it no chance to breathe?
By sowing mixed grasses, we get a greater
yield. I have made hay of pure orchard grass and pure timothy that only yielded three tons per acre. The last grass that I made into hay was orchard grass, timothy, blue grass, re
clover and English rib, grass, mixed, and yielded six tons per acre, cut the 5 th of June. The orchard grass was in bloom, the timothy
just showing its head and clover partly in just showing its head and clover partly in
bloom. Sone of the orchard grass was six feet three inches high
The question is of ten asked, how can we regenerate our worn out pastures? My plan is
to fertilize and sow fresh seed. If this cannot be done, then divide the pasture and allow a part to go to sced each year. It is not a great have good fall and winter feed and the dead grass fertilizes the laud.
If we want good feed for our cows, we must kecp horses, sheep and hogs out of the pasture.
Any of these will starve the cows to death Ay of these will starve the cows to death.
Now, about the yield of milk from mixed grasses. All I say is that I have no fancy cows thit give 20 quarts per day on good grass. A very small cow gave $33 \frac{1}{2}$ pounds, a larger one gave 36 pounds.
winter, wist very little grass. I feed the low globe bects and oat straw.
Ferndale, Humboldt Co., Cal.
[This is a good letter and full of suggestive华ics. We should like to hear from all our dairy readers.-EDss. Press.]

## Dairy Literature.

No specialty of agriculture has so rich a literature, whether it be judged from a scieutific or practical point of view, as the dairy. The volumes of reports issued by the numerons dairymen's asociations of the Eastern States and Canada would make a small library of themselves, and the truths which have been made generally known through these avenues has resulted in the wonderful growth of the industry and the improvencint of its practices. This literature is growing continually, and cach year's additions show that there is still field for
the pens of earncst, thoughtful writers, both in the science and practice of the industry. These remarks are called forth by two published reports which have come to hand during the
present week. Oue is the 8 th anlual report of present week. Oue is the 8th annual report of
the Verinont Dairymcn's Association, of which Mr. O. S. Bliss, of Cicorgia, Vermont, is Secre defatigable laborcrs in the field of dairy prog. ress, whon it is our pleasure to know. How
well he has succecdcd in building up the asseen in the fact, that its ineetings are attended encrs. His latest rcport is a pamphlct of nearly
200 pages 200 pages. It eontains the full record of the
neetings which have becn held during the year at which the whole lusinces of dairying in the underlie successful dairying everywhere which fully discussed. Thare were 15 thatelelare, wrere
and lecturers, and notes of the discussions which they elieited. Besides thess there is
value. The report is a very ably one, and an
honor to the association from whie it Another report whieh we esteem highly is
honor Another report which we esteem highly is
that of Mr. H. F. Moore, honorable Secrethaty of the British Dairy Farmers' Association Agricultural Gazette, a sterling iournal, Land t Ais iutelligeut and continued effort is mainly due the English organization of dairy farmers for their own improvement and advancement.
The first number of the Journal of this organiThe first number of the Journal of this organi-
zation, is a handsome quarto pamphlet of 100 pages. It contains, among other valuable pacultural chemist whinh en, enimert agri cultural chemist, whinch reviews the practiee of
cheese-making in a most poiuted and suggestive manner. There is also an able report upon dairy methods in Cermany, by Prof. Sheldon o Other artieles dairy practiees in Englaud, and the report iseln bellished with engravings of English prize eows.
The whole panphlet forms a valuable additio The whole panphlet forms a valuable aldition
to dairy literature, and is the forerunner of to clairy literature, and is the
nohle series, we have full faith.
These standard reports are of the kind whieh Dairymen's Association. The dairy interest this coast should eertainly assume the prom inenee both in literature and the estimatiou o the people which its magnitude merits. This ca coming meanbers of the associt the sent contributing their varied experience to the interest o its meetings, There are a hundred topics
which our dairymen should discuss together and exchange views upon. We hope the meet ing next October will show that this fact is gen
erally accepted.

Aroma of Butrer.-A Silesian farmer sus
pends in his empty churn a calico bar fille pends in his empty churn a calico bag, filled
with fragraut herbs, keeping the ehurn carefully closed. At churning time he substitutes four smaller bags, attaching one to each of the beat
ers of the ehurn. He thus communicates to th butter au aroma as delicate as if the cows hai
pastured in meadows most highly favorel by nature.

## FLopiculture.

## Analysis of Colored Leaves.

Prof. A. H. Church, of the Royal Agricult
aral Co'lege at Cireneester, Eugland, in the ural co lege at Cireneester, England, inh the phyll (the green coloring matter of plants) was different parts of variegated leaves, and the re ults he has reached, and which are reviewe iu the Journal of Chemistry, are exceedingly three plants, having green leaves variegated with white patches, or bearing both green and white leaves: a maple (Acer negondo), an ivy
Hedera helix), and a holly (Ilex aquifolium) The leaves were carefully ga thered without the ase of knife or scissors, and were put into
weighed bottles so that no moisture could he lost on the way to the laboratory Sueh leaves only were taken as could be fairly compared in bustible or volatile matter and the ash were first determined; and the following are the tab nlated results: <br> \section*{Maple. <br> \section*{Maple. <br> }

The watery character of the white leaves, an their comparative poverty in combustible or so
called "organic" coustituents, is very markel. The fresh green leaves of all three plants con-
taincd about one-third more solid matter than the white leaves. The mineral matter or ash, when not absoutely more alundant in the
white leaves, forns a larger part of their dry matter.
Of the matters soluble in cther, inclucting wax or fat, resin, chlorophyll, anll several other organic compounds, fresh white ivy leaves eonilarly, white holly leaves containcd $1.75 \%$, and greenholly 2.51
Wesen more remarkahle differcuces in comnoticel on sulbmitting the ashes of the several plants to पuantitative analysis. It was olserved that in the ash of all thrce phants there is tho green parts. ln the ash of the white parts potash abounks, and ine the ash of the green there is invariahly a higher propertion of phos. phates than in that of the green. Whero is chlorophyll in the green parts involves a ligher proportion of iron.
The cxperiments suggest an explanation of plants which have hitherto luecu inexplicalle; as, for instance, that in sonce calcareous soils
many such plants quickly revert to their norinal many such
grecu state.

Thaprionse will soon be within the reach o all. At no distant day every fanily will have
one of its own. True, you can't get a good one one of its own. True, you can't get a good one
in this country, now for much less than $\$ 30$, but

## Horticulture.

## The Diospyros Kaki.

Editors Press:-I wish simply to say that a former article, I intended to give some genral information in regard to the above fruit, belicving it to be important to all parties that he facts concerning it should be known. 1 an lso confident that such information will be elcomed and will in no way "disparage" or ijjure "honorable competition."
The statements were made from four years' persoual acquaintance with the fruit in Japan and also from consultation with the best authorties. As there are so many varieties of the Japanese persimmon that are small aud worth ess (and it is claimed that seedlings generally rs and dealers should be fully acquaiuted with their leading characteristics.
I have seen a poster or eircular issued by arieties of the fruit. Not represents five ames is given correctly, aud Mr. Shinn himself changes each one that oecurs in his recent artile on the subject. Yet he criticizes my nomen-
clature and clains to have full confidence that is is the true one.
I have eaten the persimmon at Kioto, and okohan market, but I laveties found in the less fruit like the one represeuted in the circular eferred to. Good authoritics statc, also, that no such is to be obtained.
Mly judgment in regard to the matter is also contirmed by having seen on the trees imported
y Mr. Shinn the name of a well-known, many-sceded and astringent variety. It is the minoyaki or minotzurus specimens of which I
have now in my possession. The so-called "Seedless" is not the Imperial, as Mr. Shinn claims; nor is the almong the
largest variety, as has been elsewhere stated. Since your correspondent can neither give the true nanie or descriptiou of the fruit, it is evi-
dent that he is harilly qualified to criticize or enlighten pthers. The claim that he is the pioneer in the cnterprise is disputed by other
and equally reliable partics. I write, wishing success to every honorable and laudable enter-
HENRY Loomis.

Orange Culture Among the Foothills.
Editors Press:-1 made a promise some time ago to a correspondent from the orange groves Los Angeles, that I would give, through the Rural, my opinion as to the capacity of the
foothills for orange culture. Since then I have athered a few facts-pro and con-which will briefly sum up. Orange trecs were planted in this county-Tuolumne-as early as 1853 or 854, by Capt. Smart, of Jacksonville. The cnture proved a success, until the garden passed into other hands; and was finally destroyed by being mined up by Chinamen. Large orange trees were cut down and cast
asile. The roots of a few were sct out in a neighboring garden, some of which have beeu
in bearing ever since. Orange culture has scldon becn followed here for profit. Many have planted onc or two trees as an experincont or
ornament, and those who havo taken care of rnament, and those who havo taken care of
their venture lave been well repaid. Dne eason for not engaging extelnsively in orauge
and lemon culture is owing to the loggth of tine required for remuneration. Peach, applo, pear and pllums offer a richcr reward in the might be different. Many would purchase nd phaut if young, hudded trees were brought one their noticc. One tre-belonging to a
to Fenchman a few miles from my phace-horo
70 orangos this season and only 24 the prececding year, being a young trce. The incrense
seens eneouraging. The fruit was above the verage size and of a delieious flavor; neither ur nor swect, but a pleasant mixture
The frost would be the ouly
roper developement and extensive cultivation Sut very few cases of killing ly that ineans aro on record. If those engaged extensivcly in cars will see the hillsides eovered with orange trees. If they prove to be of the same quality
as the l'renchnau's, the foothill orange will bo in as much demand as our uncquated peaches, apples and grapes.
here to give a richness to all fruit grapes aul phere to give a richness to all fruit grapes and Wine in all its varietics. Those having orang
rechards should see that the demand of the foot hill region is supplied, for surely the proper introduction of the fruit would ercate a markot prolitable to ath coneerucd. Thero is health as hose who cultivate the most are the lest friends

Almonis socks.-J. II. Reed writes to the Russian liver flay as follows: "With refertrecs, I have tried it repentedly and success-
fully trees from which they were taken."

## GORRESPONDENCE.

## Sherman Island.

Editoss Press:- -Until recently, there has been, I think, little tulc land in the state to than Shcrunan island. It has always heen something of a standard of comparison by which the late. J. Ross Brownc, and other writers, wre
wont to estimate the prollable cost of reclamawont to estimate the prolable cost of reclama-
tion work, and gauge the probable crop yield when once brought under cnltivation. It was amoug the first tulc lands iu the State to be tive. 1)ating back to 1861, when levee building was little understood and the effect of tides and freshets was, for the most part, a matter of
conjecture, the reclamation of this islaud, up to 1s75, marks the first epoch in the history of reclamation and levee building in California. Since 187.0 dredging. machines and improved
methods of construction have superscded the earlier manner of building, reducing the eost
and insuring greater stability at the outset. After passing tlirongh the discouragements of floods, damaged and ruined crops and leve assessments, and after growing into the kiowl-
edge required in reclamation work, shernau Islanders remain to-day masters of the situation, and arc now the fortunate possessors of a finc
body of as fully reclaimed tule as cau be foumd in the Sacramento or San Joaquin rivers. Tho levees have grown stronger by steady accretion,
until now when, excent iu the event of a g great
flood like that of 1862 a break in the levee flood like that of 1862, a break in the levee
might be considered the result of culpable negligence. In such a district, oue man's interest is
another's, and all are too keenly alive to those another's, and all are too keenly alive to those
intercsts to joppardize them by neglecting proper intercsts to jcopardize them by neglecting proper
precautions. Trustees are appointed, who
"spot" weak places, if any, aud repair them each fall. Another source of security is to bc noted in the steadily increasing deposit of sedithe levecs, with wider fringes of tules breaking the force of the wash in windy weather. At
this point in the river, I should judge that the eontinuous sediment deposit has been more beneficial than otherwise, though nearce Sacramento
city, where the bulk of the delris settles, it is an evil necessary to be averted as soon as pos-

## sible

has been with which it has been executed on Union,
Roberts and Grand islands, the large vield in cercals reportcl from time to time in other dis-
tricts, and the fane of the rich orchards on Old tricts, and the fame of the rich orchards on Old
river, have latterly absorbed much attention. The merits of sherman island, though less loudly trumpeted, are none the less real. Mnch
of the land on this island is farmed by Chinese, who pay a cash rent of from 815 to $\$ 20$ per acre The largest landlolder is J. I.
owns alout 2,000 acres, with two large ware houses, a wharf, store and hotel, a saloon, blacksmith shop, and several dwelling houses. The
warehonses were both filled this season to their ntmost capacity with hay, grain, potatoes,
onions, leans, etc., and much still remains on onions, heans, etc., and much still remains on
hand. Messrs. Boggs \& Jordon own a fiue raneh alfalfa and fenced, with numerous outbuildings affording ample room for the shelter of stock, place weariug an air of thrift and good manage ment. Among other fine ranehes on the island is one of 500 acres, finely situated, at the upper
end of the island. M1r. Upham has rebuilt the house fluring the past suminer, nieely furrishci ments.
The actual sales during the last 18 months are as follows, and the purehasers are, viz: J.
H. Baker, 500 acres; O . A. Lindsay, 191; Mr.
Sanborn, 250; 13. Palmer, 100; Mr. Braud, 186; Hanson Bros., 42. The price has ranged from $\$ 43$ to $\$ 60$ per acre; in a few sales of small
pieces and building lots the salcs were at higher figures.

Adaptations of the Island
Sherman islaud is not one which the cultiva-
tion of cereals will prove largely profitable; it is more than a subordlnate interest. Nevertheless it has resouroes of muusnal value and in the liue
of its adaptations to certain products and spece.
ial branches of farming there lics a rich ial branches of farming there lics a rich and
successful future. Its situation not frr distant from sann Francisec county, the soft, yielding
turf eool and moist; the rich and rapid growth of aifalfa, and the certainty and the ease witll
which it can he irrigated; the facilities afforded for safe and realy transportation hy four lines makes it the best pasture land that ean loe ob-
tained for horses and especially thoso drive over the rough pavements of Nan Francisco,
Over 300 horges were at one time pastured here last summer by Mlessrs. Pogge \& Sordan, Big.
low \& lluston. Siome of the lest stock in the State eomes up here and never fails to return
recrnited and improvel. Pasturage is one
Pusiness an and one which will surely grow in the future.

Though orchard frnits cannot be grown here
of such supperiority as to warrant cultivation for of such supperiority as to warrant cultivation for
profit, an abundance of very good fruit can be grown for home use. It is an excellent loca-
tion for the growtly of nursery stock, as a tion for the growtho of nursery stock, as ${ }^{2}$
large varicty of choice grafted and thrifty young mirscry trecs grown by Doctor D. ©.
Perry will testify. I doubt if there are any
It locartics in the state wherc black berries can be
more successullly grown than on this island. Plenty of watcr can lo supplilied, and the soil is
peculiarly adapted to their growth. The yicld peculiarly adapted to their growth. The yicld
is from 10,000 to 18,000 pornds per acre, ac-
cording to soil and cultivation. Strawberries cording to soil and cultivation. Strawberries
also do well. Few berries are as yct growu herc, also do well. Few berries are as yct growu herc,
but the case witll which thicy may be suceess: bully grown and marketed would scen to indi-
fund at some future day
The fine onions grown here are too well known to require cominent. Alout in acres
were sown and harvested here last seasoul, yielding from 200 to 400 sacks 1 ler acre. Something
like 170,000 sacks of potatocs were raised here last scason, and so many have been shipped from Nmmaton that that place has received th
sobriquet of "spudtown" from the boatmen.

## Growth of Alfalfa

Alfalfa is the product that promises most for the island. The points in favor of its produc-
tion are: 1. Its large and alhundant yield of from six to eight tons per acre, minder suitable le irrigated at any time and in any season. banks of each ranch tation by watcr in which alfalfa eanu be turrucl to account for pront, as in dairying, pasturing, stock raising,
and for hay. Twelve hundred aeres are seeded to alfalfa now, and yielded last seasonn from three
to five cnttings. Of this, Messrs. 1 loggs \& Jordan own 600 acres, which last year carried 100 pasture horscs, the ranch teams and many
sheep, hogs, and a small dairy of cows, and yielded lesides, many tons of lay for shipment.
The hay shipped from the island is better than the average, and brings the top 1 , rice in the
San Francisco market when ured with the San Francisco market. When cured with the after in market by those whose expericnee in feeding it has tanght them to discriminate be-
tween good and bad alfalfa, instead of dealing wholesale coudemnation to all hay bearing the name. There is as much difference between yoor
alfalfa hay and the poor brands that go into alfalfa hay and the por brands that go mand
the market as there is betwecn gool hay and worthless weeds.
growth and less except, perhaps, that of Brannan, Staten and
Andros islands, in which the soil and moisture are about the same. Again, the clinate of Sherman island is cooler by several degrees, aud the hay when carefully cured, is less brittle, and retains the leaf better than that grown in a
very warm climate. Plenty of water is portant factor in the production of good hay. portant factor in the protuction of goon hay,
The time to irrigate is immediately after the
crop is remoced from the fied succeeding crop springs up vigoronsly, yielding another cutting in from six to seven weeks. Irrigation is from the river, and the water is lct into tlie ditches inside the levee and is contwo to fonr feet in depth and distributed over the ground iu shallow laterals, a foot deep and
from four to five rods apart, the water secping rom four to five rods apart, the water secpay
just under the surface. Flooding is always avoidcd, as it scalds the plant in warm weather. market at from $\$ 5.50$ to $\$ 6$ per ton.

## Dairying

In coinection with swine raising should at n n distant day, be the leading intercst on this is
and. The strong advantages whieh it and. The strong advantages which it pos-
sesses for dairying are, viz: excellent facilities for irrigatiou, its climate, the large varicty of
food products which can be grown on this land for dairy stock with green forder the year round.
Irrig
ing permancnce to ineadows, by preserving the fertile properties of the soil. This is well known and acknowledged wherever it is practiced.
Those who here contemplate irrigation olliged to incur the expense of a sirvecy, of dams, or a water rent of $\$ 1$ or $\$ 1.60$ per acre on the other By dauming the inside ditch next the levce on on the boundary line of each ranch each farmer
has control of all tho watcr requisite to lis nceds, and can use it at such times as may best The climate is very fav
The climate is very favorable to dairying and
to dairy stok. The trade-winds blow regit larly in snmmer, The the climate, thourgh"quite
warin, never reaches the excessive heat of the iuterior or experiences the capricious variahle-
ncss of midday leat, with the cool raw ings and evenings known on many parts of the
coast. The thermometer ranges in the hottcst days of summer from $90^{\circ}$ to occassionally 106
in the shale, the nights are invariably cool. in the shade, the nights are invariably cool.
Frost in lecember and January faroor but a
slow growth of vegetation. It is severest in slow growth of vegetation. It is severest in
those months, thongh occurring sometinues
much carlicr as well as later. In some parta the state within the range where foge prevail,
tho climate is what inilkmen call "sour," tho climate is what milkene call "sour," and
milk exhibits some unaccountable freaks in its keeping qualities in the face of the best care.
Fog is rarely secu here and none of its ill effects are expariencel.
Alfalfa holds the front rank here in popular
avor, thouglo whetlier by merit or usurpation
remains to be detcrmined. I believe its merits
will hold it in its present position above others. will hold it in its prescnt position above others.
Its chicf value is its large yield and its nutriIts chicf value is its large yield and its nutri-
tions qualities for grazing and hay. The grat.
est objcection that can be urged against it is that est objcction that can be urged against it is that
it does not form a frrst-rate sod and that horses
and and cattle tread it ont considerably on the
softer ground and in wct weather. Experi-
ments will be made the comimg season with Anstralian rye grass; this grass is beason wieved to be will adapted to the wants of island pasture,
and is noted for a heary sod. A few tuft

## growing near a ditch on the soll A few tuft

 seems to thrive as well as any grass yet intro-duced. the best plant for wet sitnations.
Comparatively little dairying has yet heen heen done to show that profits await thosc who undertake it. Lyman Ayers, rccently removed dairy of npwards of Gocows last season Messrs Piglow comes next with sone 30 cows, and P. H. Boggs las another a little smaller. One oi the most important advantages which dairymen
here posscss lies in the abundance of green fodhere posscss lies in the abundance of grecin fod-
der, whicl grows at the season when the coast counties have the lcast, and when butter comumanls the lighest price in market. To secure the fullest advantage of these circumstances it is the practice of dairyncon to bring their cows
due witli calf the fore part of summer, aud this get the largest tlow of milk when prices are
best. This is no slight advantage in its pecuniary resnlts and as lencfits the health of the Tha
Trat the present practico of subsisting cow by pasturing is most judicions and protitable,
do not believe. Forder can be produced here in encless variety and luxurious ab of the next decade, green soiling must soon succeed the iresent system. The features which
best reconmend soiling, besiles the saving in land and fcncing, are the quiet and comfort in sulred to cows, the large increase in mink, and
the greatcr permanence of pasturc. By soiling the greatcr pernanence of pasturc.
at least four head ean be kept where one cal now. Alfalfa, green sowed corn, cablage, squasi ties which cannot be excelled for this pnrpose Alfalfa may be cut eight months in the year corn five months, while cabbage and squash
may be used in the winter months, witl beets may be used in the winter months, witil beets then or in the spring. Nuch a programme
marked out and followed wonld secure the best results in point of profit, health and close, ex act management.
Chieap transportation, and the good order in Whmendater arrives in markct, are furthcr rec this place The experiment of giving cluvf is likely to be tried this season, and if it will succeed herc as well as it is said to do elsewhere it will largely augment the urofits from swine wish to speak of the milk bnsiness as one that is not unlikely to come into promincnce here at
some day. It is a plaee that cannot be excclled some day. It is a plaee that cannot be excclicd
for the production of milk in large quantities, and its keeping qualities are supposed to be better than on the const, where now most largely among milkmen now, and he who undertakes to cessfully w wholesale business or a route suc eapacity and a thorough comprehension of the difticulties to be net and overcome. The whole question lies in timely transportation. A little
inquiry las elicited the fact that nothing can be done now in the busincss nulcess among hotels and restaurauts. Transportation would come Francisco by the stockton liue of boats, which tonch at the island at from 9 to 11 o'cloek P . . 1 . arriving in the eity at 3 or 4 o'clock the next Inorning. But one service a day cau be used for
fanilics with the existing lincs of transporta familics with the existing lincs of transporta among them; but when the railroad is built above Antioch arrangenceuts may perhaps be macle for sending it in refrigerator cars that
prove satisfactory.
H. Eucever II.
sherrnan Island, Feb. 11th, '7s.
What a Paternal Government Does for

## the Farmer

Botrons Press:-Among the tutelary deities of the natiou, whose Olympus is in Washington there is one to whose eare the farmers of Amer ica aro especially confiled. I believe some "General" nsually presides over what is com monly known as the Agricultnral Bureau. By this Burean it is supposed that publicity is
given to certain facts and theories that were already public and a few parcels of seeds are sown sparingly among farmers. The Govern-
ment thus sigifies its benevolence towards the agrieultural commnninity and its desire to eneour aye those intcrested to ontain ani culivate thc hicst of plants. It also professes to allow sced
to be received through tho mails from fureigy to be received through tho mails from forreig
eounutries at the rate of four cents per pound. So far, good: Put when 1 endcavor to avai
myself of these lenole by sending where I know I can get the best
kinds of seell, I receive, instead of my packages of seetl, a polite nute from the enstom officer, demanding
confiscated confiscat
mails on


## The Labor Problem.

Eurtors Press:-Every paper and cvery individual has soncthing to say of the hard times and the remedy. Why is it that few or none present the truo cause, and only possible cause? We are confronted with these facts: That a greater number of men are unwillingly ile than ever before known; that this state of things is confiucd to no country; and that it grows steadily worse. There can be but one reason: that there is less work than formerl for men to do. The introduction of steam and hlor-saving machinery las wrought a fundanental change in human society. Until some forty years ago the number of pair of hands was just equal to tho number of mouths, but supersedel by iron oues which have no mouth to feed. The same old earth yiclds the same
corn and oil as of old, but one-third her best nd lravest go hungry. Her best-for the people that were foremost in inventions and progress sow suffer the most. Ought this to bee
If it is the inevitable result of machincry, both
. humanity and sclf-preservation will compel ua to the old way; but this will not be, for there is a better way. Formerly three men worked nd two men in same time do tho same work while the third man is idle and has to bo sup. ported ly the other two. There is but one
remedy. lict the three men work with steam the eight or nine hours necessary to accomplish hor by law. Or simply, reduce the hours of 12 and then come down heavily on all idlers,
What work there is muthe be divided among all, if we are ever to see prosperous times again.
There is onother way of looking at it. Edu cation demands leisure. The corner-stone of
popular government is popular education. How popular goverument is popular education. How
can those who are overworked or those who are starving achieve any culture? Human progress is progress iu knowledge, and this progres,
demands more and more leisure and conse quently more and more dominion over natur to afforl that leisnre. arture. As fast as maclinery gives leisure ivide that leisure equally among all. Again here is no limit to the nniltiphication of en
gines. Already one man in thrce is idle and the whole world fecls the burden. Soon one man intwn will be iflle and starving; then two
in three. Tlien what? Let us be warned in time. We are alrealy on the llink of a revo-
lition, and it cannot be averted. Revolutious never, go back ward. The efforts of all true
meu should be to reudcr it peaccful and speely.

Auburn, Feb. 10th, 18 s s .

## Labor Notes.

Elutors Press:-It has been a source of no ittle pique to the writer to have some of our nost noted journals declare that we have a sur-
Hus of laboring men and women in this State only now needing persons of more or less capito to develop our many resources. It appear saying to those thrifty people who have suffi
jent energy, industry and econoiny to . have cient energy, industry and econoiny to. have
saved a portion of their earnings that there are many lazy good-for-nothing louts here who to let then inve it, and are willing to do little or uothing in return. As for real goon, hely,
energetic, trustworthy men and womeu, eithicr with or without mone enough of them,
ens wishing l
twice as much as the same labor commauds in the Atlantic States. There the usual price is
$\$ 15$ per month for the man, and $\$ 6$ to $\$ 8$ for these prices would be an insult; and that where clothing is equally eheap, and no valid reason
why more should be expected. In Wisconsin I why more should be expected. In Wisconsin 1 , ash, etc., into four-foot cord wood for $37 \frac{1}{2}$ cents 75 cents was the regular dar swau harvesting swinging the cradle, scythe, binding etc., $\$ 1$ or 1.25 was all that was gin expecte, and $\$ 1.50$-all this where a Chinaman was never wood, $\$ 5$ for the girl's week's work, $\$ 30$ for the man's, and $\$ 20$ or $\$ 25$ for the Celestial.
Now, the true and only proper solution of the preseut labor question is to equalize the wages all over these United States, and make every able-bodied persou pay with mouey or labor for whatever he has. The tramp is a nuisance, will die as soon as a proper public opinion is law making it a crime to beg.
The really ncedy are well provided for in the county infirmaries. All 12 hours a day, for their board, if need be, until such discipline makes them worthy of some pay, and their good work and care for an employer's things attracts attention to them, so their
services will command a price. In this State we services will command a price. In this State we
could well afford to put thousands on thousands could well afforl to put thousands on thousands
of men and women to work providing there was any surety that they would labor faithfully and with Eastern labor prices Say to the world we want real thorough-going, active, energetic men and women, without any money, who are they will be told how to make a comparatively easy living from our State, and lay by enough to insure them a sufficieuey in old age.
Boulder Creek, Santa Cruz Co., Cal.

## The Vineyard.

## Throwing* Grapes Before Swine.

Editors Press:-In reply to your inquiry in a recent issue of the Press, I have gathered
the following statement from Mr. James Holland, of our city, giving the net proceeds on his experiment of pigs vs. grapes. I will state that many of his grapes were of foreign variety, and at the time that he put his shoats in his
vineyard these grapes were dried on the vines. The rest were native. So in averaging the number of pounds each vine had, I put it at 40 pounds. I doubt if it would reach that, still 1 want to show how Mr. Pigship gained (if the
odds were against him) out of four acres. The odds were against him) out of four acres. Thi
four acres contained 2,720 vines, and these yielded, at 40 pounds each, 108,800 pounds, or about $54 \frac{1}{2}$ tons at $\$ 10$ per ton, the ruling price
for grapes delivered, would amount to $\$ 545$. for grapes delivered, would amount to $\$ 545$.
Instead of selling them at this price, Mr. HolInstead of selling them at this price, Ar. Then put in, 75 pounds each. When they were
taken out at the end of three and a half months takey out at the end of three and a haif months
they weighed 175 pound each. The gain they weighed 175 pound each. The gain was 5,000 pounds of pork. This at nine cents value gained for the grapes. The probable amount which would have been gained by marketing was $\$ 545$ for the crop. The pigs
yielded $\$ 500$ and did their own pickiug, boxing, drawing, etc.

To learn how much the pigs gained each day on grape diet divide 5,000 by 105 , the number of dittle less than one pound per day for each pig. Incidents.
This was in the fall of 1876 . Mr. Holland left for the East in September. His shoats were China and suffolk mixed, and he gave in-
structiou to have them put in the viueyard
during his absence. He returned in and was shown his shoats; but declared in toto and
they were not his. Had they not been in en-
elosure, no argument could have changed his copinion.
His re it was amusing to had them in charge, stated vine and haul in the grapes. When filled they would go no farther, but drop under the vine,
give a good puff and sleep till hunger awake them. There is nothing like well hred hogs with goor hiving and sweet pork. They are not like your long, ank, broad side, snout-digging erea-
ture. How much ease aud no expense the owner has when his hogs gather his grapes,
drink lis wine and fatten their ribs. Lahor is saved, the soil fertilized, while the owner is off on other duty, pleasure and case. Who would not
raise grapes for Mr. Pig when he is so acconmodating, and when he has done all tlis you must go and ent his throat for the good he has
done. Alas, poor Piggie!
Nocramento, Cai.
Nitting upr exploration. - The Dutch are fitting up a vessel to engage in the exploration
of the waters of Spitzhergen and Barentz next
summer. Reent diseoverics in these waters
make it probable that this expedition will have

## THE $\mathrm{D}_{\text {AIRY }}$

## Dairy Practice in Humboldt County.

Edrorors Press:--It is a long time since have attempted to give the readers of the Press little of my experience. I have read all the proceedings of the dairymeu's meetings, as pubished in the Press, with great relish, and, if you will allow me a little space, I will state lew points in the treatment of cattle and grasses that Messrs. Steele, Sueath and others have not

First, I hold it to be essential, when sowing grass for pasture, to sow three or four kinds of rass seed, for we know that cattle like a variety of food as mach as we do, aud they will thrive much better when they can get mixed grasses. Secoud, I believe it is better to divide our pastures and change the cattle at least once in
two weeks from one fiekl to the other. Those wo weeks from one field to the other. Those who have uever tried this plan do uot know the
benefits both to the cows and the fiells. It gives the grass a better chance to live and the cows will fairly laugh wheu they see you open the gate. have hys fields, and, by sive more milk aud butter than those kept in arge field all the time.
I sow orchard grass and red clover with a little timothy. We have a native rye grass here that makes very good feed and good hay, wet lands about 12 years ago, and is still preading.
Dairymen and stockmen all want to keep too buch stock and so they kill their best grasse tree to live with every leaf picked from it? Why then expect grass to grow when they give it no chance to breathe?
By sowing mixed grasses, we get a greater
yield. I have made hay of pure orclarrd grass
and pure timothy that only yielded three tons per acre. The last grass that I made iuto hay was orchard grass, timothy, blue grass, re
clover and English rib-grass, mixed, and ielded six tons per acre, cut the 5th of June. The orchard grass was in bloom, the timothy
just showing its hearl and clover partly in just showing its heal and clover partly in
bloom. Some of the orchard grass was six feet rree inches high
The question is often asked, how can we to fertilize and sow fresh seed. If this cannot ee done, then divide the pasture and allow a part to go to seed each year. It is not a great
loss, for, after the grass has cast its seed, we have goal fall and winter feed and the dea grass fertilizes the land.
If we want good feed for our cows, we must keep horses, sheep and hogs out of the pastur
Any of these will starve the cows to death. Any of these will starve the cows to death.
Now, alout the yield of milk from mixe Now, aloout the yield of milk from mixed
grasses. All I say is that I have no fancy cows tli-2t give 20 quarts per day on good grass. A very small cow gave $33 \frac{1}{2}$ pounds, a largcr one gave 36 pounds. This in the middre of winter, with very little grass.
low globe beets and oat straw.
ames Smith.
Ferndale, Humboldt Co., Cal.
[This is a good letter and full of suggestive topics. We should like to hear from all our dairy readcrs.-Eds. Press.]

## Dairy Literature.

No specialty of agriculture has so rich a literature, whether it be judged from a scientific or practical point of view, as the dairy. The volumes of reports issued by the numerons dairymen's asociations of the lastern states and Canada would make a small library of themselves, and the truths which have been
made generally known through these avenue has resulted in the wonderful growth of the in dustry and the improvement of its practices. This literature is growing continually, and each year's additions show that there is still field for the pens of earnest, thoughtful writers, both in the science and practice of the industry. These remarks are called forth by two published reports which have come to hand during the
present week. One is the 8th annual report of present week. One is the 8ts annual report of Mr. O. S. Bliss, of Cieorgia, Vcrumont, is Sccre defatigable laborers in tho field of dairy prog ress, whom it is our pleasure to know. How soeitition with which he is connected, may be by well nigh 500 interested apeakers and list chers. His latest report is a pamphlet of nearly 200 pages. It eontains the full reeord of tho at which the whole business of dairying in the Green Nountain state, and the principles which underite successfu dairying everywhere, wer
fully discussed. There were 15.5 stated addiresse and lecturers, and notes of the discussion
which
value. The report is a very ably one, and an
honor to the association from which it enanates. honor to the association from which it eluanates.
Another report which we esteem highly is
that of Mr. H. F Moore honorable Secrethat of Mr. H. F. Moore, honorable Secre-
tary of the British Dairy Farmers' Association tary of the British Dairy Farners' Association.
Mr. Moore is associate cditor of the London Agricultural Gctzette, a sterling journal, and to
his iutelligent and contined effort is mainly his iutelligent and continued effort is mainy
due the English organization of dairy farmers for their own improvement aud advancement The first number of the Journal of this organization, is a handsone quarto pamphlet of 100
pages. It coutains, among other valunble pers, one by Dr Yamong other valuable pa cultural chenist, which reviews the practice of cheese-making iu a most poiuted aud suggestive manner. There is also an able report upo the Royal Agricultural College, at Cirencester Other artieles and addresses relate chiefly to
dairy practices in Englaud, aud the report isemdairy practices in Englaud, aud the report isem-
bellished with engravings of English prize cow bellished with engravings of Bnghish prize cows,
The whole pamphlet forins a valuable additio The whole pamphlet fornns a valuable atdition
to dairy literature, and is the forerunner of nolhe series, we have full faith
These standard reports are of the kind whic Dairymen's Associatiou. The dairy interest of this coast should certainly assume the prom-
inence both in literature and the cstimation of the people which its magnitude merits. This can be doue by all the dairymen of the Statc be buting their varied experience to the interest of its meetings, There are a hundred topics
which our dairymen should discuss together, and exchange views upon. We hope the meet erally accepted.
Aroma or Butter.-A Silesian farmer sus-
pends in his eupty churn a calico barg fille pends in his empty churn a calico bag, filled
with fragrant herbs, keeping the churn carefull closed. At churning time he substitutes four smaller bags, attaching one to eaeh of the beaters of the ehurn. He thus communicates to th pastured in meadows most highly favored by nature.

## Floriculture.

Analysis of Colored Leaves.
Prof. A. H. Church, of the Royal Agricult-
ural Co'lege ural Co'lege at Cireucester, Englaud, in the phyll (the green coloring matter of plants) wa different parts of variegated leaves, and the re in the Journal of Chemistry, are exceedingly interesting. The experiments were made upo three plants, having green leaves variegater
with white patches, or bearing both grecn an white leaves? a maple (Acer negomio), an ivy
(Iledera helix), and a holly (Ilex aquifolium) The leaves were carefully gathered without the use of knife or scissors, and were put into
weighed bottles so that no moisture could be ost on the way to the laboratory. Such leave only were taken as could be fairly compared in
age and state of growth. The water, the combustible or volatile matter, and the ash wer first determined; and the following are the tab nlated results
 their comparative poverty in combustible or so so
called "organic" constituents, is very marked. called "oryanic" constituents, is very marked.
The fresh green leaves of all three plants contained about one-third more solid matter than
the white leaves. The mineral matter or ash, when not absolutely more abundant in the matter.
Of the matters soluble in ether, including wax or fat, resin, chlorophyll, aul several other organic compounds, fresh white ivy leaves containced $1.29 \%$ the green giving 3.27 , sim
ilarly, white holly leaves contained $1.75 \%$, and greenholly 2.5
Even more remarkahle differences in comnoticed on sulpmitting the aslies of the scveral plants to quantitative analysis. It was onserved that in the ash of all thrce plants there is the green parts. In the ash of the white parts potash abounds, and in the ash of the green there is invarially a ligher propertion of phosphates than in that of the greell. There ip, chlorophyll in the greco parts involves a higher Proportion of irom.
certain faets in the cultivation of variegated plants which lavo hitherto been inexplicalle; many such plants quickly revert to their normal many such
grecu state.

TEIFPhones will soon be within the reach of all. At no distant day every family will have one of its own. True, you can't get a good onc
in this conntryo now for much less than $\$ 50$, hut
a commercial value.

## Horticulture.

## The Diospyros Kaki.

Edrtors Press:-I wish simply to say that in a former article, I intended to give some gen ral information in regard to the above fruit, believing it to be important to all parties that the faets concerning it should he known. 1 am also confident that such information will be weleoned and will in no way "disparage" or

The statements wore
personal acquaintanee with the fruit in Japa and also from consultation with the best authorities. As there are so mauy varieties of the Japanese persimuon that are small and worth. less (and it is claimed that seedlings geuerally ers and dealers shonld be fully acquainted with their leading characteristics.
I have seen a poster or cireular issued by
Messrs. Shinn \& Co., which represents five rarieties of the fruit. 'Not one of the Japanese ames is given correctly, and Mr. Shiun himself changes each one that occurs in his receut arti-
cle on the subject. Yet he criticizcs uny nomcle on the subject. Yet he criticizcs iny nomen-
clature and claims to have full confidence that his is the true one.
I have eaten the persimmon at Kiolo, and Mokiliar with the varietics found in the less fruit like the one reprcsented in the circular referred to. Good authorities state, also, that no such is to be obtaincd.
My judgmeut in regard to the matter is also conirmed by having seen on the trees imported nany-seeded and tastringent variety. It is the minogaki or minoltzuru, specimens of which I
have now in my rosscssion.
The so-called ""Seedless" is not the Imperial, The so-called "Seedless" is not the Imperial, as Mr. Shinn claims; nor is the ahmony the
largest variety, as has been elsewhere stated. Since your correspondent can neither give the dent that he is hardly qualified to crit, it iticize or
der enlighten othcrs. The claim that he is the
pioneer in the enterprise is disputed by other pioneerually reliable partics. I write, wishing success to every honorable and laudable enter-
HENRY Looms.
Orange Culture Among the Foothills. Ebitors Press:-1 made a promise some time go to a correspondent from the orange groves of Los Angeles, that I would give, through the Rural, my opinion as to the capacity of the foothills for orange culture. Since then I have athered a few facts-pro and con-which I will briefly sum up. Orange trees were planter in this county-Tuolumne-as early as 1853 or 1854, by Capt. Smart, of Jacksonville. The enture provel a success, until the garden passed into other hands; and was finally detroyed by being mined up by Chinamen. Large orange trees were ent down aud cast
aside. The roots of a few were set out in a neighboring garden, some of which lave been
hearing ever since. Orange culture has sel in hearing ever since. Orange culture has sel-
dom been followed here for profit. Many have lom been followed here for profit. Many have
planted onc or two trees as an experiment or rnamint, and those who have taken care of
their venture have been well repaid. One eason for not engaging exteusively in orauge time required for remuneration. Peach, apple, pear and plums offer a rieller reward in the near future. difa good nursery were convenient
it might be different. Many would purchaso and plant if young, budded trees were brought
to their notice. One tree-belonging to a to their notice. One tree-belonging to a
Frenchman a few miles from my placo- hore Frenchman a ifw intes from my phaco- hore
170 oranges this season and ouly 24 the preceeding year, being a young trcc. Tho increase
scems encouraging. The fruit was abovo tho average size and of a delicious flavor; neither sour nor swect, but a pleasint mixture
The frost would bo the only enemy to its But very few cases of killing by that means are cultivating the orange provo successful, a few years will sce the hillsides covered with orango tres. If they provo to be of the samo quality
as tho $k$ 'renchman's, the foothill orange will he in as much demand as our unequaled peaches, ${ }^{2}$ Tples and grapes.
here to give a richnces to all fruit our atmos, phere to give a richness to all fruit grapes and
wine in all its varicties. Those liaviug wine in all its varictics, Those having orango
orchards should see that the dennand of the foot liill region is supplied, for surely the proper inprofitable to all coneerned. There is health a well as wealth in the orango and lemon, and those who cultivate the most are the hest friende

Almown Sroeks.-J. 11 . Reed writes to the
assian liver Vlay as follows: "Witl referhussian hiver rlay as follows: "Witl refer eneo to budding peaeles or plums on ahnond
trees, $I$ have tricd it repeatedly and success-
fully , such buds producing as fine fruit as the fully, such buds producing as fin
trees from which they wero taken.

# Patrows ot Hosisampr. 

## Removal.

Until further notiee the offiec of the Seretary of the
State Grange will be at Ios Davis treet, in the store of
the Grangers' Business Assoeiation. Correspondents will the Grangers' Business
continue to send their
nia street, as heretofore

The Grange in Sacramento County.
Edrtors Press:- $\overline{\text { How }}$ often we hear th qnestion asked by some opponent of the Order, "What good has the Grange ever accom.
plished?" It would take a long chapter to give our idea of the many good results that have grown out of the Order.
The evening of the 1st inst. was the occasion of a benefit party given by the ladies of Florin Grange at Florin Grange hall, to Mrs. Bandy I received notice of the affair and an invitation
to attend from Broo. L. H. Fassett, andl never having met Florin Grange, and having prom-
ised to meet with Cosunnes Grange on the following day, I thought it a good opportunity to see what the Florin benefit was wike. Theresett for a pilot over the muddy roads, we ar-
rived at the hall in Ylorin a little after six in the evening, where already the young (irangers of both sexes had began to assemble, and a
peep into the dining-hall showed that the matpeep into the dining-hal showed that the mat-
rons, too, were early and were arranging the tables for the enjoyment of the inner man. \& Johnson and passing the compliments of the
evening with a few old friends and forming new evening with a few old friends and forming new acquaintances, we ascendee sion being that the
to the hall, ur first impression
hall was to large, only about 100 persons having hall was to large, only about 100 persons having
as yet arrived, and the hall looking rather thinly populated; but Mr. F. assured me that the party had only commenced to a
truth of which was verified ere long.
truth or whice was furnished by parties known in the vicinity as the Baker brass band, and was
all that could be asked for, and music was freely dispensed until the golden light of the morning drank in the last twinkling satellite of the other worlds.
By half-past nin
odock there were so many present that
still around the coall filled wancing left the seats
anxious ones waiting for a turn. It has not been my lot to
be present at at a more truly enjoyable party for many a day. To say much about toilets would should call of "princely elegance," or "extravagantly rich," yet onc or rather two points I
noticed which are always agreeable to me in ball-rom. I believe there were none of the
ladies dresses too short at the top and but very ladies dresses too short at the top and but very
few too long at the bottom, which very much relieves a bashful and an awk ward man.
The pleasant, sparkling, merry, happy faces enjoyment. The approach of $12 o^{\prime}$ clock brought producing quite a jam by the eagerness of a few producing quite a janl by the eagerness of a few baskets. The supper tables were laid for 43 abundance of rich and substantial food fit to gratify every natural appetite and epicurean
taste. The tables were laid three times and three times filled to thcir capacity, thus seating 258 , after which those who had acted as the committee of arrangements and waiting, with a
few of the guests, made a fourth sitting. After parable of the loaves and fishes. Then another round of dancing, which lasted until the lamps burncd dimly by the overpowering light of the all-beholding sun not yet risen.
We then were soon on our way to the home
of Bro. Fassett, escorted by Sister Fassett and accompanicd by Bro. David Reese and Sister M1.
Killgorg. Bro. F. having returned to Killgore. Bro. F. having returned to Sacra-
mento by the early train to attend to duty at our Grange store, which has just grown into
existence. In closing this imperfect account of what was
perfect success as a benefit and as a happy reunion of Grangers and farmers, their wives,
daughters and sons (and perhaps it will bear daughters and sons (and perhaps it will hear refer you, Patrons, to the last stanza of the
service of installation of officers, without further comment, for none is needed. with Bro. where the exercises of the installation of ofti-
cers and a Grange feast awaitcd ws cers and a Grange feast awaitcd us. The ride
throught the fruit lands of Florin was most sug gestive that the desert, by the hand of man, is
made to "blossom as the rose." What, a few made to "blossom as the rose." What, a few
years ago, was known as a hard place for a farmer to get a living in, now, by the use
of irrigatiou, will yield a good income from a Cew acres, when used for the growing of small
fruits. But as we came out into the rolling eountry, we found large sheep pastures and
herds of sheep in charge of the shepherd, with his companionable dog. The change of scene
and the face of naturo alike, remind us of the great variety of occupation and the natural adaptability of such great variety.
But time brings us to the Cosumnes Grange
$\left\lvert\, \begin{aligned} & \text { hall, situated just within the tree line of the } \\ & \text { Cosumnes river. We found ourselves to be }\end{aligned}\right.$ Cosunnes river. We found ourselves to be
there on time and among the first on the ground.
Wee We were cordially greeted by Bro. Doty,
Master elect, and others, and all who remember Master elect, ard others, and amb who remember
the 2d of February, will remember the warn, genial sunshine. It was so pleasant that it The Grange was opened in due form and the necessary business transacted, when remarks were called for in the interest of the good of the Order, which were responded to, in a conversa-
tional way, by myself, the theme being tional way, by myself, the theme being
Grange coooperation. Afterwards the Grange closed and the visitors were invited in to wit-
ness the installation services, which, being ness the installation services, which, being
finished, all were invited into the hall, where the fcast was spread. This was another of the fcast very enjoyable features pecculiar to the
Grauge, and, here again, we found as of erst that Grange tables are always bountifully loaded and that Saturday afternoons are all too short to enjoy in full measure the feasts of
mind, soul and body that are laid before us on all such occasions. Te ate aud made merry, nntil the sun admonished us that we must
"homeward wend " our way. Our visit to this Grange brings to us the feeling that there is no Grange death nor halt nor lame in Cosumes arange. A perfectly good feeling prevails,
with a determination to stand by the ship. As this is one of the small Granges of the county, there is reason to feel encouraged to hind such real interest in the cause. There is much cour
age felt all over the county, by reason of our co-operative store. It is practically proving
what we have heretofore held as a firm belief -that great saving can be made ly co-operaton. It is like the rising of a new sun. As
we said the last good-bye, we started home
with Patrons of Cosumnes. GEo. W. HANcock. Sacramento, Cal.
Worthy State Lecturer's Appointments for April.

We give below the State Lecturer's appoint meuts for April, and will a future issue give the appointments for Mlay and June. The pro-
grainme is somewhat different from last year, granme is somewhat different from last year,
Fro. Pilkington having arranged to mect each Grange, as per advertised appointment, at 10 'clock A. 3., in a closed meeting for the good of the order, and at 2 oclock P . M. for public
lecture, to which latter meeting everybody is invited. It is urged upon each Grange visited to do all in their power to get out every member
of thcir own and near Granges to meet the Lec. turcr and hear from him the communication rom the state Grange at the closed norning meeting, as only in this way can the State
Grange reach the individual members of the Subordinate Granges. We need ouly suggest to the Worthy Master of each Grange the necesall may be accomplished that is laid down in the programme. We want to hear through the
State Lecturer from every Grange visited, and to fecl that we are not only in fraternal sympamy buat interests. The times are monientous and full of interest to our organization. We send expect from each (irancuc visited a most ardent response. We need not request for our 'visitor' nents on time, for this has ever been tendered him most efficiently, but promptness in remis-
sion to the State Lecturer's fund (at the (iranger's Bank) will alone enable us to keep the Lecturer in the field. Amos Adays,
I. C. STEELE,
Sec'y of State Grange. Master of State Grange.
Worthy State Lecturer's, Appointments for
 Livernore, Alameda county, Tuuesday, April 2d. Granges
Livermine sunol.
Elis, sun Joaquin eounty, Wednesday, April 3d. Granges
 Granges-Atlanta, Rustie, LLinden, Stoektan.
Lodi, sin Jooquin oount, Friday, A1ril Sth. Granges-
Lodi, Castoria, Elliott.
 Eli Grove, Saerancento county, Tuesday, April 2 th.
Granyes'-Elk Grove, Georgiana Frankline, Saeranento county, Wednesday, April 1oth.
Enteraririse, $\begin{aligned} & \text { rankerintentento county, Thursday, April 11th. }\end{aligned}$


 Yuha City, Sutter county, Wednesday, April 17th. Grange

- Yutat city
Grand Island, Colus county, Friday, A pril 19th. Granges Antelope Valley, Colusa eounty, Saturday, April 20 h.
Girange -Antelope Valley




Cambrat Grange.-This Grange has adopcendiary" law recently passed by the Legisla-
ture and demanding its ture and demanding its repeal.

## Salida Grange.

Editors Press:-Our Grange is composed of farmers, strictly, and if we do not furnish you with much matter for publication, we help to consume your column
bers take the RURA
Our officers were installed at the first recula mecting in January, by Past Master Bro. B. F. Parkes, the highest installing officer in the county. Our (irange is in good working order.
Although its numbers are not nearly so large as it has been in former days, it is reduced to per manent working members, those that take an emanating from it.
The following resolutions were adopted by
Tr Grange, and our Delegates instructed to preseut them at the first session of the Stanislaus Pomona Grange, which adopted them. They were ordered priuted by our Grange.
Wuberss, The Patrons of our State have bai

center of our eommereec. And
$W$ nirks, , he sueess of our
解g of oursel ves deyends oll hearty co-operationt, there-
The,
lezolved, that it is the duty of this Grange to extend
eside organization their hearty eo-operation aud in-
J. D. Reyburn, Secretary Salida Grange.

## Ben-Lomond Grange.

Fditors Press:-The installation of officers of Ben-Lomond Grange took place on tho 2d o acting as installing officer. Not manns, wer present, but those who were $I$ am sure will forget the very enjoyable and pleasant time has not progressed as rapidly as might be ex pected, but its future prospects are good. The new officers are determined to take no back.
ward steps, but push forward the work until as a Grange it stands second to noue in the county. The increasing population to our
mountain is encouraging indeed, and as no mountain is encouraging indeed, and as no and financial benefits derived from the Order will assist iu completing what we so much desire, a good solid and substantial Grange on
Ben-Lomond. We have a class of four new members to initiate this month, when other are explected to follow. James Burns, Sec'y.
Ben-Lomond, Santa ('ruz Co.

## Election of Officers.*

Eafleville Granger, No. 268.-Election
Jan. 10th, 18:8: J. W. Brown, M.; Jacob Gilcher, O.; W. H. Carson, L.; Jess Parnan, Runyon, Al.; R. A. S.: Ginto, Sec'y; J. L. L. Mar
tin, G. K., Cornelia Price, Ceres; Addie Prior tin, G. K., Cornelia Price, Ceres; Addie Prior,
Pomona; May faine, Flora; Emily Runyon, L.
Montain Gravge, San Bentro, Call -G.
M. Butterfiell, M. J. W. Wathews, O. J. F.
M. Butterfiell, M.; J. W. Matthews, O.; J. F.
Taylor, S.; W. K. Goff, A. S.; E. C. Tully, L.

Housh, S.; Jane Carmichael, T.; Mrs. N. A Mlossop, Pomona; Edith Bacon, Ccres; Mollie
Kennedy, Flora ; Ellen Chambers, L. A. S. Newcastle Grange No. 241, Placer Co.
R. M. Nion, M.; J. Tood, O.; Julia S
Rice. D. Nix. Mitchell, C.; Sec'y; Geo. Perkins, Threkel, K.; Mrs. G.
Griffetb, Ceres; Mrs. J. Threkel, Pomona Grimetb, Ceres; Mrs. J. Mhrekel, Yomona,
Miss M. A. Greeley, Flora; Miss B. C. Boggs,
L. A. S.. W. J. Wilson, Trustee. L. A. S.; W. J. Wilson, Trustee.
 Dennison, Sec'y; Mr. T. B. Steepleton, Ceres;
Mrs. C. E. Soules, Pomona; Mrs. A. P. Wait Flora; M1s. E. Reith, L. A.'S.

 Sec y; M. M. Harbinson,
Parkes, Ceres; Mrs. C. H. Heinning, lomona;
Mrs. J. D. Reyburn, Flora : Mrs. M. J. Wilson, Tomales Grange, No. 153.-Election, Jan. 2th, $1878:$ J. L. Blake, M.; A. Gerickee, O. Hnbbell, L.; C. Stump, S.; O. Morton, A. Wn. Vanderbilt, Sec'y; R. H. Prince, G. K.
Mrs. J. Huntly, Ceres; Mrs. F. A. Plank, Po-
mona : Mrs. J. L. Blake, Flora ; Mrs. R. H. mona; Nrs. S. Li Mrake. Ben. Harrington, Organ-
Prince, L. A. . . Mr. B. Harriugtou, for two years; Wm. Vanderbilt, for one year.

Offeers of Granges are requested to sens list of off
eleet, date of electlon and day set for installation, to eers elect, date of
this offiee diret.
$W_{E}$ take pleasure in annouucing to the Grangers throughout the State, that the Wor
thy Master of the State Grange, Bro. I. C. State, Grange on a portion of his tour through the State. We hope, thert themsel ves to bring out full meetings at the Lecturer's appointments,
which will in part compensate these two Brothers for the great sacrifice they
intercst of the Order.-Patron.

Agricultural Notes.

## California.

## contra costa.

Late Seeding.-Gazette, Feb. 16: The grain sown before the rains, that did not perish with
the drouth after sprouting is all doing finely the drouth after sprouting, is all doing finely
upon ground that has drainage slope and eleva upon ground that has drainage slope and eleva
tion-and the weeds are growing with it, the prospect being that they will make the biggest
crop in many instances. There is still considerable area of ground in the section of
the county west of the Diablo meridian, not yet seeded but, while we thablo meriian, not yet portunity of getting it in proper condition be
fore March, we have much confidence that, in fore March, we have much confidence that, in most situations, there will be safety in sowing
up to the middle of that month, and in the San Ramon bottom the chances of a crop will be sown before the first of April.

## FRESNO.

Broom Curn. - Expositor, Feb. 13: We learn that a number of colonists lave each agreed to
plantanacreof broom corn thisseason as anexperiment. If it turns out well, there will be enough raised to justify shipping it to San Francisco,
and if the will be but trifing to each one. If the experiment, however, is successul, considerable
land will be devoted to broom corn eulture another season.
J. A. F. Smith, of the Central colony, 9: Mrs. J. A. F. Smith, of the Central colony, has jus
received 40,000 grape cuttings from the Strub received 40,000 grape cuttings from the Struba
place near Visalia. They are of the Hungarian "Troyueske" variety, and are the first cutting from a large lot of vines imported from Hunof raisins from these vines, and emphatically pronounce them equal to auy we have ever seen made in the state. They are not as large as some made at the Fisen vineyard the past sea-
son, but the seeds are small and tond son, but the seeds are small and tender and the skins are as delicato as can be. They are of
rich flavor, and we think, are in every respect rich favor, and we think, are in every respect
choice. We are glad to see the eolonists turn This vicinity is destined to supply the state with its rery choiee raisins, and those who take the lead now will reap the early harvest. A large number of fruit trees are being set out in the colony. Mrs. Smith alone setting out over
2,000 , and every settler in the colony setting out some. Several hundred thousand grape cuttings, and a large number of rooted vine and there is a call for more raisin grapes tha and there is a call for more raisin grapes end A Wool Esterprise. - Republican: We are informed by Frank Dusy that he will immediately conmmence the constructiou of large and permanent corrals, sheds and troughs, for shearing and dipping sheep in Fresno. Everything
will be put into shape to shear and dip a largo band of sheep in a single day. A wool press will be provided, and those who wish can have
their wool graded, presssed, and shipped, either to San Francisco or the East, 20,000 pounds in house is expected to be present, prepared to make advances of money to those wishing to commast. Nixything will 20 th of March Fifty-six white men will be employed, the
work will be personally supervised by Mr. Dusy, and good work in every respect will b guaranteed. The charge for shearing, provid
ing sacks, pressing wool, and loading into cars, will be nine cents a head, and for dipping two cents a pound.

## MARIPOSA

Sale of the Big Trees. - Stockton Inde pendent, Feb. 18: The Big Trees property, in
cluding the Nammoth Girove, of 1,360 acres, the South Park Grove, of 800 acres, the hotel, the South Park Grove, of 800 acres, the hotel,
furniture, live stock, etc., was sold by the Mas ter in Chancery, under decree of the U. S. Supreme Court, at San Andreas, on Saturday. The whole property was bid in at a low figure by S.
W. Sperry, of this city, for his brother, James. L. Sperry, one of the partners in the ownership
of the property. There were about 100 people present from diferent parts, but nobody bid ex-
cept Mr. Keefer and Mr. Sperry. Mr. Keefer, against the sale for several reasons, all of which were disrecarded by the Master in Chancery The personal property was sold first, and paid for in cash in full. The real estate was sold in paid down, the balance to be paid on the con firmation of the sale by Judge Lorenzo Sawyer, the first nuonday in March. The host of friends of Mr. Sperry in this section and in the moun-
tains will congratulate him on the final settle ment of this dispute, and the sole possession of this magnificent property

## MERCED.

The Farmers' Canal, - Stockton Independ. ent, Feb; 16: A few days since, we published the lariners' canal, now being taken out of the have learncd from one of the parties in interest a few additional facts in regard to it. The tun nel, at which the company has been at work for several
through through
100 feet
above the tunnel, by way of the ditch, and for that distance the construction of the canal wil
be expensive. About $\$ 60,000$ have alread been spent and it will require $\$ 25,000$ to com
plete the canal as far as Dry creek, at the plete the canal as far as Dry creek, at the
southern end of the tunnel. The work is being
pushed ahead and will be completed this pushed ahead and will be completed this sea
son. Some 40,000 or 50,000 acres will be irri-
gated by the canal, nearly all of which is gated by the canal, nearly all of which is owned the latter having 10,000 acres in a body border
ing on Dry creek, which will be the main chan nel of the canal

## MONTEREY.

portion of the State has been blessed with an abundance of rain; even old "web-footers" admit we have had enough for the present. Both grass and gration are looking well, and there is R. Hebbron, Natividad.

## NAPA.

Under Water.-Rutherford Cor. Register: None can complain of not having enough rain,
but some have had too much. The grain crops at various points along Napa creek have been partially drowned out, but not enough to have auy material effect. Many of the

Forward Grain.-Star: Mr. W. A. Field is mowing some of his grain, as it is too forward the frost will catch it while in the dough or milk.

## SAN BENITO

A Prolifc Ewe. - Enterprise, Feb. 16: A
ewe, belonging to J. M. de Laveaga gave birth, a few days ago, to four perfect lambs. The little fellows are all alive and active, and give It is the first instance we have ever known of triplets are not uncommon.

## SAN BERNARDINO.

The Winter.-Editors Press:-We are There are no heavy dashing rains bu here. There are no heavy dashing rains, but gentle
rains and plenty of them. The ground is thor-
onghly wet and it is raining still. We are almost onghly wet and it is raining still. We are almost
ready to cry, "hold, enough." Our member at Sacramento, Hon. Byron Waters, is getting laws passed to protect our apiarians, to-wit: to prosell manufactured honey for pure honey. Our honey prospects are good. Bees are doing very
well now; it is a little too cold for them. More grain lias been sown than ever before, and more is being sown all the time. Thousands of trees are being set out. All hope for glorious results.

- Waterman's Hot Springs, San Bernardino, Cal. SAN JOAQUIN.
California Leather. - Independent, Feb. at home and abroad, and Stockton stands in the front rank in the business on the Pacific coast. The Pacific tannery in this city not only ships Japan and other foreign markets. California is on an equality with her older sisters in at least one manufacturing industry justly entitles her to high commendation.
The West Side. - Parties who have recently
returned from the West Side report the greatest activity in agricultural operations over there. For a hundred miles south of Banta's the level
landscape presents the appearance of a grand landscape presents the appearance of a grand
plowing match, and every inch of ground that can be turned over is being seeded. It is said yet, although the raius are interfering witl operations considerably. The prospects are,
that the West Side will yield a crop surpassing all previous seasons. The grass is getting a
rank growth, and the alfilerilla is in some places a foot high.
SAN LUIS OBISPO

Editors Press:-We had a heavy rain here between here and the landing; then one fair day, and it washed away again. Since then it
has rained frequently, until farmers think we have an abundance of rain, and grass is far more Feb. 6th.

## SANTA BARBARA

Weeds.-Guadalupe Telegraph, Feb. 9: The
weeds are growing so rapidly as to inconverweeds are growing so rapidly as to inconven-
ience our farmers. We have heard of several pieces of early-sown ground thed
plowed over on this account.
plowed over on
Tests of Goverment Seeds.-Proceedings
Farmers' Association in Sentinel: Mr. Kinsley made the following report on grain received from Washington: One quart of barley, sowed
November $23 \mathrm{~d}, ~ 1876$ cut June 13 th, 1877 , threshed July 30th, 1877; yield, 87 pounds 27th and July 7 th, 1877 , threshed July Juth,
1877; yield, 120 pounds. Tanzella wheat
sowed November 27 th, 1876 , rust and mildewe sowed November 27 th, 1876 , rust and mildewed
badly, and, being worthless for grain, was cut for hay. The above grain was sown on heavy
clay subsoil, 100 feet above the level of the sea
Mr. Mattison said that he had sown the same amount of wheat as Mr. Kinsley, and on the
same character of soil, with about the same
result. The Secretary was instructed to inform
the Department of Agriculture that this locality; tlat the Australian wheat seemed
best adapted to our soil; that if the Department
had the Australian red wheat for distribution, to forward samples for trial.
SONOMA.
Notes.-Petaluma Argus, Feb. 16: Farmers tate that the heavy fall of rain of late has so soave been drowned in squirrels and gophers sands, even up in the high hills. The price of
fresh bntter in Petaluma now is about the same as at this date last year, and about the same quantity produced in this vicinity. Packed roll butter, made last year, now brings a little
higher price than fresh butter. We were shown, on Tuesday last, a specimen of barley in the unteer, on the farm of H. P. Lichau, in Vallejo in February?
Roots for
N. Gladden, on Russian riv, Feb. 7: Mr. W aised 30 tons of mangel-wurzel to the acre, on light, sandy soil, and these sold readily a
8.50 per ton. And well they might, as thi was a very low price for them. Here then is clean yield of $\$ 135$ per acre. The stock men
who took them were delighted with the effect of the roots on the cattle-would take all he could raise, and protested they could not do hay. Mr. Gladden is of the opinion that, with whorough cultivation and manuring, the mangel wrow a corn crop, and Mr. Emil Berlin inform us that in the vicinity of Santa Bar bara he raised crops of 10 to 15 tons per acre on uplands by planting early
STANISLAUS.
The Stanislaus Irrigating Canal.-Stockgood progress has been made in driving the by the Farmington Water Company to to tak water for irrigation from the Stanislaus rive into San Joaquin county. The tunnel is being driven at the rate of 200 feet a month and will
be completed about the first of July. The drainage water from the hillsides got into the north end of the tumnel and stopped work tem-
porarily, but at the other end work still proporarily, but at the other end work still proa rich placer mine at the north end of the tun nel in Littlejohn creek. The canal will proba-
bly be finished in 1879, for the crops of that
Editors Press:-Farm prospects are very encouraging. We have had an abundance of
rain since the 15th of January, and the ground has been too wet to plow since that date. Many farmers were through seeding, putting in a and reseeded. A great many of our farmers have adopted the plan of summer fallowing, as the success of the practice was thoroughly de-
monstrated last year. Some that had left land to summer fallow this spring, since this change of weather, have gone to plowing it up now and
seeding. They cannot resist the temptation to venture a crop. Grain, in all parts of the and spring rains we are sure of an average crop.-J. D. Reyburn, Salida.

## SISKIYOU.

Editors Press:-I learn that the snow on the summit of Scott mountain is from 10 to 24
feet deep, the mail being. carried over by meu on snow shoes. Old residents say this is the and still it rains. I hear that one of my neighbors, Mr. Doll, has lost four head of horses I have not learned the cause. I believe all the dogs in this vicinity are affected with distemper, or something else. Two of mine have their "oars" now, the ground being too wet to plow. A wagon road from Etna to Salmon formed and we expect to see it put through this
year, or at least started. Paine purchased "Bill's ranch last week for $\$ 500$. I learn the complete. Potatoes are on the rise, worth now one and a half cents per pound. The crop in this valley was short and generally inferior. More ground is planted now than usual at this 100 acres; John Smith Howland, George Smith, Cory and others tell me they have in more
than usual.-R. D. Nunnally, French Creek.

## Washington.

Reclaiming Swamp Lands.-Cor. Oregonian, Feb. 9: It has long been known by all intelliwe have in the northwest, or in fact in any we have in the northwest, or in fact in any Believing thus, Mr. Samuel Calhoun, one of the ington Territory, went down to what is known the Skagit river some 15 years ago, and began work, and to-day has several hundred acres of tide land successfully diked in, which produces land on the Pacific coast. Me harvested, last
year, from 410 acres of diked land, 35,407 bushels of oats and barley, and this was ouly an bushels of oats and barley, and this was only an
ordinary yield. A majority of the oats he sold
in the San Francisco market at 50 cents per
bushel, for the purpose of manufacturing into bushel, for the purpose of manufacturing into
oatincal. The late Thomas Perkins, of Oak

Harbor, Whidby's island, had on his farm a Harbor, Whidby's island, had on his farm a
fresh-water lake or marsh, which he drained at a great expense, by cutting a ditch, 15 or 20
feet deep, through a small ridge. This, after
 often raised 100 bushels of oats to the acre on
it. These are indisputable facts and can be proved by as good men as there are in WashHaller, of Coupville; Thos.fB. Merry, of Seattle, and Samuel Calhoun, of La Conner

## News in Brief.

The joint legislative committee on the labor investigation has adjourned sine die.
Some consid erable property has been damaged y floods about Marysville.
Large bodies of Indians are reported in Bear Lodge mountains, 40 miles from Deadwood.' JMEs $N$. McCune, an old merchant and aluma, died in this city on Sunday.
Amador county, died in Sacramegislature, 15th inst.
Two large frame buildings were burned to Loss $\$ 10,000$, covered by county, on the 13th. The strike of the London masons is virtually over, the men recognizing the hopelessne
he struggle which has cost them $£ 30,000$. Mr. Y. C. HAYES, formerly a Secretary in the Japanese miniug department, conmitted suicide A Tokio on December 18th
A sNow-SLIDE in Big Cottonwood, Utah, car-
ried away the tramway and ore-houss of the A DEcIsion has heen rendered in favor of Mr. land amounts to 16,000 acres and the suit has AN oen long pending.
Avestigate the wre Revenue Marine, detailed to that the fragments of the wreck are uunsually small, and the rottenness so apparent that ther The Russian Government has concluded
Gin one oontract with an American company for dredg ing in the River Neva, between Cronstactand Americans were preferred.
Americans were preferred.
Ofrcers of the Postoffice Department estisuffering not lless than $\$ 250,000$ per month by the Hood of stamps sold by Postmasters a cities and towns
THE loss by the burning of Webster's mansion was $\$ 50,000$; insurance, $\$ 15,000$. Mrs. Fletcher
Webster and lier son, the occupants, saved a quantity of silver plate, pictures and other price less memente on Daniel webster. The librar was removed some time ago
The Utah legislative
The the legislative committee, to whom was message, asking legislation against polygamy, report, claiming polygamy is sustained by the
bible, and is a divine ordipance; and they cannot legislate against religious beliefs and prac-
The report of the Supervising Architect of
the Treasury Department for 1877 states that the Treasury Department for 1877 states that the total appropriations for the Appraiser's
stores in this city have been $\$ 663,000$, and that the smallness of the last year's appropriation
will compel the suspension of the work at an will compe.
early day.
stated that a building has been rented on Wall street by the Bank of Nevada of San bank of that institution, and that a it is to be son, present cashier, who will superintend the titute part of the institution.
Jackson, Amador county, has suffered
Oreatly from floods. greatly from floods. One-half of Chinatown, on the North fork of Jackson creek, is swept off,
and many buildings on the Middle fork. Eight Chinamen and two women are known to be drowned. Some 15 buildings have been swept away. This flood was caused by the heavy
rains of the 17th. WHAT a story of misery is comprised in the that 'the entire and partial stoppage of opera. tions in the different districts in the coal regions has thrown out of employment between 25,000 otlier classes miners, laborers, rairoaccrs, aned about the mines and by the transportation comW. J. Wilson and H. C. Hydc, assignee in
bankruptcy of the Pioneer Savings and Loan Association, have commenced suit aygainst the Srom Depling and disposing of in auy manner 500
from sharcs of Safe Deposit Company stock, or from issuing new stock, on the ground that these issuing new stock, on the ground that these
shares are a portion of the assets of the bank and fraudulently transferred to said J. T. Little.
tion of silver and mar it a legal tender for any amount (except on contracts made in gold) has passed the Scuate by a large majority, and
now is before the House of Represcntatives. The bill makes various provisions, one of which is posited in the United States sub-treasurics, and thete certificates are also a legal tender for dues the House and the President, are the ncxt points to be deternined.

Bayard
Germany
Ir is rumored that the King of Holland il abdicate in favor of his eldest of Holland THE Cuban insurgent chiefs are said to have The heavy reins offered them.
The heavy rains have caused the caviug in of
number of sewers in the city number of sewers in the city.
Two iron-clads from the Fren myrna han to the a danelles.
Speculations are already indulged in as to off the coming season's crop wary to carr Several more of the over-due coasting fleet帾 Capt. Reddish, the pilot who was carried away perforce by the City of Sidney on her last rip, returned on the St. Paul on Tuesday.
THE President has approved the joint re tion declaring a reduction of the tax on distilled pirits inexpedient.
THE United
THE United States revenue cutter Thomas her cruise after the distressed coasting vessels.
The internal revenue collections in the S rancisco district last welk amounted to s21, 851 , making a total of $\$ 361,009$ since January
The Sacramento river is very high, but the American has not overflowed, so at the present
writing-Wednesday-Sacramento is safe from serious flood.
The bill introduced by Senator Eustis proposes an appropriation of $\$ 60,000$, to be availaAssay Officefat New Orleans
The coasting seamen at this port are on a
ort of strike for $\$ 30$ per month instead of $\$ 25$ as heretofore. There is some difficulty in ship. IT is stated, on authority which cannot be questioned, that $70,000,000$ of human beings are now starving in the
provinces of North China.
Tue steamer St. Paul, from Honolulu brings
ews that the bark $H$. W. Carleton, Harkness from Hongkong for Honolulu, went ashore on Molokai, Hawaiian islands, January 25th, and The Secretary of the Navy has testified betore the House Committee on Naval Expendpartly on the ground of fraud, and partly because they were made without law.

## W. L. L. Pierce \& Son is a new San Francisco

 monthly paper. It presents a neat typographi-cal appearance, and is made up of select articles in prose and poetry, statistics, scientific facts, aseful recipes, fashion notes, etc.
The steamer City of Dallas was burned and sunk at her dock at New York, on Monday night. She was laden with 500 bales of cotton,
porcelain clay aud fruit, and insured for $\$ 30,000$. porcelain clay aud fruit, and insured for $\$ 30,000$
THE ferry steamer Saucelito, originally intende ap since her trial trip, made several weeks
since. It is said that her furnaces will require alteration so as to prevent so large a consump-
Representative Dayis has presented in Con gress the resolutions of the California Legisla-
ture against subsidies to steamships engaged in the China trade, and asking a grant of proceed of sales of public lands in California for pur
poses of irrigation and protection against min ing debris.
the California Commissioners have abandoned the attempt to make any exhibit of California
products at the Paris exhibition, the Legislature having failed to make au appropriation. The having ailed to make au appropriation. © the
mineral exhibit will be sent, however, by the
genernsity of a private citizen of Nevada, Mr. J. W. Mackay.

Tre Senate has passed a bill for the relief of settlers on public lands under the pre-cmption
laws. Yaddock, iu explanation of this bill, said it was to allow a settler who had occupied a tract of laud a year or more, to change his the homestead law, the time speut on the for the homestead law, the time spent on the for-
mer tract to be counted as part of the five years required under the homestead law.
CAMERoN has introduced a bill in the Senate to reinstate certain officers of the United States army. It provides that all officers of the
United States army who served thorein more than 20 years continuously, and served also duing the late rebellion, and who wcre wounded
and breveted for gallant service iu the field and who were houlorably mustcred out of servic under section 12 of tho act of July 15 th, 1876,
be reinstated and retired as of the date they ee reinstated and retired as of
were respectively mustered out.
DUNCAN, the lioncer bank defaulter, came near being caught on Saturday night. He had schooner Mchinuou. The detcetives boarded the schooncr, and found some of Duncan's baggage. They then intercepted the tug-boat the schooner. The tug-boat, however, was faster than the stean yacht Elaine, which car-
ried the policc, and landed at the wharf alread of her. Duncan was supposed to have escaped
from the tug as she tonched the wharf. The captain and consignee of the schooner have been arrested for compounding a fclony.

It is proposed to print a new cdition of the
New Testament and portions of the Bible in the Mpongwe language.


The Rain-A Parody.

rizzling

 Shit the farner sing
For thary whinh
Laukhing.









## Farm House Chat.

My Chicago eousius write that they have a truly Californian winter: "Up to Januar 29th, no frost in the gronud, no sleighing, hardly
a flake of snow has fallen yet." But the beauty and blessing of a California winter eannot be told in negatious.
Another cousin, coming from Vermont to now from San Diego: "My last home letter tells me they are almost luried in snow. Can
I make them realize that this country is fairly brilliant with the riehest green and that I an gathering roses by the armsful? How kind and sociable the people are: Though we are only 'pilgrims and strangers,' they call on us
and invite us to so many picnics. Mid-winter pienies are the style in San Diego, and a very pleasant style we find it.
Here, in Santa Cruz, our weather is too catehing to admit of those airy festivities, and
daneing attendanee upon the rain- gauge is the most intercsting out-door reercation, ressulting fall to Jan 1st, 8.91; for month, of January,
20.87 ; to Felruary 13 th, $7.6 \overline{\text {. }}$. Total for the

All these inches do not indicate a eorresponding number of gloony or disagreeable days.
Sixteen days of January had no rain at all Several more were fairly sunny after the mornhig showers and but very few were stormy from
morning till night. In fact, we have been
reminded of that speech of the much-quoted old lady: "Providence sends the rain mostly old lady: "rights and sundays, so that the hired men
ond As usual, our rainfall here in the hills is
heavier than along che coast, but the lighter heavier than along che eoast, but the lighter
soil and natural drainage prevent any great soil and natural arainage prevent my trot nimbly off to town at the leegining, middle or
eud of the heaviest stornn. This has been well tested by my ehirdren, who attend school in
town, riding the nearly six niles in an oper buggy and have never missed a single day or
fairly earned a tardy mark. leing intrustel with all the family errands, they are learning
business along with their books, something business along with their
after the manner of that excellent, early traing ing deseribed by Mrs. Niehols, iu the artiele "Give the Girls a Chanee." Of cwurse she meant boys as well, and that all ehilaren
shoold, at the proper age, be instrueted in (or
rather intrusted with) the business of buying, selling and managing.
If up to such age they have had careful, gen
ne home training, the heart of the parent ne home training, the hart of the parent
"may safely trust in them," the glad, zoalous
young agents, proud to be trusted, learning
faster than in faster than in any other way the self-reliance and firmness that will help then to
oravely into manhood and womanhood.
How thank ful we all are when a writer giv
If a liit of personal experience on the us a hit of pcrsonal experience on these vcx
questions that cone tearing through our complacency like the shary plow throngl stulble
fields and matted routs, forcing them to give place to something new and fresh and living.
low welcone is the brisk work of the pen that will not let our brains lie fallow, but scatters
the good seel everywhere so that by and by
we here the good seed evcrywhere, so th
we harvest a good crop and call it

## Original Thought.

And so it is good, honest home proluction,
and the iucrease may be without limit if we in turn scatter generously abroad. What good things we constantly gather from all that is
uttered or sugyested in social intercourse, in tetters, books, paleers and the ever-changing nature out of doors. But, whenever a topic
touchics the wise traininy of our chiddren ing heljs so nuthel as a well-told item of personal experience or a good plain sermon like that we
had from the text " Mlariyolds and Ouions., I an now reading that sermon for the fourth time, trying to imagine what sort of a "seven-
thly," ought to follow and wishing our IIr. A. would remember his promise to provide for "the
uineteen-twentieths of scholars who must go
out iustead of up."
out iustead of up."
Waitling patienty for that, I have, perhaps,
too long delayed my own supplement to former too long delayed iny own supplement to forner
articles upon indstrial education, although there was much to stir my zeal in another letter
from iny kern eonnty friend, who says: "The 'Chat, is all right, esplecially the making
matrimony one of the professions! Why not? And yet there are more things that ought to be
said. I ean talk to you, luat to face an aud dence suid. I ean talk to you, froun the columms of the Rcral Press, would quite take away the power
of speech. It is good to say that ehilldren of speech. It is grool to say that elihtren
should be trained in pernanent, happy homes
but how get the influence of permanent homes where it is the custom to move twice a year? or hapyy homes where the inmates have no
sense of propriety, order or comfort? To bring sense of propriety, order or comfort . O bring
within range of your vision another section of
the field mot all iu sifht,' I inclose for your 'the field not all iu sight,' I inclose for your
reading this letter, the story of a journey from Kernville to Compton, aeross the desert, the
fanily and wornly possessions all in the ox.
wagou, which wagon, which has already earried them fron
camp to canp, until the wagou itself gives the
alition elildren their only idea of a perinanent home.
If they push on to Arizona, as the tile is now
setting pul if the chauge like most of their changes, proves only for the worse, what kind
of eitizens think you will those chilldren make? And what will you have done with all those
Attle laaf-breeds she mentions in her letter? httle lalf-lbeeds she mentions in her letter?
The white fathers and Indian or Mexican mothers are not exceptional eases, they are a
part of our every-day comntry people and their home in are perhaps fair sample home in a large section of our great and grow
ng state. Can those parents be made responsi he for the right training of those flocks of some of then take the RTRaL R1MEss, and
thers would if they were to see it." This ends the suutation frum iny friend's leter, and does not every realer see what a goold
enting it is: Her own "motherly worry" led her still further along the gloomy outlook,
seemingly unconscious of the hopefil light she had just east upon it. Does she not remember And a yeneration of half-llreeds, whose fathers subseribe for the Rtral Press, are very well In the year 257 s their deseendants may luok baek upon onr history as we do upon the erude
outline of the dark ages. Beyond the dark ages we find our ancestors shock-headed savagcs,
with brains hardly elearer than those of the beasts they tended; and at he rime of thi bodies blue, regarded oak and mistletoe as acred, and offered saerifiee of human beings Taught them ware few first tessons. After that eame the wild tribes of Finglish, who were the blody pirates of the northern seas. Following
them caine other tribes of Saxons and fightin them caine other tribes of saxons and fighting
Danes, while down from the mountains swarneed Danes, while down from the mountains swarnen and mixing at sueh a rate that after a few hun crf and wineherd of the concuering tribe The great Norman conquest, A. D., 106 aces, and ther vast stir-abont and mixture during the last 800 years, has developed the
power, pride and pardonable eonceit of England power, pride and pardonable eonceit of England
and Aneriea A "o, ye of litte faith, "look back ward as well as forward
the gods grind exceeding slow
The letter alluded to as the story of a journey aeross the Califorma desert is so interesting I
am telnpted to put it in bodily, but as that is
hardly fair with private correspondence, I will only copy those sentenees that refer to

The Half-Breeds
"White women and children are a searce ritice on the road we came. 1 did not sec one
until we got within 30 miles of Los Angeles.
Wo passed several little villages or statious, ani saw a a yood number of white men with squaws
or Mexican wonlen for wives and such or Mexican women for wives, and such a quan-
tity of little half-breeds. The men are so cleve
ind and agreeable,
poor and happy

Now, as the French say, "What would you?"
If the wise over-ruler could wait upon the slo If the wise over-ruler could wait upon the slow
(yet, in some respects, rapid) development of a ret, in some respects, rapid) developmegt of a
race issuing fron our own wonderfully and fear-
full fulls: mixed-up ancestors, is it timely or "in
order" for ns to legin to worry alout this (posorder for ins tegin to worry about this (pos-
sibly) new departure just starting forth over
there in the det there in the desert, and so well started, as
to be at peace with all the world, poor, healthy to be at peace with aill the world, 1 poor, halthy,
happy, able to read the licral Press, "and agreeable, too"' If they are never heard from
in future histories, it will be, perhaps, because their lines were cast in pleasant places, and they mark. As for the pilgrims of the ox-wagon chance to become grandfathers aud oond mothers of Tresidents as the petted darling who sleep, in laced and rnflled garments under the mansard-roofs of San Francisco
It is quite the habit to syeak of the superior advantages of city and town children, and a
superficial view of conditions makes it almost pityful that so many are cxcluded from those comfort of many lonely ayments. Bit for would like to allude to the compensations that may lbe secured and are even now unconsciously enjoyed by the children of the
There are many hopeful things to be sail, but
they must wait another week.

## The Building Up of the Country

It is not true, as has been so often chargel, that the wealth of our mines and the surplus rom our grain fields are being absorbel by our arge citics in their devchopnent, to the neglect ther mis mave been true year made the discovery that there is wealth, not so great, perlapss, yet more sure, to be garnered in nanipulations of the diamond drill or the stroke of the mason's hammer. Agrieulture and horticulture are now recognised as the most substanstrongly is this eonvictiou held that it will require a dricr season than the past, and more of them, to shake it. Nor is it in the immediate vemity of san Franeisco (the Bay countics "eountry homes" Marle leautiful, beeause of the tasteful expenditure of money on them, but,
far away in the interior, up in the "foothills," far away in the interior, up in the "foothills,
the native tree is falling, to give roonn to the apple and the orange, white the laud of the wheat and corn, and rivers long running to waste, are now fertilizing thousands of hitherto of perennial green.
We are contident we do not exaggerate when we say that at least $\$, 000,000$ were drawn by our capitalists from the banks of San Francisco the last year, for the de veloping of agrieulture
in this State, and to continue this work already begmin indepentent of new enterpriscs of simila character, which in the nature of things will be
nntertaken from tinte to time, will require a muel laryer exponditure the eurrent year. The evilent teudeney of San Francisco's surplus wealth at present is toward the 1 1urehase of
arming lands and their development. We doult if thr $r$ is a city in the eomutry, in proportion to its population, that numbers anoung its in-
labitants as many land, or rather farm owners hahitants as many land, or rather farm owners as these farins are leing largely purchased for homes, and hence are being inplroved from year to year, their owners andionsy a whing the
tinle when they will be froed from the restre time when they with ife, and the harassing cares of its
tions business, and enter upon the comtorts and en-
joyments of their farm home. We know of nothing whieh indicates a more healthy progress anong our people thitn this growing taste for
ountry homes. While it is true that therc is till an abundance of good land to be had at conparatively low prices, yet whoever would ay, for in our judgment the years are not namy in the future when the lands of California will be recognized evcrywhere, not only as among
the most fertile, but ou other aecounts as well, the most valuable and desirable,-R. J. Trum ull's Catalo, upe for 187

Muserms as Userll Institutions.-Prof Marsh in the Popular Science Monthly says The old idea of a museum was a showroonl; the his institution is to hold high rank in science as we hope, it will not be in eonsequenee of the pacious halls lefore us, crowded though they
be with the rarest of Nature's prospeets. re with the rarest of Aature's prospeets; hut
rather, it will come through the sinall work rather, it will come through ne suall work-
rooms in the attic, where the naturalist, with mieroscope or scalpel, has patiently worked out discoveries that add to the sum of human knowl-
edge. This nuseum will fail of its highlest good, fail even to achieve more than a local inHuence, unless the work-rooms alhove are made the most inportant feature of the whole. These
vast eollections will spread the elements of nataral seience among the people of New York workers in the attie, who pursue science for it wn sake, , will brin.
throughout the world.
A sosc heard by a hive: "Bee
hunble, there's no plaee like comb.

Simple Illustrations of the Laws of

## Gravity

Teaehers can do much to impress seientific facts and laws upon the minds of their scholars by using simple illustrations. A hint of this i gen by 'Thomas B. Lovell, in Barnes' Elucational Monthly: Some years ago I heard an excllen teacher leeture on a subject pertaining to as periments. First he made use of several ex always revolye to show why the earth is flattened at the poles Thesc experiments eund be peformed by poles. of apparatus found in almost every schoolboy' pocket, namely, a pieze of string, a lead penci chain not larger than a small watch chain. Ti to the midule of a lead pencil a piece of strin about three feet long. Suspend so that the pencil will balance itsel. Now twist the end finger of the righ had steadying and he firs the string with the left steadying and holdin tion will thus be communicated to the pencil and it will revolve around the point on which i is suspended. Tie a piece of white string
around the middle of the pencil, or its center of gravity, simply to show the position of that poit. Now, agy tie the firstpiece of string half way hetween the end of the pencil and the lar motion described alove, and we shall ob serve that the peucil will still revolve around it eenter of gravity, the point marked by th that anything, of whatever shape, will revolve on its shortest diameter. If the end links of the chain referred to above be hooked together, and the string tied to a link and the circular mo tion given, it will.be observed that the chain begins to take an clliptical form, which grad ually approaches that of a circle, until at last it tally. This shows that cven a ring is subjeet axis, the center of gravity Simple as this ex periment is, it illustrates the revolution of the earth on its shorter diameter.

## Boys' Smoking.

Whatever may be said for or against the modCate use of toljacco by adults, says the filasgow Times, there eannot be any question about its prejudicial effeet on unformed constitutions. growing disposition among boys to indulge in growing disp)osition among boys to indulge in
"the frayrant wech," even at the cost of nicotine sickness, should meet with every opposition. A liverpudlian, however, rceommend head, in a letter to a local joumal, that one might well ask whether the cure would unt be
worse thau the disease. Having oceation to worse thau the disease. Having occation to
frequently cross the Mersey, he has noticed that the troops of schnolloys making the royge during the afternoon geperally "sneak into
the baek of the smoking cabin and at once light their pipes." The simple trutl is that the lads who have onec aequired a taste for smoking will he sure to gratify it surreptitiously in one way eve another. Henee the neccessity or stion of the habit. A great deal might be done in this direction by parents and sehoolmasters if they eonvinee the boys that the use of tobaceo in
early years acts prejudicially on physieal strength. This is a p. strong, and if it can only be impressed upon strong, and if it can only be impressed upon weakling, he will be more likely to steer elear of the halit than if high moral considerations ere brought forward.
These remarks apply with no less force to Ameriean youth, whom we see in the streets, hardly higher than a walking stick, pulling Weakness

A licssian Biby.- In the life of a Russian peasant there is a period anterior to all tumies, mantles, and even sheepskins, during which the Egyptian, it is the first instead of the last stages of their existence. For the youngest
children are swaldled, and rolled up tight iu burdages, so that they may be conveniently put away without risk of getting themselves into houses an enthusiastic traveler thinks he has and penates, with the heals well earyed out and the rest of the body left in block. He looks curiously at oue laid upon a shelf, another hung the main beams of the roof, and roeked by the "Wother, who has the cord looped over her foot. "Why, that is a child!" cries the astonished traveler, posed to be a stone. "Why, what else should o mueh in so short a time, the inquisitive travof wishes to inform himself about the habits what damped by the extreme dirt of the little figure, he inquires of the parent when it is
washed. "Whashed!" shrieked the territied
mother, "washed!-what, wash a child? You mother, d kill it."-A Journey Due North.


RAIN SKETCHES ON THE CITY STREETS.

## Getting Married

The Rev. Mathew Hale Smith in a recent lecture on "Our Young Married People," after
quoting various portions of the bible to show quoting various portions of the bible to show of it, went on to speak of the relations be tween husband and wife. If the husband de mands reverence from his wife he must in re turn treat her with the respect due her and mutual. Many ladies make a bargain with thic minister before they are married that the word minister before they are married that the word onission makes no differeuce. The bible says
distinctly that the wife must obey her hus. distinctly that the wife must obey her hus-
band, and the laws both of God and nature de mand a proper obedience to a husband's wishes When a young couple get married they know really nothing about one another in most in stances and have to become acquainted with each others character and qualities after they are united. They cannot learn these things be Tho man deceives the woman and the woman deceives dhe nian, but in most cases the woman deceives the man, but in most cases the woman gets the best of the man. Young people are in
too great haste to get married, and nine-tenths of the marriages turn out badly because the courtship and engagement are too brief. After marriage, men are too often in the habit of f. the children entirely to the mother, thinking they have done their entire duty in earning the money to support them. Many men know nothing of their own children, of their associa tions and habits of life. They take no pains to study their characters, and in some cases
hardly know them when they see them. Oue man in New York was in the habit of going to mian in New York was in the habit of going to turning until Saturday night, when his wife turning until saturday night, when his wife would bring them into the parlor aud introduce them to their father. The great conflict as to who shall be head of the house is a subject that is agitating the whole world, and is the cause of most family quarrels. In true marriage there should be no such conflict; both should be willing to give way and to make mutual concessions. It is a terrible blow to a mother to give up her daughter to a stranger, and to find that the affection which she had fostered trausferred to some man of whom the daughter knew nothing.

A Cheap Telephone.-Prof. Barrett, in a recent lecture on the telephone, gave a receipt
for making a cheap one. Take a wooden toothpowder box and make a hole about the size of a dise of tinned iron, such as can be had from a preserved meat tin, and place it on the outside of the bottom of the box, and fix the cover on
the other side of it. Then take a small bar inagnet, place on one end a small cotton or silk leaving round the reel wind some iron wire, magnet the ends loose. Fix one end of the ing, to the disc, and then one part of the tele phone is complete. A similar arrangement is ected by the wire, aud with this Prof. Barret says he has been able
"At what age were you married?" asked she, emergeney," and quietly responded: "At the

## Young Folks' Column.

## The Minister at the Tea-Table.

The other evening the liev. Mr. Philacter sat down at the tea-talle with a very thought ful air, and attended to the wants of his brood looked at his wife and said;
"The Apostle Paul
"(fot an awful lump on the head 'safternoon,", broke in the pastor's eldest son, "playing baseball. Bat flew out of the striker's hands when was umpire, and cracked me right over the ear, an' dropped me. Hurt? Golly!" and the
lad shook his head in dismal but expressive pantomime as he tendcrly rubbed a lump that
looked like a billiard ball with hair on it. The looked like a billiard ball with hair onit. The
pastor gravcly paused for the interruption and pastor gra
resumed:

The Apostle Paul-"
"Saw Mrs. O'Ghemminie down at Greenbaum's this afternoon," said his eldest daughter, dd everlasting black. "She had on the sanie ld everlasting black silk, made over with est of tileuk green silk, coat-tail oasque pat front, edged with deep fringe; yellow straw hat with black velvet facing inside the brim, and pale blue flowers. She's going to Chicago."
The good minister waited patiently, aud then The good minister waited patiently, aud then iu tones just a shade louder than before, said: "The Apostle Paul
"Went in swimmin' last night with Harry and Ben, pop, and stepped ou a clam shell," exclaimed his youngest son; "cut my fot so I
cannot wear a shoe; and please can't I stay annot wear a shoe"
at home to-morrow?
The pastor informed his son that he might stay away from the river, and then resumed his opic. He said
"The Apostle Paul says-
"My teacher is an awful liar," shouted the second son; "he says the world is as round as
an orange, and it turns round all the time faster an orange, and it turns round all the time faster
than a circus man can ride. I guess he hain't than a circus ma
got much sense."

## got much sense.

The mother lifted a warning finger toward the boy and said-"sh!" and the father re"The

The Apostle Paul says-
Don't bito off twice as much as you can chew," broke out the eldest son, reproving the
assault of his little brother on a pieee of cake. The pastor's face just showed a trifle of annoyance, as he said in very firm, decided tones.

The Apostle Paul says-"
"There's a fly in the butter," shrieked the youugest hopeful of the family, and a general laugh followed. When silence was restored the eldest daughter, with an air of curiosity said: "Well, but, pa, I really would like to know what the Apostle Paul said",
"Pass me the mustard," said the pastor,
Then th
to exerumittec rose and the scnate went - Burlington HIawkeye.

Little SUsie, lookiug at some pictures of wingod angels, exclaimed: "Why not, dear?" "Humph! leave off my pretty clothes, and wear fedders like a hen?"

Hhat makes Jolmny so cross this morn "Dot up s'urly,
"Dates Jol

## Gooo Health.

## Advances in Medical Science.

In reviewing the medical and surgical progress for the year 1877, the London Lancet notes
the following: M. Paul Bert has published an extensive work on the effect of variations of
pressure on the body, and he shows that the pressure on the body, and he shows that the
observed effects of diminished pressure are exclusively due to a diminution iu the tension of the oxygen in the air, and consequent predisposition to asphyxia; while, on the contrary, increase of pressure up to three atmospheres occasions more active intraorganic changes, and
when the pressure reaches five atmospheres the oxidizing processes either cease or become mod ified in such a way as to become inconsistent with the maintenance of life. (xuttman, Frick ler and Oertmaun have demonstrated that the absorption of oxygen is independent of the me
chanical acts of respiration. Richet has dechanical acts of respiration. Richet has determined that when perfectly fresh the gastric juice contains only mineral some time a find of fermentation standing some time a kind of fermentation is
set up iu which free organic acid is formed that on analysis proved to be lactic acid. It is believed to be beyond doubt that lactic as well as butyric and acetic acids are often introduced either into the stomach or are formed in it as a product of fermentation.
The most important progress in the depart ment of pathology is that toward the establish ment and diffusion of the opinion that minute organisms are concerned in the progress of acute infectious diseases. Chaureau has shown that the horse is peculiarly receptive of the vaccine
virus, and is capable of reproducing it in remarkable purity and force.

Valuable Mouth. Washes.-The English periodical, Dentalscience, commends the follow ing recipes: A wash to harden the gums.spoonful each of powdered alum and saltpeter pulverized, and one ounce of pulverized myrrh mix. A favorite wash.-Take salts of tartar one-half ounce; honey, four ounces; alcohol two ounces; water, 10 ounces; oil of winter green and oil of roses, sufficient to flavor. For unhealthy gums.-Unhealthy gums are very
common. A lotion made from the following common. A lotion made from the following to a healthy coudition: Carbolic acid, 20 drops spirits of wine, two drachms; distilled water
six ounces. Use first a soft six ounces. Use first a soft toothbrush with water, afty wigh porttle a send After using this for a short time the gum Atter using this for a short time the gums
become less tender and the impurity of the breath, which is commonly caused by bad tecth will be removed. A fine tooth paste. The fol lowing is also from Dental Science: Take red coral, three ounces; cuttle-fish bone, one ounce disulphide of quiniue, one-half drachnn; mix Triturate to a very fine powder, add hone white," four ouuces, and a few drops of otto of roses, or neroli, dissolved in rectificd spirits, three fluid drachms, and bcat the whole to a pasto. A little powdered myrrh, ono to thre

Simple Test for Purity of Chloroform. The Philadelphia Medical Times, statcs that simple method of testing the purity of choloro form: "Immerse a small piece of thin white blotting-paper into the chloroform, and then let it dry in the air.

## Domestic Econory

## A New Potato Dish.

A lady correspondent of the Cultivator says A positively new dish, and one which has not been mentioned in any cook-book or paper, to
my knowledge, has recently been introduced to our circle of acquaintance. It is delicious, in expensive, and can be tried by any one who has the three staple articles, bread, milk and pota toes at hand. The receipt calls for crackers, but as we who live near the stores often find ourselves out of them, it would not be strange
if people living some miles from a grocery might also find themselves out of crackers just when they are most needed. In such case try bread crumbs in place of rolled oyster crackers. very thin; roll a pouud of oyster slice then break about a pound of bread into fine crumbs have ready a quart of new milk, if you live the country and have plenty. If you live in the city, and saving milk is an object, you may add a pint of water to a pint of milk, and use that instead, but of course pure milk will pro-
duce the best results. Put a layer of crumbs duce the best results. Put a layer of crumb upon the bottom of a porcelain pulding dish, sprinkle of salt, potatoes, a trife of butter, sprinkle of salt, and a few almost impereepti-
ble specks of pepper, with a hittle of the milk ble specks of pepper, with a little of the milk
next another layer of crumbs, then potatoes, reserving enough crumbs for the top, which reserving enough crumbs for the top, which
may be ornamented, if you think best, by nay be ornamented, if you think best, by a and be careful not to use too much pepper. Bake in a good oven 40 minutes or an hour. W
call it scolloped potatoes, and consider it a dis particularly adapted for the everyday tea table We had one, however, with our turkey on New Year's day, and it was preferred by many to potatoes cooked in the usual manner.
Judgment must be used in
proper quantity of milk required. Whard to the if the enough milk or water has not been very moist enough milk or water has not been used, and the next time a sinilar dish is prepared mor
may be added to advantage. As the milk we buy is probably quarter water, it may be possi ble that pure, unadulterated country milk would be too rich, but the housekeeper will be able to regulate this after one or two trials.
Philosophy of Light Digestion.-In a diet etic point of view, it would be well for wea stomachs to remember that wind birds are nor nutritions than their domesticaled cousins, an more digestiblc. But the white breast or wing winged game. Other game, such as vinisou, which is dark colored, and contains a large tion of fibrin, produces highly stimulating chyle, and conscquently the digestion is an eas and rapid affair for the stomach. But, though the whiter meats may be detained longer in th stomach, furnish less stimulating chyle, and be suffered to ruu iuto acetous fermentation, thei lesser stimulating quality may recommend them when the general system is not in want of spur. Meats are wholesome, or otherwise, les with reference to themselves than to the con says Van So asser "withou be condition of the panson is like a salor prorson for whom it is intended without knowing to what port the vessel is bound. -"Dr. Doran.

Sausages. - To 50 pounds of meat, ready eut and assorted for grinding, put 14 ounces o sifted salt, six tablespoonfuls of pepper and eight of sage, rubbed through a sift. Whe more sage or pisper is needed add some, but more sage or pepper is needed, ada some,
add no more salt. After all is ground, knead over well; then make out into cakes of suitabl size for the table, fry a little brown and pack down close in small tin or other vessels, pourin over them the grease that fries out, addin sufficient lard to cover the whole, to exclud the air. Keep in a cool, dry cellar, and it wil bc just as fresh and nice wheu opened at next harvest as when it was made. Old tin fruit cans, with the tops cut off close around th edge with a sharp chisel, make very nico cans to pack in.
An Adulteration of Essence Cloves. -Jacquemin-Atteution is called to the uso of phenol for this purpose, and for its detection sinall drop of anilme mixed with or oc. c. distilled water is recommended; this is adde to the essence, then several drops of hypochlo rite of soda. If phenol is absent, the color fur nished by aniline alone is obtained a slight violet-purple, which is transitory; if present,
a beautiful bhue color is produced, which lasts for several minutes; one per cent may bo defor sever
tected.
Paste Blacking.--Paste blacking is made by mixing powdered bone-black with half its weight of molasscs, and onc-eighth its weight o ohive ou, and to this is afterwards alded one eighth of its weight of hydroric acid, and cid, the whe is to ben mixed up aid; the whole is to be then mixed up with Prear - yion Lis
Preservation of Lime Juice.-Lime or cmon juice may bc preserved as follows: Hea the juice, to coagulate alh abuminous matters, glycerine will not only retard turgid growths, hut prevent the juico from freering even during

# PAC RIC RUMAL AN. 

## DEWEY \& CO., Publishers.

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The Șientific Press Patent Agency DEWEY \& CO., Patent Solicitors.

SAN FRANCISCO:
Saturday, February 2.3, 1878.

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## hew advertisements.

Grand "Gold Bedal Seplarator, Mareus C. Ilawley is Co

 hurru Egyss
Nauman \&

The Week.
The week's rains have been like those which have gone before-but more abundant. The
surety of profitalle crops has been supt in many parts by anxiety because of the actual danger from the rising, rushing watcr. 1) well-
ers in the State capital have passed days and ers in the State capital have passed days and
nights of exitement and apprenension. 1 n
some respects the water has been higher than some respects the watcr has icen higher than
ever known before, in others it still falls lelow the thood record of ${ }^{\text {and }}$ tules there . In the outlying plains ancenter loss than in the city of sractramento. 1 ln sone casse levecs have been swept away, and
the work of nonths has goue beneath the flood. In others almost superhuman elforts have been
put forth, and breaks have been repairel, and the roaring river turned baek from its prey. In other regions than the Sacramento valley there
have come minor downrushes of water from the have come minor downrushes of water from the
hills and roadways, and railways have been there been any damage which can be mentioned in comparison with the glorions benefits which
this abuudant gift of water will bestow nipon all our material interests. As we write, on Wedncsilay, the south winil storms as they were a month ago. According
to all human wisdom, it scems now as thongh to all human wiston, it scems now as thongh
the time had cone now for the clouds and winds let the suu ouce more appear. There is yet world's of work to do to get the benefit of the
water which is now in store, and fariners are getting impatient to begin. All will doubtlcss come in good time.

## Deep Plowing.

Farmers in this state are either besonght, all ised or commanded to plow deep by almost every writer who sharpeus his pencil for an agricultural theme. Although these entreaties and manllates may be wise in most cases on our
deep alluvial soils, they shonld always be accompanied with duc reference to cases whiel do not warrant too decp sinking of the sharc. It is wrong to convey the idea that the deeper you
plow the better in all cascs, and that if you can by extra efforts scrape the bottom out of
the wells at the antipodes, yon will get wonder ful crops. In some cases it is just as fatab to plow too decp as it is to cut off a dog's tail just bechiml the ears. A fow years a aro, it was just
as common at the last and in laigland to adrocate plows with a mining tendency, as it is now
in this $S$ tate, aud it was not until many acres of ood seed bell were buried out of sight and held down ly a monument of barren subsoil, that
the land dredgers fonnd that deep phowing, like nauly other good things, may be carricd too far Those who have not gained experimental nowledge from turuing up the soil from differ cint deptus, may gain a theoretical insight intio
the status of the question by the reflection that the chief ageucies whieh bring fertility to soils and the atmospliere expend their powers and deposit their treasures. Here the compounds of
nitroven are filtered fron the percolatiun water nitrogetn are filtered fron the pereolatily water
or absorbed from the penetrating air. Ilere the wealth of decaying vergetation has bcen deposited.
All these causes have leeen giving cluracter Alt The depth to which their intucnce has ex-
tended is widely ditlerent according to the maerial with which they have had to deal, and have acterl. The which and dednction is, upon theo-
have theal grounds, that this quality of availability
retical retical grounds, that this quality of availability
to plant growth, which has been produced a such cost, so to speak, of natural forcese, slonould
not lee overlookel in any schene of cultivation The latest practical testimony upou this sub. ject conics to us in some remarks upon the use ion to the London agricnlturak journals Mr. Hechi points out the errors whieh he aul some
of his brother farmers have made by turning up the soil from to great depth. When the cultivator was placed in plossession of such a power-
nil agent as stcam, the tendency to indulge lis theories of deep plowing was irresistible. lu aldition to this disposition, the plow itsclif, an
thong conscious of its stringth, showed a hun though conselous of its streligth, showed a hun-
ger for depth and delverl nueh decper than the
"set" of the implement woutl indicate. The sset of the implement wouth indicate. The
practical results which Mr. Meclii sets forth nay be summarizud as follows: In one case on
his stean plowed land, although the growing yrain tooked unusualiy, strono, and the growth
of blade and stemn was fairly magnincent; he of btadc and stem was fairly magnincent; he
found on thrcshing that his stean-ptowed land yielled him 12 bnslels sess per acre in grain than the horse-plowect, and gave ham a nik of straw
which was expensive to handle. He countell his loss on the experiment at $\$ 1,000$. Similar
hosses were noted with other crups aud by other

Thesc results ly linglish experimenters would harilly be reproduced in this stante as a gencral
rule, beeanse our soil is of a diftirent chanacter and the lower strata are richer in qualities
which are fitted to the perfection of the frnitery power of the plant. And yet we know of ex pericnces hocre which are quitc similar in the
heavy growth of straw amd light yield of grain. We liave donlittess few lands upon which a plow cutting nine inches will bring up that "1asty
vellow sulsoil" which Mr. Mechi descriles, n which mischief might be done "by mixixing too abundantly the wretched sulboil with, the
ong :erated and long manured top soil;" and yet as a general principhe it is well to remem-
ber that iu all soils there is a surface layer of varying depth, whinh is especiahy fitted lyy long exposure to promote plant growth, and to mix
this or to cover it with lower earth which is that or to cover, it either to weaken or obseure its productive power.
aiued by deep working this coast to be loes not pertain in many othcr agricultural regions, and that is in the conservation of
moisture. Harl, coupact gronnd recives watcr slowly, and parts with it readily by evaporation. Vor this reason it is more important
here than elsewhere, that the soil should here than ersewhere, that the soil should be
decply stirrell. lin this way it is often, aud trupy said, that deep culture may take the
tlace of irrigation. But to accomplish this, it is nate necessary that the snbsoil should be brought to the surface. It may be broken up and
still not rentovel! from its natural position. This may be done ly a subsoil attachment to the conmon plow, so that at the same operatiou the surface may be turned over to the
depth of six or eight inches, and the sulsoil oosened to the depth of four or six inches more with conparatively little addition to the labor
Or a team with a subsoil cutter may follow in the same furrow with the turning plow. We have seen both these deriees successfully used
at the Fast. By such practice there is no dan ger of exposing a layer which is unt fitted for
growth, and yet all the advantages of dcep
$\left|\begin{array}{l}\text { stirring, with its attendant storage of water and } \\ \text { deep rooting for plants, which send roots deep } \\ \text { for moisturc, may be gained. This is a safe }\end{array}\right|$ and sure bencfit for the consideration of all who have not found their deep plowing as remuner-
ative as they have hoped. We believe in deep ative at they have hoped. We believe in dee
plowing if it be done wisely, and we believe also in lousening the subsuil and giving it the wealth of air and water in all cases. Any
thing which we say upou the subject docs not militato against the fact that our culture, as a enough.
Conn diffing the fertility of strata of soil taken ue of crent depths, we are glad to note tha ulumber of experiments, the result of wlich w expect will be intcresting to publish at some
future tine. Ile has taken out layers from different depths, will sow grain upon each o
them, aud record the facts of its may we see, so far as one set of experiments strata of our soils connpare with each other.

## Insect Investigations.

In our issue of January 5th, our Washington orrespondent gave an ontline of the work which the United sitates Entomological Com mission had done in the great western country
by their study of the locust plague, Of course that onthine contained but a hint of the infor mation which will be made pmblic in their de tailed reports, which will ere long appear. In another letter, which we shall print soon, our correspondent reviews in an intercsting manner
the great fiekl for entomological work which lies opeu and hitherto unexplored in the destruction which has leen waged upon the cotton crop in southern states. Onr correspondent is right in suggesting this as a futuro branch for the work of the commission. We have now
three of the leadiug cntomologists of the country, Profs. Rhley, Packard and Thomas, at worl inn a line which bids farr to do our agricultural them step aside until the saine work is done for the other parts of the country as has bcen done for the Northwest. It seems strance that our Covernment has liitherto done so little to aid the farmors of the country to a better understanding of the nature of the pests which are
destroying their crops lin the nillion's worth and to dissemninate the best known metiods fir repelling thcir grievous attacks. We have excellent work from state entomologists in the
different states; we have also had crelitalle calinet work ly the stated entomologist of the Agricultural Department. But these have not, cril as it reasons, beech able to cope with the and in its destroying phases in the fields. The talent, its kuown zeal, and its outfit for making these qualities uscful, was a mise Congressiomal creation, and it should not be permitted to lay aside its laikors until the end is reachel. have sech it stated that the commission esti-
mates that they can pursue and complete their investigation, including the cotton worm and its If this lee true lect cor an expenditure of $\approx 2,500$ complete the task without delay, for that amount is saved to, the farmers of the Nouth by letting them nuderstand the weak points of the enemy with which they have to deal. Every point of give the ayriculturist in conquering the insect - of greater value than one nuacquainted with ur farming practice cau imacine. The cril is our which only has to be let alone to secure its revalence. To be overcome it inust be fonght burlen of furnishing the people with the science
of evil and its remedies should be cheerfully ndertaken ly the enereal Government, and we hope the work will be pushed forward.
Hornless Cattle. - We notice that the smb ject of hornless cattle which has been prescuted in our columns, is attracting attention among onr
nuriculturists. Dr. L. D. Morse of san Mateo ounty writes as follows: "If a company conld e formal somewhere on this coast for import ing and breeding Angus and Norfolk polled cat te, more especially the latter, it would inau surate an improvement of the most importan haracter, and or the cattle line there many men in this county who could bnild up a herd of such cattle and scarcely miss the few can prolably be purchascl in New York State, where they have been introduced within the past six yen
North Carolisa.-Information concerning he agrieultural resources of this state is becom ng nuch more extendel and detinite throug
fforts of 11 on. L. L. Polk, Comnissioner the State Goard of Agriculture. His third hat terly report, which we have just received of excellent work, winning the support of the
farners of the State, and the interest of agrifarmers of the State, and
culturists in other States.

Queqies and Replies.

## Gypsum.




Rock gypsum is worth about $\$ 5$ a ton deliv.
ered in this city. It is sold, after bein in buik for $\$ 10$, and in barrels for $\$ 12.50$ per
ton. In order to gain this price the rock must ton. In order to gain this price the rock must
be exanined beforechand by the manufacturer, is alhore is some rock of tine appearance whiel is almost worthless for his uses. It does not
appear that there would be much chance for profit ou the rock shipped to this city fron
hern county werc it never so freight would eat up the reeeipts, not to say to the ears. It is true that gypsum rock has transportation has been by water, and conse quently much cheaper. It would be well for
onr querist to send a specimen of his Lo Lucas \& Co., of the Gohden Gate Plaste This firm takes the cead in manufacturing and seltiug plaster, and they would doubtless give information on the value of the raw material. in different parts of the State, because of the value which will accrue to our agricultural in trests by using it wisely as a fertilizer. For this purpose the raw inaterial should be widely
distributed, because it will be thus more easily distributed, Thecause it wil be thus more easily scription of plaster for the alkali soils at West quent discos Augeles county, ported near there, is a case in point. The plaster must he had cheaply if our tarmers are to reap in distant parts of the State, the rock should be dug and ground as near the field as possible.
In western New York, whence we came, and, In western New York, whence we came, and,
we doubt not, in other parts of the Eastern We doubt not, in other parts of the Eastern
States, the plaster mills are of frequent oceurrence. In some cases they are adjuncts to the
flouri flouring mills, and the farmers when they com plaster for their ficlds. We expeet to see in this State, when the demand shall warrant it, establishments for grinding plaster in different parts of the State, and then the cost of long transpurtation will be done away

## Aphis on Rose Bushes.

Eutrong PRess:- The rose busles in my yarden, partie-
ulariy the youns buds, are now eovered wit in rrads of
 cal.
There arc several methods by whieh the pests may be destroyed, if they are diligently applicd. We have cleared bushes entirely by syringing
with a suds made of whale-oll soap, which is sold for this purpose by the florists and drug. syringe. (ioold results may also be attained by Irenching with water heated to $120^{\circ}$, or with the whale t-soap suds, if not too sore cious. In green houses the nost common fight against this plague is by funiigation, burning
tobaeco and leaving the house tightly closed tobaeco and leaving the house er plants fumiga-
through the night. through the night. On out-door plants funiga-
tion may also be applied with some success, if paper and the tobaco burncd near the ground under it. Where the bushes are not too large, nor too many of then, this plan is easily applicd. Who knows better methods

Tarred Corn for Seed.
pmitors Press:- in a recent number of the keep I noticed an artiele on tarring corn to have operated the thing is to take (we will say), a three gallon kettle, put in six quarts of water; fetch it to a boiling point, then drop in four
tablesponfuls of tar, or thereabout. Let the tar mix with the water. Take it from the fire, and pour in cradually eight quarts of corn. (Yive it a little stir and turn it out into a basket will is below blood heat, then sift in wood ashes to dry the tar. Corn will remain in boiling water one minute without in. juring the germ. If the above directions are method followed for the last 60 years. Corn reated in this way will come up planted in Batavia, Cal
Cranberries.
Editors Prkss:- 1fas the growing
tried in
sard to
county:
We Wents of late. Has any reader made any? We have said on several former occasions that we believed they could be grown in this state, pro-
viling the proper location and conditions were chosen. Our eonditions are so various that an adapted to the plant. The snbject is worth dis-

The
of John has been issued in the Roard.

The Rainfall of the Sandwich Islands. The rainfall on the $\overline{\text { Sandwich Islands differs }}$ widely in the various parts and is to a great extent governed by purely local influences. Oftentimes these variations are very marked, and even are appreciable on the opposite sides of
the same mountains. Many times have we stod in Honolulu when the sun was shining
stightly overhead, and watched the rain falling brightly overhead, and watched the rain falling
heavily but a few iniles away up the Nuuanu valley. The causes which produce these seem.
ingly strange results are very obvious to anyone who stops to think
These islands are situated in a zone of perpetual summer, and being surrounded by water
on all sides, the warm atmosphere absorbs on all sides, the warm atmosphere absorbs
large quantities of moisture. Now, in the parlarge quantities of moisture. Now, in the par-
ticular case of the Nuuanu valcy, the rainfall is easily explained. The island of Oahu, on which Honolulu is situated, is divided by a high range of mountains running nearly east and west. between 1,000 and 2,000 feet. The trade-winds, which here blow from a northerly direction, when they meet these high mountains naturally find an exit down the valley. As they pass down the valley, they meet the ascending cur-
rent of warm moist air from the sheltered south rent of warm moist air from the shetrered south
side and immediately condeuse it into clonds.
The table which we publish below is taken rom the Howa. Hall from the record of the rainfall at his house in the Nuuanu valley. His residence being about midway between the two
extremes of local influences, would be a fair approximate of the average, rainfall of the isl-
and. By looking through the table, one will and. By looking through the table, one will
see that there is no regularity in the time of the heavy rains, and the rainy months in one year may be the dry ones the next.

| Rainfall for Four Years in the Nuuanu Val- |
| :--- |

## January February March Apriil... May..... June. July August <br> August ... September October... November. Deeember.

The amount and place of the rainfall will be to a great extent regulated by the force of the
wind; when it is strong it forces the clouds down the valley, and the rain falls on the town, but generally the wind loses its power among
the clouds of its own formation, and the rain falls near the middle of the valley. It is a pecu-
liar sight to see this valley filled with cluds liar sight to see this valley filled with clouds which do not reach the tops of the mountains
on either side, and the rain falling heavily in
one on either side, and the rain falling heavily in
the bottom. These rains are almost of daily Beside these local rains, the tall mountains Beside these local rains, the tall mountains
with which all the islands are marked tend to
confine and distribute unevenly even the larger confine and distribute unevenly even the larger storms that nay be general to the whole group
or even of greater area. It will be seen that no rainfall which is taken at any one point can
be an exact slowing of the rainfall of the islands be an exact
in general.

## Rains and Floods.

The long-continued and heavy rains of the past two months, having entirely dissipated all or merchant of California, have brought fears of danger in the opposite directicu, viz., of floods.
Already, as meutioned, considerable damage has been done in different parts of the country by the overflow of accumulated waters in the overcrowded rivers. The large tracts of land under cultivatiou, which have been covered
with water, have, of course, been seriously damaged for this season. A great deal of expense will be entailed for the construction of
new levees and for repairing breaks, banks, levees, ditches, dams, etc. The railroad companies have been kept busy in repairing the
roads, to keep them in order, and, in some instances, have had to abandon temporarily
short stretches of road. The new line from Oakland Point to Martinez has been so much
trouble to keep open that the efforts have been abandoned for the present. There have been so many slides in the cuts and in the banks that they have concluded to stop running the line
until the rains ccase causing slides. There ar some peculiarities presented this season which are worthy of note. In 27 years prior to the
present year, the quantity of rain has exceeded eight inches only in 11 months, viz.: in December, four times; January, five times; and Febru-
ary, twice. On four inonths only in 27 years has there fallen as much rain as in January of ever fallen in a month was in January, 1862 ble floods, which lasted through December 1861, and January, 1862, destroying an im. It is worthy of note that the month just menonly month for 27 years which exceeded the noon on Wednesday, was 26.62 in San Fran-

An Important Improvement in Ice Manufacture.

## A San Francisco Invention

There seems to be no finality iu science or in scientific mechanism. One improver comes after another in such swift succession, that cach im prover soon finds himself improved. A few years ago, the production of ice by artificial means was considered something quite wonderful, even taking into account the great cost attendant upon the earlier efforts. But by suc cessive discoveries and improvements, the cost of the artificial production of ice has been greatly diminished, and the simplicity of the process so wonderfully advanced, that within the past year or two art has fairly superseded nature, even in the most favored localities, like sway over, river, and poud, and lake, for full one quarter of the year. To give some idea of the economic progress which has been made in this arection, it may be remarked that fifteen years ago, it cost nearly or quite $\$ 20$ to produce one
ton of artificial ice ; ten years ago the cost had ton of artificial ice; ten years ago the cost had
been reduced more than one half, since which time the cost has been reduced from time to time, by added improvements, until by the be made at a cost not to exceed one dollar per be ma
ton.
For
For a century or more, the great problem has ost as by the steam engine. The progress in this direction has been very slow and unsatis-

of the vessel containing the water to be frozen.
This quality greatly simplifies and reduces the This quality greatly simplifies and reduces the weight and bulk of the machine, and
process of artificial ice manufacture.
process of artincial ice manufacture,
6 th. This fluid condenses under from five to ten pounds pressure, while ammonia requires fen pounds pressure, while ammonia requires fluids in use vary from 40 to 50 and upwards all the way to the condensing point of ammonia.
7 th. By reason of the low condensing point of the Gesner fluid there is great economy in the amnunt of power required over any other,
while the machine itself may be constructed of While the machine itself may be constructed of
lighter materials, as well as made lighter in lighter materials, as well as made lighter in
weight. For the same reasou there is less liabil ity of leakage in the joints. Iu fact every joint ly byordinary solderiug - a method which gives a low condensing point is the less liability to leakage of the pump, around the pistou of which, and from the high pressure required to condense other fluids, there is
8th. The low condensing point of this fluid admits of its ready use in warm climates when other machines are either utterly impracticable
or attended with great expense, especially in the use of power. It is not doubted but that one of these machines could be made to operate even the thermometer stands constantly at $120^{\circ}$ Fahr. or even higher.
it would be useless to further enumerate the advantages derivable from the usc of this new fluid in the maunfacture of ice. Suffice it to say that the discovery of its application marks
the most important era in the progress of ice manufacture, since the first introduction of

GESNER'S ICE MAKING APPARATUS.
factory. Much better success has been achieved ing power into cold by the ice machine

The Latest Improvement.
However, and the one which entirely distances all others, is of quite a recent date, at least in its practical demonstration, and has been made in our own city of San Francisco, by Mr. M. J. G. Ges.
ner, who has recently come hither froun New York ner, who has recently come hither from New rork
for the special purpose of putting into actual
use a discovery which he conceived some the use a discovery which he conceived some three
or four years ago in his little laboratory in the ast nained city. This improvement consists mainly in the employment and in the adaptability of machines for the employment, as a refriger ating agent, of

## An Entirely new Fluid

One scarcely known at all out of the laboratory of a fine chemist, and one never bcfore employed as a refrigerating agent. The advantages of this
fluid are manifold, somc of which may be enumerated as follows
merated as follows :
1st. It is non-explosive, entirel
quite pleasant to the sense of smell.
2d. It is anti-corrosive, hav
whatever, on any of the metals.
3 d . Its condensing aud evaporating points come nearer together than those of any other
Huid known, an advantage which is readily appreciable to any expert in the manufacture of ice.
4th. It is exccedingly volatite aud mobile, 4th. It is exccedingly volatile and mobile,
especially when placed under the action of the
air pump. important one, and is so perfect that while the
ethers and the various lighter products distilled ethers and the various lighter products distilled
from petroleum, now in quite general use, as well as sulphurous oxidc, compressed air, etc., gealing liquid such as salt and water to intervene as a carrier or conveyer away of the heat from
the water, this new liquid acts as its own carrier, and may be used in direct contact with the walls

In order to give our readers some idea of th simplicity of this machiue, we have prepared the accompanying illustration. The simplicity of
this machine over any other ever before conthis machine over any other ever before constructed wull be at once apparent to every one manufacturing ice. While it may be worked on the largest possible scale, it is also peculiarly operation on a small scale of from one to three four tons per day or less.
By reference to the engraving, the arrangement of the machine will be understoo water-tank in which the ice is made; $B$, ice in in
process of formation; $D$, the freczers or colls in process of formation; $D$, the freczers or cettsin in
whieh the freezing liquid is placed, and against whieh the freezing hquid is pated, $A$, condenser filled with watcr, through which a coil of pipe
passes from $I /$ to $K$, and in which the freezing passes from $I$ to $K$, and in which the freezing
liquid is condensed; a larger coil nay bc used with a spray, if desirable; $M$, the gas chamber,
which is connected with all the freezing cells: $G$, the pipe connecting the gas clamber with the vacuum side of the punp and through
which the gas is drawn off for condensawhich the gas is drawn off for condensa-
tiou; $E$, the pump, double-acting; $H$, the pipe connecting the condensing side of the pump with the condensing pipe coiled in the
tank $F ; K$, a self-acting valve which passes the condensed liquid colleeted in the condenser to the freczers, $L$, the pipe conveying the co
densed freezing liguid frons the self densed freezing liquid tront the self-acting valve
to the freczing cells. These cells are fed at the bottom, as shown. $N$, the vacunm gauge
the pressure qauge; $P$, the driving pultey opcration the water tank, $A$, is closed by a re
movable water.tight door in front, not show movable water.ti
in the engraving.

## How Artiflciai Ice is Made.

For the benefit of such of our readers as may
not be familiar with the theory and practice of
artificial ice making, we will try to describe it.
lce is water deprived of a Ice is water deprived of a certain measure of heat. Now, if by artificial means we can take away that measure of heat from the water, we
have ice. Put any very volatile tuid, have ice. Put any very volatile fuid, such a
ether or ammonia, in your hand and you will ether or ammonia, in your hand and you will
feel a strong sensation of cold, produced by the feela strong sensation of cold, produced by the
rapid evaporation of the fluid from the warmth of the hand-that is the heat is extracted from the hand by means of the evaporation which takes plaee. The quicker the evaporation, the more intense the cold. If now, the hand could be placed in a closed vessel and the air pumped out of the same, the ether would evaporat much more rapidly, and the hand would be frozen. If a cup half full of water be placed in
a vessel and another cup filled with a vessel and another cup fitled with ether be placed within the cup of water, the two place
under the receiver of an air pumped out, the evaporation is so rapid tha
 This is precisely the principle of artificial ic manufacture. the cells $D, D, O$, are partly filled with the highly volatile fluid described, and the air pump, $E$, i put in motion to remove the air and vapor from
the cells. The rapid evaporation thus produced causes the water in contaporation thus prodiced the cells to freezc, as shown at $B$. The ic gradually accumulates until it reaches the de sired thickncss, when by a simple device the ic is separated from the walls of the cells, slid out the market and cut up into blocks suitable for the parket. As the vapor is pumped out through
the, the pump being double-acting, it is forced, under pressure, through pipe, $H$, int the coil not shown, but placed within the tank t. Here the pressure reduces the vapor again to its liquid condition, when it passes on, automatically, through the valve, $K$, and pipe, $L$, into
the bottom of the cells $D, D, D$, as shown, to b the bottom of the cells $D, D, D$, as shown, to be
again converted into vapor, and so continue its again converted
regular round
The process, as will thus be seen, is exceed ingly sefrigerating effect is applied direct becaus the refrigeraug effect is applied direct to the containing cells. No other liquid known, then the one here used, will do its work in the man-
ner described. All other liquids except this, require the intervention of a non-congealin liquid, such as salt and water, or glycerine an water, etc., which must be provided for by extra
machinery, and at a considerable loss of powe machinery, and at a co
and refrigerating effect
already been organized in this city to build and 'pull
principle, has smanine, merely to demonstrate th principle, has becn in operation for several
months at Klemm's Lounge Factory, on Brannan street, between 5th and !ith, where it has bee examined by a great uumber of our citizens, who are curious or interested in such matters.

For Refrigerating Purposes
This machine, or rather this fluid employed ice machine-is most admirably ancation ing purposes, for cars, breweries, cooling houses
for fruit or meat, for skating rinks, etc. For refrigerating cars, its lightness and simplicit render it peculiarly applicable. It may be employed for a single car or for an entire train. There is no method known by which the same degree of cooling effect can be produced in so
compact a space, with so little weight or such compact a space, with so little weight or such
small expenditure of power as in the use of one of these machines. Arrangements are now be ing made for the construction of a large skating
riuk, cooling house, etc. Ice has now passed out of the category of lux uries to take its place among the necessities of hife, and the natural supply being so uncertain of our population, we hail with pleasure this new iprovement for producing it more cheaply, credit of the more becanse is plaeed to the credit of the already long list of valuable Cal foina have alreally been obtained through the
tion Mining And Scientific Press Patent Agency, and other patents are now pending. Any fur ther information in relation to the above ma
be obtaiued by comnunication with this offiee

Business Change.-As will be noticed in ou advertising columns, the partuership heretofore
cxisting between A. T. Dewey, IV, Be Ewer, existing between A. T. Dewey, W. Be Ewer, Patent Soliciting business connccted with this paper, has been dissolved, by the withdrawal of business will be couducted, as heretofore, l, Mr. Geo. 11. Strong, and our elients candepend upon recciving as courteous and skillful attenThis transaction does not in Dewey \& Co. Mr. Boone intends to occupy himself principally with Patent law in the Hallcek block, No. 320 Sansome streot, south east corncr sausome and sacramento streets, las exceedingly promising talcut for the new ield of Patcnt law practice which he enters, -
On Frie.-""(Hahto,", R. M. W.; "Notes
roum Los Angeles," J. W. P.; "Roting, Straw Piles,","Rose Calture," W. S. D.; "Bernuda "Corn Fodler its Culture and Eusilege," F. G.;
"Tilot Hill Grange," A. W. ©. "Adress of
W. M.," Danville Grange; "Mlum" on Peach Stock," A. B. R., "'Hard, Milking
W.; Utilizing Straw Piles," R. H. B.

## Breeders' $\mathrm{D}_{\text {IRECTORY }}$

 SUa Ranss. - Six linee or less inserted in this Divect ory So cents a ine per month, payabie quarteriv.
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BARRETTO \& CO, Downey City, Cal, brecders of
A. MAILLIARD, San Rafael, Jarin Co., Cal,

PAGE BROTHERS, 302 Davis street, San Francisco,
(or Cotate Ranch, near Petaluma, , Sonoma Co.),
Brectl crs of Short Horns and their Grades.
R. G. Gie SNEATH, San Bruno, Cal., breeder of Jersey
Ho
Has Jersey bulls for sale-various agese-at $\$+0$

## SHEEP AND GOATS.

L. U. SHIPPEE, Stockton, Cal. Importor and Box. FATKINS, Santa Clara, breoder of thorough M. EYRE, Jr., Napa, Cal. Thorouglabred Southdown
Sheep. Ranns and Ewcs, I to 2 years old, ${ }^{2} 20$ each; Sheep. Rans and Ewcs, 1 to 2 years old, $\$ 20$
Lambs, $\$ 15$ each. LANDRUM \& RODGERS, Watsonville, Cal.
porters and breeders of I'ure Breed Angora Goats.

## POULTRY

BURBANK \& MYERS, 43 and 44 California Market, San Francisco, Importers and Breedors of Faney Fowls,
Plyeons, Rabbits, etc. M. FALLON, corner Sevcuth and Oak streets, Oakand. Bronze Turkey
from Pure Bred Fowls.
T. A. FREEMAN, San Jose, Cal. Pekin Ducks for
sale. Also, eggs in their season. A. O. RIX, Washington, Alameda County, Cal., WILLIAM NILES, Los Augeles, Cal. Importcrs
and Breeders of Thoroughbred Poultry.
Eggs for MRS. L. J. WATKINS, San Jose, Cal. Premiun rowis, white and
Pekin Ducks, etc:

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ALFRED PARKER, Bellota, San Joaquin Co, Cai Thiporter, Breener and shipper of Pure Berkshir
Agent for Danas
Catte, Ilog and Shecp Labels. A. TWOGOOD, Riverside. Call,
Breder of Pure Bred Poland-China Hogs.
Bren

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The best Beef Bull in America. The Herefords, the beat cattle in the world. For partictlars write to T. L. Miller, Buchu, Will County, illinois.
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Beecher, Will County, minois
BERKSHIRES


Breeder and Importer of the "Crown Prince," Also, pure, Suffolk hogs and pigs. Salinies of Berkshires.
Jersey , or Aldert horn and
 PETER SAXE RUE A pouibrced. PETER SAXE, Russ helose, Angeles City, Cal.
and Los
CARD.

Last fall, preparatory to moving to Oregon, I disposed of my entire herd of Berkshircs. Alfred Parker, Esq., of Bellota, San Joaquin Countr, purchasing seevcral of miyy
best imported lows. I take pleasure in recounulending him to my forrucer patrons and to the public generally as a reliable brecler. R. S. Thomi'sus, Napa City, cal.

271 Partics favoring me with their orders may rely apongetting a No. 1 Pigs, with perfect pedigreos and themost fulionable Enylizh Alress, ALFRED PARKER, Bellota, San Joaquin County, Cal

## GRANGERS' BUSINESS ASSOCIATION

Incorporated Feb. 10th, 1875 . Capital Stock, $\$ 1,000,000$. OFFICERS AND DIRECTORS.


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BRANDS OF

## Coffee and Spices Have no Superior.

Twenty-Five Years Experience

in tile business on this Coast enables them to place on the market the very best goods at the lowest possible prices.

## Ask Your Grocer for Marden's Coffee and Spices.

## W. \& J. ROBINSON,

Hanford, Tulare County,
THOROUGHBRED BERKSHIRE SWINE
Pure Brown Leghorn Fowls. birds and eggs for sale.

Grangers' Bank of California, 42 California Street,

SAN FRANCisco, Cal.
Authorized Capital - $\$ 2,500,000$

OFFICERS:
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G. W. COLBY. ............................... J. CRESSEY, Cashier.......... ALbert montpellier. Sbcretary............Frank a. cressey

The Bank was opened on the first of August, 1874, for the transaction of a general banking business. Having mado arrangements with the Importers' and Traders' National Bank of N. Y., we are now pre pared to buy and sell Exchange on the Atlantic States a he best market rates.
 The largest and best Business College in America. It
teachers are competent and experienced. Its pupils arc from the best class of young men in the state. It makes
Business Education a specialty; yet its instruction is not Business Education a specialty; yet its instruction is nio
confined to Book-keeping and Arithmetic mercly, but give such broad culture as the times dennand. Thorough instruction if given in all the branches of an English educa-
tion, and Moodern Languares ane practically taught. The
discipline is excellent, and its systen of Actual Busincss discipline is excellent, and
Practice is unsurpassed
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Ladize Derarthent.-Ladies will be admitted for in-
Tkiton in all the Dpartment of the college.
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ted for operators, both by sound and paper. For further particulars call at the College, ${ }^{24}$ Post
E. H. HEALD,
Ftreet, or address for circulars,
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## Notice of Sale.

The property of the Aldcin Fruit and Vegetable Pre-
serving Company, situated in the towil of Centerville. serving Company, situated in the towin of Centerville,
Alameda
Counts, California, unust be sold before Feb.

Three Alden Elevators, A Steam Boiler, Steam Pumr,
And the eeneral fixtures nealed for carrying on the lus
iness of drying fruits and vezetabiles

 Winder. For further particulars, madres
W. A. YATES, Sec'y C. F. P. Co., Engraving done at this office,

Lands for Sale and to Let. FINE RANCH FOR SALE.

LOWEST PRICE, \$8,000.

The ranch is situated on the direct stage road bectweel Mendocino City and Cloverdale, in Mendocino County Forty miles from Cloverdalc, 20 miles from Navarr
Ridze and one mile froun the Christine Postoffice.

It Consists of a Total of 2,000 Acres, of which 640 are secirred by Government title and the balance by pusseasory title. It consists of

150 Acres of Rich Bottom Land, Which is alapted to thc raising of Wheat, Barley, Oats, erops as any laud in the county. There is 1,210 orre
 Cows. The whole ranch is well fenced with pliekct anil post ind rail fence, and laas eighit rood buillhiugs on
consisting of a kood substantial and

Dwelling House of Six Rooms
Two Barns, one of thom 200x 40 fcet, and the other $40 \times 40$
 nercr failing sullly of good soft water at both the Dwell
ing and Dairy 1 tucuss ing and the rarncl isuscs arge quantity of Rodwooll timber,

Fine Orchard of Some 300 Trees, Of the chncicent varieties of Peach, Aplle, Pcar and Plum,
as well as a larre as well as a larre quantity of (irayce cines, Currant and
Gooseberry bushes, and other small fruit.' There is 10
 fall. $\begin{aligned} & \text { The owner has also about } 40 \text { head of catte, a few } \\ & \text { Sheep, fre horses, } 150 \text { heal of hogs, } 100 \text { Hens, and a large } \\ & \text { supply }\end{aligned}$
 The neighhorliood is as good as could be desirel, only

 offered it is the chanipest ranch in Mlendocecino County,
the crop bids fair to bo worth when harvested, 84,000 .
 cion, addurcss
DEWEY \& C0., 202 Sansome Street,
san fravcisco, cal.

## RANCH FOR SALE.

A ranch for salc, near Riverdale, Fresno County It couprises 180 acres , (U. S. patent,) of rich bottom land, with houso and out-buildines. Grass is green the
year round. Alfalfa grows without irrigation, as water is year round. Alfalfa grows without irrigation, as water is
but six to eight fcet beneath the surface. There is an but six to eight fcet beneath the surface. There is an feet of water per sccond belongs with tho place. It is the feet of watcr per sccond belongs with tho place. It is the
bost of tule layd and borders on the swann or overflowod
lands. lands, There are a few Fruit Trees, strawberries and
Blackberries. The ranch is one mile from the gelin Blackberries. The ranch is one mile from the gellnd
louse and postotice; 10 miles from Lemore, way and ninc miles from Kingston, county soat of Fresno county.
address

DAVID S. ORR, Riverdale,
Fresno County, Cal.

GOOD IAND

FAVORABLE LOCATION,
GUARANTEEING

## Sure Crops Every Year.

The Redding Ranoh,
In the Upper Saeramento Valley, originally em braeing over 26,000 acres of

Choice Grain, Orchard and Pasfure Land,
Is now offered for salo at low priees and on favorable terms of payment,

## In Sub-Divisions to Suit Purchasers.

The ranch was selected at an early day by Major 1. B. Redding, one of the largest pioneer land owners in California. It is situated on the west side of the Saeramento River and extends over 20 miles along its bank.
The average rainfall is about 30 inches per annum, and crops have never been known to fail from drouth.
The climate is generally healthy and compartively desirable. The near proximity of high mountain peaks give cool nights during the "heated terms" whieh occur in our California summers.
Figs, Grapes, Peaches, Prunes, Alnonds, English Walnuts, Oranges and other temperate and semi-tropical fruits can be raised with suceess on most of the tract. Also, Vegetables, Com and all other cereals ordinarily grown in the State.
A considerable amount of the rich bottom land has already been eultivated.

## Deep Soil With Lasting Qualities.

The soil throughout the tilled portions of the ranch proves to be of great depth and enduring in its good qualities. It is quite free from foul growths. The virgin soil among the large oak trees on the bottom land is easily broken up. and cultivated.
The California and Oregon railroad traverscs nearly the entire length of the tract. There are several sections, stations and switches, besides depots at the towns of Anderson and Reading-all of whieh are loeated within the limits of the ranch.

## For Colonies.

Land suitable for settlers in colonies can be obtained on good terms.

## Town Lots

Are offered for sale in Reading, situated on the Saeramento River, at the present terminus of the railroad. It is the converging and distributing point for large, prosperous mining and agricultural distriets in Northern California and Southern Oregon. Also, lots in the town of Anderson, situated more centrally on the ranch, Lots in both these towns are offered at a bargain, for the purpose of building ap the towns and faeilitating settloment of the ranch. I'nrehasers are invited to come and see the lands before buying here or elsewhere. Apply on the raneh, to the proprietor,

EDWARD FRISBIE,
Anderson, Shasta Co., Cal.

M. EYRE, Jr., NAPA, CAL. Send Stamp For

Price List.
 Safe Arrival of Eggs \& Fowls Guaranteed.

I never owned a FINER LOT OF BIRDS than I have
raised this year. Also, Thoroughbred Southdown Sheep. ATAFPamphot on the care of fowls- hatching, feeding,
diseases and their cure, ete,
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## LOOKI

BURBANK MYRRS, Im.

 and Fowls at reduced prices
BURBANK \& MYERS, 43 and 44 California Markee


## WHITE LEGHORN EGGS,   sons of 1876 -77, packed to arrive safely and hatch. Address, 35 Mission Market, San Francisco. <br> Imperial Egg Food



Will Mako Cour Hens Lay,


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HAND PRUNING SHEARS,
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## GRAND HEADQUARTERS FOR MUSICAL BOXES.

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MUSICAL BOXES

## S

## GREAT ENTERPRISE :

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Sierra Flume \& Lumber Co.
Have over 100,000 Acres of
SUGAR PINE, YELLOW PINE, SPRUCE
Fir and Cedar Lands,
10 Saw Mills, 3 Planing Mills, 1 Sash and Door Factory,

149 Miles V Flumes,
10 Miles Tramway,
157 Miles Telegraph Line, 13 Telegraph Stations,
Employ 475 Men and 550 0xen \& Horses,
The Sugar Pinc is unsurpassed ${ }^{\text {'in }}$ quality, and the wbole Coast can be supplicd.
The Yell can be supplicd.

 the Fir and cedar are as valuable for a great variety of
Lurposeg. Lhirty millions of feet were eut and the esti-
Late for 1877 is fifty nillions; fifteen nillions are now on
 hana, thoroughly seasoned by the hot elimate or Red
Blunf nat Chico.
Large orders ean be filled on a days' notice for all kinds of

BUILDING MATERIALS,
Rough or dresed dry, by which ologant and substant ial
work
for green be beacom lumber. for green lunber.
Orders for the in
prices and freizhhterior filled at less than San Francisco


SIERRA FLUME AND LUMBER CO.
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Center Street Station, Oakland.
Convinced of the superiority of the elimate of Oakland
to that of any other place on the Coast, more particularly for those suffering from discases of a malarina origin, anil chronic diseases gencrilly, the undervignct have opened the above nanied Institute as a resort for invulids, where
alt the facilities for the thorougli and seientifle treatinent of diseases have been introdnced.
Our methods of treatuent embrace Electricity, Turkkinds; the liealthlift, Ihadficld's Equalizer, ane in faet all appliances and remedies of extablighed merit known to
the medienl profesuion. The huldiny is onc of the the medical profession. The hulling is one of the fluest
in the city, and the rooms large and comfortable. No efiort will jee plared to make the patients feel at home. Lying in-roons comnected with the Institute. Charges,
including loard, etc, from $\$ 15$ to $\$ 30$ per week For further information, address
Oakland Health Institute, Oakland, Cal.

Berkeley, the University Town and Business Center.
There are certain favored localities in our State, which seem to have in them the elements
hat ensurc continual and nearly uniform growth and improvement. Berkeley is of this character. Situated in the northern part of Oakland town-
ship, on what was the old Peralta rancho, it commands magniticent views of the lay of San rither side of it, and the boundless Yacific knocking at the Golden Gate.
The beauties of the situation were appreciated by the founders of our noble University of Cal ifornia, and it was appropriate that the site should be named in honor of Bishop Berkeley, who did so much to advance the cause of learning during its early struggles in the New World. He also wrote the poen, in which oceurs the oft taotes its way." How little did he think that his name would be borne in this year, 1378 , ly a university towu on the shores of the Paeitic,
where more than 300 young men and women pursue their studies under able instrnctors without charge.
The natural
Berkeley and educational alvantages of Berkeley are attracting pcople from all parts of
the coast. The successful business men, who wish for more quiet and purcr air than can be
had in San Francisco, can but be pleased here, had in San Francisco, can but be pleased here,
and the minucr or farmer from the interior, who feels that his children should have a better edposition, finds here the highest educational institution in the State. The climate at the foot of
the Coast range in what is called the warm belt, is remarkably mild and even, and favorable to the growth of almost all vegetation that a Cali-
fornian wishes to beautify his home with ornian wishes to beautify his home with
From an elevation of about From an elevation of about 350 feet, there is
a gradual descent to the shore of the bay, two a gradual descent to the shore of the bay, two
miles distant, where deep water is reached by mharves of moderate length at West Berkeley. A line of street cars give direct communica-
tion from the University to Oakland, and a tion from the University to Oakland, and a
branch of the Northern R. R. runs to West Oakland and the San Francisco Ferry. The shore through West Berkeley giving land trans.
portation to the interior, while all river craft can load at the wharves. A steam ferry also
plies directly between this point and San Franse to build $u p$ a ise to build up a manufacturing town on the water's edge corresponding to the edncational
center on the heights. There will be an inereasing number of those who here find remunerative lusiness, while their children are being fitted to take their places as good citizens,
The West Berkeley Lumber Y. F. Byxbee, proprietor, is supplying a great deal of building material for local consumption, and is prepared to supply all points in the interior
which are accessible by water. When the railroad conncctions are completed with the interior, via Martinez and Benicia, an immense area will
be added to their field for business, as they can be added to their bield cors at Berkeley for all points on the main railroad in this State, Nevada and Arizona.
Mr. Thos. Richardson, the manager, has many friends in the trade and among his old patrous throughout the coast.
The Berkeley Gymnasiun is a private board-
ing aud day school of a high character, coning aud day school of a high character, con.
ducted by Mr. S. F. Burris and an able body of
to teachers. Opening in August, 1877, with 20
puyils, the number has inereased in six months puyils, the number has inereased in six months
to 76 , which is certainly a satisfactory showing. The avowed olject of the institution is to pre--
pare students for the University, and if this is properly carried out the youth of California will owe Mr. Burris a debt, of gratitude.
There is a movement on foot to secure a char-
ter for the "Town of Berkeley," in order to maintain good order, good schools, and preserve
the health of the comnunity. The intelligent the health of the comnunity. The intelligent
class of men who ask for it should be able to class of men who ask for it should be ahle to
get the charter withont tronble, and use it with
wisdom.

Poultry and kges. - We are pleased to note the establishment of a new commission house dealing in ponltry, eggs and game nnder the
name of C. \& F. Nauman \& Co., at 507 Front name of C. \& F. Nauman \& Co., at 507 Fron
street. Mr. Nauman has been long identified
with the with the poultry and egg trade of this city, be-
ing with 1). E. Allison \& Co., on Washington stret. He is thoroughly acquainted with the
business business and now starting under his own frm
nane and with good associates, will push sales
to the satisfaction of his old to the satisfaction of his old patrons and many
new oncs. The card of the new firm may be
found in onr advertising columns.

## Bay Ntrseries.-We have received a copy

 of the descriptive catalogne issued by James Hutchison is now in his 26 th year as nurseryman and tlorist on this coast, and his experi ence and entcriprise in securing and propagatingthee best and rarest plauts are well-knowi1 the best ani rarest plauts are well-known
throughont the state. His eatalogue will repay
examination, and his depot, at the corner of exammation, and his depot, at the corner of
14th and Waslington streets, is a lower of lusiness and beauty.

## A IENTS AND NVENTIONS

List of U. S. Patents Issued to Pacific Coast Inventors.
 By Special Dispatch from Washington, D. C. Week Ending, February 5 th. Ttbes for Wire.Rope Railways, Two Casfa.
-W. Eppelsheimer, S. F. Stekring Propeller. - T. Blast and Reverberatory Furnaces.-C Bennett, Clifton, A. T.'
Rebcu-Loadina Fire-Ab Eureka, Cal. Marimlil Wherl., -A. Klotz, Vallejo, Cal Swage for Saw Teetri--N. W. Spaulding,S.,
Strefi Pavement.-W. H. Stow, Chicago Ill. and H. M. Stow, s. S. F..
Combination Under-Sutrs.-Clara S. Brad Otfice patents are net ready for dclivery by the Paten



## Notices of Recent Patents.

Among the patents recently obtained through Dewey \& Co.'s Sclentific Press American and Foreign Patent Agency, the following are worthy of mention:
Netting for Unloading Wagons.-Thomas arrangenent for This device disconnectin the two halves of the false bottom or netting which is placed in the bottom of a header wagon before it is loaded, so that the load can be lifted
bodily and dumped at onc operation. Each half of the net is triangular in form, so when con-
of nected the false bottom is diamond-shaped. wo coruers only have then to be gathered to of hinged bars which can be closed together, so as to retain the load, but whiel will open out
when the latch is detached, so as to form an opening through which the load can pass. Whe the frame is opened, the load drops. readily through the opening, withont the entire separa-
tion of the parts of the netting, so that the parts can be easily connected after the load has possibility . Mis arrangement prevents th possibinty of ilijury to bystanders, as often hap
pens with the ordiuary net, when the lower ends of the parts fly outward by the dropping of
the load. the load.
Nut Lock--Lazare Landeker, Laird Lan deker and Hilamon Spencer, San Luis Obispo.
The object of the invention is to provide a cheap simple and effective device for securing nuts to bolts, which are liable to become loose by constant jarring or other canses. It consists of a metallic washer, having projecting flanges on
its upper side, which prevent the nut from turuing on the washer, and having one or mor pawls, or catches, which engage with radial
slots or grooves in a sccond washer, placed below the first, or in the surface, which the frrst or npper washer is in contact with, so
that, as the nnt is turfted on the bolt, the tirst washer turns with it and engages with the slot or grooves, so as to prevent the bolt fron turn-
ing lack, but permitting it to be turned for ward or tightened whenever it becomes loose nn case a second washer is nsed, it is provided
with llanges, which enter the bolt-hole and thas prevent it from turning on the bolt.
Scrubbing and Mopping Machine. - F Stockley, Bishop Creck, Inyo county. The machinc for scrulbing and mopping Hloors con sists of a tauk mounted npon a wheel at one end and a scrubling brush at the other end. water to lee nsed in clcaning the floor. The iuveutor also provides a lanp-chamber below
the tank, in which a lamp is carried for heating the water, a sprinkler for spraying tho water the floor after the brush has passed over it The whole is combincd in oue machine and perated antomatieally fro
Pcarr.-P. A. Clark, Anahein, Los Augeles county. The inventor ealls this an improved quadruple suction and force pump. The inven noving upou a longitudinal axis in a cylinder which has a diaphragm longitudinally throngh its center. This diaphragm is so made as to redischarge valves, which are respectively con nected by proper passages with the inlet and outlet pipes. The operation of each valve is $t$ close first the lower and then the npper part, so
that there are four openings for for the discharge of water at eael complete or
donble movement of the piston, each valve doing
double duty. As the piston and the diaphragin form four distinct chambers of the cylinder, it will be secn that the two diagonally opposite wischarging it.
dill
Bill File.-Wm. C. Bussey, San Francisco. The improvements relate to that class of bill and paper files in which two upright wires are employed, one of which is longer than the other, and has its upper end bent in a semi-circular form o that its extrenity will interlock with the orming a joint over which the papers or bills can be slipped, and the joint displaced for con venience in removing amy particular paper or
bill in the file. The improvements consist first, in the manner of attaching the wires to the base ing the interlocking joint; thirdly, to an adjust ing the interlocking joint; thirdly, to an adjust bills which are lifted from the main pile ani transferrel to the opposite side of the file and thus preventing them from interfering with the
inspection of the main pile; and lastly, of an arrangement for permitting of the alphabetical arrangement and indexing of the bills, Carpet Sweeper.--B. Figer, S. F. This fore cors certain improvementsin that clas mounted inside in which a revolving brus floor when the case is moved over it. The im. ngement consists of a novel device for secur be readily detached, so as to be taken out for the purpose of cleaning the brush or sweeper The device for securing the brush in the case is so arranged that the brush can also be adjusted to or from the floor, so that as the bristles of
the brush wear away, the brush can be adjuste oo as to preser away, the brush can be alion with reference to the floor. The invention furthe onsists of a novel application of the India rub ure from being masred for protecting the furd lid for opening and removing the dust in the oox without removing the brush.

Tiressiuso.-As harvests are assured, the mind of the thresher turns naturally to the subect of machinery for the coming season's work Everything should be in hand and arranged for time may be used to advantage. cis C. Hawley \& Co. give our readers a hint page broad in this week s Press on the subject read by all.
Cayadan Seevs. - We have received Mr. Wm. Rennie's "Seed Catalogne for 1878 ," and be in the hands of all cultivators. A nmmber of Mr. Rennie's customers in this State have expressed to us their satisfaction with
ings. His address is Toronto, Canada
Peter Henderson. - We have received the plant and general catalogue of this well-known York city They show that his repertoine for 1878 is full of good things in the way of sug. estions to growers and in hile They pamphlcts will prove of wil
Small Fruits.-We have received the price ist of small fruit plants, etc., of John S. Co an excellent assortment of new strawberries, aspberries, blackberries, currants, etc., includ ng the most successful of the new varieties,

A Callfornia peach Abroad.--At the re cultural Society, in some running talk of new arieties of frnit, Briqgs' Red May, of Califor nia, was called b
peach known."

Anerican Bible Society.-We are indebted to Rev. John Thompson, of Oakland, district or a report of the Febrnary meeting of the Roard of Managers of this association.

Bloomington Nursery.-This well-known Illinois establishment sends ns their new cata-
logues for 1878. The business is being pushed logues for 1878. The business is being pushed
nergetically by W. F. Baird, Trnstee, Bloomington, Illinois
 The burfalo chase large whale ekeletorl; new nirseum;
mprovenents in he zoological deparment, besides th ther features which have made it popular

## Farmers! Farmers 11

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value to advertsers; sent free. Addres N. W. Ayer \&
Son, Advertising Agents, Times' Buridiling, Philadelphia.

## S. F. MaRKET Report.

## Nark-Our truule review and quotations aro propared on Wedneosay of anch week (our pubbication dyy), and are

 not intended to represent the state of res.urday, the date wbich the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC

San Francisco, February $20 t h, 1878$. nother broken week in trade. There is little of general interest excent the firmness of Wheat prices nnder the nnsettled condition of affairs Europe.
Range of Cable Prices of Wheat The course of the Liverpool quotation for days of last week has been as recorded in the days of last
following table:


## The Foreign Review

London, February 19th.-The Mark Lane Express says: Imports of foreign Wheat into London have been moderate and wonld have
been exceellingly small but for the nuusual mildness of the season, which permitted shipments from Revel. According to last Monday's furnished by northern Russia, by way of this port. Latest advices state that Revel is now closed by ice, so that for the present we mnst not expect much more Grain from this 8 source.
Arrivals from India and Persia are steadily decreasing hom fndia and Persia are steadily Indian produce has obtained have once more attracted attention of millers. The raising of dei blockade of the Black sea ports has been political situation. The present is a time of suspense and business has moved within moderate limits, which is all that can be expected as long as such uncertainty prevails. The country demand for which has improved, and a fair consumptive inquiry has been met at an advance of ser quarter. Barley, Maize and eedag ports of call, the floating cargo trade for Wheat has been firm, owing to the unsettled state of political a

Freignts and Charters.
There has been another quict week, with but one charter, the ship Harvester, $1,49+$ tons,
Wheat to Cork, U. K., $f 211 \mathrm{~g}$ G; Continent, f2 16 s 6 d

## Eastern Grain Marketa

New York, February 16th.-The market has been in a more or less feverish and nnsettled condition throughont, owing to the warlike $2 @ 3 \mathrm{c}$, closing at $\$ 1.2 \pm \Subset 1.35$ hor advanced prime spring. Corn has also sold higher and shipping Flour has been most popnlar in the
English market. Barley has sold freely at 75 © 930.
week haco, February 16th. - The markets, this than for some time past, and last week's de. prcssed prices have been more than recovered. The war news has had much to do with this, although there is a good homc demand for a legitinate trade in noarly every article. The
 L412c; Rye, 54 c ; Barley, 48 $\ddagger \mathrm{c}$; Por
Lard, $\$ 7.30$.
Boston, Febrnary 16 th. -Wool is generally unchanged, with no prospect of any inprove-
ment, and holders find it diffienlt to place Wool except at concessions, notwithstanding that 566,000 tts California, at 17 © 34 c for Spring and 132@ 262 $\frac{2}{2}$ c for Fall. The movemont in Califorkinds, about one-half the sales of the week hav. ing been of this description.

Domestic Produce
The following table shows the S. F. receipts Domestic Prodnce for the week ending at
noon to-day, as compared with the receipts of noon to-day, as
previous weeks
ward step. We note sales: 300 sks choice Coast
Feed, $\$ 1.30$. Feed, \$1,30. B .
CORN-Large Yellow Corn is subject to a slightly lower range. Sale of 500 sks Large
Yellow, for Mexico, at $\$ 1.50$. Yellow, for Mexico, at ${ }^{\text {DAI }}$ I.50 still weak and prices depressed. The new make of Cheese is coming in.
California Eggs, as the supply has fallen off ittle during the week
prices. Hay is unchanged.
FRUIT- There is
slight advance in Cocoanuts.
HOPS-The local market new. There has been a sale of 150 bales Fair California at 7c. Emmet Wells reports the New York market for the week ending February 8th
as lively, 3,500 bales having been shipped to as lively, 3,500 bales having been shipped to
London. Prices remain steady under this move-
OATS-Oats ta
with Feed Bar
8 per ctl, and have an upward tendency POTATOES-Inquiry for Seed Potatoes active, and fine lots for this use have sold above
the regular rates. We hear of a sale of Early Rose for seed for $\$ 3$ per ctl.
PROVISIONS-Fresh and cured Meats are quiet and unchanged. Trade is reported light. worth 1c per th wholesale. Asparagus drops to worth 1c per to wholesale. Asparagus drops to
20@25c. The first Rhubarb is reported sold at 25 c per tid.
-Rates are a little better, owing to abroad. We note sales of 400 ctls choice Mill ing at $\$ 2.10 ; 3,000$ ctls shipping, $\$ 2$ per ctl. trade and prices are nominal.


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infuence and encouraging fuvors. We intend to send Noence but worth nen nen.
J. L. THARP-San Frn



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EEBU An S. BAKER-Australian Colon ies and Salldwict.
$\qquad$
counties
B. L. Lorp-Sonoma and Napa counties.
E. M. Dersiy, Oregon.


From A Patentee.




 TO QUERISTS.
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Signal Service Meteorological Report.

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| Feb. 13 | Feb. 14 | Feb. 15 | Feb. 16 | Feb. 17 | Feb. 18 | Feb. |
| 30.01 29.58 | ${ }_{20}^{29.99}$ | ${ }_{29}^{29.97}$ | ${ }_{29}^{29.98}$ | ${ }_{2}^{29.97}$ | ${ }_{20}^{29.93}$ | 退30.21 |

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 also, every desirable variety of vegeta BLE AND FLOWER SEEDS, GRASS AND Lover seeds, ETC., OFFRED A

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No. 317 Washington Street, San Francisco
THE THREE POTATOES.
EARLY OHIO- - Earlier than Early Rese. Ranked

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Eate

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 Then, ". "huashers, , ond How to Grow Then,", "Onions
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 should useThe Salutation ( $\$ 12,00$ per doven), er Zion ( $\$ 12$ per dezen), er The Encore (87.50 per dezen), er Perkins Singing School (s6.75 per dozen), of Johnson's
Chorus Choir Instruction Book ( $\$ 12$ per dozen. The first twe are frst-class Church Mus c Beeks, by L. O. Emerssen and W. O. Perkins, and have full instructive
coursea. The last tliree are fitted especially fer Singing Schools by the very best talent. Now for a spirited winter and Spring Singing Class!

Alse give new interest te the year's practice, by getting up one of eur 40 CANTATAS, (send fer circulars) Five of them are:
BELSHAZZAR.. DON MUNIO,... JOSEPH'S BONDAGE Butlerncid, $\$ 1.25$ prodigal son Dudley Buck, $\$ 1.50$ WALPURGIS NIGH . OLIVER DITSON \& CO., BOSTON,

## H. H. H.

HORSE MEDICINE, D. D. T.-1868.

As a horse medicine it is superior to any liniment ever
invented. For RiNG BoNs, SPAVIN, SWEENEY, CALLovs LUMPs, and all old sorks, apply freely so as to blister,
from three to five days in succession, and in four or five
 Joys, isf, Bruiscrs, Windacalls, and all slight ailments, apply
a smali quantity so as net to blister. Saddle Sores, Cuts, a small quantity so as net to blister. Saddle Sores, Cuts,
and all other sores where the skin is broken, mix the lin-
iment half and half with any kind of oil, and apply in and all other sores where the skin is broken, mix the
iment half and half with any kind of oil, and apply in
mederatien.

WILLIAMS \& MOORE, Proprietors, STOCKTON, CAL.
DALTON \& GRAY,
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All Kinds of Country Produce. 404 \& 408 Davis Street, San Francisco.


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The Power and Accuracy of its Discharge,

 Commend it to the attention of all who use a Rifle, either for Hunting, Defense, or Target Shooting
The San Francisco Agency is now fully supplied with all the various kinds and styles of Arms manufactured by the Winchester Repeating Arms Company, to wit:
Round barrels, plain and set, 24 inch-blued. Octagon barrel, plain, 24 inch-blued. Octagen barrel, set $24,26,28,30$ inch-blued. Octagen barrel, set extra beavy, 24, 26, 28, 30 inch-blued. Octagen barrel, set, 24
$26,28,30$-extra finished, case hardened and check stocks. Octagen barrel, set extra heavy, 24, $26,28,30$ inchextra finished-C. H. \& C. S. Octagen harrel, set, 24, 26, 28,30 inch-beautifully finished-C. H. \& C. S., blued, alse gold, silver and nickel plated. Military rifie, muskets, medel 1873. Rifies, muskets and carbines, model 1866. RELOADING TOOLS, PRIMERS AND PARTS OF ARMS.
A heavy stock of Cartridges Manufactured by the W. R. A. Co., for all kinds of Rifles and Pistols, constantly on hand and warranted the best in the market.

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he most powerful and tie nearest perfection of any in use- one tiat protects itself in a gale, will keep your tank flled with

Water Without Waste and Without Attention,
examine the recent
Improvements of Mr. Bachelder,
As now Manc factured by the
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Joh Press for sale, will pleasc aldresss J. P., car \& Co., S. F. State conditien and lowest price.

THE CLIMATE OF CALIFORNIA.
AA thoroumlly studici and ahly written treatise on this TAcike RukAL Puksk for January 2the, und also the Mix-

 state. The infornation is condonsed in a papler read be in the I'Resss as read hefore that Society without any al terations or onnissions. Extra copics, past. paid, 10 cents.
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## Agricultural Articles.

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 shows their simplicity. fill erders Jor zul syzes, from a
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PUMPING MIL to a 24 feet POWER MILL fer running
Machinery as wcll as deing the pumping Hachinery, as well as doing the pumping.

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Managers for California and Pacific Coast.
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LIVERMORE, ALAMEDA COUNTY, CAL
martesun \& WILLIAMSON'S


Teek the Premium over all at the great plewing Match in Steckten, in 1870.
This Plew is thereughly made by practical men wh have been leng in the business and knew what is required
in the censtruction of Gang Plews. It is quickly rdjuster Sufficient play is given so that the tengue will pass ever cradle knells witheut changing the werking pesition of the
shares. It is so censtructed shares. It is so censtructed that the whieels themselves
gevern the action of ; he Plew cerrectly. It has various gevern the action of, he Plow cerrectly, It has varieus
peints of superierity, and can be relied upen as the best and most desirable Gang Plow in the werld. Send fer
circular te

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stockton, cal
Peerless Corn Sheller.


THE IMPROVED. Lamb's Family Knitting Machine.


IT IS THE ONLY MACHINE That kuits flat or tubular work of all sizes;
Narrows and widenson hopiery or tubular wor
Knits a regular rigltanglangled heel, as by laund; Knits a regilar the toe:
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Knits a sock or stocking completc;
Knits a sock or stocking completc;
Knits mittens er gloves of any size without seam;



 only fanily knitter that fills the bill. Local akents want
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J. J. PFISTER \& CO, General Agents, Manufacturers of knitted goeds and dealer In woolen yarns.
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 wanker \& Barry, Rochester, Nai Franciseo, Cal.
nente, Cal.; A. Lubk \& Co., Sau Fran

## JOHN L. BOONE,

Attorney and Counsellor at Law, PATENT LAW A SPECIALTY.

Onfiok-2O2 Sansome Strcet, N. E. corner I'ine Street,
San Francisco.

## THE GRAND "GOLD MEDAL" SEPARATOR. THEIR CALIFORNIA RECORD.

| Curco, Cal., June 8th, 1876. <br> Gold Medal Separator is doing perfect work in barley -threshing 150 sacks an hour, without furcing. <br> A. BULLARD. |
| :---: |
| Chico, Call, June 12th, $18 \% 6$. <br> The fiold Medal Thresher threshed one thousand sacks on Saturday, working three-fuurths of a day. |


| faction to myself and to the parties whom I thresh for. It threshes, separates and cleans bett Russell's thresher that I ever saw. <br> WM. IEFFREYS, Colusa, Cal. |
| :---: |
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| arator, and am well pleased and think it caunot be surpassed. <br> K. GUPTON \& BROS |
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Sr. Jonns, Sept. 3d, 1877.
The Gold Medal Scparator which we bought of 3 ou
last year gives us perfect satisfaction this year. We did
not do any large day's work, owing to the lightness of the
crops. lt is no trouble to thresh from 1,200 to 1,500 sacks
of good wheat per day. Youss truly,
EMERSON \& DURING. Jacinto, Sept. 3d, $187 \%$,
I am highly plcased with my Gold Nledal Separator,
it has done the best of work this season. Had no stop-
page from morning until night. I have never used a ma ma
chine that rmn so steadily, and will all the time. My ex-
pense for repairs was nothing. Can recommend the Gold
Medal Separator as one that will do fast work, and save
all the grain. Yonrs truly,
J. BAYLE.S. We have run thirty days, and have averaged 1,000
sacks a day on our fiold Nedtal Separator. We allo think
the Separator is the best we 6 ver used. We will thresh 1,250 sacks to-day. $\quad$ EMIERSON \& DURRIN( $\%$. Ny new (iold Medal Separator threshes splendidly in
both barley and wheat. I have never seen anything to
beat it aud 180 .
by all who have seen it at work as the best machine ever
in Humboldt county.
l. B. CAVVF.beat it, aud 1 ann certain for good, smooth, clean work she
has never been equalcd. I think her the easiest runningley is 1,800 sacks ( 4,200 bushels). 1 am running two
fold Medals, and both keep going from morning nntilgold Medals, and both seep going from morning nntil
night, as regular as a clock; no stoppage for repairs, and I
am well pleased. Yours truly,
f. W. HOAG.ain well pleased. Yours truly,
We would state here that Mr. Hoag is one of the mostextensive farmers in Colusa county, farming some 17,000
acres on Dr. Glenn's and his own ranches. He has given
us an order for a 44-inch cylinder Gold Aledal Separator,us an order for a 44 -inch cylinder Cold Medal Separator
and a Rice Straw-Burner Engine for 1878 .

Separator, and they are heys that bought the fold Meda Separator, and they are the best pleased men, you ever saw,
with their machine. They say it works most exeellently, with their machine. They say it works most excellently,
far beyond their expectations. WOOD \& TURNER. Hayward, August 7th, 1876.
The Gold Medal Separator we are glad to say has given
us perfect satisfaction in every respeet, and all parties for us perfect satisfaction in every respect, and all parties for
whom we have threshed are quite satisfied, and say that
they never had better work done, their grain is clean and they never had better work done, their grain is clean and
free from eracking. The machine is the best on this coast

$$
\begin{aligned}
& \text { My Cold Medal Separator is the best machine I ever } \\
& \text { cd. Have been farming for ten years, and never had }
\end{aligned}
$$ for saving and cleaning grain. Yours truly,

$$
\begin{aligned}
& \text { used. Have been farning for ten years, and never ha } \\
& \text { one to compare with it. I threshed } 35 \text { days and made }
\end{aligned}
$$

$$
\begin{aligned}
& \text { one to compare with it. I threshed } 35 \text { days and made an } \\
& \text { average of } 2,000 \text { bushels per day. It threshes cleane } \\
& \text { (with }
\end{aligned}
$$

-Nelsov Jume
I started my Gold Medal Separator and lice StrawBurner Engine to-day. It does splendid work, and I think I have the best rig in the State. P. M. fillyNN.
Marysville, September 11 th, 1877.

Marisville, September 11th, 1877.
ine, No. 5, cave entire satisfaction during the threshing scason; threshing sometimes forrr sacks per minute. It
did the best work, and gave entire satisfaction, and an well pleased, an can recommend both engine and separator as
the best I ever saw. Yours truly, SAMUFL BEST. cleaned the that there is none which has saved an compare with the Grand Gold Medal in threshing the grain better work we do. Everyone for whom we have threshed
will give you a stronger testimoniai than we lave, as all acknowledge the great saviug of grain over any other Sep
arator they ever had to do their work. It is the machine for both farmer and thresher-not doing fast work for on and wasting grain for the other, but doing good, fast work
for both. Yours truly, $\quad$ LINNINGER BlROS. Colessa County, August 29th, $18 \% 6$.
I had a Gold Medal Separator threshing for me thi season. It threshed over 30,000 bushels of grain
for ine. It got it all out of the straw and saved it. I am
confident confident that I saved 1,000 bushels more grain than could
have been saved by any other machine yet introduced on this coast. I unhesitatingly pronounce the "Gold Medal" Yours, etc.
HARRIS.
Colusa County, Sejpember 4th, 1876,
We had one of your Gold Medal Separators threshin for us. We can speak for ourselves in ligh praise for its
merits as a thresher and separator. Our straw has been threshed cleaner, and the grain; 11,000 bushels, separated more thoroughly than any other machine now in use could
possibly do. We can well recommend it to our fellow farmers.

## -

We consider the Gold Jones, August 19th, 1876. any we have ever seen in this valley; we have used bot Russell's and Pitt's the past 15 years.

THOMAS PATTON \& CO.
For the benefit of farmers and threshers, I state that

I deem it but just and right to add my testimony of the merits of your Gold Mledal Separator, as it is the first one
that has ever been in this cuunty, and I believe it is the that has ever been in this cuuncy, and I believe it is the
best one in use. I have had Mr. Ca.e thresh my grain of my grain. But I think that this machiue will motet the
desired waits of the farmers in this valley. Notwith-
standing the dampness and the long straw we had to con-
tend with, they threshed 810 bushcls in four hours, and

$\qquad$ seen. I threshed 130 sacks of harley in 30 minutes, and
would have kept it up if it had been in the
tren would,
truly, $\begin{array}{r}\text { J. R. LOWF. } \\ \text { NeLso } \\ \hline\end{array}$

| I have used a 36 -inch Gold Medal Separator for 70 |
| :---: |
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|  |

given entire satisfaction, and I think it is the best thresher
ever built. Yours, etc., JAS. T. McINTOSH.
For quality of work done I would refer you to Chas
V. Holart, wheat inerehant, Chioo, who says he can tel
every parcel of wheat I have threshell, by the manner i
whieh it is cleaned.
JAs, T. MIClNTOSH.

$$
\text { Tenama Cousty, September 6th, } 1877 .
$$

Cunco, September 15th, 1877.
The 40 -inch Giold Medal Separator during this season, 46 days, has threshed 46,000 sacks of wheat. Largest run
for one day of 12 hours was 1,700 sacks, while I have for one day of 12 hours was 1,700 sacks, while 1 have I have done nice work and saved the grain in all casesI have done nice work and saved the grain in all caseshave threshed testify to the quality of work I have done
 Decker, with a Gold Medal Separator and Gaar, Seott \& Rice Straw-Burner Engine, and we desire to give you an work that he has done for us. We have had our grain cver had the work done before, and it has been saved unch eloser-we fully believe equal to the cost of threshing over machine, while the grain has been well cleaned and not cracked at all. We cheerfully recommend both Separator and engine, as in our judginent the best we have ever seen, and in every respect the friend of the farmers, who desire
to put all the grain they raise into the saek rather than a arge portion on the ground

Respeetfully yours,
W. M. THORP
J. J. WAste,
W. W. DAVIS,

Arcata, August 22d, 1877.
I have fully tested your Gold Medal Separator, which
have purchased of you, and find it does excellent work.
in recommending it to farmers. Yours truly, J. S. CONE.
I have done well with my Gold Medal Separato everything has worked well and very satisfactorily. I an now better satisfied after two years work that the ma threshing. Yours truly,

My Gold Medal Separator has run as steady as clock work this year, no stoppages from morning until night | Yours, as ever. |
| :--- |
| $\begin{array}{l}\text { KINDDRED GUPTON. }\end{array}$ | Lakerort, Cal., July 13th, 1877.

1 think I have the lest machine I ever saw, and ain glad that I met Mr. Ball and that he persuaded me to buy well pleased with the work, and I think I can safely say that there will never be another Pitt's or PIMussell's sold in A number of men have come to see the machine work, and they all say it beats all they ever saw. P. T. BOON.


SAN (IABRIEL, Cal., July 9th, 1877.
Started our Gold Medal Separator to-day, She
running splendidly. I consider it superior to the Pitt's
ruming splendidly. I consider it superior to the Pitt
Russell's selarator.
J. F. FALVEY
I have run all the different makedanuary 3d, 1878 I have run all the different makes of threshers
years past, but l have never had a machine yet to do work so well, or as much of it, as the 36 -inch Gold Meda separator I bought of you last summer. I am not saying any other machine, will clean better and save more grain,
without craeking, than any other machine in the country and in this asscrtion I will be backed by all the farmer anyone wants to know about the "Gold Medal Separ while convinee them that it is the best thresher in the while convinee them ther
world. Yours truly,

* Siy for Catalogues for fuller Information of the Grand "Gold Medal" Separator, also, the Rice Straw-Burner Engines. "a

Manufactured and Sold orily by MARCUS C. HAWLEY \& CO., San Francisco and Sacramento, Cal.
TESTIMONIALS OF THE GRAND "GOLD MEDAL" SEPARATOR.

Volume XV.]
SAN FRANCISCO, SATURDAY, MARCH 2, 1878.
Number 9.

A \$35,000 Cow.
Our illustration on this page shows the head of one of the highest priced cows, which ever passed under the hammer of the auctioneer. She was the l0th Duchess of Geneva, and was
of the famous New York Mills' herd of Short Horns, owned by Walcott \& Campbell. We were present at their sale in 1873 and saw this cow sold for $\$ 35,000$, to the agent of Earl Becsale, on the whole, was one of the most remarkble ever held. Amid the wildest excitement on cow, the eighth Duchess of Greneva, was bid up to $\$ 40,600$. This high price was owing in part it is believed to some misunderstanding on the part of the bidde
was a true sale nevertheless.
The 10th Duchess of Geneva died in January, 1877, and her portrait was recently engraved for the London
Graphic. This cow was the 11 th in direct lino from first Duchess direct lino from first Duchess by count (145), the cow bought by Mr.
Bates at the Colling Sale in 1810 for 183 guineas. Tradition ascribes the 183 guineas. Tradition ascribes the tle possessed for centuries by the land, but the actual Northumber mence in the last century, when an ancestress of this cow passed into the possession of Mr. C. Colling, of Ket-
ton, Durham, who was ton, Durham, who was one of the founders of the Short Horn as a distinct and highly improved breed. In 1804, Mr. T. Bates, of Kirklevington, Duchess cows, and recognizing in her exoellence and that of her male off spring the superiority of the family over the Short Horns he had previ more of the sort ; and at Mr. Colling's great sale, in 1810, when 47 animals of both sexes and all ages, from 11 years downward, made the then un precedented average of $\$ 732.84$, he gave $\$ 929.64$ for the two year old heifer Young Duchess, afterward called First Duchess, a daughter of Comet (sold on the same occasion for cow he had just purchased from that heifer, in the female line direct sprang those Duchesses which hay at different periods won the chief honors of the Royal Agricultural So cicty of England, and for many years past have commanded the highest prices at public and private salcs. Mr. Bates, while practicing to considerable extent the system of in and-in breeding, arossed his Duch esses at different times with other ap proved Short Horn families, notably and Princess, thus combining what he considered three of the oldest and best Short Horn families in the king dom. In 1853, at the Tortworth sale (after the death of Earl Ducie), 66th Duchess was bought by Messrs.
Morris, of New York, for $\$ 3,557.40$. Her descendants, having changed owners in 1873, America the bulls Third Duke of Oneida, Sixth Duke of Oneida, and the heifer Eighth Duchess of Oneida, bought also for Lord Bective, at the dnced the bull Duke of Underley and the heifers Duchess of Underley and Duchess of Laucister all of which, with Eighth Duchess of Oneida are now in the herd at Underley Hall, West moreland, England.

Brrkshire Association.-We received from of the American Berkshire Association meeting in Springfield, Illinois, on Wednesday, February were electentice that the following officers Phil. M. Springer, Springfield Ill., Secretary Polk Saxe, of San Francisco.


SHORT-HORN COW-TENTH DUTCHESS OF GENEVA.
$\begin{aligned} & \text { so that large tracts of land in all those valleys } \\ & \text { have been brought under cultivation by irriga- }\end{aligned}$
$\left.\begin{aligned} & \text { Sonoma and Marin, } \$ 1,500 ; \text { Northern District, } \\ & \$ 1,500 ; \text { Napa and Solano, } \$ 1,500 ; \text { Santa Clara }\end{aligned} \right\rvert\,$ have been brought under cultivation by irrigafor it lies within that portion of the United States domain upon which the annual rainfall is insufficient for the purposes of agriculture.
With the irrigation of the land, came increascd and perennial vegetation; with that came in rcased insect-life, and with that an increase of birds and toads. The irrigating ditcles are everywhere numerous, and during the season o growing crops they are frequently visited by This, and other circumstances, disturbs the toads, that frequent the shade of the herbage which grows upon the bordcrs of the water. It is no uncommon thing for toads, as well as frogs, to jump into the water when disturbed, but the habit of the former is to make a shallow dive, rise immediately to the surface and swim upon
it by a sweeping curve to the 'shore again, not it by a sweeping curve to the shore again, not
resting until the brink is gained, upon which Frogs, on the contrary, whon disturbed, make a Vallcy, $\$ 1,500$; Southern District, $\$ 1,500$; Up per Sacramuto Valley, $\$ 1,500$; Plumas and Lassen, $\$ 1,000$; Montercy, $\$ 1,000$; E1 Dorado $\$ 1,000$, and Siskiyou, $\$ 1,000$. There is a provision in the bill that none of the inoncy shal
be expended in premiums for horge.racing be expended inl premiums for horse-racing a bountiful harvest be fully rcalized, the fairs of the forthcoming scason ouglit to be the most successful ever held in the State.

Our Name.-Some of our exchanges have quecr way of crediting articles taken from ou columns. They dock us mane and tail, so close that we hardly recognize our own likenes This is the latest, "P'ac. Press.

Removal.-Owing to the demand for the paco usually rescrved for them, our table of will be found upon page 140 of this issue rate
strong dive directly for the bottom, upon which
they lie prone, with the legs flexed against the they lie prone, with the legs flexed against the
body, and into the mud of which they settle themselves a little. Here they remain, and exhaust the patience of one who may attempt to wait for then to rise. Now the toads in this irrigated region have adopted precisely these
common habits of the frogs, when disturbed common habits of the frogs, when disturbed
upon the borders of the ditches, as Dr. White repeatedly witnessed.
State and Local Agricultural Societies.
a bill has been passed by the Senate, appropriatA bill has been passed by the Senate, appropriating $\$ 42,000$ for the State and local Agricultural Societies, allowing the following sums annually
for the next two fiscal years: State, $\$ 5,000$; San
Joaquin Valley, $\$ 1,500$; Golden Gate, $\$ 1,500$;

An Interesting Characteristic of Dry Chara

An interesting point of local application to our soils which are dry for months together, is mooted in a paper in the last bulletin of the Bussey Institution, by the able Professor of Ag ricultural Chemistry, F. H. Storer. Prof Storer found by analysis of water, which had been allowed to percolate through specimens of air-dried soils, that carbonate of lime is dis when they are treated with cold walte loam they have been long dry. Even the pures they have been long dry. Even the pures arbonic acid, produces this effect and will be found to hold, dissolved lime after it has been allowed trickle through a quantity of the dry loam. The solution of the lime-car. bonate is manifestly due, at least for the most part, says Prof. Storer, to the presence of carbonic acid which the water takes up from the pores of carbonate of lime is so general with different specimens of loam, and a escape the conviction that it must play a highly important part as an ac of nature. It is plain that the solntion in question must exert no incon siderable influence upon the forma tion of soils and the growth of crops, as well as upon the maintenance o the fertility of the land, even in coun tries that are wholly devoid of lime the idea. The special abundance the idea. The special abundance that has long been dry, goes to show Prof. Storer continues, that the occa sional absence of water from soils, may, perhaps, be advantageous. In other words, it is not improbable that drouths are sometimes useful by pro moting the disintegration of the soi
in a way that has hitherto been un suspected.
Prof. Storer discusscs this prop-
osition at length, introducing osition at length, introducing hi own analyses and reviewing the chem chief points arrived at by his inves tigations are, that while percolate obtained by leaching moist loam with pure water generally contain very little, if any, super-carbonate of
lime, appreciable quantities of thi lime, appreciable quantities of thit lates from moist loams that have been thoroughly air-dry for some littl time. He remarks that the subjcc could be best studied in some locality periodical; and it is in sueh countries periodical; and it is in sueh countries,
doubtless, that the good effects of the disintegrations and other reac tions in the soil, due to dissolved suconspicuous. Prof. Storer's proposition is inter csting. It would indeed be comforting to re ffcet that during our dry months there are agencies at work which moist soils do no foster, and that the sere plains are restoring their strength and fertility by preparing new raod for the plants which the to lifo and growth.

Date Palms for the Desert.-Gen. Chas. P. Stonc, writing from Cairo, Egypt, to Gen Leduc, says: From what I have secn of the date-producing regions of this part of the world, and what I know of the Desert of ColoI am inctined to Cairsa ereek and Fort portion of the latter region ean be made productive and very valuable by making plantations of the date palm. This tree not only does not require much watcr, but water is prejudicial to it, and the climate of the Colorado desert is singularly like that of
districts here.

## GORRESPONDENCE.

## Utilizing Straw Piles.

Emitora lress:-I do not think the most raplid way of returning straw to the soil the most profitablc. . It is a most wanton waste
to destroy by fire. Straw should be well stacked, and salted as stacked; stock will then thrive on such stacks, during the cold, wet season like the present. Therc ought not to be any loss of
stock in this State in our wiuter months. Straw stock in this State in our winter months. Straw salted will kcep beef cattle in good condition for
months, and sheep will fatten on it. If straw months, and sheep will fatten on it. If straw
stackers or carriers were more generally used
with threshing nachines, perhaps less would be with threshing machines, plerhaps less would be
burned up. Many of the stokmen in the
Montezuma bills do not allow their straw piles to be burned. On some large ranchecs straw sheds are built, and no doubt to considerable
profit in turring of winter beef and mutton. Stock is a necessary adjunct to well regulated
farms, turning into coin what must otherwise be farms, turning into coin what must otherwise be
a total loss. SSave the straw; give the work a total loss. Save the straw; give the work
horses plenty of lediding, not forgeting the
milch cows, when butter is worth 30 and 40 cents per pound. But some may say this is too
much work for large farins. Well, time will much work for large farins. .o ell, time win
prove that 25 years to wheat growing and straw
burning will impoverish the land. Rio Vista, February, 1878 R. H. Barkway. Comments on Mr. Holman's Proposition. Editors Prens:-I wish to make a further statement in answer to your question of utilizing straw, and notice a few remarks from your fockeford correspondent. You ask the best heaps, also the best method of utilizing straw, The gentleman writing from dockeford gives
you the process of manufacturing compost from straw in France. This may be a good plan for
farmers in Europe where labor is cheaply ol. farmers in Lurope whcre labor is cheaply ol.,
tained, and where they have sensouable rains with warm, moist atmosphere. But it will not practically apply to our California valleys and
climate for the following reasons: First, our climate for the following reasons : First, our great bulk of our wheat and barley lauds are on
high, dry plains supplied with water from wells only; and in many instances in summer time scarce ellough for farm purposes, making it
impossible to successfully adopt the European plan.
This process of rotting straw in one month
must be attended with a vast amount of labor and expeulse. And I cannot see the propriety one crop of straw in one year, and if he should
adopt the rapid plan he has lost his feed which is a part of the profit of his produce. I find First, I have the proit of feel for my stock, and then a fine lot of manure for my laud, thin red gravel upland, I have produced 44
bushels of good barley per acre in one year.

## Black's Station, Yolo Co., Cal. Comments and Amendments.

Editors Press:-In the Rural of Feb. 9th, 1878, Mr. Jay Green connes to the front and
gives his experienee of six years in eonvertiug straw piles into cheap and profitahle manure.
I am inclined to the opinion that comparatively few farmers on the Pacifie coast will accept of his plan, though in somono casses I kuow fron experience it works well. The only conditions
under which I have been ahle to make it pro-
fitable, is where I have harl pasture ranges adfitable, is where I have had pasture ranges admoving but a slort distance and stock had full many ranches, and where fertilizcrs are the
most needel, the system of dry lowing and sowiug make it necessary to remove all stock soon arter the crop is harvested
The great length of time
The great length of tine required to rot
straw piles, as they are left by the thresher and straw piles, as they are left by the thresher and
the amount of ground they rendered useless for cultivation, brought about the practice of burn-
ing straw at an early day. This system most ing straw at an early diy. This systen most economical plan of converting it into a profit-
able fertilizer. This fact must have pronpted the Roral Press to offer a prize for the best
plan of bringing about this inuch desired obplan of bringing about this nnuch desired ob-
ject. I woulin not tave you think, Mr. Ellitor,
for or a moment that I an conteuling for the said prize, procrastination, the great thief of tilue,
having robbed me of that clance, lyy letting
Mr. G. C. Holnan, of Lockeford, come in with my thunder in a late number of the Press; he
having brought it all the way from France. I propose only to ald somo improvements to his
system, and should it meet the approval of tho farmers of the State, they are all at liberty to govern themselves accordingly
The first great consideratio
Tonvertirst great consideration is, can straw be manure as it is left ly the converted
thresher upon the fields, at so sin sinall a eost as
to leave a protitable margin in favor of the operation. I claime it can. Thcre may be ex.
ceptioual cases, and where such exist, I would ceptioual cases, and where such exist, I would
say burn the straw if you have no further use for it and pay out the imaginary cost of con-
verting it into manure for bone dust aud guano,
and yo
The first important item, worthy of notice by
who bind and stack their grain before
hreshing is, there is no time for gathering your threshing is, there is no time for gathering your
straw into large quatities and near your barns and such placees as you wish to operate with it
as, when it is bouud, two nen can gather more
and in one day with one team than six men can in
the same time witb three teams after it is threshed. Several other advantages follow in hauling your grain a long distance to a a suitable
place in the vicinity of your barns. 1st, when phace in the ricinity of your barns. 1st, whe
threshed, you have your filled sacks convericulu for storing or hauling away. 2d, your thresh
ing inen and stock are all convenient to be fed ing inen and stock are all convenient to be fei,
giving a chauce for au hour's rest instead Siving a chauce for au hour's rest instead
traveling a nile or mere to and from thei meals, and as we propose to use the manure
that gathers about the stables and yards o every farn for our own fermeuting process, in the third and great advantage is gained by stacking near your barn. After your grain is
cared for theu comies a leisure time, with most farmers, and there is time for operating with your straw. Pitch it into ricks 12 feet wide
and any length desired, with a depth of from and any length desired, with a depth of from
three to four feet. Tread it down well and cover a foot deep with the coarsest and lightest on either side, you may continue putting on
layers to as high as it is convenient reserving the scrapings of the yards and heav manure for the top. My word for it, after tw winters' rain, you can cut it through with
common spade or shovel, and after harves common spade or shovel, and after harvest
move hundreds of loads of valuable manure over dry ground to places needing it the most. Where the accunnulating manure of the stables and yards are not sufficient for the
annout of straw gathered, then we will accept Mr. Holman's plan and use earth.
esire to much farmers in this section may deire to move out the manure from aroun
heir barns and yards after the spring work is done it seems inpossible to do so, and if doue
attended with double the expense. I believe is attended with double the expense. I believe
the same objections exist elsewhere. Then, crowing grain. The manure is not sulficiently growing grain. She manure is not suuliciently long dry scasou to follow. The earth is more or less soft and the manure very heary, and if
you burned all your straw the previous fall, you have no straw pile to nix it with.
Save your straw. Let the stable manure re
main in its place till after harvest. When it it light and easily handled, for cleanliness and comfort, scrape the yards in piles to one side, together as directed and await your rewari which will surely come. W. S. Downina.

Alkali Soils Near Stockton
Editors Press:--In order to "eatch the season," during which they may be made
available by inaugurating practical tests, I hasten to communicate to you the results of the aualysis of two soils from the neighborhood of Stockton, just completed (as far as necessary for the prescnt purpose) in the laboratory of the Agricultural Department: The results show
that the alkali soils of San Joaquin, like those of Los Angeles, can doubtless be reclained by the use of gypsum. But it must be done while water is available, otherwise the gypsum cannot
an the alkali.
The soil specimens exanined were taken fro W. L. Overhiser, about four miles southeast on stockton. The surface of this land is quit from 12 to 18 inches above the general surface, of irregular shape and froin 10 to 50 fect or
more in diameter. The soil of these hillocks is a dark colored loam, intermingled with a little
gravel. It is very casily tilled, very fertile aud during the growing season bears a luxuriant crop of weeds, The soll of the lower ground is, It bears a fiue growth of "alkali grass " and there was some water standing on it in puddles. This had a perceptibly alkaline taste and a very strong reaction ou litmus paper. At a fcw points
the alkaline salts could even then lee seen on the surface. During tho dry season it becomes very abundant, so as to whiten the surfaco of
low spots. Seeds will not germinate at all in tho bad spots. In others they will grow awhile,
but finally produce little or notling. Manlure scareely improves this state of thiugs percep.
tibly. As to tillage, it seems to le almost impossible to reduco the alkali soil to any thing
like a fair condition of tilth. One tract examincd had been plowed, harrowed, then cross-
plowed and harrowed again uutil no farther effeet was produced. The hillock soil by this The alkali soil was a mass of clolds, from the izo of a marble upward, lut did uot approach
to what might be ealled a lassable state of The tract on which this alkali soil occurs is several miles wide and is said to extond in a southeast
miles. As the two kinds of soil are interspersed
$\left\lvert\, \begin{aligned} & \text { in small, irregular patches, so as to render it } \\ & \text { impossible to till or cutlivate one kind without } \\ & \text { the other, much of it is thus reudered almost } \\ & \text { unavailable except }\end{aligned}\right.$ the other, much of it is thus reudered almost
unavailable, except for pasture. The black
liillock soil occurs in continuous tracts on the hillock soil occurs in continuous tracts on the southern
esteened.
A preliminary examination of the two kinds of sol seemed to indicate that there was little other words, that neither containcd an amount called a hcavy soil and that the sediments forming the rest of their
different in character
It thus appeared probable that not only the also the refractorincss of the soil under tillage might be owing to the alkali alone, and that if the latter were neutralizel, both defects would be remedied. It remained to test the correctncss of these surmises by chemical and mechan-
ical analysia, , in order to obtain a safe basis for
a method of reclamation.

## The fir or reclamation

The first stcp was the detcrmination of the kind and quantity of alkali. For this purpose, a bottleful of the water standing in tho furrow
of the alkaline tract was taken. It proved to of the alkaline tract was taken. It proved to
coutain $0.6 \%$ of solid salts. The compositiou of these in 1 pi parts is given below, tagether wit
the analysis of the alkali from Mir. Curtis' farm (previously made) for comparison:
 Chloride of soohium (common salt).
Bydric
Nyd ric phosphate of god

- Not yet deterninch.
It will he observed that while the ingredients Ir: Overhiser's land is inuch the nome, that from of the two, from the large amount of sal soda $i$ contains, It is thus easily seen why the pud-
dles standing in the water-furrows are of dles standing in the water-furrows are of the
color of genuine lye-the sola has dissolved out the vegetable natter of the soil and this cause the lighter tiut.. On the other hand, some of
Mr. Curtis' worst soil seems to contain a laryer total of salts than any on Mr. Overhiser's tract. A sample gave $3 \frac{3}{2} \%$ of the weight of the dried


## A

presence of a notable feature in both cases is the ociuin-the first case of the kiud that has ortant practical conclusions: First, that the soil coutains more phosphate than it can retain, already; and that any addition of phosphatic if the alkali were to be leached out by underdraining, a large proportion of this important
ingredient would be washed out of the soil And I may add that the extraordinary sill continued productiveness of the soils about ounted fo
I now give the results of the "mechanical
analysis" of the two soils taken in characteristic pots of each, but only about 12 feet apart. 0 the "Black 1tilloek soil" 12 inches in depth was
taken for "soil," 12 to 18 for "subsoil." Of the taken for "soil," 12 to 18 for subsoil "ili," the 5 inches for "subsoil," according to the usual surface soil, as above defined.



In ordcr to appreciato the meaning of the above figures, it should be kept iu mind that
the heaviness of a soil in working is usually esteemed to lo proportionate to the ancout o soils ranging usually from $10 \%$ to $20 \%$ of clay. A soil containing 20 . of clay may nevertheless
be Iuite hcary, if the coarser sedinents pre muninate greatly over the medium fine ones at it will be observed that in tho two soils be
ore us, all the sediments are very evenly prea ent; this being characteristic of river alluvial soils, and producing easily tillcd loans. I than surface soils, for the reason that the latte continually lose some of their clay by the wash ing of rains, and this clay is partly conveyed t
the sulbsoil, partly to lower ground. We sloould therefore expect to find somewhat more clay in the alkali soil than in that of the knobs, excess of clay is too small to aceount for th difference in tillability, the more as what differ act the effeet of the clay
In other words, the refractoriness of the alkali comprosition, lint to the carbonate of soda it contains, which tends to keep it in a "puldled"
or tannell condition; it being a known fact the or tainjerl condition; it being a known fact that such is the tendency of alkaline ye. yrill there.
fore the soda is neutralizel, this effect uril disap
vear, and the
of the fillockis.
The agent to effeet this neutralization is gyp. three distinct points of view: nert Glauber's salt, thus removing the injury ow done to growing plants.
2. It will remove tlie tend

It will remove the tendency of the soil to
puddling or tamping, not only by the removal
of the soda, but poositively, hy sub which gypsum is one. 3. It will fix in the soil so reclaimed that
important ingredient, the soluble phosphate Which would be leached out, with damaging
rcsults tennpted to reclain it by drainage alone. As a matter of course any soil once reduced
to the puddled condition of this alkali seil not be restored to full tilth by one or two sea. sons' ordinary tillage; and it nay be that seils
as heavily charged with salts as is the worst soil of Mr. Curtis' ranch, will need drainage in addition to gypsum for their full reclamation.
But I venture to predict that in the majority cases, the simple application of plaster at the will in a few years render these now worthless soils nearly or quite as productive as the soil of the hillocks in its best days.
University of Califormia, Feb. 22d, 1878.
[The practical deluction from the above is that our fricnds having the soils thus described should make a trial of gypsum at once and mark the results therefrom. If the results should prove as satisfactory as thoso gained by Prof. Hilgarl's advice in Los Angcles county, and there is every rcason to expect it, they will be of inmense practical advantage and value to hose diligent cultivators to whom these unproductive alkali patches have been plague
spots for years. It will be an application of spots for years. It will be an application od
science to agriculture which will win the admiration and approval of all practical men. Investigations like the above should plainly be made of all similar soils which act as ohecks upon our farmers' success, and certainly the State owes it to its agricultural citizens that provision should be made for pursuing such inEds. Press.]
Government Entomological Investigation.
Elitons Press:- The entomological cominission connceted with Prof. Hayden's U. S. ieological Survey, for the purpose of investigating and reporting upon the devastating locust of the West, has thus far paid exclusive attention to this pest. Should Congress continue this important work, would it not be well for the commission to include in its investigations the cotton ariny worm? It is estimated that tho a verage annual loss to the cottou erop of the country by this insect alone amounts to upwards
of $\$ 20,000,000$. The habits of this insect so far of $\$ 20,000,000$. The habits of this insect so far
as known are somewhat as follows: The parent as known are somewhat as fillows: The parent wings during flight expand an inch and a half;
tho fore wings have two faint scalloped lines, between which is a dark oval discal spot cenflat ribbed egg upon the surface of the leaf, and she is capable of laying from 400 to 600 such
cggs. Shoutl a season favorable to insect life set in, and a large proportiou of the young hatch and
attain maturity, it will at once be seen that the attain maturity, it will at once. be seen of the in-
increase over the ordinary numbers of sects nust be enormos. In most years, but a
single pair or two pairs survive the attacks of parasitcs, the incleniency of the weather, and
the many causes known and unknown which act injuriunsly on the progeny, so that if, say, 400
young caterpillars hatch, 396 or 398 verish in the struggle for existence. We know nothing full size and ravages on fields of cotton. We know nothing of the life of the insect in the period when it is preparing for a inal onilaugh
npon the plantation. We know nothing of the parasites which doultless infest the brood, and carry off a large proportion of the wornns, and
which may be bred in such numbers as to render efficient service in permanently reducing their numbers. We know little or nothing as to what birds prey upon them, of the quadrupeds which know an them, or their chrysalias; wo pear with great suddenness, and do their nischief before the planter is aware that his cotton is
thireatencd. The young worms aro said to feed upon the
soft, fleshy parts of the leaves, and then attack the hesiy and flower huds, as well as the sinall leaves at the hase of the boll, so that the also said to cast their skins five times, and to becane fully fed in from 15 to 20 days,
pan worms or genmeters, but the body is thick puite hairy, green, and is dotted with black along a subdorsal yellowish line, and with hlack dots
benenth. There aro three different broods of worms during the year, the first appearing in danage, appearing in August or Septeuber, or

After feeding of between two and three weeks, tho worns stop eating and spil a light nct of soinen which they
among the leaves of the plant upon wlich feed, and lere the wornm changes to a tan. brown chrysalis. In this state the insect remains for


## Correction.

Editors Press:- Your correspondent, in a recent notice of the Mokelunne dam, gives me
the credit of having furnished the plans and the credit of having furnished the plans and specifications for the dam. As I have no desire man, I would say that and specifications, the one adopted by the Board of directors was that

San Joaquin Co., Cal., Feb. 15th.

## Horticulture.

## Plum on Peach Stock.

Editors Press:-Your correspondents come to the surface in reply to my statement of actual experience and my personal acquaiutance with
the experience of hundreds of our leading or the experience of hundreds of our leading or
chardists in regard to plum on peach stock. A Mr. Freemon starts out by admitting a limited experience extending only to 100 trees, I shall
only reply to him by saying that 1 have grafted plum on peach ever since the year 1839, and have never found a tree but what gave to the plan peach stock, and raised as fine plums as ever
were slown in any country, on all the various were shown in any country, on all the various
soils and situations, as I stated in my first letter, sond I made these statements simply for the
and
benefit of those who may not have had so much benefit of those who may not have had so much
experience on the subject. I will furthermore experience on the subject. I will furthermore
say that out of all the leading varieties of plunns and prunes, I have found none but what
ceeded better on peach than on plum stock.
ceeded better on peach than on plum stock.
I think I gave good reasous for my opiuion I think I gave good reasous for my opiuions
and in support of my positions, and I don't consider these positions that they do raise the plums for the New York
city market, "New Hudson and Albany, and city market, "New Hudson and Albany, and
would have to go without if they had to depend
on the peach." Mr. Patterson does not assert on the peach." Mr. Patterson does not assert
even that they have tried the peach stock and
faile
Neither does it prove or disprove anything to
failed.
assert that " in NJew Jersey and adjoining assert that, "in New Jersey and adjoining
States, where most of the peaches are raised to supply the large cities they always have a young
tree planted between the bearing trees, as they only last a few years." This was the practice
where I was raised, but my parents chanced to where I was raised, but my parents chanced to
perceive that it was the tops of the peach tree, perceive that it was the tops of the peach tree, they adopted the practice of cutting off one-half
of the tops of the trees the second year after of the tops of the trees the second year aftcr
they cone iuto bearing, and again the second
halit half as soon as the first cut limbs came into
bearing, and thus the trees were reuewed for an indefinite length of time, and I will say whilile I practice ever since, and that my experience in the matter teaches me that it in the best policy.
The fact, as Mr. Patterson states that they The fact, as Mr. Patterson states, that they
graft peach on to plum in England is news to me, but I shall not deny the truth of the state-
ment or accept it as proof that we should wot reverse the practice here. He says that " near
San Jose in 1862 , when we had a wet winter, on upland where chcrries prow finely at present,
the peaches all died out from the effects of the the peaches all died out from the effects of the
water." If this proves anything 'avainst plum me that near Walla Walla I had a row of peach
trees bordering on a marsh, that"died out from
the effect of water, as I believe, and I cut off the efrect of water, as I betieve, and
the trees at the collar;and grafted in plums, and
to-day those plum trees are as fine and healthy as any that ever grew, and they are now 14
years old and very large, and produce fruit that
is a credit to any country. And I will say that
many of the trees were dead and dry as kiudling them off. The next year I followed up this
experience by cutting off and gratting to plum
and prunes a peach orchard, that I had previous-
$\left\lvert\, \begin{aligned} & \text { ly planted on wet ground, and had been ditch- } \\ & \text { ing at heavy expense, but could not reduce the }\end{aligned}\right.$ ing at heavy expense, but could not reduce the
water to more thani 18 inches below the surface water to more than 18 inches below the surface.
This orchard, consisting of pear, plum, peach and This orchard, consisting of pear, plum, peach and
apple, I had planted at a tine when we had an idea that there was no land in the country fit for Four years after planting, which was in 1860, 1 Four years after planting, which was in 1860 , I
found my pear trees not dead, but smaller (if any different) than when planted; my peach trees had grown up and died down two or three times; my plum trees were producing me im-
mense crops of fruit and actually were the support of my family; and, as if to show their character, two or three of them threw peach
sprouts from the eollar, one of which I let resprouts from the eollar, one of which I let re
main until it bore fruit, in order to see if it main until it bore fruit, in order to see if it
might not be some choice kind. It bore three might not be some choice kind. It bore three
or four peaches of inferior quality and died, but the plum tree on who
The above and many hundreds of similar incidents, I think fully sustains my remark as quoted by Mr. Po. and as then he says, "if he was planting on a damp havy soil where the peach would be worthless, I would plant ou the peach
root." That might be profitable to the nurseryman, but a loss to the orchardist. Such allu sions as that do not pass for argument with me nor does it convince me that the experience of
a lifetime is of no avail to me and should not be given to the public.
Again, Mr. Paterson say
Again, Mr. Paterson says: "Though suck ering
a nuisance, as I said in my last, by is a nuisance, as I said in my last, by using weeds and suckers." Now the Tarlton culti-
vator nor any other cultivator will uot kill suckers. You may cut them of but they are growing, growing all the time, great bunches of sening the quantity and quality of the fruit,
and why plant a nuisance just so as to need a and why plant a nuisance just so as to need a
Tarlton cultivator. Tarlton cultivator.
Again he says: "Planting peach pits where
the tree is to stand will do where land is $\$ 1.50$ per acre, but would not pay where it is from
$\$ 300$ to $\$ 600$." Why, Mr. Patterson? Now gave you my reason for plauting the pits where
the trees should stand, and think I showed that they made the best trees. Now pleasc tell us why not seek to have the best on high priced
land as well as any other?
Now I have followed those assertions of Mr P.'s far enough and until he refutes my position drop the subjee by reasonable arguments, this remark, that what
have said in the former and in this letter is in tended as the unprejudiced experience of one
who has had means of knowing and who dewho has had means of knowing and who
signs to be of benefit to future planters.
A. B. Roberts.

## Boise City, Idaho, Feb. 7th, 1878 .

## Japan Persimmon.

Editors Press:-I am sorry to ask space for what may seem a mere private controversy yet, in the interest of simple justice, I wish to the Japan persimmon, aud shall then drop the matter
Mr. Loomis' resideuce in Japan and other sources of information certainly give him the he wishe extol his own varieties and to add, but not to assert that the latter do not exist, since we obtain our seeds, our trees and our tical gardeuers, residents of Japan. One word
with reference to the "so-called seedless" variety. We only insist that a variety, said to be
one of the best, is grown and "so-called " in different portions of Japan. We think it quite probable that, like the so-called seedless grape,
there will occasionally be a seed found iu the variety, and I have uever asserted the contrary I find no fault with Mr. Loomis nomencla willing to abide by miue and concede the same privilege to others.
The persistent dispagement of our varieties o this rruit on the part of Mr. L., seems to me rather inconsistent, for it is true that Mr. L. four weeks to obtain these trees, or some part of them, for his own business. Once he offered
to exchange some of his for some of ours. Then to exchange some of his for some of ours. Then he proposed to borrow some of ours, to be
returned to us in the same varieties, which he himself has on the way from Japan!' And here, so far as I am concerned, ends the discussion.
James Shinn.
Niles, Feb. 25th, 1878.
[Our good nature and desire for fair play have beguiled us into letting this controversy go farther into the region of personal interest than it should have gone. Satisfactory conclusions, ular interest demand its continuance.-EDs. Press.]

Plowing Orchards and Vineyards.
Editors Press:-As the time of year has again arrived when farmers want to plow out
their orchards and vineyards, I will send you description, and also a sketch of the manner in which I rig my plow for the purpose of plowing
close to the rows of trees and vines. It con-
having a single-tree so constructed that the
middle staple or clip will be further frot end than the other-say two-thirds of the oway rom one end; second, I place a block of wood, one and a half or two inches thick, on the side the elevis outside of this block. This gives the the elevis outside of this block. This gives the
horse an opportunity to walk straight forward horse an opportunity to walk straight forward Without having his legs rubbed and clated by
the tugs, and thereby keeps him from becoming
fretted the plowman a chance to bear his plow close up to the row of trees, while the horse can walk with ease at some distance from the row.


Arrangement for Plowing Close to Trees or Vines.
The drawing shows it arranged for turning the soil from the trees, the block being placed on the mold board side of the beam. When wanting to turn the soil to the trees, it is simply changed to the other side of the plow beam, and the single-tree turned over-that is, turned
end for end. This keeps the short end of the ingle-tree to the row of trees. A single-tree bout 18 inches long is, I think, best-having one end about a foot or 13 inches, and the oather
about five or six inches. The principal feature ar advantage in the thing is the way the single-
tree is made Sone persons may think that it ree is made. Sone persons may think that
vould not draw evenly on the horses' shoulder and would consequently hurt the horses' shoulders, but such is not the case. I have used it for three years now, and lave not had a horse's
shoulders hurt yet. Neither have I had in the ame length of time a horse's legs skinned by the tugs. A common one-horse turning plow
(Moline or Smith's patent), rigged in this way is better than all the "adjustable" plows ever
patented. If any one is skeptical with regard patented. If any one is skeptical with regard
to it let them try it-it costs nothing. I have no patent, and I send it as a free girt to the

## Vacaville, Feb. 4th.

## The Apiary.

Notes for the Season-Transferring.
Editors Press:-I have been waiting for some of the older hands at the business to give their experience, as I am aware there are many such in this state, and as we have no malar Press should hold that place, and bee meu might give and gain considerable information in wee matters by exchauging ideas of their experience through the Press.
Already do bees take advantage of the blooming of the wild flowers by bringing in honey and pollen during the intervals of good weather between the rains. Every fair day they come East they are packed in straw or stored in cellars they are pack. The prospect for the coming lars or caves. The prospect for the comig bright for a good honey season. Now is the their bees to see that they are in the proper hives (movable frame) and the proper amount of
(worker size) empty comb for the queeu to lay worker size) empty comb for the queeu to lay with, together with a certainty that all have a laying queen. Those that have bees in box
hives can make movable frames and transfer them the first warm day. From two to four oclock is better, to give time to have all finished by dusk, to prevent robbing. I have trans-
ferred fron October to the present safely in erred from October to the present safels in than if left until later, as they have hatched broods right aloug, and before they were transerred they did not have room for the queen to
lay. Of course, I gave them all their honey. To transfer, I removed the hive a few yards from their stand, inverted the hive (after blowing smoke in at the entrance and giving them
time to feel the effect). I then placed au time to feel the effect). I then placed au
enpty one over the mouth, or the bottom, of enpty one over the mouth, or the bottom, of
the hive, closed all openings and rapped until the hive, closed all openings and rapped until
most of them had gone up, with their queen, most of then had gone up, with their queen, in the top box or hive. I then placed an empty
hive on the old stand, put in a frame or two of brood from another hive, emptied the bees on top, put on the cover, then rapped on the orginal hive, with the same box placel over it, then took off the top box, emptied the becs in front of the new hive, keoping them off of the ground by laying a board in front of the hive.
I then, with a chisel and hanmer, took off one side of the old hive, and, with a long, widebladed knife, cut the comb clcan away from the old hive as near perfect as possible. I sorted brood, and kept them separate. I got a board, arger than the frame, put on scveral ofds of
cloth, laid the comb to bo transferred (brood first) on the cloth, placcid the empty frame on
that, and, with a thin knife, eut the conb to fit the frame, so as to hang in the frames in th
same position as previously in the hive. I used all smaller pieces, that will work in, to fill the wire and made them this shape ( C ). The crool fits on the top of frame. Press it well down and push the lower part under the bottom bar. Put enough on on both sides the comb and, if well itted, neither nomb nor frame wil sag. hang them in the hives, brood iu the
center, worker size next and drone size on the outside, and close up the hive and the work is done. If honey is comin days you may look at them, and if the bees have fastened them, the wires can be taken off by slipping the lower part off first; the top then comes off quite easy. If not properly joined, wires will do again. I think this the quickest way and the safest. If any have a better, let's A board can be laid over the frames, by first laying some one-quarter inch strips across the tnp of the frames to rest it on, and the piece
can be laid on that, until the bees clear them all off. After putting the raise the frame, comb and board to a perpen dicular position, then place the board on the place the wires on the other side position and being now opposite side up, if the bees should broad-bladed knife, into place. By usin broak-ball can be done without killing a single
smone and
What bees are left on the comb can be brushed in front of the hive. They will go in with the others. Clean up everything afterwards, so as
to attract no robbers. I hope to hear from others through the Rural.
J. D. Enas.

## Mining in 1877

The bullion production of our mines the past
ear has been large, exceeding the yield of any former year by more than seven and a half mil. lion dollars. That the product has fallen short of the expected round hundred million by a lit tle may be attributed to the drouth that pre
vailed so generally throughout the minin vailed so generally throughout the mining
regions, the bullion like the cereal crop of this
const being coast being largely dependent on the water
supply. The bullion yield of the year is summarize in the following table of John J. Valentine, General Superintendent of Wells, Fargo \& Co.'s
Express. It furnishes the most reliable statis Express. It furnishes the most reliable statis
tics on this subject which it is possible to pro


Assessments and Dividends.
Of course the questions of assessments and dividends is an all important one to the owner tion of 1877 was the largest one ever had the amount of assessments has been the smallest for three years. The heaviest assessments as the Comstock lode. The following table will show the total assessment for several years:
Delinquent in 187

The mining companies paid to stockholders $\$ 25,125,700$, about three times as much as all the city, commercial and savings banks, gas, water, insurance, express, powder, telegraph companies and other public corporations comtions for the year were $\$ 34,366,800$, of which the nining companies paid $\$ 25,125,700$. Thi part of thc business is not stock jobbing either,
but good, solid coin, right out of the ground, and is we the legitimate part of the miniu iudustry eomes in to prove its valuc. And yot there are people who think mining is all When they come to consider the figurcs whic shows the results of the year's work and the profits of mining, which exceed by three time all the othcr corporate iutercsts of the city combiued, perlaps it will set them to thiukiug that mining-that is, real mining, not stock
jobbing-sometimes pays after all.-Mininy amd jobbing-sometin
Scientijic Press.

Woon and Iron.- Herr Hirn has been con-
ducting a scries of experiments, in Germany, on ducting a scries of experiments, in Germany, on in their different applications, and finds that in a great number of cases tho formor has the
advantage. Mrof. Hirn finds the strength advantage. Proo. Hirn had the strength this to be diroct ratio imensity and this strength is increased by immersing the
pieoes of wood in liusced oil, heated from $185^{\circ}$ $212^{\circ}$ Fahr., and letting the wood thus im
mersed remain for two or three days, or until partially saturated.

## 

Removal


Exorbitant Interest.--No. 1
Edrors Press:-1 have no doubt that it has often occurred to you that the one grand incubus which oppresses our agriculture and prevents its proper development is the exorbitant inthose who have to borrow of them. I think it is high time this matter should le looked into by the farmers-inside the Granges and outside of them. From time inumemorial, men hav been wont to abuse their power, when that
power has waxen strong and confident. Ther is a strong tendency in selfish men, purposes, regardless of the puhlic goo When at last it becomes unendurable, the peo ple rise, and their oppressors fall, and a new
order of things is established. Such is history often repeating itself. That this has been tru of the civil powcr, all will almit, viz: its ten
dency to become oppressive. So, too, it ha ever been with the money power. It has often
become a grcat oppressor; not a whit less regard become a grcat oppressor; not a whit less regardbeen the civil tyrants who have oppressed th the passion for moncy is a source of nutold evil So oppressive has the money power often be
come, that there is not probally a nation unde heaven, of any resprectable agc or size, hut ha in Ward, and impose upo
natious have sooner or later ben obliged to pass, but this, that capital accumulated in the and must be restrained within certain bounds?
California is uearly aloue, among civilized
States, wherc capital is petted, almost worshipped, and allowed to charge any interest on ties of the borrower, reuder possiblc; and then
the State stands by and forces the collection by all the power it can command. The result is, the great mines of the State have already falle banks, while, worse than all, the cold, metalli from Mendocino to San Diego, and from th coast to the hills of Nevada. The rates of in
terest farmers, tradesmen and mechanics hav to pay to carry on their respective enterprises,
as a rule absorbs all their profits, and is fast pause and ask themselves is not this co cosses to any legitimate iuterest depending on huma sideralle amount at the rate of on or $1 \frac{1}{2}$,on we have to pay it. There is so much of th
spirit of enterprise among the farmers of thi State, so much hope, that they will buy land
and improve homes for their fauilies, even i they have to pay those terrible usurious rates
allowed in this State. After years of self-denial and inccssant toll, and anxious thought by night hangs over their beloved home, and the outtlow And now a new order of things is commenc ing. Emigrants learn these facts, and they say pay for down;" "It is better to hire land, and ence teaches farmers they had better sell off al except what they can pay for, rather than pay all enterprises and death to improvements, cx cept so fa
for them.
Take an example at hand. Land here where of $\$ 50$ an acre. A young man, full of agricult ural enthusiasm, buys 80 acres. He pays down
for 40 acres $\$ 2,000$ of his own earned money. He goes to a capitalist and borrows the balance
to lpay for the other 40 acres to pay for the other 40 acres. He borrow:
$\$ 2,000$ and gives a mortgage. On his note he is
obliged to pay 1 it a month. interest on cach acre not paid for, and the taxes. if he can hire that same land for $\$ 3$ an acre and pay no taxes. No; if shrowd, he will not buy,
but becone a tcnant, and thus save $\$ 6$ an acre If he pays but l make his land cost him $\$ 0$ and taxes for each acre. Ion't say he loses the rise on the $\$ 3$ a for land won't rise when it is so much better t so appalling.
laws, merchants have to charge $1 \frac{1}{2} \%$ interest on
bills not paid within 60 days. The blacksmith ware merchant like interest on his iron and coal, and it pretty much all comes out of the farmer in the last analysis. If I lay in a supply for the
agricultural year, of say $\$ 500$, when iny crops ome in 12 months after, I have to pay $1 \frac{1}{2} \%$ interest for 10 months, and on that 85. Nonths accumulates an interest of deny that the payments of such normous rates of interest is terribly discourag of the a check on the growth and enterpri evival of business and entcrprise would follow t once and all over our State, if these usurious atcs were abolished, and loans could be effected
t $6 \%$ At these rates, men could afford to buy land on credit, and inaugurate a vast number of schul enterprises. asking the people of California to look close ter of extortionate interest in the face; to con enace stringent usury laws, the same as the rest of the civilized world have been compelled o do, and make money-lenders pay some taxes loans.
San

## Grange No. 1 Still Lives.

Editors Press:-There has been no report of our Grange this year in the columns of the
licral. Therefore I will give you a synopsis of its progress for the past few months. In Octo ber eight pctitions for membership were re cived, and at the next regular meeting eight or initiation. The Gate Keeper informed us hat the white mules and chariot were rcady. I nced not speak of the delightful ride; up hill
and down dale, around the fields and over the rough places, among the oak groves, etc.
Suflice to say at the end of the jourucy, five sisters and threo brothers (including myself)
were added to Pilot Hill Grange. Thankswere added to filot fing was appointed as the time for our hird and fourth dcgrces had been, andern upon the new members, we repaired to the hall bclow, with invited guests, where the long y oures wichly lad
After the busincss of the last regular mect ing was transacted, the hall was prepared and
Bro. A. J. Bayley, I'ast Master, assisted by ro. Ferry, procceded to install the officers lect. The installing officcr's cercmony to the his counsel to the Order, was given in an im pressive and commeudable manner. The specch the cnsuing terin, was bricf but pointed entitled to the hearty applausc that followed. Bro. P. D. Brown, who has just retired from ive ycars, was elected Mlaster of the first Sub ordinate Grange in the Statc; and for his con-
stant zcal in the cause, descrves the eulogy, good and faithinl servant, well done. this ncighborhood will bc benefited pecuniarily trough the manipulation of the Grange. Ar grist mill on the cooperative plan. We also ummer. A party will be given February $22 d$ when we will celebrate the anniversary o Waslington's birth, and pick up a few pieces
of silver to help support the dome of the new hall.
You have our earnest desires for your future prosperity in the enterpriso with which you ar A.
Pilot Hill, Cal., Feb. 14th, 1878.

## Golden Gate Grange.

The following resolutions were passed at a pecial meeting of the Golden Crate Grange, at ended by visitiug farmers from various counties, Wednesday evening, the 20th inst.
Whereas, No event for many years in Cali fornia has more deeply involved the interests of differences, than the Constitut of Cormer party ifferences, than the Co Stive Conventio Soon to be called by our State Legislature; and
Wismeas, At the last session of the State Grange important resolutions, seeking to mak timely provision for the clection by farmers and those equally interested of suitable candidates to attend such Conveution, was referred to Resolued The; therefore
Resolved, That the Golden Gate Grange and visiting members from various counties attend deem that the time has come for the associatio tion to be taken; and that the farmers through out the Statc, and those of like interests, should位 awake to the importance of the occasion should proceed forthwith to form such organizations among themselves, and to take such ther steps as may secure their vital intcrests through a proper representatiou by able, eonResolved, That we men in such Convention. Regolverl, That we respectfully request o begislature, now in session, to so frame their delegates shall not exceed 120 , and will be allotted by districts as to correspond with the
number of Senators and Assemblymen. Also,
that there be no delegates at large, in order
that voters may know well for whom they vote.
Res poesolved, That a Committee of three be ap-
pointed to attend the Legislature and urge the adoption of the principles embraced in the secResolved Th
furnished the Run copy of these resolutions be furnished the RURAL REss, California Patron, papers, for publication.
Committee was appointed: Messrs, Carringtong of Solano; Overhiser, of San Joaquiu; and Coulter, of Sonoma county

## Election of 0fficers.*

Round Valley Grange, No. 207, Covelo, Mendocino Co.-J. A. Crawford, M.; P. graff, T.; Will Todd, Sec'y; D. Johnston, G. mona; Sister I'ullen, Flora; Sister Johnston, L.

Oificor of Granges are reausested to sen I list if ofil cers elect, dat
this ottice dir

Full Text of the Silver Bill.
The following is the full text of the Silver bill as it passed Congress. The bill is now in
the hauls of the President for sighature or veto.
Be it
Bepre enacted by the Senate and House of ica in Cougress assembled:
Secrion 1. That there shall be coincd at the lars of the weight of $412 \frac{1}{2}$ grains Troy, of stand lars of the weight of $412 \frac{1}{2}$ grains Troy, of stand
arl silver, as provided in the Act of Jaunary 18th, 1837, on which shall be the devices and sulperscriptions provided by said act, which coin, together with all silver dollars heretofore coined ness, shall be a lates, of like weight and hinevalue for all debts and dues, public and private, except otherwise expressed and stipulated in the contract; and the Secretary of theTreasury is authorized and directed to purchase from time
to time silver bullion, at the market price thereto time silver bullion, at the market price there-
of, not less than $\$ 2,000,000$ worth per month, nor more than $\$ 1,000,000$ worth per month, and cause the same to loc coined monthly, as fast as so purchased, into such dollars; and a sum sufticient to earry out the forcgoing provisions of this act is hereby appropriated out of any priated; and any gain or seignorage arising rom this cinage shall be acolnted for, and paid into the Treasury as provided under exist ug laws relative to the subsidiary coinage; pro time invested in such silver bultion, exclusive of such resulting coin, shall not lexceed $\$ 5,000$, 000 ; and provided further, that nothing in this act shall be construed to authorize the payment in silver of certificates of deposit issued nnder the provisions of section 254 of the Revised Statutes. SRO 2. All acts and parts of acts
inconsistent with the provisions of this act are hereby repealed.
this act that immediately after the passagc o this act the President shall invite the govern Union, socalled, and such other European 113 tions as lie may deem advisable, to join the United States in a conference, to adopt a purpose of establishing internationally the use o bi-metallic money, and securing a fixity of lative value between these metals. Such ference to be held at such place in Curope or in
the United States, at some time with months, as may be mutually agreed upon by the Executives of the Governments so movited, or
when any three of them shall have significd their willingness to unite in the same. The President shall, by and with the advice and
conseut of the Senate, appoint three Commissioners, who shall attend such couference on be-
half of the United States, and shall report the half of the United States, and shall report the
doings thereof to the Iresideut, who shall transmit the same to Congress. Said Commis sioners shall cach receive the sum of $\$ 2,500$, and the Secretary of state. The amount necessary to pay such compensation and expenses is hereby appropriated out of any m
Sec. 4. That any holder of the coin authorized by this act, may deposit the same with the Treasurer or any Assistant Treasurer of the United
States, in sums not less than $\$ 10$, and receive therefor certificates of not less than $\$ 10$ each, corresponding with the denominations of Unite senting the certificates shall be retained in the Treasury for the payment of the same on demaud. Said certificates shall be receivable for customs, taxes, and all public dues, and when so received may be re-issued.

The area of the several islands inundated by the present Hood is estimated as follows: Andrus, 8,000 acres; Brannan, 4,000; Sherman,
13,$000 ;$ Frand, 16,282 $\frac{1}{2}$; Tyler, 4,000; Twitchell, mated at $\$ 2,000,000$, the most of which falls upon the Roberts' brothers and Gen. Thomes H. Williams also suff
flow of Union island

## AGRICULTUR1L NoTES.



Beracir.-(G. N. Nike is making calcu grown Persian powder this year. He is arnia planting a crop on the ranch of Mrs. E. A. Hili, of Calaveras connty, and they will hav , or about 800,000 plants in full bearin ,000 pounds per yar's product was sold at the rate of 16 cent per polnd, prcpared ready for use. The area
 extended year after year, until it is hoped the
business will assume gratifying and highly re munerative proportions.

## COLUSA

Flood.-Sun, Feh. 23: A. H. Rose has per haps sustaincd the largest loss by the floon, of 4,000 and 5,000 acres of wheat, all of which is replauting. Ife had also a dwelling, barns an out-houses on the Byer's point, which have al been swept away. There was a considerable
amouut of grain in the granary, and some fifty amouut of grain in the granary, and some fifty
pairs of harness, besides all the agricultural im pairs of harness, besides all the agricultural in The granary floated off land was wrecked
Mr. llose's entire loss must lee in the neighbor Mr. Rose's entire loss must le in the neighbor
hood of $\$ 65,000$. We notice that at a Swamp Land meetiug at Sacramento, Mr. Rosc placed the loss of the county at $\$ 1,500,000$, but really is. It is a pleasure to be able to note the good done by the storm, as well as thc damage.
From the best imformation we ean obtain, w estimate that 10,000 acres of land, heretofore comparatively unproductive, has been covere from six inches to two feet, with a rich alluria sediment makes the very best grain land there are $\$ 200,000$ to $\$ 300,000$ added to the per

## HUMBOLDT

The Season.-Cor. Ukiah Press, Feb.
January, with a very few days exception.
may not be too much for farming purposes, and
may , prove very salutary, but surely "sheep
men" are oversoaked. Stock does not require great deal of rain, and it is very often the case at night some of the

may
slowl
fair supply. Grass is starting
e will get along very well if we don't
have too minch snow while the sheep are lamb

## Humboldt will be pretty well stocked, and

 while there is some danger of the increase becoming too great for the amount of range, yetIfumboldt is destined to become one of the most flourshing counties of the State.

## KERN

The Livermore Ranch. - Cor. San Joaquin ranch has cost already over $\$ 400,000$, and it is but just getting in a condition in which it yield a revenue of $\$ 150,000$ or $\$ 200,000$ a year, gross reattle, 7,000 shcepr, 2,000 hogs, and about 200 horses and mules. There are 1,300 acres sown in alfalfa, partlof
times, and part
half tons to

besides a large quantity of corn and root crops,
The lower eud of the rauch borders on Kern
ake, and in the young tules that fringe it the
hogs get an ample livelihood, costing nothing for hogs get an ample eave and yielding large retnrns,
their maintenance
In fact, Mr. Souther considers the business of og raising one of the most profitable depart-
ents of his farm. He has a breed called the Byefeld, which he prefers to all others. We
have scarcely begun to describe the plaee, so mach is there in an enterprise of this magnitude
of interest, but this article is already too exof interest, but this article is already too ex-
tended and we must close. The public spirit ing to risk such a large amount of eapital in and making it habitable, giving employment to a large number of working men, and adding greatly to the commerce and property of the
State, cannot be too strongly commended. The country needs more of them.
Notes.-Courier, Feb. 23: There was but little accomplished in the sheep rodeos. The
time of shearing will be used for recovering lost sheep. The lambing season having commenced renders it difficult to assort flocks. No such
prospect of feed has been known in the county prospect of feed has been known in the county
sinee the wet winter of 1867 . The rains have fallen in the most useful order, and the growth The season is called by all the most perfect possible. The rains have come in showers almost daily for more than a week past, and it seemed
to be storming all that time in the Sierras. The great work of grain planting continues in this county. Probably more grain is sown aiter January than before. The immense amount of
snow in the mouutains insures an abundance of water, and the season of planting is conse-
quently lengthened. It is to be regretted that quently lengthened. It is to be regretted that
many of the farmers of Tehachapi, Bear valley many of the farmers of Tehachapi, Bear valley
and Cummings valley are unable to procure seed to sow with this very favorable season. There are some such sufferers on the upper south fork of Keme merosperou
the maplying seed
in sum
in supplying see
Editors Press:-We are having our first suow this morning, but I hope it will not last long, in fact a long snow storm this time. Our feed was unusually short last summer, and was stock was poor in the fall and is still poo
the loss thus far is not great, and with a favor able spring Mendocino county will be all right.
In the matter of rain we have had an abnndance. The gauge from January 7th to the last shows a fall of 281 inches; and from the 1 st to
the 13th of February a fall of $10 \pm$ inches the 13th of February a fall of $10 \pm$ inches-mak.
ing from January 7 th to February 13 th, a fall ing from January 7 th to February 13th, a fall
of $38 \frac{1}{2}$ inehes. The temperature has only reached the freezing point twice during the
storm. Waters have been higher than for several years past, but no great amount of dam stage was washed into Rattlesnake at the mouth of Grapevine creek, but the driver, Mr. Fielder, and a passenger, Mr. Duncan, sueceeded in
saving themselves, the United States mail and the horses, by great risk and exertion. The
stage went on down Rattlesnake for some dis, tance and was afterward recoverel so badly damaged as to be almost worthless. The way
mail to Garbervile was lost and I have not mail to Garberville was lost and heard of its recovery. Farming is at a stand still. The usual amount of plowng had been done when the storm commenced, with but lit
tle sowing. Most of the farmers sow here in January and February on account of the spring frosts, which sometimes damage the grain in the bloom. Much of the land orn A few day of clear weather would be a great blessing to
the people of this section. The Press, with its budget of useful information, comes regularly
to hand, is doing a great work for the farmer and the time is not very far distant when an observing man can point out the readers of the
Press infallibly by the appearance of their

## homes and <br> \section*{Edth, 1878.}

EDITors Press:- "Bottled sunshine," have ain, rain, rain! In 23 consecutive days not till all outdoors is a dripsing. Clouds mond If If were veryerman, or a deeck this drenching. Or if the patehing
vould hold out; but the old coats and trousers pressed into service-are either hanging over and visiting are ruled out, and popping corn
must end somewhere. Rcading-the luxury of all the days and the necessity of stormy ones rations. Our mail bag went oceanward with four of my cherished weeklies and semi-weekthem, and each week its "Home Circle" has
brought to ours the cheer of rateful compal onship and the knowledge of interests and
ind NAPA.
Edirors Press:- Kain commenced falling a
Phenix mine, Napa county, on the 6ith day o
January and ha not over 24 hours, up to February 20 th. 'Total
fall, $42 \pm$ inches; for the season, 513 inches.-M fall, 424 inches; for the season, 513 inches.
K. Brownsox, Pheeuix Mine, Feb. 23d. SaCramento.
ing over large sections of country, causing de-
struetion on its mareh, and making many houseless and homeless. The opinion is formed by an evening paper giving statement that the result
of the overtlow by spreading debris over so mue surface will result in immense amount of good therefore the break and overllow is a God-send
to the farmer. Irrigation properly gnided by to the farmer. Irrigation properly gnided by skillful hands is a blessing, and would result in
a thousand-fold, but let it run wild and unstaid, a thousand-fold, but let it run wild and unstaid, Crops in the upland drawn by those who sufier Crops in the upland never looked better. The
earth cries "enough," and is relieving itelf by drainage and evaporation. A bird's-eye view o the upland presents a beautiful earpet of green, which argues well for a full harvest. Fruit rees, ornamental, shace, shrubs, flowers and
varied tropical fruits are found in great profusio in our nursery grounds. Messrs. Strong and Williamson are supplying the market and the of all the best and latest variety that can be found, including a collection of new seedling fruits of their own perfection, beside deciduous,
shade and ornamental trees, nuts and evergreen trees of the finest variety, semi-tropieal fruits, budded and standards, Japan persimmon, potted plants, with a large variety of garden seeds our gardens and orchards are showing the swelling buds, colored petals, and bursting flowers for the humming-bird to gather its sweetness, and perfuming the air with its richness. Spring
is beginning to unfold her beauties.-GEO. Rich, Sacramento, Cal.
Santa barbara.
Editors Press:-We are having the fines season so far we have known for years, and
everybody is trying to make the best of it There will be a much larger aereage cultivated
in this county than has ever been plowed before in this county than has ever been plowed before,
Land that has never known anything before, been over-turned by the plow, and is now, green with what will be food for the millions.

## SANTA CRUZ.

Press:-It being a fact that a great many people prize a comfortable home in a prosperous,
healthy country, with a pleasant climate, above all other earthly blessings, I wish to say to
your numerous readers that are in search of such a country, to visit Santa Cruz county, and see if we don't possess all the natural advan-
tages and many of the created in our county, on the bay, to insure just such a home. I have
tried different portions of the Atlantic State tried different portions of the Atlantic States
and of Oregon, and, being driven about, on and of Oregon, and, being driven about, on I finally made my way into Santa Cruz county, five years ago, and have satisfied myself that
in point of climate, pure air, pure water, health, soil, timber, advan tages for the growing of the greatest varieties of ehoice fruits and thas not Now, I am not selling land or being paid to write for others that are, but I am engaged in climate, that is not cold in winter nor hot in summer, where it never gets very dry nor very
wet, where thunder storms and tornadoes never come, where good crops and a good market are
insured to the prudent and industrious and where people may grow all the ehoice fruits that can be found from the Gulf of California
British Columbia. I mention these facts, be cause I prize them as a great blessing and know hat there are thousands of persons in Calif wia, without homes, that would glady av
themselves of the opportunities offered here make themselves comfortable, pleasant and n opportunity, Our foothills and numerous little valleys are naturally adapted to the
growth of fruits, and land can be had in small quantities on liberal terms, with good title, and we are not obliged to irrigate to grow eho
fruit.-M. P. OwEN, Soquel, Cal., Feb. 9th. SOlano.
Losses at Suisux.-Cor. Vallejo Chronicle: erably. Sam. Morris has lost nearly four out of ive of his 100 fiock of young lambs. Ben,
Rush has lost quite a number of sheep and young cattle, and has two men constantly em-
ployed in removing pelts to save what little ployed in removing pelts to save what little
may be. Hastings has lost a large number of may be. Hastings has lost a large number of
sheep. Michael Allen has suffered a loss of 13 head of cattle since last Thursday, and several ther cases involving more or less damage are other case
reported.
Notes.-Democrat, Fel. 23: On all the land
Notes.-Democrat, Fel. 23: On all the land
not overflowed there never was a better prospect for abundant crops in Yolo county than at
en present time. We predict a larger vield the cereals, in the aggregate, for 1878, than in any previous year in the and more or less shecp, owing to the poor con-
dition the sheep were in at the comineucement of the winter. Should the weather clear, a large area of grain will yet be sown, there
being considerable ground, already plowed
before the rain, which was not sown before the
a drouth.
drouth.
Nevada.
Cornhrning trie, Cattie Markit.-Reno
Joural, Feb. 23: Miller \& Lux, who have been Journal, Feb. 23: Mille
styled the "attle king
of their broad acres and
business. They have agents running through
this entire section buying up all the beeves they ean find, paying for them a good price, and daily long traing go westward filled with their
stoek. The question may be asked why they are doing the question may be asked why the most natural solution is
that the Meat Shipping Association is doiu that the Meat Shipping Association is doiug
them harm, or at least they fear it is destined to, in the near future. tayists as these gentlemen are could begin to play such'a game as to buy up all the purchasea-
ble stock in sueh an extent of country for the sole purpose of defeating a rival institution. dustry cannot be affected, for the stockholder are cattle raisers and therefore will supply their own requirements first. A steady increase is
reported in this business, and the people of the Golden (ate prefer their beef. While we wish Miller \& Lux no harm, and know they are do lively market for our many cattle, we eertainly
rejoiee that prosperity is assured to the Meat rejoice that prosperit
Shipping Association.

News in Brief.

## A carria in this city

 e by the Department considered unfounded. The large commercial house of Merado \& A move is on foot looking to the impr the North Beach watcr front of this city.WILLAAM WorkMAN died at Montreal lately, leaving about $\$ 400,000$ to eharities in that city
THE Pennsylvania Legislature have appro oriated $\$ 710,000$ to defray expenses of suppressing the July rio
is not alone in her floods. They
y freshets in the New England tates and Canada. $H$. The sehooner J. H. Roscoe has returned
rom Cocos island, reporting disappointinent in THE churches are still relieving distressed persons in this city by giving free meals to
those in want. The Senate in Maine has indefinitely postponed the bilections.

## has been sentenced to be hung on March

 29th. Dr. Carver, the shooting expert, broke 885glass balls out of 1,000 , in a match at Oakland, GEN. Crook anticipates no trouble from Sit ting Bull, and does not contemplate any expedition against the hostile sioux.
Redwood City was flooded the other day for couple of hours, the first time such a thing Drsor occurred.
Disorderly meetings have been held in Lon-
don, and conflicts are reported between and war sympathizers.
AFTER an interruption of eight days, caused this city and Los Angeles has been resumed. The Austro-Hungarian ministers have auto issue a a loan of $60,000,000$ florins
The House Committee on Pacifie railroads have directed a favorable report on the bill to
extend for 10 years the time for the completion extend for 10 years the time for
of the Northern Pacific railroad.
have agreed to accept the $5 \%$ reduction of wages asked by the masters until the price of coal By
By the proposed transfer of the Indian Bureau claimed that the cost of caring for the savages will be reduced from $\$ 23.05$ to $\$ 4.28$ per eapita. where he leaves a large family, was killed at Ben City, Blaek hills, a few days sinee, by IN Jannary, a mat shed, at Tientsin, China,
in which were collected many people from the in which were collected many people from the
famine districts, took fire and 1,400 women and children were burned to death.
Joserf A. Coprola, of the regular police,
was shot by his wife at their residenec, iu this city, on Monday night last, producing death a The famine
proportions. At Tienstin, the later part of De cember, there were over 90,000 refugees from The famine in India also causcs much suffering and is likely to continue for several months yet. Tue Secretary of the Treasury has issued instructions for discontinuing tho ronceipt and return in trade dollars, and that deposits here-
tofore made be settled for in that coin on satistofore made be settled for in that eoin on satis-
factory evidence being furnished that the same will be exported; or, if preferred by depositors, they may receivo their silver back in fine mint
bars.
Tr is
Ir is estimated that the danage cansed to the country about and below sacrame
amount to nearly $\$ 7,000,000$, apportioned as
follows: for rebuilding leves $\$ 2,000,000$ follows: for rebuilding levees, $\$ 2,000,000$; loss orchards, $\$ 500,000$; injury to buildings, $\$ 500$, ,
$000:$ loss of porsonal property of various kinds, 000: loss of porsonal property of various kinds,
$\$ 200,000$; loss of cattle, $\$ 20,000 ;$ destruction
of of I asturage for those saved, and cost of trans-
porting them to ligh ground, $\$ 125,000$; fenees
swept away, $\$ 100,000$, boarding homeless fam.
wept away, $\$ 100,000$; boarding homeless fam.
ies, $\$ 50,000$; loss of rents to land owncrs and debts owed merchants, $\$ 500,000$.

On Sunday morning last, a cadet at West
Point, named Tolin, shot and killed another named Gilbert. 000 if The lockout of 4,000 weavers at Oldham, if not quickly terminated, is likely to eause the Tranches of trade
Tre steamer John L. Stephens goes to Alaska, oo be used as a floating cannery during the fish-ing season, after which she will steam baek to
this city with her cargo. his city with her cargo.
AH SAM, the Chine $^{2}$
whites, at Rocklin, last summierer of three whites, at Rocklin, last summer, was arrested
in Plumas connty, last week, by John Boggs,
but committed suicide by shooting himself Melville Atwood, of the Mineral Committee of the Paris exposition, says that it was his tee outt that pullicity was given to J. W. Mackay's
ofter to defray the expenses of his department offer to defray the expenses of his department
of California exhibits. The offer was made vith a request by Mr. Mackay that his name be
MANY people in Nevada are dissatisfied with
Me sect. the hanging of Rover, executed last week, for
the killing of Sharp, at the Humboldt sulphur mines, two years ago, they being of the opinion last, or else insanee, of which latter he also gave
The freight eapacity of the Government ships
Constitution, Supply and Wyoming being insuftiConstitution, Supply and Wyoming being insufti-
eient to aecommodate the goods offered for the Paris exposition, the ship Portsmouth has been placed at the disposition of Commissioner-Gen-
eral MoCormiek. All the space in the Ameri-
can department has been assigned.

Mining and Farming.
There is probably no other country under the sun where the operations of mining and agriculture are so closely connected as in California. The generally conceived idea of a mining counry is one where there is a barren, sterile region, mountainous and rocky, productive of nothing but minerals; where men are dependent for
fruits and vegetables on some more favored section and which they are glad to leave as soon as wealth is obtained. Nothing could be further from the truth as far as California is concerned. For instance, all the quieksilver mines
in the State are situated in regions otherwise devoted to farming operations. The gold quartz rounded by thriving farms and orehards, from which all kinds of fruits and vegetables may be procured. In the hydralie ming district
the ranches, in many cases, cover areas of gold.
bearing gravel, so that the land is both agrieul tural and nineral, causing frequent contests as It often oecurs that the miners will buy land previously nscd for agricultnral purposes, with
the intention of putting it through the sluiees. A ease in point oceurred, last week, in Amadior
county, where C. D. Horne and W. A. Neville purchased the ranch of W. Avla, at Butte
City. The property embraces orchard, containing fruit trees of every variety in full bearing. Indeed, the orchard has long county and has annually netted a handendsome
coll revenue to its owner. But the main reasonn
that has induced the above-named gentlemou to buy it is the fact that 10 acres of gold-bearing
uravel are included withiu its limits. Mr. yravel are included withiu its limits, Mr.
Horne for months past has been working the adjoining elaim, formerly owned by yoakes,
The last two or three clean-ups have been in the highest degree satisfactory, If not the
riehest gravel claim in the county, it is certainly richest gravel caim in the county, it is certainly
not far behind the riehest. Miuing operations ave been carried to the boundary lino of the selves of the by Avla, and to possess themselves or the and his partuer lavo thought it
nel, Horl ande to buy out Alva.
advisable The priee paid for this ground was a low one,
aecording to the Ledger, but as there was likely to be a contest ovcr the mineral land, the owner
thought it best to avoill litigation by sclling out. The present owners will prosecute work energct ieally, and it is thought by the Leelger that the This instance is eited merely to show
This instance is eitccl merely to show the close connection in this State of farming and mining
seetions. In many places a farming section sells all its produce to a neighboring mining com-
munity, so that the proximity of tho interests is fivorabic to both. In faet, in almost any ishing mining camp, a number of persons wil conmence to till the soil and build up homes,
knowing thoy will always have ready salo for their products.
Several of the towns of the interior of this State are built on ground which would pay to
mine, and in a number of instances houses have been raised on props, while the ground undermined and transportcd to mill, meu have made a good living pickiug up the pieces which dropped
froun cars nud wayous, and working then. In Mokelmmne IHill, as we see by the Calaveras found in the streets since the heavy rains set in. A boy pieked up ono last week on Center strcet,
weighing over seven dollars. This town is in 2 . mining region, and ono forinerly famous for tho nuggets found there. These circuinstanees, are
oxceptional, of course, but scrve to show that there is
streets.

# x <br> Cm 

Monday Morning. E So 1 take the pail and book,
And 1 erose the launh hing brok,
And
nlad








 Thon the elasses toc the lino,




## About Our Women.

(Writen for the Press by Mrs. C. 1 H. Nichoos.] "Are Women equal to men? Is it not true
that woman is an inferior being, the weaker vessel, and that the Creator's plan is that shc should be dependent upon man-a superior being-for protection and guidance? It is hard to find the trut
it in prejudice.
I find the above in the Rural of October 13th, in notes of an admirable tecture "About Our Women," by Dr. Dio Lewis. I am sorry the
Doctor thiuks it hard to fiud the truth in this matter. It seems to me that iron lying at the
bottom of the well, truth has risen to the surface, to be seen by all who love her face.
If the solution of the question were of less If the solution of the question were of less
importance to the well being of humanity, we might wait the slow verdict of accumulatiting
facts. But, gratifying as are the faets presented has enjoyed opportunities of culture and posilian at all approaching those of men, we pnust hs the opportunities. A ceutury of equal oppportunitios, for the training and u use of her intel-
lectual powers, must cranspire before we can with apparent fairness be called upon to basc
our elaim to equal intelligence upon facts. But our elaim to equal intelligence upon facts. But
wo are no more dependent upou faets for faith
in woman's equality than for faith in a Creator Both questions are within range of common pro allics even as exeeptions to a general rule- the
factor that will scrve us best in the develop. ment of womanis capaliilities, is faith. For
woman is eminently practical, and untit the inl woman is eminently practical, and until the in-
dividual woman lias faith in the equal ability of her sex, she reirains from attempting equal
results. Our first and collaterat work, then, is results.
to imbue woman with faith in herself - in her
her
For five long years C-T lay iu bed, sisted that he coold not. The the house caught
lire, and he found his feet like any other ablelire, and he found his feet like any other able-
bodied man. So, here and there, a woman driven ly necessity, or impelled by intcllectual
hias, leaps the lyarriers of custom, tramples prejudice, and to her own and others' surprisc
wins the honorary medal struek for her brotlic man; and but for the stimulus they prove to prise that greet her would be little mure thar mortifyiug evidence of the low estimate of the
female intellect. "Pretty good, for a woman," was the enco-
mium lavished lly a naster-builder upon the plan of an elegant warehouse, projecte.t by a ware-of Philadelphia
Fred. Douglas remarkeli of a gentleman whon
he met, that "not onee in their conversation was he reminded of his color." It will be some affairs will cease to be reminded-even in the
congratulations of elucated and sympathizin men-that they are fugitives from a general in
feriority of ser Indeed there are in the wastebaskets of this 19th century, elaborate trcatises termed instinct I will do their writers the justice to adnit that in comparing her intellect with man's, they laal the grace to abstain from any mention of instinet as the reasoning powa
er-or substitute for sucl-iu the brute ereation. ycars ago, when the hercsy of woman's
Fity equality, by nature and by grace, had not, in
clurch or state, hinted at possible insubordination among the danes; when intelligent women sat with meekly foldcel hands and downeast eyes to hear themselves conplimented, from pul-
pit and platform, as a saving barrier bet ween nian and barbarism, or a grateful cataplasm for man's infirmities, an iratc youth of seventeen1
sainl to
to girl of fifteen: "A $A$ wonanin was made to be kcpit uuder a mau's thumb; she's the
weaker vessel; the Bible says so; she can't reasou like a man; she jumps to her conelusions by instinct; that's how you go ahead of
us in the lower branches; but you'd fall behind
in college for in college, for you haveu't the intellect nor the
physical strength to dig deep." A few y ears later, when this boy hal bccome a man and this
girl a woinan, he asked her to be his wife Taking his hand, and looking intently at it a
moment, she replied: "No, John, your thumb is too tmall!"
In his role of protector and guide of woman as ayainst her own intuitions, man is prove, thumb, he is too small to fill the bill. "It is
not good that the man should be alone"-in the administration of human affairs or for hinnself
and
ind individually. Neither is it good for humanity,
or for woman individually, that she be rclieved or for woman individually, that she be relieved
fron the mental and moral stimutus of his need of her, or from the duty and discipline of self-
protection, self-guidanee and self-support, conscions responsibility in these personal dutics being as necessary to the development of her
moral and intellcetual powers as of man's.
And when exercise of power, prevents the development and excreise of her Goil-giverr talents for the
disclarge of these duties, he ceascs to be her disclharge of these duties, he ceascs to be her
protector and becomes to her a robber and a tyrant whose protection means to her pauperism
and intellectual inferiority, resultiug in moral aud social degrellation to both
"The Creator's plan, that woinan,
Should be dependent uporn man"."
Why, the boy-baly-as helpless as the girl.
bably-is nttery dependent upon woman to By creative arrangenent man "boru of wonan", is dependent upoll her-as she is not upon him
-in the inost critical and receptive periods of his lifc. The strong man, when stricken lyy diseasc, is as lelpless as a sick woman. With
less patience and endurance in trials and mis. fortune he appeals-never in vain-to woman's
skill and sympathy as his best dependeliee. The mass of women, the world ovcr, are no only self-supporting but weal th-produciug
Unequal laws and customs obscure but cannot conceal the fact, that women, by their industry thus nnderwrite the national credit. So con
non is the faet as not to attract olservation o women ly their labor of hand or braiu, support ing iufirm parents, orphan brothers and sisters,
invalid or reckless lusbands, or children res cued by widowhool or divorce of the mother,
from the pauperism to which drunken fathers had consigned them; aud paying taxes alldi
tional for the support of frovernment. how few take into consideration the fact that one-third the this ou an average of less than same amount and I quality of work donc.
In the funancial relations of
In the financial relations of the sexes, woman pockets two-tlirirs the avails of her labor in the wages market, and then, ly unequal marriage
laws, monopolizes whatever property is thic ress, monopolizes of her co-opcrativecer labor perty in the home.
rem Trangers to butt against at their leisure.] Sup reform, or in the guise of "conseience money," this proportion of the taxable assets of the Stat
were placed to the account of women whos earnings and savings it represents? Or suppose
the legal status of the sexes -as regards personal and property rights-reversed. A law
giving the property aud earnings of the most drunken, speudthrift proteetor, would seni now seuds capable, industrious women to that pitiful
The Creator's plan, if He dcsigned woman for hepenience and man for her protector, is a fail-
nre, and such a failure! His wonnan proves cavable of self-lependence hy the use of a
moiety of her powers, and His man, accepting the role of porotecctor, subsidizes womath for
neans to discharge the duty, or appropriat her carnings for his whiskey and totacco, till, straw woru out, she drifts away frons "bled and board," and he forbids a sympathizing, public
"to harlor or trust her on his aceount." And so it cones to pass that she can't depend, and this plan of the Creator (?), in spite of the
superior intellectual alility men have brought
to the ail of to the aid of the Creator for its execntion, is a
sorrowful failure, for an orthodoxly depending
woman, as compared with her inhercut a ability
for self-dependence., And the question uaturally
arises: the Creator's plan, being a failure, can arises: the Creator's plan, being a failure, can
the Creator himimelf be reckoned an unqualified success ?
If in setting this weaker vessel allift, He
lias, contrary to His design, endowed her with las, contrary to His design, endowed her with
ability to padlle her own canoe, and guide it oo, is it not possible that He has unwittingly ailed to endow mau for the offices of pilot and upercargo, and hence the in
of outward bound voyagers?
The Creator, not less than the creature, on his failure, so much better than the plan, for humanity in general, as well as woman in prar-
ticular, begets increasing distrust of the alleged ticular, begets increasing distrust of the alleged
paternity of the plan. Evidently woman in her struggle for self-support has stumbleI upon a
self-development that fairly challenges the claim of this plan to a divine origin. Wherein is man superior to woman that hould he her guide? Dcar reader, think it ove nd let us conipare notes
Pomo, F'eb. 11th, 1878 .

## Read It, Girls.

Judge J. McM. Shafter, having offered prizes to those girls in the district minder 20 years of age who should make the best loaf of brcad, de
iverel a sensible address to them upon receivng the prizes. We give a portion of it in th hope that our girls will rend it and learn what
class of people it is who despisc this kind of hope the
class of
labor:
Sch
Schools of cooking are established in all large cities, and in every farm house thcre is soine one who loves you, upon whom you ean eall for
instructions. No sudden effort will answer your purpose. Nothing but patient and
peated effort will make you a good cook. Is it not reapectable? The universal voice of the press, whilo it has indulged in some pleasant-
ries, favors those competitions, 1 have an example to give you. There is, an elderly lady interests herself in a pullic way in culin, wos interests herself in a pullic way in culinary af-
fairs. She bas a large house iu the city in which airs. She bas a large house iu the city in which
she spends nuch of her tine, and iut it she las organized a school for certaiu respectable falniies. Her daughters attend regularly, and with other young ladies persoually do aud conduct
every branch of cooking. The acquaiutance of every branch of cooking. The acquaiutance of
this lady and companions is much sought for, so mueh so that to be allowed to salute her, kiss her hand, from which the flour may have re-
cently been washed, is regarded as a distincently been washed, is regarded as a distin-
guislied hoonor. Her house is Buckingham Pal ace, and the laclies iu question are Yietoria Iie
ina, Queen of Great Britain and Ireland Emprcss of the Iudies, Defender of the Faith and the princesses are her own danghters
and the daughters of the English nobility The exalted character and position of these
ladics clevate them above the temptation ladics clevate them above the temptation of
cxhibiting that contempt for labor which is the fruit of ignorance, vanity andl laziuess, Take the aivice of an old man who is your cle used commouly as human food-not passably, not well even, hut in the best manucr possible Learn to serve it, put it on the tahle in a caste ful position and nanner, and so whatever may
be your futire, you will be pepparel for it. If
it be that of misfortune and poverty, you will it be that of misfortune and poverty, you will
at least have that skill and self-reliance and self-respect which will assure you at least com-
fort and the lrotror of all good nucn's opinion Or, if you are rich, your abilities will have
fuller scope. fou will become the exemplar o your social circlc; one of those women about whom our hcart and thoughts cling with an
entire devotiou. In cither case you may becone one of whom it is said the priee is above rubies. langerous times. The evil elements of society are fast becoming too powerful for good. Men actuated by evil passions threaten the public
peace, the riglits of property; personal peace and seeurity. The happiness of the home you may 1 1ray you cultivate in yourselves personal graces. Be cleanly, tasteful, ueat and plain in your applarel, molcst and decorous in your atti-
tude, your walks, manners. Above all deespise the adulation of the fools; that fanily is alread too large. Honor your father and your mother so if the evil days eome you will be prepared
for them. Buckled about by all luman loves for then. Buckled about by all limanan loves
and respect, aud upheld by his aid, whose pronise to be evcr present with you never fails
ou can lift up your head above all evil and you can lift up
defy all calamity.

Ricalyptus as a Cure for Rievmatism.Kussinh Riter
city, was some time since attlicter matory rhcumatisn: One ankle and foot exxeedingly intlamine dand yery painful, and he could not use the other limb at all. Mrs,
(ioodspeed procured some eucaly ptus leaves, nhbel then together a little, and without fur ther preparation bound them on in goon
tity, renewwing every hour and a half hours, as the fever rendered theni dry. linb could lee used. This was the speediest $\mathbf{r}$ hef Mr. Gromspeed hat experienced in the
many times that he hald been allicted with the saine disease. A plysician1 from sann Francisco
at this time infornied Mr. Goollspeed, that,
then knowing the cxcellent medicinal qualities of
of these leaves, he had already prepared at least half a ton for

## Rural Literary Society

Half a dozen people are sufficient to form a nucleus for a literary and social society like the one of which I write, and if properly managed any man, woman and clind within a radius of
three miles will become members. To secure order, a president and secretary are essential,
and as inany other officers as the society seems and as many other officers as the society seems
to dlemand.
The "Philomathic" society has on its roll of nembers an euergetic, intelligent couple of 75 mentality, thus securing a menbership com. prising whole famiilies who work together with the society. The president arranges the programme, which is as varied as ingenuity can
devise, and embraces a range broad cnough to meet evcry stage of intellectual developinent. select readiugs, original essays, biographical etc., are a small prtion of the exerciec hcalth, cacll member may feel a personal responsibility and interest in each mceting, the exercises are opened by a quotation from each one, a quicsweck is answered by each, and every member is asked to contribute some useful item of informCounected with this week
whichected with this society is a museum, to which all take pleasure in presenting curiosities This is an important fent one that cannot be too strongly urged upon the attention of every settlement, however small in California. This State presents a broad field from which to gather specinens; and a
system of exchange conld be inaugurated by which Juplicates may enrich other collections, which nitimately may prove of great value as well as affording a perpetrial source of study. No one can justly plead lack of time for this week spent in preparing for the meeting of the soeiety can be casily found, and I promise all paid a huudred-fold. Sou have then a place of peculiar interest to which you can invite the yrieuds; a fondness for study is fostered by rested and improved in body and mind woman is subject of thought and couversation is establishci between parents, children and neighbors, and the common gossip and light talk is ex-
changed for something far pleasanter and more

## elevating. Those

urprised who follow these suggestions will be has been brought to light aud the slumbering genius that only awaited a call to life to illuminate and happify all that come within its intuence.
For nearly four years the society I have Insen as a sample has met every Friday evening. thusiasm is constantly increasing, for they find how pleasant it is for neighbors to dwell toCounly.

A Substitute for Getta.Percha. - The which has been tately inalata is a new product for gutta-percha. It is the hardened resin of
the so-called Bully tree, fonnd on the banks of the Amazon and Orinoco. Each of these trees yield from one-third to one-half kilograms of
balata each year. This substance is so similar in appearance and properties to gutta-percha less, has the same smell as gutta. perchn when warined, has the sanie leather-like toughness, but is far more elastic. At $50^{\circ} \mathrm{C}$. it becomes temperature than at 150 ., hence at a higher soluble in pure slcohol and ether, but compiletely soluble in warmed turpentine and in
benzol and carbon (li-sulphide even when cold. It becomes strongly electrified when rubbed
and is a better isolater for heat and cold than gutta-percha and will doubtless soon find an important application in electrolysis. The acid have no action upon the balata, but warmed the sam violent action upon it as upon guttapercha.

Those Oli Postage STamps. -There is a
story abroad to the effect that the United States goverument will pay $\$ 300$ to anyoure presenting We inquired of an employe this city as to the origin of the report, and
received the following statement: Some time ago a gentleman in the East, a resident of New in a substantial way, but thought it would be better to have her carn her money than to
make her a clear gift of it. For want of something better in the way of employment, he said cent stamps he would pay her $\$ 300$. The con ract was made, and fulfilled with the aid of our informant was one. The purchaser of the worked up into papier mache boxes, ctc., but he does not want any more on those terms. If
the government wanted old stanps, the deail-

As Abcrdonian recently bought a horse photograph, t

THE PACIFIC BUBAL PRESS.
$\xlongequal[\text { Chaff. }]{\text { There is a man somewhere whose memory is }}$ There is a man somew
so short that it only reaci
never pays for his boots.
never pays for his boots.
"The mouth of the Amazon," said a professor "The mouth of the Amazon," said a professo
of geography in a female seminary, "is the big
gest mouth in the world-present company gest mouth in thays excepted.'
The man who invents a noiseless drum for Christmas gifts for boys, will deserve the bene
diction of a grateful people and make a fortune besides.
A Scotch schoolmaster having repeatedly
and at last angrily demanded of the pupis and at last angrily demanded of the pupils: tremblingly replied:

The Cambria News, having occasion to speak of the rector of Llanfairpwigwyngyllgogerty that this is merely an abbreviation of the full title of the village.
Let no one hereafter insiuuate that teachers
institutes produce no good. At a recent county institutes produce no good. At a recent county teacher, of the female persuasion, forever demolished the base insinuation by the following conundrum: "How do you make a "Maltese cross?" Answer. - "Tread on her tail.
A Kansas couple who were apparently living
in peace and harmony were not long ago diin peace and harmony were not long a
bors; but the mystery is now explained. The husband had homesteaded 160 acres of fine
farming land, and there was another 160 acres farming land, and there was another 160 acres adjoining not yet taken up. The pair were di-
vorced, the woman entered the vacant quarter section and established her claims as the head of a family. When this was done the pair wer
remarried, and now have a fine farm of half section.

Down in the Lower Levels. - Not many at the top of the shaft at change of shift have the courage to descend into the lower regions of
that mine. Very few even of the old residents of the Comstock would care to descend into the steaming regions below, and not one Eastern
mau in a thousand conld be induced to make mau in a thousand conld be induced to make top of the shaft, steaming as though just lifted from out of a cauldron of boiliug water. Though
they are shirtless-naked as at birth from the they are shirtless-naked as at birth from the
waist up-and wear only cotton overalls, they waist up-and wear only cotton overalls, they of water; yet this is all from steam and perspiration. In all this great heat men must
work. The wonder is that they are able to do anything but gasp and paut. It is a place better fitted for salamanders than for men. At the head of the main incline, where they have so long been engaged in puttiug in the $V$-bob, it is as hot as in the hottest vapor baths at Steam-
boat springs. One would thiuk that men much in such a place would be quite secure agaiust the rheumatism. On making inquiries in this regard of an underground foreman, he said that
he never knew of auy of the meu working below he never knew of auy of the meu working bclow
to have the rhemmatism. Some of our sufferers to have the rhenmatism. Some of our sufferers
from the disease might try this cure-might have from the disease might try this cure-might have
themselves lowered into the depths of the themselves lowered into the depths of the
mine, there to sit and steam through one shift mine, there to sit and steam through one shift per day. But for the immense quautities of
ice water they drink, the men could not endure the great heat in which they are placed or the
foods of perspiration pumped from their They swallow gallons on gallons of it, and it never hurts them in the least. - Virginia Enter-

African Explorers' Arts.-Dr. F. M. Hil debrandt gave an eutertaining account last month, bcfore the Berlin Geographicai Society,
of his adventures in African exploratiou. His adroitness in dealing with the natives, not less just praise from Nater was obliged to play the part of a magician, and collected of all the different animals and plants in the neighborhood. Over the collection incantations were pronounced, so that it passed for a On another ore being carefully packed away, natives, he levelled his camera at them as if it were a weapon of war, and charged upon them
with it. They retreated in dismay Pneumatic Clocks.-A company has been
formed in Paris for working the system of pneu matic clocks-time-measurers by air-pressureadopted successfully in Vienna. The compressed
air is fed into a reservoir, which gives off air is fed into a reservoir, which gives off
a uniform pressure of half an atmosphere, the compressed air received by each clock being rein connection with a single reservoir, and the time can be la
gas and water.

Let the Brain Rest the Hands.-"There are many who get up in the morning weary Usc let me say, dear sisters, stop and think
health, and my own and feet less. Having poor
Hew years, I soon learned do, tolll within a and experience will teach you many ways of economizing strength."

## Young Folks' Column.

## The Shepherd-Boy.

Little Roy led his sheep kown to pasture,
And his cows, by the side of the brook; And his cows, by the side of the broot,
But his ows never drant the water,
And his sheep never needed a crook.
And the gloss brown cows were so gentle
That they
moved at the toueh of his hand
 So he led all his sheep to the pasture, Thouph hit raind jyet the rain neeer potter'd
For his pasture was only a tate,



 Thee there enterd his hif brother Waler,
While thie shepherad was soundy asleop,


Playing Funeral.
One day I was lying on my lounge trying to
leep, when I heard the patter of childish fee along the hall, followed by a scratchy tap at my door. I did not answer, for I did not feel like entertaining two such frolicsome visitors as my
twin nephew and niece, Willie and Tillie Blackstone, but after a short silence the door
was pushed cautiously open, and two curly "Oads peeped in. "Oher!" sighed one; "auntie's asleep." "Oh, dear!" sighed the other; "what shall "Leet's go in."
"Sh-sh-h-don't wake her."
They tip.toed by, over to the window, and looked down into the muddy streets and sighed,
and up into the gloony sky and sighed. I felt going to wake up and cry "boo," when Tillie said:
"Let"
"Let's play funeral and bury Auntie." oud, you will wake her up."
"You can't wake dead folks," said Tillie.
"You can't wake dead folks," said Tillie.
"Well, I'll be the undertaker."
"Bring the casket this way," said Tillie, giv ing orders.
"Y,ou must not say that-that's may busi"What can I say?"
"Be the visitors, and talk.
"Be the visitors, and talk."
Last summer, when they werc in the country,
Last summer, when they warc in the country, dcep impression on them.

Then she beautiful crop t"" sighed Tillie
Then she
aud said:
quisite flowers;" then she dropped it way down into her little boots and said mournfully: he died young.
"But she was ready to go," and Willie, join-
ing in as a risitor.
"What'll become of all her children?" she
asked, dolefully.
"How many did she have?" plaintively that I almost laughed.

They'll grow up," he replied logically
But who will take care of them?
God. He takes care of the spros
children are bigger. Play mourners have come
"All right," said Tillie, cheerfully; then
"ddenly she sobbed:
"There's her begrieved mother."
Which one?"
The one with a crape handkerchief."
"I'll make the eulogy," said Willie, after short pause.
"Go ahead,

## gets she is a girl.

Thildre deceased was a woman. She liked children, and was the auntie of us-

No, no, Willie; she had seventeen children."
gave water, to some she gave bread; she whipped them all soundly, and sent them to bed." shoe," laughed Tillie aloud, much to the disthings mixed
As soon as he restored order, he went on:" Do
not weep for her, my brethren. She is happier not weep for her, my brethren. She is happier
than you are. Let us pray.".
Together the dear little things repeated the Together the dear little things
"Our Father," and Willie added:
"Dear God, we know that she is in heaven.
We know all good people go to heaven, because Jesus Christ went there when he died. Make us all love as much as she did so that we
shall see her when we die. Do not let us wish she was here again, because Yon.t to
away, and You know best. Amen."
luncheon, and they ran away, leaving me to re-
joice at their great faith, and pray that it may not falter when the time comes for them to giv
ap their treasures aud say, Thy will be done up their treasures and say, Thy will
God knows best.-Conyregationalist.

## Good HEALTH.

Eucalyptus Essence.-According to a memoir presented to the French Academy of Sciances, the essence furnished by the eucalyptus is a species of liquor camphor. The aqueous infusion of the leaves possesses uncommon as tringent qualities, due to the presence of a
large amount of tannin. In exterior applications tount of tannin. In extorionappin the infusion have been found singularly efficacious. The inhalation of vapor from the esciont. Thil, and the smoking of the dried leaves rolled into the shape of cigarettes, give excel-
lent results in affection of the respiratory orlent results in afrection of the respiratory or
gans. The febrifuge properties of the essence have been tested on a great scale in Austria and Roumania and Spain, and especially by Dr.
Crunel, of Montevideo. It appears from his clinical observations, covering a series of years, that the eucalyptus, taken in an infusion or in pills, not only replaces quinine, but sometimes
acts with efficacy where the latter had been fruitlessly employed. We may here state that the eucalypt resin closely resembles resin of chinchona, while the sulphate crystallizes in
star-shaped crystals, like sulphate of quinia ard presents the green coloration on the quitia, of chlorine and ammonia supposed to be peculiar of chlorine and ammonia supposed onemical indications were
to that salt. These che
abuudantly verified in practice beside the sick abuudantly verified in practice beside the sick
bed in the hospital of Montevideo.
Look to the Cellars.-There is little doubt, says the Herall of Health, but many cases of
ill health have their obscure origin in our cellars. ill health have their obscure origin in our cellars.
What is the remedy for this state of things? What is the remedy for this state of things?
First, and best, build a fireplace in every cellar, and have the flue connect with the main or most always be ventilated through the chimney weather always have the wes ; but in suitable weather always have the windows open, and the
spaces closed by wire gauze. Beside this, nake and use a convenient way into the cellar from out-of-doors, or at least from the woodshed,
Some cellars cannot be made sweet and whole some without better drainage, some mold every-
thing until they have been made tight, then thing until they have been made tight, then and some need to have the floor or bricks or earth taken out and replaced by fresh bricks or
gravel. In regard to the drainage of cellars it gravel. In regard to the drainage of cellars it cheaply effected by making a well down to some
gravel bed or porous stratum. No cellar drain, git whatever distance from the dwelling, or what ever may be the fall, should ever receive the poisonous gases engenerered wvill inevitably find
their way into the cellar, and all through the dwelling. In the cellar, and all through the serious disease and death, or it may be ill healt
nd a lowering of vitality to a point that makes and a lowering of vitality to
life hardly worth the having.
New Mental Malady.-The London Exammen tal malady, which they call grubelsucht, or
ment "metaphysical mania," Dr. Oscar Berger writes learnedly on the subject in one of their scientific serials, and it would seem, according consist in an irresistible current of ideas tak ing the form of useless inquiries as to the how and why of everything, pushed beyond the as the usual range of knowledge." It is comforting to know that the subjects of this disease are "generally young people," that it can be
cured by "mild doses of bromide of potassium combined with the hydropathic treatment," enter lunatic asylums." How wisely does Providence order all things : Were it other
wise, the mad-houses of two hemispheres would not suffice to contain the contingeut of these newly-discovered maniacs that must be delivered up by the Scottish and German universi nished by the "noble army of martyrs" in England who pine in the pursuit of "endowed re gland who
Rheumatism.-This disease is a standing "conundrum" to medical men, but, says the that he has at last cleared the subject of some confusion that surrounded it. He says that the term rheumatism is applied to several different
diseases which are essentially distinct, al though they have certain features in common.
The two chief forms are articular and muscular rheumatism. The former is a disease of early
adult life, more or less acute in character,
with a tendency to get well in about six Articular rhey to get well in about six weeks. called rheumatic fever. It attacks the synovial membranes and also the similar serious membranes, especially of the heart. Therc is
distinct predisposition to this disease in certain distinct predisposition to this disease in certain
persons, which is sometimes inlierited. The immediate excitiug cause is exposure to cold or "taking a chill." It never attacks the muscles. Muscular rheumatism is a disease of middle and advanced life, is commonly chronic, and will not the muscles themselvcs, but the tendons similar anatomical structure. Muscular rheumatism
fatal.

## Domestic Economy.

## Puddings.

The following recipes are given by a lady White Puddin the Rural New Yorker: two pounds of leaf lard; ten pounds of wheat flour; one-half pound of salt; two tablespoonfuls each, of thyme, sumnier savory and black pep-
per; rub thoroughly together all the ingredients and keep in a cool place. When wanted for use tie the required amount in a cloth and boil unti Yorkshire Pudding.-One pint of sweet milk our eggs; one cupful of raisins or currants; one a pinch of salt and flour enough to make a stif batter; pour into a buttered pan and place in
the oven under a roast of beef, allowing the dripping under a roast of beef, allowing the quires about 20 minutes to bake and should be caten as soon as dished.
Potato Puddiug. - Boil two medium sized potatoes, mash smoothly and add ggs; one pint of sweet milk; two tablespounEgg Pudding.-One quart of sour milk; eight beaten eggs; two teaspoonfuls of soda; flour to warm with cream and sugar, flavored with nut-

HUNTERS' Sour.- Rabbits or game that is too
tough to be cooked in any other way, or even scraps and hones can be made into very savory soup, says Clara Francis in the Prairie Farmer.
If a rabbit is to be used, cut off the legs and divide the body in the middle, then stew it in three quarts of water, with a carrot, two onions, pepper corns, a head of celery and a sprig or three hours, or until the meat is tender. Cut the nice meat from the back and upper joints into mouthfuls, and put it aside; cut the rest of the meat off, mince it fine, then pound and
mash it tua piaste with a little butter, and two Thash it ta paste with a little butter, and two
or three tablespooufuls of flour, that has been
first mixed smooth with somc of the cooled first mixed smooth with some of the cooled
broth. Rub this through the colander into the soup, then boil all together for an hour longer,
when it should be again strained tirough a canvas into a cleau saucepan. Put in the re-
served meat, a glass of port or claret wine, a served meat, a glass of port or claret wine, a
tablespoonful of current jelly, the same of temospoontul or current jetice, and salt to taste.
lemon
Bolonga Sadsage.-Chop your beef raw; I gain untenth clear lat pork, fresh, then chop gainuntil quite fine; season with pepper and
salt, and, if you like it, a little sage (I think it improves it); then mix the seasoning well with the meat; stuff in links of about one pound each (the most convenient size); have a
wash-boiler three parts full, and at the boil, when your sausages are all stuffed, tie the eud of each link so as to meet and form a hoop;
put your sausages in the boiler, they only need rom five to 15 minutes to cook. Very little If you will listen you will hear then squeaking; they are then ready to be taken out, which should be done by running the smoking rods
through the links; then hang in the smokc

Liebig on Lieqors.-The following is a transiation of a paragraph found in the writiugs
of Profi. Von Liebig the distinguished Gerinan of Prof. on Liebig, tne distinguished Gerinan nervous system, causing trembling, confusion
of language and convulsions. The stronger wines, such as champagne, rise quickly to the tiou. Sherry and strong cider are more quickly tiou. Sherry and strong cider are more quickly
intoxicating than the generality of wincs, and they have a peculiar influence on the gastric uices of the stomach. The intoxicatiou of heer is heavy and dull, and it does not hinder the drinker from gaining flesh. The drinkers of Whisky and brandy are going to certain death.
Red wine is the least hurtful, and, in some cases really bencficial."

Deviled Pabbir.-A fat, young rabbit is very nice cooked in this manner. After it is prepared for cooking lay it in salt water for
half an hour, then wipe it dry and cut six or eight gashes across the back so that it may
well cooked in the thickest part. Broil in the well cooked in the thickest part. Broil prairie chickens, over a clear hot fire, only it should be urned oftener and dipped once more into the nelth butter. Lay it on a hot dish, close with pepper, salt and butter; cover chose inegar and one of mixed mnstard. Garnish with parsley and scrve very hot.

Apple Superstitions.-The ancient Arabians believed that the apple had some mysterions
elation to health. In England and Gerinany it has been deemcl potent against warts. Some tines it is regarded as a bane. In Hessia it is day, as it will produce abscess. In Pomerania it is eaten on Waster morning against fevers; in Westphalia (mixed with saffron) against jaun-
dice; while in Silesia an apple is scraped from to top to cure diarrles, and from the bottom to cure costiveness.

## PACIV RURAL

The Great Flood of 1878.
In the midst of life we are in death: the tide
bringing promise of prosperity to many, bebringing promise of prosperity comes the flood-visiting desola-
tiou upon others. Thus it will appear when the history of the year 1878 in California shall be written. The long continued and boantcous rains which we have longed for and whose coming has
been hailed with so much joy been hailed with so much joy throughont our State, now cause
ns to deplore the desolation of hundreds of happy homes, the destruction of millions of dollars worth of farm produce and property, and to mourn the losses of human lives, which, thanks to a kind Providence, have been few.
The year 1862, which has been The year 1862, which has been
memorable as the great season of memorable as the great season of
disaster to the low lands in the Sacramento valley, now yields a gloomy prestige to the year 1878 . It is true that the capital city has
been spared the destruction of ' 62 by the superior charaiter of her
byefences, but the wider ruin in derences, dut the wider ruin in scene of the destruction has but been exchanged-the country for the city.
Almost daily for nearly seven Weeks has the rain fallen, until poured its surplus into the waterways, until geutle brooks became rushing streams and mighty rivers grew to vast inland seas. The river at Sacramento touched 26 feet above low-water mark on
February 23 d . The obstructions February 23 d . The obstructions which have been placed around
the tule islands to save their cul. the tule islands to save their cultures from the waters proved in.
effective for this purpose, and effective for this purpose, and
more than this, they became barriers to prevent the passage of the
flod and thus almost immeasurably increased its area. One can form little idea of the extent of the country submerged, unless he has steamed for hours upon a waste of water covering fertile
fields. It is reported thg fields. It is reported that at one
time there was not to be seen time there was not to be seen
from Knight's Landing to Rio from Knight's Landing to Rio
Vista, from that point to An. ista, from that point to An-
tioch, and from Antioch north. ward to Sacramento, 15 acres of ward to Sacramento, 15 acres of
yround, including the visible
levees, excepting of course the Levees, excepting, of course, thc
Montezuma hills and the Diablo range; and it is safe to say that there were over 500,000 acres of cultivated land under water. Of
the 25 islands, sall but four wer the 25 islands, all but four were
supposed to be under water. The supposed to be under water. The
towus of Washington, Kiight's landing, Frecport, Courtland, port and Onisbo were flooded. The towns along the Sacramento north of K night's Landing escaped. The Lisbon district, of 5,000 acres; the upper half of Sherman island, 7,000 acres-the lower half has not becn reclaimed-Grand isl-
and, 16,000 acres; Brannan issand and, 16,000 acres; Brannan island,
$4,5(0)$ acres; Tyler islaud, 3,500 a, 50 acres; Tyler islaud, 3,500
acres Amdor island, 4,000 acres; Sutor's, Merritt and Staten isl-
ands were ands were all flooded, the levees laving given way before the high
waters. The amount of damage by the Hood over these wide productive
areas cannot be ascertained areas cannot be ascertained with
any certainty at this time. mates range from $\$ 5,000,000$ to
$\$ 20,000,000$. Into thc losses many eleme mes of loss of farm erops, buildings and animals is certainly appalling, but to this must be placed the vast sum which has been expended dur-
ing the last few ycars in ing the last few ycars in levecing
the tule islands. These levees the tule islands. These levees and expensive character than mantial before, and it was thought they had
at last solved the question of tura ing the tules into productive tields. How illusive was this hope now clearly appears.
As the mind endenvoring to is bewildered in endenvoring to measure the extent
of pecuniary loss, which thousand

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have undergone, the heart sinks at the thought
of the hardship and suffering which has come of the harclship and suffering which has come
to earnest and hopeful men and women. Our engraving, suggestive and appalling as it is, gives but a few of the incidents which are reportcd
from the flooded district. Helpless from the hooded district. Helpless and homelcs
upon the waste of waters many a been driven from its habitation. To attic and house-top have the sufferers goue until their only refuge was a frail craft, in which amid floating houses and barns and drowning cattle, they have crossed the turbulent flood to places of safety. Jew pens can describc sueh scenes as these, but hearts can feel their dread darkncss and yearn with sympathy toward the sufferers.
The flood has proved potcnt in calling out the and yearn with sympathy toward the sufferers.
$\mid$ The flood has proved potent in calling out the $\mid$ graving portrays. Thus it seemed in reality to
mantil help came. There was water below,
nobility in manhood, and almost superhuman exertions have been made in rescuing the refugees
frow the waters and providing them with food, froin the waters and providing them with food,
raiment and shelter from the elements. It is to the noble aid of sympathizing neighbors that the comparative freedom from fatality may be y moving. A dozen steanboats were continual y moving among the islauis and sloughs carry-
ing cattle and people. Sailboats and skiffs were busy in every directiou, some carrying passengers, and others towing cows and horses through he water. Hundreds of people were taken to the towns below the flood.
It is a scene almost of despair which our en-
water above, rain, mist and flood. Barns wer standing almost entirely submerged; smal houses woating, onmented by turkey and chickens ; chickens were flyiug from tree toward the houses, but making most of thei way in the waters, Now and then people wer seen on the levees, looking cold and blue and
anxious for the rescue. Incidents of the mos
ing are not wanting. D, B personal suffer Hloated off on a haystack from Frank Jolinson's ranch, in the Sutter tules disaster, Wednesday, was found several miles south of Nicolas, ou Saturday afternoon. He was discovered by a lying with a small bunch of hay under hi

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INOIDENTS OF THE GREAT FLOOD IN THE SACRAMENTO VALLEY REFL
breast and his arms thrown over the limb of a tree. His extremities were in the water and
were swollen toan immense size. The haystack were swollen to an immense size. The haystack
upon whicll he started contained almost two tons of tule hay, which was all washed away from him but the bunch upon which he lay when found. He was carried off Wednesday wholly insensible until Sunday, when he spoke for the first time. Two dead bodies of men, whose names cannot be ascertained, were found by some parties near where Kindall lay.
Heart rending accounts of suffering and narrow escapes from the disaster continue to reach
sympathizing friends of the sufferers. Hon. Clas. F. Reed, ex-President of the State Agricultural

Society, writing to a friend in Sacramento, from Knight's Landing, under date of February 22d, a high wind raised the eriver and water in th tules so high that I was fearful my house woul wash a way. No boat could get to us, aud the water was over the floors and dashed against
the house as high as the window of the story. My hay barn is washed of the secon blacksmith aud carpenter's shop and all the tools. The milk-louse, wash-house and store houses are all gone, with everything iu them, and another barn is about to go. One barn, containing 42 head of horses, is all under water.
Knight's Landing is destroved and everybody is Kadly demoralized. We have to get neu to
work at any price. You can have no idca o The water is two feet higher than ever befo known.
Experiences like those of the present year in the Sacramento valley must teach impressive em for reclaiming the large tracts of productive and is not the wisest nor the best. They may inpress other points of economic value. These act upon. The first lesson is to discern and act upon. The first lesson is one in the old, teach human weakness; let it impress the lime truths of a union of interests and of effort anong men, and drown the selfish, grasping
spirit which brings a man nothing but weaknes when the trial comes. Let it go farther, and to himself, neither dieth to himself,"

Damages in the Upper Sacramento River Although the largest figures of individua losses by the flood will be reported from the islands in the delta of the Sacramento rivel
tics. A dispatch to the associated press from
tive The flooded country, ise statement of losses in line, in Yolo county, begiming at the Colus river and tule, as far down a mouth of Feather's ranch, at th ter county, from 15 miles above Woodland to the mouth o iver, along the Sacra

Yolo County
nd Frank Welch, $\$ 15,000$; Cox, $\$ 30,000 ;$ J. P. Bullock, $\$ 20$,
$000 ;$ Wm. Haney, $\$ 4,000$. Downs, $\$ 1,000 ;$ I. N. Heshey
$\$ 12,000$ W. J. Clark, Wm. H. H opp, John D. Rose, Grasshoppe teorge Shar By, Pigur Sterling Creason, Mr. Rahm and heavy losers; William Mills, s. 000 Mrs Morrison, iam Ridley, $\$ 4,000$. P . S cook, $\$ 2,500 ;$ H. Hulbert, $\$ 4,000$ Peterson, $\$ 1,500$; Thos. H 1,000), \$000; Rubert Conner word wh. Hurd, 2,500 ; Hay 2,500; Noble Cleu; J. M. Jacob Laugeuour $\$ 2$, ark, $\$ 3,000 ;$ J. D $500 ; \mathrm{Mrs}$ Mceling. Philips , 7,000 ; D. Hamilton, F4,000, . Gwinn, $\$ 1,000$; D. M, Ed 6,000; E Wilett $600 . \mathrm{E}$ H Curtis, $\$ 3$ co; Charles F. Reed 5,000; W. C Wright, $\$ 3,000$ ames St. Louis, 845,000 ; Henr rovest, $\$ 2,500$; John Coller nowball, $\$ 10,(0) ;$ Mr. Beck Pow; L. Johnson, $\$ 300$; Mrs Powell, \$00; Mrs. Simmons, $\$ 500$ B. Hoscberry, 2,500 ; Mr Curtis, $\$ 300$; Laward Lofeker, H. B. Yood, $\$ 3,000$ Rusell $\$ 6,000$ H. B. Wood, $\$ 3,000$; Russell Leon Knight's Landing The town of Knight's Landing
has been more fortunate than any part of the district named. Front street has been high and dry al through the flood. The hotel, restaurants and business house have all escaped. the back por Three louses were washed away with their contents, age, $\$ 1,500 ;$ Mrs. Smither dank $\$ 700$; Carpenter's house, $\$ 500$. Other property was damaged as
follows: J. A. Black s.500; Huston, $\$ 600$; Win. Honey, $\$ 300$; Wm. Barnet, \$250; W. S. Husion, O'Kecfe, $\$ 500$; other damages to citizens, $\$ 4.000$

Sutter County
Losses along the river about stands, as far as can be ascertained, as follows: W, H. Ifeatt, $\$ 1,000$; o., $\$ 25,000 ;$ D. roll, $\$ 10,000$; Hart \& Gossman $\$ 7,000$; Theo. Cummings, $\$ 5,000$ D. G. Theyer, $\$ 2,000$; Biddell Bros., $\$ 1,000$; Manuel Darby, $\$ 1$,
$000 ;$ R. S. J. Hiatt, $\$ 7.500 ;$ Gwin 000; R. S. J. Hiatt, $\$ 7,500$; Gwin $\&$ Klertley, $\$ 5,000$; T. D. Kirk
$\$ 8,000$; W. B. Smith, $\$ 2,500$. E. Clow, $\$ 4,000$; Col. Willia Rackerby, $\$ 4,000$; 13. Gireen 500 ; Mrs. W. A. Smith, $\$ 2,500$ A. Throgmorton, $\$ 1,500 ;$ Mrs II. Bostwick, $\$ 1,500 ;$ N. D. Bost wick, $\$ 2,000 ;$ B. Grcen, $\$ 1,200$ $\$ 1,200$; Geo. Esinger, $\$ 1,000$ Thomas Recse, $\$ 3,000 ;$ J. L. By ington, \$1,500; Johas Yardly, \$1, $\$ 6,000$; Daneron \& Winchester $\$ 4,000$; E. Masters, $\$ 1,500$; (ieorge Aten, 22,$500 ; \mathrm{Wm}$. Mciriff, $\$ 2$, $500 ;$ Morton McGiriff, $\$ 5,000 ; \mathrm{H}$ J. Bowels, $\$ 1,500 ;$ D. Rockerby, Vin. Ballwwin, $\$ 2,000$; W. S. Hus ton, sheep, \$200.
Kearney is dissatisfied with ome of the nominations made on land, and may insist on their land, and may ins rconsidered.

## Mining \&Scientific Press

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Figs, Grapes, Peaches, Prunes, Almonds, English Walnuts, Oranges and other temperate and semi-tropical fruits can be raised with success on inost of the tract. Also, Vegetables, Corn and all other cereals ordinarily grown in the Statc.

A considerable amount of the rich bottom land has already been cultivated.

## Deep Soil With Lasting Qualities.

The soil throughout the tilled portions of the ranch proves to be of grcat depth and enduring in its good qualities. It is quite free from foul growths. The virgin soil among the large oak trees on the bottom land is easily broken up and cultivated.
The California and Oregon railroad traversce nearly the entire length of the tract. There are several sections, stations and switches, besides depots at the towns of Andersun and Reading-all of which are located within the limits of the ranch.

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Land suitable for settlers in colonies can be obtained on good terms.

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Are offered for sale in Reading, situated on the Sacramento River, at the present terminus of the railroad. It is the converging and distributing point for large, prosperous mining and agricultural districts in Northern California and Southern Oregon. Also, lots in the town of Anderson, situated more centrally on the ranch. Lots in both these towns are offered at a bargain, for the purpose of building np the towns and facilitating settlement of the ranch. Purchasers are invited to come and see the lands before buying here or elsewherc. Apply on the ranch, to the proprietor

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LOWEST PRICE, $\$ 8,000$.

The ranch is situated on the drect stage road betweed 3endocino City and Cloverdale, in Mendocino County. Forty miles from Cloverdale, 20 miles from Navarro It Consists of a Total of 2,000 Acres,

## Of which 640 are secured by Government tltle and the

150 Acres of
iso Acres of Rich Bottom Land, Which is alapted to the raising of Wheat, Barley, Oats,
Potatees, Corn, Vegetables, etc., aud will raise as large crons as any land in the counts. There is 1,210 acres
of tine looling Land which is . . of tine lolling Land which is A Ao. 1 pasture land, and
capable of keping 1,000 head of Sheep, or 100 Dairy
Cows capable of kecping 1,000 head of Sheep, or 100 Dairy
Cows. The whole ranch is well fenced with picket and
post and nail fonce, and las eight good buildings on it, - Hous

Dwelling House of Six Rooms, Two Barns, one of them $100 \times 40$ feet, and the other $40 \times 40$
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the crop bids fair to be worth whon harvested, sut,000. cured by a nortgage at one per cent. For full informa-
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hest of tule land and brides on the swanip or overflowed lands. There are a few Fruit Trees, Strawberrics and
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crease the laying of hens $50 \%$ as minht
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bidder. For further particulars, address
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Jons L. Boowr, Ese, having withdrawn from the firm
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concern will be settled by Wests concern will be settled by Messrs. Dewee, Ewer and
Strong, who will continue the business under the title of
of the old firm. of the old firm.
San Francisco, Cal., Feb. 20th, $1878 . \begin{gathered}\text { GEO. } \\ \text { JNO. }\end{gathered}$

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## SAN FRANCISCO

Saturday, March 2, 1878

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## new advertisements



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## $\int_{0}^{1} A$ IENTS AND NVENTIONS

List of U. S. Patents Issued to Pacific Coast Inventors.

By Speclal Dispatch from Washington, D. C
Week Ending, February 12th. Hydravis.-Alvah C. Austin, Oakland, Cal.
Saw Teeth.-S. J. Randall and J. O'Brien Port Ludlow, IW. T.
Fire Escape. -I. T. Cross, Reno, Nevada. Cigars. - (2), Liebes Bros. \& Coo., S. F. Othe patents are not ready for delivery by the



## Notices of Recent Patents.

Among the patents recently obtained through Dewey \& Co.'s Scirstific Press American and
Foreign Patent Agency, the following are worthy
of mention:
Derbick.-Thomas Powell, stockton. The invention relates more particularly to such derricks as are used for lifting loads of grain from header wagous and for other hoisting purposes. The improvement consists in so applying the ropes which sustain the boom and hoists the load, that they will form a truss to stiffen and
strengthen the mast, so that the heavier the strengthen the mast, so that the heavier the
load the more perfectly will the truss brace the load the more perfectly will the truss brace the
mast, thus admitting the use of a light mast. mast, thus admitting the use of a light mast.
It also relates to a novel arrangement for supIt also relates to a novel arrangement for sup-
porting and steadying the mast. The inventor will lift a load that an untrussed derrick of this size and character would not sustain, and as lightness is an important element where a der
rick requires to be frequently moved, this one will be especially convenient and useful.
Umbrella Runner.-A. Good, S. F. This is an arrangement for securing the braces of an
umbrella in the runner which moves on the handle so they can be readily detached there from and replaced when necessary. The run. ner can be cheaply manufactured and is ex-
tremely convenient because any person can secure the frames from the runner with very little trouble when the umbrella or braces are $t$
be reframed, and replace them when desired. Hay Cetrer, -Tohn Weichart, S. F. This covers an automatic arrangement for feeding straw to the knives of a feed cutting box. The device is so arranged that it gives the straw a
forward thrust after each knife passes the end forward thrust after each knife passes the end
of the box, thus projectiug a sufficicut length of of the box, thus projectiug a sufficicnt length of
straw for the succeeding knife to cut and leaving it stationary while the knife is in the act of fod regularly at the proper instant and is not forced against the knives.
Orerating Window Sashes.-James Kelly S. F. This invention relates to certain improve-
meuts in operating wiudow sashcs, transoms aud other doors or devices which are suspended so as to turn about an axis, and which may be
situated out of convenient reach. It consists in a combination of a rotating axis with certain levers which communicate with a set-screw or
knob, so that by a slight movement of the knob the window may be opened or closcd, and may Feeder for Thrfshing Machines.-Rufus R. Moore, Modesto, Stanislaus Co. This invention relates to certain inprovements in apparatus for fecding unthreshed straw to the threshing
machine cylinder ; and by its use the straw is nachine cylinder; and iny its use the straw is
delivered to the cylinder in 3 regular flow, which
is is necessary to goold work. II the straw arrives
at the feeder in hunches, it is held back in such a manner as to be fed iu gradually, and is pre ented from sluggiug through the threshcr in an unthreshed condition.
Bucker. - J. A. Bruner and Alexander Rich, stockton. The invention is a portable machine for hoisting earth, water or other substances,
transporting it a short distauce and dumping it transporting it a short distauce and dumping it
The macline is especially adapted for hoisting The macline is espectialy adapted for hoisting and discharging it, aud is so constructed that
one mau call operate the entire machine.
table gavge for circolar Saws.-0. Bon ney, Jr., S. F. This is an improved table-gauge for circular sawing machines. It is a novel ar-
rangement for connecting, alljusting and securrangement for connecting, aljusting and secur-
ing the gaugc-bar, or novable part of the
tale table-gauge, to the permanent part or holder;
also to the manner of applying the pernanent part or holder to the saw table, so that when
the gauge-bar is removed no obstruction will b
left projecting above the surface of the table

Government Work at the North Pole.
The Naval Comminittee of the National House of Representatives has reported favorably upon the Howgate Polar Expedition bill. 1 e extract long stay, which will give ample opportunity a long stay, which will give ample opportunity
for observations and the conduct of scientific
inquiry ior
inquiry under the most favoring circumstances.
It provides that au intelligent gystem shall be It provides that au intelligent system shall be
pursued under the direction of the Natioual pursued under the direction of the Natioual
Academy of sciences. We have ascertaiued to Academy of sciences. We have ascertaiued to
our satisfactiou that the results yielded by prior explorations in the Polar scas have incalculably beuefited the whole world; that the knowledge acquired by experiment and discovery in that other section of the globe ; that such knowledge is an important factor to the regulation of commerce which is absolutely depemlent, so far as decreasing the perils of the decp and enlarging boundaries of navigation arc concerned, upon
the knowledge of physical laws. There has the knowledge of physical laws. There has
never before |been an opportunity afforded so promising in results as the one which now pre ents itsel. To make such explorations entirely successful, it is essential that simultaneous obArctic Circle, and for continuous periods of time. Eingland, during the preseut year, will fit out two vessels, under the explorer Nares, on a Polar expedition via east cosst of Grcenland. Siweden, in 1878, under the auspices of Prof. Nordens-
kjold, will explore the Polar regions via Norway cross to Behring's strait. Holland has determined upon another. Germany, under the has an Obi of the Arctic Exploration Society, Wiggins, now on duty. Russia, during the empedition to the Obi and Irtysh

Silk.-Franklin Allen, Sccretary of the Silk Association of the United States, sends us a draft of some resolutions recently adopted by a meeting of silk importers, dealers and manu facturers protesting against the proposition now before Congress, for the imposition of a
duty upon the raw silk which is imported for use in our silk manufactures. The manufac ture of silk has made commendable progress in this country of late and as there is no extensive country which can production of silk in the reason why the domestic manufactures should not be encouraged by the free import of the material upon which now thousands of hands are employed in our factories. If we had a good show to make the culture of silk worms a But we do not know that at present there is any such promise of home production of the raw material.
Frutr Seeds-Thomas Meehan, Germanstock of fruit seeds, mazzard cherry, mahaleb, plum, peach and honey locust, all kept in con dition for spring planting.
Cold and Heat. -The Victoria bridge across the St. Lawrence at Montreal is more than a provision were not made for the change, some provision were not made for the ch
thing would have to break.

## Important-Farmers.

It is often desirable, when wishing to secure suitable Farm Hands, such as Teamsters, Milk them Plowmen, etc., to know just where to hind numberless so avoid being imposed upon by the abounds. The city is a place where large numbers of men from all parts of the country congregate, and among the number many good,
strong ablc-bodied farmers are to be found awaitung employment. Messrs. Crosett \& Co., 623 and 625 Clay street, are daily receiving appilcations from these sturdy yeomanry, connposed of Germans, Scandinavians, Americans
and lrish, who wish to be sent out to work on some farm, and should any of our readers wish to avail themselves of the opportunity to pro-
cure such persons for any work they wish accomplished, they can address, giving full parSan Franciaco, and particular attention will be given to supply them with good men.
"CAsin l.ain Promptly." May Bros., (ialesproved $W$ indmills, the cheapest, strongest and best in use. Retail price, $\$ 50$. Write for
Woonwards Garding has the following new aturaetions
The buffalo ehase; large whale skeleon; new mureum; improverents in the zoological department, besides the
other features which have made it popular.

## Farmers! Farmers II

Throughout California are reguested to send Labor Exchange," 33 and 35 O'Farrell Street an Francisco. All hands curefully selected free of charges to employers and employees.



## S. F. MARKET REPORT.

 nut intended to represent the state of the
urday, the date whleh the paper bears.

## Weekly Market Review

domestic produce. etc.
The Washington's Birthday holiday ha broken the trade week, and the continued rains have washed away the fragnents. There is ittle to report, although some interesting

Range of Cable Prices of Wheat.
The course of the Liverpool quotation for days of last week has been as recorded in the following table:

##  <br> Satur T T ond Ted Wed <br>  <br> To-day's cable quotations to the Produce Exchange compare with same date in former years as follows: years as follows: <br>  <br> The Forelgn Review.

Lonnon, February 26th. The Mark Lane Express says: Offerings of Euglish Wheat at Mark Lane and in the provincial markets con-
tinue scant. Foreign, Wheat has reached our tinue scant. Foreign, Wheat has reached ou shores in a greater quantity, owing to the action of America and Mermany, whion to last Monday's arrivals amounted to nearly 35,000 quarters, while the imports into Iiverpool also have been decidedly large. Th and with it apparently nearly all demand, as business moved within the narrowest limits, and racticable in a merest retail way at a decline of 1 l on $W$ heat. Feedin stuffs were also about $6 d$ lower. There has been very little pressure to sell, and holders appea perfectly content to abide the issue of politica affairs, which can scarcely reduce the value even if the Fastern question finds its ultimate solution in a pacific manner. With ultimat rivals at ports of call, the foating cargo trade for Wheat is very dull, and prices have given way fully ls. Maize, with large arrivals, has
declined $6 d$. Barley is dull and cheaper to scll. Frelghts and Charters.
The Commercial Neus says: The supply o tonnage available for Wheat loading in port is light and rates are well maintained. One vesse the week to load for Liverpool at $£ 27 \mathrm{~s} 6 \mathrm{~d}$ There is some inquiry for ships to load new crop Wheat to Cork for orders, at about $£ 3$ We have at this time in port 21,061 ton o tonnage secured for Wheat and 3,328 for mis cellaneous.

## Eastern Grain Marketa

New lork, February 23d. -The produce markets have been kept in a feverish and unset. tled condition by the political muddle in Europe, and prices have shown much irregularity. Peace Breadstuff and Provisions, but the more threat ening tone of cables subsequently imparted eming tone of cables subsequently imparked a
somewhat more buoyant tone to the market for products. Wheat is lower, closing at $\$ 1.200$ 1.30 for ordinary to prime, and Corn, $50 @ 60$ c.

Cnicaco, February 23d. The frain mar kets have fluctuated widely each day, and a very liberal amount of dealing has occurred in frirly, while the other cercal were more than (airly active. day. Gilt edge has sold up as high as $\$ 1.10$. opened, was nearly recovered at the close. 243 c ; Rye, $54 \frac{1}{2} \mathrm{c}$; Barley, $45 \% \mathrm{c}$; Pork, $\$ 10.30$; Lard, $\$ 7.30$.

## Eastern Wool Markets

New York, February 23L. -The Wool marictet prescuts no encouraging features, but on the continne downward. The demand, as has been the case for several months, is for medium grades, and such being in reduced supply
holders are enabled to obtain full prices. The few parcels of good California that are in stock are held with firmness, but on inferior qual sales for the week are: Fifty thousand the Mexican at $15 \mathrm{c} ; 42,000$ ths Spring California, 1tes Fall do $15 \frac{1}{2}\left(a 16 \frac{1}{2} \mathrm{c} ; 5,000 \mathrm{ths}\right.$ scoured do Bosron, February 23d. - Wool is active, but ered a shade easier all round, particularly for fine Wools. Mauufacturers are as judifferent as ever about future supplies, while there is eviholders. The principal sales lave been in Cali-
fornia Wool, the aggregate sales of this descrip. tion being 834,000 pounds, at 14@22c for Fall
and $20 @ 33 \mathrm{c}$ for Spring. Salcs of the week for
all kinds amounted to $1,491,100$ pounds
The following table shows the S. F. receipts of Domestic Produce for the week ending at noon to-day, as
previous weeks:

| Articles. | Werk. Feb 6. | WEER. Feb. 13. | Werk. Feb. 20. | WRrk. Feb. 27. |
| :---: | :---: | :---: | :---: | :---: |
| Flour, quarter | 31,195 | 73,995 | 30,633 | 30,023 |
| Wheat, centals | 47,904 | 103,430 | 15,225 | 74,519 |
| Barley, centals | 17,267 | 16,221 | 2,538 | 5,005 |
| Beans, sacks. | 1,658 | 2,431 | 518 | 1,951 |
| Corn, eentals | 2,836 | 3,821 | 3,193 | 1,101 |
| Oats, centals. | 6,365 | 8,946 | 2,116 | 2,700 |
| Potatoes, sacks | 17,857 | 21,233 | 15,821 | 15,098 |
| Onions, sack | 916 | 474 | 259 | ${ }_{218}^{935}$ |
| Wool, bales | 150 | 174 | 205 | 35 |
| Hops, bale |  | 31 | 61 |  |
| Hay, bales. | 1,252 | 1,016 | 594 | 1,224 |

## BAGS-The Graiu Bag price takes on another

 small fraction. 10 g $@ 10^{3} \mathrm{c}$ is now the cash price, is small, but holders are firm on the outlook.BARLEY-Barley has sold within the range BARLEY-Barley has sold within the rang
established a week ago. We note sales: 22
sks fair Bay Feed, $\$ 1.25 ; 800$ sks weevily sks fair Bay Feed, $\$ 1.25 ; 800$ sks weevily Coast,
$\$ 1.25$.
BEANS—There are a few slight changes, as BEANS-There are a few slight changes, as
may be seen on the list below. We note sales: 63 sks Pea, $\$ 3.50$; 60 do Small White, $\$ 3.35$; good do, $\$ 4 ; 86$ sks Pea Beans, $\$ 3.40$.
good do, CORN-Large White Corn still holds the note sales: 320 sks Large Yellow, $\$ 1.50$; 150 sks Large White, $\$ 1.85 ; 200$ do, Small Round,
$\$ 1.75 ; 500$ do Large Yellow, $\$ 1.50 ; 150$ sks Large Yellow, $\$ 1.471 @ \$ 1.50 ; 300$ do do, $\$ 1.50$. DAIRY PRODUCE-Butter prices are unchanged. Receipts are considerable, notwith-
standing the difficulty of transportation, and standing the difficulty of transportation, and
they doubtless seem larger from the fact that no one is buying goods to move if it can possi turn of better weather will do much to reduce the stock now in hand. New Checse is becoming more abundant, and a range of 17 (3) 18 c per tib 18 now reported.
EGGS-Eggs are lower all around, as may be seen by our prices below.
FEED-Hay is unchanged. Oilcake meal is
educed to $\$ 36$ per ton, usual discount to the reduced to $\$ 36$ per ton, usual discount to the
trade. We note hay sales: 41 tons choice Wild Oat, $\$ 16.50 ; 38$ do good Wheat and Oat, $\$ 16$; 40 do fair Wheat, $\$ 15 ; 43$ do Wheat and Oat,
$\$ 14 ; 30$ do Wheat and Barley, $\$ 13 ; 48$ tons choice Wheat, $\$ 12 ; 21$ do good do, $\$ 17 ; 21$ do
good Oat: $\$ 14 ; 27$ do Stock, $\$ 13 ; 34$ tons fair Barley, $\$ 12.50 ; 52$ do good Wild Oat, $\$ 16.50$;
11 do Stock, $\$ 12$. A sale of 40 tons poor Straw is reported at 55 c per bale.
FRUIT-The closing of the railway in Kern etc., from Los Angeles, and prices have been higher. The City of Chester brought about 2,500 boxes of Apples from Oregon. Those sold at auction on the wharf realized from $\$ 1$ to $\$ 2.85$. HOPS - The local market is still without notable change. Emmet Wells reports the New
York market for the week ending February 15th, as follows: "The receipts and exports continue very heavy, amounting to over 3,000
bales again this week. It is really surprising bales again this week. It is really surprising ment; it only confirms the report of the few dealers who believc in the existence opinion that if the shipments to London keep up much longer at the present rate, prices will advance in the interior; we think, however, it spared from the country; it should be remem. bered that our home brewers have laid in large supplies on account of the low prices, and the only outlet for the surplus is in exportation." OATS-Oats have sold better than a week
ago. We note sales: 150 sks good Oregor. Feed, sks fair Washington Territory Feed, $\$ 1.50 ; 300$ sks fair Washington Territory Feed, $\$ 1.50 ; 300$
sks good California do, $\$ 1.50 ; 200$ sks good Humsks good California 130 sks good Oregon Feed $\$ 1.50 ; 520$ do do, $\$ 1.55 ; 100$ do Surprise, $\$ 1.65$ 237 sks common Feed, $\$ 1.30$; 175 sks Humboldt Feed, in two lots, $\$ 1.30 @ \$ 1.50 ; 236$ sks black
Feed, $\$ 1.40 ; 190$ sks Oregon Feed, $\$ 1.45 ; 200$ les do do, \$1.47 $\frac{1}{2}$.
ow few in the mave advanced: There are Sacramen in the market but Union City and were brisk, and nearly all lots brought $\$ 1.75$. POTATOES-Humboldt and Kidneys are slightly improved. Early Rose has dropped. Since the Sacramento flood many lots purchased or seed have been returned to the city, and people will only take them at eating prices. PROVISIONS-Fresh Beef and Mutton ar arriving slowly, and much is poor in quality.
The scarcity forces first-class Beef to $8 \frac{1}{2} @ 10 \mathrm{c}$. Cured Meats are unchanged, and dealers repor nothing doing.
POULTRY for nearly all kinds of Poultry and feathered Game.
VEGETABLES-Asparagus and Rhubarb are falling a little. Carrots rise to $75 @ \$ 1$ per ctl. been made at a concession. We note sales
2,000 ctls to a shipper, $\$ 1.96 ; 4,000$ do do, $\$ 1.95$ 300 ctls good milling, $\$ .07 \frac{1}{2} ; 266$ ctls fair ship ping, $\$ 1.87 \frac{1}{2} ; 410$ do good Wheat slightly dirty,
to a miller, $\$ 1.05 ; 2,000$ ctls choice Chico mill ing, $\$ 2.02 \frac{1}{2}$. The situation is without change.
WOOL
Trade and prices are at a standstill.

## DOMESTIC PRODUCE.



## GENERAL MERCHANDISE

Wednesday m., Fcbruary 27, 1878.






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By the to.....

Signal Service Meteorological Report.
Week Ending February 26, 1878.




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$\qquad$ Total rain during the season. from July 1,1877 , 28.53 in

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## EAGLE MOWING AND REAPING MACHINE COMPANY＇S

# Who  

## Volume XV.]

SAN FRANCISCO, SATURDAY, MARCH 9, 1878

Rainfall and Percolation.
Sinee writing the paragraph on this subjeet in the Press of Feb. 9th, we have reeeived, in the Scientiffc Farmer, a reeord of the results with two years' measurement of pereolation in the lysimeter at Waushakum farm, Massaehusetts, as compared with similar observations elsewhere. As stated last week, the lysimeter is an arrangement for eatehing the water pereolating through a eertain depth aud area of soil the measurements in the rain gauge, some idea may be gained of what share of the preeipitation growth. Thi much premised, we cite the figures whiell Dr. Sturtevant lays' down in the Scientific F'armer:
 elly (Jour.
Enj. s years
Engand

 | Rainfall. $\begin{array}{c}\text { Per cent. } \\ \text { Inches. } \\ \text { Percolated. }\end{array}$ |
| :--- |




## deep, goil face, 2 br 2

Thus it appears that but a small part of the total rainfall penetrates the soil. Aceording to these different observations, there was a percolation of one-fifth to less than one-half of the rainfall, under different conditions. The great diversity in results plainly
ealls for local tests to determine loeal results and indieate the advautage it would be to have sueh tests made. On this point Dr. Sturtevant says: "The relation of the percolation to the rainfall on our land deserves more careful study. And it is not aloue the total amount the rain, nor its distribution whieh eoneern agrieulturally, as it is the extent of the evapo-
ration whieh uses up from the land sueh water as ean be ill spared.
lysimeters combined with rain A series of lysimeters combined with rain gauges, with
temperature records of the soil, with measurements for radiation, the foree of the wind, etc, would bring honor to auy institution and soon find its information of praetical value to the

This is a suggestion for those who have the means to equip our agrieultural college with this needed apparatus. Nowhere is knowledge whieh may be thus obtained more necessary thau iu California. Shall we have it
Salmon and Trout. - The Fish Commissioners learn that all the coast rivers and ereeks from this bay, are full of salmon on the way to the spawning ground in the upper waters.
soon as the Saeramento settles and beeomes clear, salmon will be taken in abundanee. The eoast salmon go up the ereeks emptyiug into the ocean wherever they ean find aceess, and as soon as the eggs are deposited go down to the sea again with the first flood. The waters rushing down from the Coast range mountaius have washed channels through the bars at the mouths of the streams, so that the fish find no diffieulty
in going to the spawning ground. At tle State Fish Hatehery at Chabot's lake near San Leandro, there are 50,000 Eastern trout and 2,000 river trout. These fish will he ready for distri. bution within four weeks. They cannot, however, be given to individuals for stoeking private they shall go only to publie waters. Any person making applieation or fish for publie waters
will get the proper proportion, and also eans for transportation. Applieation should be made to J. G. Woodbury, toreman Chabot State Fish Hatehery, San Franeisco, and some one sent to
reeive the fish. Nomiseclature--Some of our interior ex "Estabura" is the latest twist of Easter Beurre It is enough to baffle a postoffice clerk.

## New Early Tomatoes.

Diligent propagators of improved fruits, grains and vegetables continue their valuable work, aud enterprising seedsmen soon make the results of their patient experiments available to all growers. This work is worthy of praise and reward, beeause the mass of growers lack either the taste or the time for produeing new varie ties, and yet they often find the old ones de teriorating from eontinued growing on the same


A NEW EARLY TOMATO-THE ACME
soil. Our illustration on this page shows one of |and we shall look out for it in our markets du two new tomatoes which have just been brought out by B. K. Bliss \& Sons, of New York eity. The pair are named the "Little Gem" and the "Aeme." The Little Gem is a very early, bright red tomato, measuring from four to si inches in eireumference. The Aeme, as shown in the engraving, is of good size and form. It ieved to be a leader anong the best sort know: "It has been earefully tested the past season in many localities, and growers report that it is not only one of the earliest, but the to possess all the good qualities that ean be desired in a tomato, and will eventually super
sede many others now in the field. The plant
are of a strong and vigorous growth duetive; fruit of medium sizc, large cnough for ny use; form perfect, rouud, slightly depressed at the ends, very smooth; color, a glossy dark
red with a sort of purplish tinge; ripens all over and through at the same time; bears eontinuously until frost; delieious in flavor, has no green core, and but few seeds: unequaled for canning, preserving, or as salad; a splendid where tomatoes are grown for shipment to distant markets by rail." A vegetable with sueh

The Banking Spirit Strong in_Jail.
There are many things that people do not understand In this rattor, and I think I can save more for the do.
posiors than it appears they will get now, if they will Thus spake the eaptured eulprit J. C. Dun an, after the long hunt of the deteetives had fixed him behind the bars. We hardly question the aceuraey of the statement, beeause we believ that no one knows better than the areh-eonspira tor the avenues along whieh he seattered the depositors' money, nor eould any one display , keener scent in pursuing all remaining traees of the treasure. If the unfortunate old man pos sesses a contrite heart, we should be inelined to rely upon the skill he claims, on the principle tire, and the reformed drunkard the most vivid portrayer of the horrors of iutemperanee. But
this is not the point we would make by allusion this is not the point we wou
to his jail-born declarations.
We have credited him with the "banking spirit still strong within him.
do not allude to the true spirit which inspires upright fiuanciers who nake their banks the bulwarks of our commercial life. We refer rather to that style of banking which late event have shown is far too prevalent all over the bodiment. How phainly Duncan's words de scribe the spirit aud methods of fraudulent banking which have already made thousands mourn. It hints at what may be termed the personal element in banking methods; an autoc raey which rises above all responsibility; whie discarls the cramped systems of the book keeper,
the thousands entrusted by frugal depositors as the generous man does of dimes at a ehureh sucl methods prevail in savings institutions that assigness ind no trace of assets on the books, and the inearcerated banker boasts that he can save more thau any oue else from the is this ou the stability of institutions into whic men are led by laudable motives of eeonomy and frugatity to cast their earnings, with assu ance that they shan receive them with all the inerease which the money earis, ther mark, wo diminglity in thinted that there need to lable things as erimes whieh out there rage $m$ mankin possesses. What would we think of man clerk who cast our moneys reeeived, into the poekct of his pantaloons, and registed neither reeeipts nor disbursements. And yot here is a man who stood before the community as the are por ords do not show, and whieli he alone ean dis cover. It might scem that this was but the ef fort of a repentant spirit to restore all withid werc it not that other deel cations of the man diselained the eonsciousness of wrong-doing. Whatever of foree there may be in these suggestions is in support of the truth that no peop of handling trusted funds tho possibility of existenee. Certainly we have had enough of a style of banking whiel enables a man to throw our money into a hole and then push the hole in after it; leaving us naught in view but the brazen eheek of his effrontery, and the eonsola. tion of a boast that none but he eall gain us even a fragment of it
Cofree.-We reeently stated that our Eastern friends are going too far in calling us eoffee growers. One of the largest ventures in the eultivation of eoffce, was Brothers, 1 neres of hast week says that by great Angeles nursing the tree has been made to grow eare and nursing the trce hassech has not been at all proportioned to the labor and expense attending the experiment.
So greatly has mueh of the overflowed land in the Saerameuto valley been enriehed through the sediment depositcd thereby, that it rents at higher rates than ever before, some of it for $\$ 40$
per acre.

## forarspononence

San Joaquin County Notes.
Ehitors Press:-A very large area has been sown to grain in this county, larger, some say, than ever before kuown, and there is every
prospect of a correspondingly large harvest. Fariners tell me that the ground was never put in in better shape, and rarely so well. The
yield of summer fallow, all over the county last season, was as two to oue to winter sowed. the fact, that the lands in this county which are regularly cropped year after year with wheat, have in the last 15 years dcereased in yield $30 \%$ at least, shows, as nothiug else can, the all-
vantage of summer fallowing. If persisted in 15 years longer, the decrease will be in a greater the non-existence of facilities for irrigation,
summer fallowing is the only profitable alternative on most of the land. Its advantages are marked and positive in three partienlars: 1 st, a
yield of from $60 \%$ to $100 \%$ greater than winter sown; 2d, a smalher expense incurred becanse of
the smaller area workcd; all, and most important, the smaller ares work the
the maintenance of present fertility of the Messrs. Shippee, Hildreth, Hussey, Davis,
and others, on the veras, harrested 30 bushels per acre on sumnuer
fallow lands last season, and these tinures were fallow lands last season, and these tigures were north aud sointh of that strean
Linden

## Linden.

No handsomer farming lands are to be found in the county than those lying about Linden. tell me the result of summer fallowing is to
make too heary a growth of straw. The land make too heary a growth of straw. The land
is a rieh, heavy loam, showing handsonely to
the eye under a ncarly level expanse of growing the eye under a ncarly level expanse of growing
grain, and its beauty is enhanced by numerous
live and white oak trees live and white oak trees, which give it a park
like appearance. Among the many fine ranches worthy of mention, those of Messrs. J. Asher
and J. Harrison are eminent, botll haviug fine and J. Harrison are eminent, botls haviug fine
residences; that of the latter being very finely
situated near a grove of youug oak trees. North situated near a grove of young oak trees. North
of this ranch, on the other side of the Calaveras, lies a snug quarter section, the property of J. . B.
Messick. On this is luilt ono of the eosiest Alessick. On this is built ono of the eosiest
houses in existence, which shines like a new
dollar inside and out. In front is a arden dollar inside and out. In front is a garden
tastefully laid ont in ornannental shruls and flowers, and maintained by Mrs. M. with foster ing care. Alout three miles west of Linden is
a fine ranch owned by J. B . Wamrell, and at one time a part of the 2,000.a.ere ranch owned by
Comstock, the discovercr of the Comstock lode in Nevada, prior to his owuership of that mine.
A brick warchouse, slowly crumbling to decay, A brick warchouse, slowly crumbling to decay,
is all that remains of a little village that he at one time projected. Two descendants, a son
and daughter, live in posscssion of a quarter section a piece, the rest having passed into the
hands of others.

## The conntry surrounding

Which lics southwest Collegeville,
Which lics sonthwest of Linden, is adobe, and the Calaveras. To instance two ranches here on which farming is not such a gambling buse
ness as is commonly asserted of all ranching ness as is commonly asserted of all ranching,
I can mcution those of Messrs. A. D. Mclutosh
and W. Il. Snow, who botli annually real and W. I1. Snow, who hotll annually reap many of their ueighbors are not behind them. Visitiug the ranch of Mr. S. B. Kingsley,
two miles sonthwest of this place, I saw there nany evilences of grod management. M1r.
Kiugssey owns 400
aeres, much of it being sowed to wheat, 130 of which is summer-fallow He is also a stock ralser, having in years past
raised wany horses of the Chieftain stock. He
believes in sheltering believes in sheltering lisis cattle from the in.
clemency of the weather and in providing against tho contingency of a short scason ly
storing his straw. For these purposcs he has storing his straw. For these purposes he has
erected a capacious larn in one corral and a long shed in auother; the first affords stable
room for horses, mules and cows, while the room for horses, mules and cows, while the
center is filled with fodder; the other is used for sheltering calves, colts and hroods mares. In addition there is a carriage-house, pens for
swinc, and another shecl. 1 ind not find stock
throughout the county in slow condition, and throughout the county in slow condition, and
his was no exception; cereryone is carrying his was no exception; cveryone is carrying
mosts of the stock over on straw. Mr. Kings:
ley possesses an nnusually fine Iersey bull, from ley possesses an nnusually fine .Jersey bull, from
which he is breeding at present grade stock, bnt intenis ly and by, I understand, to add a
few thoroughbred Jerscy heifers. "Hero," the bull, was droppeld septetember 15th, 11868, color,
black, cream under telly and hetwen lind legs, with white spot on shouldcr. He has a promiucnt eye prot ugly temper. He He was
rasised hy ex.fovernor Claflin, of Massahi1.
setts; he was aftcrward ownel ly lirank I) setts; he was afterward owncl ly lirank I).
Curtis, of Santoga, New York, and was inn
ported to California, by a Mr. Johnson, of Sac pamento and has sinee been siccecessively of owaed
by ex-Shcriff Bryte, of Sacramente county, by coolfrey Smith, of French. Camp, San Joaquin
connty, and now hy Mr. Kingsley. His weitht
at fair time was 1,440 pounds, and he now

Weighs 1,600 pounds. He is registered in the
"American Jersey Club Herd Book," No. Sto, Dam, 2,018 , sired by the celeli, $r$ ated J J
P. C'ushing bull, near Boston. Up to December 6ith, 1572 , he had takelusix first preminms. His
dan took the first preuium at one of New England's fairs, and was an execllent milker; i descended $\begin{aligned} & \text { from a cow imported by banie } \\ & \text { Webster. "Hero" was cntercd for premium }\end{aligned}$ The san Joaquin county fair in the summer a dd and upwards, and was awarded the year mium ly thc committee, but by some mistak twas published in the papcrs as awarde
nother. Mr. Kingslcy is breeding from one-half, thrce-fourths and seven-eighths Dur
ham, of fair form and good milkers. He i hrecding this eross for a dairy cow with a three
fold olject, viz: to retain as nearly as may be old olject, viz: to retain as nearly as may ber larse flow of milk which distinguishes the or which the Jerse cows at present comprise the herd and 15 grade dersey calves from three
being reared.
Loti, Jan. 30 th, 1878.
Destructive Waters in the Sacramento Valley.
Edrohs Press:-The visitation of storms, ollowed by their usual wreck of property leaves a mark that is never obliterated. Cali
foruia has not been overlooked, but has had to succumb to the ordeal of floods and lashing storms. But; principally, the heaviest stroke lies in the broad valley of the Sacramento, surbmitting its lowest land to be sulmerged in sea of waters. For years past Sacramento val
ley, with her richest soil, has secn new towns and habitations scattering aloug her winding
river. Property increased in value, aud hun reds sought tule lands, comprising thousand f acres. On eacls island parties have gone to ork, and by years of industry, helpel by men respective section, enclosing the same by strong Frand ieland, with 15,500 acres; Lisbon district Andrus, Sutter, Tyler, Brannan, Twitchell and Schooleraft, not leveed, have all fallen, The only island spared was Randall, with 1,501
Along the river and within the fallen islands ures of alfalfa lay along the river lorilers Therc the shephcrds with their flock were
found; fiue herds of stock and horses; orchards new and oll, the finest in the state; vineyards he cloiecst fruits and flowers; hofled wit the growth; ficlds of new sown grain yard hay ying ont on the edge of the ligh land, were a and humble cottages, with thcir accumulation of ropcrty, all lay enshrouded in a watery grave The capital city, with her bulwarks of levees ou
her three siles, faced the foe, and came out ongucror to the end, but received lessons whic will not be forgotten.
by land and rail, leading on the castern sid oothills, and other sections of valley and State The lolo side, with points of higher clevation is reached by boats, carrying mails and passen gers to and fro. Possibly the sea of watcers may ions of land to be reseeded and mature before the close of the season; but the majority will
have to lie idle and be preparcd for anothcr

The principal regetable gardens of the city e under a coating of dellris, and will not bc accessible for some time. In the mcantime par
ties on high land arc preparing suitable gronnds ties on high and arc preparing sinitable gronnds
for that purpose, as the demand will be good
for or spring and summer tradc. Some varietics fut the peach apricot, fooctarine and clerry may suffer. The loss will fall heavy on the producer. All the finest vineyardsin the county Americal river kept its waters within its own banks, and the ruralist along its borders felt no of grain and lay smile in the surushine letween of grain and
the storms.
The heaviest loss of dairies are on the Yolo Todhunter, J. P. Sarsfield and John Hoagland There are smaller losses of shcep, hogss and
fowls. Horses were lost by others. Dairies elow the city had sufticient timo to secur their stock on higher grounds. All the alfalfa
fields along the river lie under water. These were the principal stock ranges during summer produced heayy cuttings of hay. Th
ffeet of the water lying long ou its surface ani he time it will remain, cven after the lreak i closed, will scriously imparir its roots if it doe hay to be marketed.
Nurscrics and flower gardcus to some extent eunder water. This will destroy the labo The heavy yarm.
The heavy storms have felled mauy tall trecs A fine eucalyptus int Peter Kuns' uursery, 13
years old and 107 feet in hight, fell with a crash across the rail track. It was a tree which was admired by all that passed by.
Messrs. Flint, Merkley, Brockway and John. son are the principal losers in hop culture. The entire yarils on both rivers are fooded in many feet of water, with Mr. Brockway's dry-house. ago to lose lis by the opposite devouring eleroots to auy length of time may be serious. It he storm and fall of river allow the work to be esumed.
Amid these sore calamities and sevcre aflicAons, the homeless and houseless are rcceiving from tho hands of the city and county residents sufficient means to help them in food and raiment while looking for employment pecter in ans inspection nay be devised that the lesson of the pest, may nay to sccurity in the future, and a channel be o formed for the surplus water. This will cssen the flow in the preseut outlet that re ccives the water of many tributaries, and thus the cost of so much levceing, both at pullic and private expense, will be unnecessary, and the
loss of so much property will never occur again. The So-Called Indian Mounds. Natural history and the reminiscence of carly days is interwoven in statements eoncerning
acrannento valley which are of doubtful truth acrannento valley which are of doubtful truth. The high knolls or mounds scatterci over the of the Indian mind or human hands for selfprotection in high floods. The formation of should be credital to the geological period past ages. Its sandy surface, undulating hard an, gradual ascent, embediled redwood trunks olen spaces, boulders and gravel mass, show
hature's handiwork. Probably the name Indian mounds originated by their locating on hem during migratory travels, and thus cscap ing from the sea of waters during its hig
stages. The early settlers on these mound could trace the war-paths and find relics of their abodes, and from this came the belief that
Business men think the loss by floods through out the State will in nowise be eqnivalent to the cffect of drouth which prevailed last year Having escaped the flood the city feels proud of rriving for spring trade, and again bnsy da
will return to Sacramento. GFo. Rictr.

Editors Press:-The follon
解 annot our tule onr farmers altention. Why ample of Egypt, where the inundations of the rast benctit, on cocount of the no injury, but o leposited by them? It certainly seems that the crops in the Sacramento meadows ought to specially pin aiter the foods have gone onf, moist just below the surface. With sufficient high grouud for the buildings and farmyard the proprietors might profit by the deposits of ower sides of the islands, would gradually raise the level of the tule lands. The records ear higher than ever before. From an account ately published, it appears that the bed of the iver is much more shallow than formerly, and this alone is cnough to raise the water more and more every year. At the same time the general
level of the whole valley must be gradually risevel of the whole valley must be gradually ris-
ing from the deposits brought down from the

## Haywood, Cal.

The Lesson of the Flood.
Entrors Press:-This scason is considered a proper time to revise our plans for reclaiming and protceting ovcrifowable lands. One con-
clusion is forced upon the minds of all, viz: hat we must not levec one against the other any more, but must have one general system for he whole sacramento valley. I would say fur ther, we nimst provide one system
In my cstimation, one very important factor has not been included in my reading upon this subject. The Strait of Carguincz is the only outlet for the accumnlated waters of all our
reatest rivers. A system of canals may save he upper and middle parts of these valley's, by hurrying the waters past them; but this will in
rease tho danger to the islands and low land bordering npon suisun las
I do not know the width of Caryuinez strait its narrowest part, but julging from the maps I have seen, it is not half the width of The papers inform ns that there has been no influx of the ocean tide through the folden Gat on acconut of the accumnlated waters in the an Francisco bay. If that happens where the
strait is one mile wide, much more will tho aters accumi
The present tlood arises mainly from the upper the Sacramento, Feather, American and San Joaquin all combine. When that time comes, anl come it may any ycar, the strait of Car quinez will not diselarge the accumulated
waters fast enongh to prevent a risc over the whole area of Snismn bay and its lowland suror ascertained by olservation, and dne allow.
ance made in planning a levee system for the slands and lowlands adjoining Suisun bay. for such study there this question for further discussion. I write
mainly to call their attention to what I believe mainly to call their attention to what I believe
demands very grave consideration. J. R. demands very grave consideration.
Auburn, March 2 d .

## Bermuda Grass.

Edirors Press:-Let me say a few words on behalf of Bermuda grass, in regard to which farmers in different parts of the country, and cultivating different soils, differ so widely
Few plants vary so much in accordance with the conditions of soil and elimate as does the Bermuda. Whoever has seen it only as turf former, blooming profusely at the hight of three or four inches, alparently without any higher aspirations, would hardly believe that it can he useful as a hay grass. Iet such is the case in the (iulf States, and I have seen it making a heavy math and hay very much liked by much disposed to bloom, and still less so when it gets out into the plowed ground, which it will dispute very effectually with corn or cotton it then forms what is known as "wire grass" in the cotton States, and scarcely one planter out of 10 will believe that this pest of cultivated estecing 90 much in his $h$ In other words, like só many
Forld, ther natural preference is for light ealcareous. It such as the "cane hills" and alluvial lands of Mississippi and Louisiana. There it forms highly valued natural pasture throughout the growing season; nor is it at all diffeult to get vation, provided you know low to go alout it. If you try to tarn it under like prairie sod, you get it out. But if you take it in the dry season, deeper than four inches at most, then let it dry matted stems and roots ward harrow out the burn, leaving the rest exposed on the surface,
you will sce no more of it. This, of course, presupposes a pretty loot sun and a light, fino have plowed deep enough to prevent the sun from thoronghly drying the furrow-slice, you will have no end of trouble. When let alone suplerticial and the grass can then be killed out by shallow plowing iu the dry season.
The Bermnda has proved to be a most valua sand washed from cultivated hillsides, ruined by shallow culture, that are so lamentahly and abnndant in the cotton states. It binds the shifling sand, soon forms anairable pasture soil on the snrface
I have made some trials of this grass in Calblue grass in the formation of lawns, since it requires but a fraction of the amount of water nceded by the latter to form a slightly green swarl. But I notice that it is ill adapted to our long, ary season, by reason of its habit of forming runners, whieh, in a climate having herc, the rapid drying of the surface while watering jrevents them from taking hold, and, after growing a yard or two in length, they die at lenst is the unsightly brown surface. rendered loose by liming and moderately
watered. Perhaps in sandy soils the result would be more favorable. But in any case, whenever it is desired to give this grass a good
chance, the soil should be calcarcous. When chance, the soil should be calcarcous. or hen not naturally so, a dressing of lime or mari
should be given. This will make the soil lighter and more retentive of moisture, thus giving the rummers a ehance to root
The sward formed by Rermuda grass is of a darker tint than that of blue grass, is shorter lent surfaco for crocuuet aud similar games.

University of California, Feb. 1 Sth, $18 \% 8$.

## Malva.-Its True Value.

Fditors Press:-A year ago I concluded hat I would sow an acre of malva on trial. I failed to get good seed, ouly a few stalks being the result of my effort. But the mamner of growth of those few stalks has given me an idea of its great value as a forage plant, and that great value consists in the fact that it raary, just the time when everything else here stops growing. Alfalfa is standing nearly still as regards growth during that timc; the three wild forages (our best native feed plants on the plains) do not get sutficiently started to furnish
iceel in these two winter months, but during jast this time the malva is making a prodiginus trowthier believe an acre of it would, during
Decemler anl Jaminary, make as much food for grazing stock as an acre of alfalfa will during
its most active growth in March and April.

fields and pastures, being natives, and therefore kinds. If some seedsman who has a chanee will make a business of colleeting the seed they will tueky blue beeome as useful, in time, as Ken Haywood, Cal.
[This is a point which we have urged upon several oceasions. There is a little being done in this direction, but not at all to the extent to which it should be done. The suggestion is pertinent and should be heeded.-Eds. Press.

## Horticulture.

## Borers in Fruit Trees.

Ebitors Press:-Having read a very inter esting article from the pen of W. B. West, of Stoekton, published in the Rural, some weeks sinee, a part of whieh referred to the fruit tree
borer (Terebella), I gladly give ny experience with the mueh dreaded pest. The borer is, perhaps, the most destruetive, dangerous and insiduous inseet that the hortieulturist has to contend with, especially in the warmer or interior vallcys of this State. The borer makes its
appearauee and begins its ravages mueh earlier in spring or summer in California than in the Northwestern or Atlantic States. On our arplanted 50 very fiue apple trees. They began to grow vigorously, and about midsummuer
saw one of iny trees drooping and wilting. and completely girdled on inside of bark, but no unusual appearanee on outside, exeept a little fine red dust on the ground. On further exam of my neighbors having lost nearly all of his, told me he was diseouraged, and did not thiuk our warm valley was alapted to the culltivation
of the apple. I planted again, and in the lat ter part of April or first of May found my trees
literally bestudded with borers. I lid as Mr. West advises, applied the knife, seored the trees most dreadfully, as their name was "legion." Subsequently I saw an article, written by an
experienced horticulturist of New York, giving his remedy for the prevention of the ravages of
the borer. It is as follows: "Take lye as strong as ean be inade from wood ashes; add a little soft soap to cause it to adhere to the tree;
the tree from the lower limbs to the ground, and let a small quantity soak into the ground, or remove the dirt, so as to apply the remedy
an inch or more below the surfaee of the ground.'
I have applied the above remedy for three years, and find it in ost effectual. I have scarcely
lost a tree since, or even seen a borer. Most persons are afraid to use lye so strong, but there
is no danger, not in the least, if not allowed to is no danger, not in the least, if not allowed to
touch the leaves or any tender branch just shoottouch the leaves or any tender branch just shoot
ing forth. It really gives vigor and vitality to a trec of weak growth. Our method of apply ing it is as follows: Take a stick, and score or
noteh it at one end; talie a woolen eloth, wrap it firmly, and tie with strong twine; dip in perfectly saturated, and woe be unto the embryo borer or larvax that may be lodged in the bark, for thereis a chemieal ehange effceted immediately, with which proprietors of soap faetories
are very familiar-the conversion of this pestififerous fat worm into a lump of soap.
Lye of the above strength will disor
Lye of the above strength will disorganize all animal tissue, and cannot be tonched with the hand in washing trees, and therefore will de-
stroy all insects and their larve which nay be stroy all insects and their larve which nay be merly killed many for me, seem not to rclish the bark any more, as they never touch them. Norlhoff, Ventura County.

Fruit Trees in the South-Wooly Aphis.
Editors Press:-Duriug the past two month I have traversed the greater part of Sau Ber nardino and Los Angeles counties. Every where, since the copious rains, I find evidences and barley thau ever before. Last week while passing through San Gabriel Mission I saw barley in all stages of growth. In one field men were sowing and harrowing in the grain.
In another not 40 rods distant was a field well up, while in a third, within three minutes' walk you find the grain all headed out waiting for the sun to ripen for harvest. Indeed, a consider The farmers are busy planting trees in every direetion. Orange, lemon, lime, apple, Japanese persimmon and other dceiduous The orange and the apple will bear off the palm for num-
bers. In liverside alone during the past year bers. In liverside alone during the past year year, 1 aan credibly infornued, over 60,000 have
alrealy been contracted for. In Los Augeles eounty they are pushing the tree-planting especially in the vieinity Los Angeles, Pasa would like $y$ who are planting apple orchards deseription of, and remedy for, one of the wors enemies of the apple tree, the wooly aphis
(Aphis lanigera). This inseet is not indigenous Aphis lanigera). This inseet is not indigenous introduced with imported trees yet in England it is ealled the "American blight.". It is th most inveterate enemy of the apple in the north of Franee and Germany. "It makes its appear erotehes and creviees of the brauches, which in eomposed of a great number of very minute
wooly lice that if allowerl, will increase with fearful rapidity and produce a siekly and diseased state of the whole tree. Fortunately
this insect is easily destroyed. 'This is effected this insect is easily destroyed. diluted sulphuri acid, whieh is formed by mixing three-fourth of an ounce, by measure, of the sulphuric aci
of the shops, with seven and a half ounces of the shops, would be rubbed into the parts a eeted by means of a piece of rag tied to a stic the operator taking eare not to let it toueh his washed with this mixture, the first shower will redissolve it, and convey it into the most minut creviee, so as effeetually to destroy all insect,
that may have escaped.'-Loudon's Magazine, ix, page 336. It is the more common practice
to destroy it with the use of whale oil, soap or lime wash.
I have
Fruits," by Charles Downing from "Selected Fruits," by Charles Downing, page 87. I have not seen anything of the ravages of this its pres ence in at least one large nursery, if prossible. Thoosands of trees have already
been sold and thousands inore may be scattere over the State this year, which nay or may no
contain the germs of this fearful seourge. It i well for all buying to be surc of the conditio of their trees and at the same time prepare for
the worst. Perhaps my opinion of a mau the worst. Perhaps my opinion of a mau
men capable of selliug sueh trees for gain, the risk of infeeting the whole State may not he worth the space it will take in your valuabl
columns, but surely no punishment short San Quentin is too great for such accurse
covetounsess.
D. W. McLeod.

## THE $D_{\text {AIRY }}$

Corn Fodder--Its Culture and Ensilage

Editors Press:-When, five years ago, an unusual drouth cansed the total failure of the hay crop in France, so much so that serious alive of stock through the long and dreary mouths of winter, we were told that fermented corn fodder preserved in trenches by the ensilage proeess not only did save eattle from starv ing, but at the same time created almost a re olution in the agricultural system of that coun-
try. This I must say impressed me more from is a frequent thing, and the suceess of crops very uncertain; aud although not being directly interested in the question, for I own no cattle kink, not even a gen at a glance what inmense profit might be de the use of this new fodder; indeed, if there is country that ought to be beuefited and made nich through this ensilaged corn lodder, it are far from being abundant, either at the tini that grass has all dried up or at that whe it is making its eariy growth.
where heat and moisture re countrie and regular that the beet erop, the great staple of the farm for eattle or dairy purposes, is al the giant forder, has entered the field as a rival to the beet. I will say then, that in a land lik ours, where the beet eamnot be cultivated ex eept in privileged plaees; where dust, and noth lag but dust is to be seen on the parched land all fodders, the one best adapted to our soil and elimate? The one to best answer our wants and needs, and in years of unusual drouth to even raising of stoek on a small scale?
That eorn might aecomplish all that, an more too, may be eonsidered by some as a merc many parts of the Stato, put the systen to test and make experiments tending to show what wc really have to expect froin that source? By
what I have read on tho subject in the I'Ress, I belicve that nobody has yet experimented on
fermentel corn fodder I throw some light on this most important ques tion, and give your readers a synopsis of the best manner of building "silos." After getting posted on ensilaging, I inyself tried the exper val variety, whieh I litained from Furope Chi
neasuring on the average 11 to 12 feet in stalks ized sill, 1 kept it for seed, whieh I here offer in small quantities, free, to any of your readers who will write for it. Taking all that preeedes is an introduetion, I will, withont any further remarks, give you as full a description of the
eulture and eusilaging of eorn as the means aud information at hand will permit.

## Yield by the Acre.

Corn, Indian eorn, or maize, may be appropritely termed the giant plant of the farm, as surin faet, often reaches to a hight of 12 to I6 feet, and its yield by the acre, while green, averages rom 50,000 to 125,000 pounds. The erops that come the nearest to corn are beets, with a yield of 50,000 to 80,000 pounds per aere; then lueerne, alfalfa, but only on "well irrigated" lands. It is true that when corn is grown to the above
hight, the stalk is hard and coarse, and this might look to many people as au obstaele to the altivaion poscs. But let me say that if the stalk is eut in is easily done with eorn cutters), by fermentation in the silos it gets softcned down, and is then readily eaten by eattle. This way the stoek or dairymau cau rely on a full erop withthe stalk, after fermentation, gets a great deal nore tender, and is ofteu served in that shape

What is the best variety of corn to plant for ensilaged fodder is a question that I must say has not yet been positively settled. In Europe ar the favorite varieties. Not that there is much difference between the two, both yielding about alike by the aere. However, some objecing too late a variety, and remaining green ate it is better to use Dent de Cheval seed, the
 quite as mueh as the former, the larger quantity of nutritive sulbstance it, contains makes up
argely for the difference. Not being at all posted on the various sorts of corn used in this state by our farmers, and not having experi-
mented on their respective merits, as compared mented on their respective merits, as compared with the two above ones, I cannot but adviso
your readers to experiment on the kinds of eorn your readers to experiment on the kinds of eorn
already in use in our State, and the Dent de Cheval and Caragua. Whether the two lattel vell. But anyhow the little seed I raised last ummer I will keep for distrihution among the rearders of the Press, so as to make more seed
for the ensuing season, and then try the ensil-
aging process, To rase perfeet sed the people
must be eareful to plant the corn for that puraing process. To rase perfeet secd the people pose far off from auy other corn to prevent the
mixing up of varieties. Now as to the general Nutritive Value
Of eorn fodder, as compared with hay, let us neadow hay, whieh is aeknowledged as cousti uting the very best fodder for the keeping and attening of eattle. It has been found by ex perienced agricultural ehemists that the azote or
 (fat and stareh). Takiug, therefore, 1 for unity hing nitrogen, we
hydrocarbonates with beet and corn to be as follows:


Te see from the above figurcs that corn conay almost twiee as much hydroearlonates as hay docs, and is, then, half less nutritive. On mmense yield by the acre, so superior to hay and beet, too, makes up greatly for the deficiency n nutritive substance. In Europe the question is, whether corn, as a fodder for stoek, is more
valuable to raise thau beet; with ns in California the question is quite different, almost one of counlear, raising in "large" fuantities a "cheap" fodder. Climate.
Corn is a native of America, as everybody knows. It is extensively cultivated for its sood In North and South Ancriea, Spain, Italy, ever, its culture extends further north to the older zone of our hemisphere. It is as fodder that eorn seems destince to ereate quite a rev.
olution in our agrieultural system, its advantn. ges being so many. To mature its seed well, corn requires inueh heat; thence tho reason why its cultivation was confined to warm climatos only, hefore the using of its stalk and leaves in a fermented statc as fodder, while now its cultivation and use are getting more general every
lay, and in temperato as well as in warin lay, and
countries.

The Soll.
The roots of corn are vigorous, though the rowth only in its maximum and evon average oil, moisturo, or the capability of tho soil to hold it well, is a fundamental condition of success. Corn grows splendidly in sod land, light drills, requires a soil free from stones. In dry

## Partary oz Hysiramar.

## 



Exorbitant Interest.-No. 2.
Editors Press:- $\overline{\mathrm{n}}$ the article of last week, We considered the anomalous conditiou of Cal
ifornia among civilized states, in that she has no usury laws, lut allows greedy capital to do its worst in checking enterprise, discouraging
agriculture and preventing inmigration, etc. I also alluded, in elosing, to the shameful fac that, through the decision of its judges, it exempts the great capitalists fron taxes on vas worded, as to double and twist a rope around the borrower's neak so tight as to suggest the handiwork of the devil and a lawyer in company. And yct, though our large capitalists State and receive more income therefrom than all the toiling farmers muited and pay no taxes thereon, they expect the State to call out its
militia and spend millions of treasure and river of blood to enforce their collections, if resisted
hy force. Think of it, hy force. Think of it, a man owns five acres
and lhe inust he taxed. But the nan who owns no real estate, hut has inortgages to the amount
of $\$ 5,000,000$, pays nothing. What cheek! What consistency. Let the ad vocates of this great injustice imitate the Athenians, and close
their ears and cry out for the space of two hours, "
I hold that money is property, that it needs State protection, that the more a man has the
more protection he needs and the more taxes he ought to pay for that protection. I hold further
that, in every age and land, accumulated capital that, in every age and land, accumulated capital
has heen wont to take advantace of the misfortunes of men, to demand ruinous and cruel rates of interest. To such an extent has this
been done that all States have been compelled been done that all states have been compelled
to pass laws punishing such cruelty and restrainto pass laws punishing such cruelty and restrain-
ing such greed, in order to protect itself and its
subjects. All usury laws have heen the out-come o
this necessity. Yet I attirm in few lands on which the sun shines has capital demanded and secured such immunities as here. Where else
so high rates? Where else not taxed? I shall so high rates? Where else not taxed? I shall
be asked what we want. I answer, we want the Legislature to pass stringent laws, punishing men for asking or taking more than from forcihle aud a crime, punished hy forfeiture Such laws have been passel and enforced in other States and they can be in California. My

1. The growth and trauquility and prosperity
of the State demands it. It is the duty of the of the State demands it. it is the duty of the
State to look out for the intercsts of the great masses, on whom it leans in hours of danger
and from which it derives its revenues. It is suicidal for the state to lose the confidence of
the nasses in its partiality for a few rich men. and him who can live without the capitalist and him who can live without work on his
interest vastly better of than the toiling nill-
lions who gain their bread hy the sweat of their brow. 3. Capitalists ought to submit to such restric-
tions, because in times of peril their vast and tions, because in times of peril their wast and
wide-spread possessions will demand corresponding protection. If we concede them this,
they ought to make concessions such as the public good demands
ize better retarns under the nisury ize better returns under the nsury laws than money at high rates brings on, sooner or later,
failures, deprciation of property, destroys
legitimate legitimate husiness, and, in the eud,' the usurer
gets less than he would had he ouly loaned at gets less than he would had he only loaned at
living rates. Ie. has killed, in his greed, the goose that laid the golden egg. So often we
have secn the "engineer hoist by his own petard." I maintain that the permanent interest of the londer, not less than that of the borrow cr,
demauds the usury law enforcing a living and let live rate of interest.
High rates of interest harden the lender's
heart aud help to make a monster of hime heart and help to make a monster of him. High
rates demoralize the conscience of the borrower.
How can he feel How can he feel much gratitude for one whose
greed is taking the luread from the mouths of his wife and children. It is hard to make a man, so used, feel bady condemneel for avoid.
ing every payment be can. In this he is
strengthened by the sympathy of the great strengthened by the sympathy of the great
masses, who never sleed a tear when the surer
is outwitted. is outwitted. The State should prevent, if
possible, such demoralization hy passing laws preventing both the usurer's wrong and the In my nett I
In my next, I propose to consider the oljec-
tions comnionly mado to usury lavs
San Bucnaventura, Cal.
Bristol.

The Tariff Question.
Enitors Press:-I am glad to see by correspondence in your paper of February 23d that tective tariff is an awful incubus on the Grang crs' interest. I grant that we get a better price for our wool, but it costs 11 dear in the end. We pay for it in our clothing, our taxes, provisions, books, seeds, and, worst of all, in labor that it is for the interest of New England or Pennsylvania, who fatten on the rest of the comntry. Our merchauts and storekeepers ar obliged to make larger gross protits to cover
the high salaries they are comnpelled to pay hcir employees to enable them to live in these capital is required, and the interest must be paid out of extra profit. The additional cost of the merchant's own living is calculated. By
the time it has been reckoned up by the importer, the jobber and tho retailer, it comes pretty heavy upon the consumer unless he is in
trade. Domestic goods pass in the same wa rom manufacturers to consumers, and raw material, such as wool, which are also protected.
They can only, in many instances, sell just bew the foreign article, and in others, naturally they dont care to. it is to be expected that
they should keep np prices as hong as possille,
I know. I should like the price of wool to be kept nip, but to have living and lahor cheap. farmers, for no matter what they may be taxed directly or indirectly, their produce must be sold aecording to the state of foreign markets.
I trust ere long the $G$ ranges will consider this matter seriously. But for "protection" the city of San Francisco would doubtless get a large
share of the Australian and New Zealand trade, hare now gostralian and New Zeatand trade, wools compete with ours, we ought, witl own, for at least we should be the freight ahear of them. Free trade would have a great influence on the Chinese question. Four hits a could command, and as their living would be very slightly affected by the priccs of groceries ry goods, agricultural implements, etc., I am
nclined to think the fall in their wages would onsiderably lessen the temptation to emigrate Why shoul
cheapest market and scll in thour goods in the land has found it to pay, Why should we not debt? Why should we not fund it? Uncle Sam can horrow at four or five per cent. Let
keep the foreign capital, pay the interest on it and be thankful to borrow at that rate, for eac dollar we pay off we could use at houne at,
much ligher rate in developing our country.
[We admit this communication hecause desire to be fair with all thinkers who favor us with their views. We trust, however, that the discussion will not he pursued. The subject is interminahle, aud the literature on it alone would fill a library. We have no space for
general reviews of the disputed question, although points of particular and present import ance under it are admissible. We believe the tariff should he discussed and studied by all for it-especially as all the arguments pro and con can be gained from pullished works on the subject.-EDs. Press.
Grasgers' Busisess Assomation.-The an
nual meeting of the Grangers' Business Association has heen adjourned until Tueslay, Apri ifornia and Davis streets. It is prer or Cal amend the by-laws so that the annual meeting
will come hereafter soon after the meeting of the State Grange.
Mes With Suarl Exes.-Few persons hav trong enough eyes to see certain planets with could see 14, and Littrow one who could sce 16 stars of the Pleiades, when ordinary people see nly six. Mr. Q. M. Wara, an ama scientific men for having viewed two of the four moons of Uranus with so small and simple a help
as a four-inch telescopc. In this country, Mr S. W. Burnham, of Uhicago, is noted for the
S. Whe the particularly acute vision which reveals to him
double stars, and astronomers of other lands often eall upon him to decide vexed questions relating to these stars.
Color Pundsess. - Color hlindness is stil
the subjeet of unuch investigation in Europe the subject of much investigation in Europe,
with somewhat surprising results. French railroad 1,050 men, from 18 to 50 y cars
of age, werc examined from July, 1853 , tober, 1576 , on oljects of color, violet, green, 10 per cent., mistook at least one of these colors. The errors inade : Concerning violct, 78 ; hlue
$50 ;$ green, 54 ; yellow, $14 ;$ rel, 10 . Twenty nine gave correct answers "after repeated hesita-
tions," and eight corrected mistakes afterward. Only 11 of the whole number were rojected fo
color llindness.

Agricultural Notes.

## California.

FRESNO.
Mieep INTEREsTs. - Republican, March 2 This is an inpprovement upon a year a goo, but this in January or February. There is little fat mutton at this season, and sheep owners
must arrance to feed sheep in the fall so that must arrange to feed sheep in the fall so that
there shall be no loss in flesh after the rains fall. One half.pound of hay fed every night to sheep green feed grows. There is very little call for green feed grows. There is very little call for
stock sheep, though noue are for sale at less than
on s2, and sone have changed hands at that price. The spring clip of wool promises to be both
clean and clean and long. leports from evcry part of lavocus. - We have had an abundance of
Pain in this section. The valley is rapidy rain in this section. The valley is rapidly
assuming its coat of verdue. The grain crops look promising aud farners are jubilant. The prospect now is inviting to those desirous on
procuring homes, pleasantly located and in a procurning homes, pleasantly located and in sections of (Government land awaiting a class of practical, energetic farmers. A considerable oad company; hut, should the company forfeit their chartre, ly not complying with the terms of the suhsidy, this land will, of course, revert
into the hands of the Government, thereby into the hands of the fovernment, thereby
making the inducements stronger to persons making the inducements stronger to persous
wishing to establish permanent hoines.- ResrIENT.

| ITEMS. |
| :--- |

Items. - Courier, Fel, 2s: One of our most successful corn raisers reports his experience the une, in rows four feet apart, and two feet in
he row. His hest crop the past year
 xhich he had cut a large crop of barley hay the
ame season. The corn then grew the hest of ny, but there is danger of frost before its maturity in some seasons. Ir. Thornton has tin-
ished the planting of 2,500 acres of wheat and shed the planting of 2,500 acres of wheat and 3,500 acres of barley. Most of the fields are
vell advauced, and are worth a visit for their well ad vauced, and are worth a visit for their
heauty and extent. The favorable season will reatly diminish the labor of irrigation, and this vill be a year of cheaply made crops.
eb. 23: Sinee it has been learned through sum will neutralize alkali in the soil, that article promises to assume a degree of importance not hitherto expected. In reply to an inquiry
as to where it could be obtained, the I'rofessor one of his lectures said to his hearers, "Seek, and ye shall find." Its practical value in the
reclamation of land depends upon the cheap reclamation of land depends upon the cheap
ness with which it can be obtained, and con sequently the question was a very pertinent
one. A deposit of gypsum has been discovered in Los Angeles county, but with this exception
ie have not, until recently, heard of any southern! California, where it is principall needed. We are iuformed that deposits o cypsum extend along the foothills from (al-
ente to
Long
Tom, a distance of perhaps 30 miles. As it has not been prospected as yet,
the extent of these deposits is not known, but it is helieved there is an abundance. The deroad, and can therefore be delivered for shipment without great cost. The probability is that the problem of how to oltain gypum
cheaply is to be solved here in Kern county As we have much land that would be valuable but for the presence of alkali in largo quanti-
ties, the discovery promises to be of decided importance to our own local prosperity, and it may turn out that the worthless alkali flat
will, in a few years, he as valuable as our best LOS ANGELES
Lange Farmers.-Outlook, March 2: The entura Free Prexs introluces a series of state
ments with the declaration that "in the matter of big farming, we do not think there is a county in Southern © California which can hold a candle
o Ventura." Then follows the names of the farmers and their cropping operations. J. K.
Gries has sown 1,600 acres to harley, and will put in eorn until further operations are stopped
y the rapid growth of weeds; John Cowelti y the rapid growth of weeds; John Cowelti,
1,200 acres, mostly barley ; John Saviers, 80 r acres of barley and 500 of wheat, and not ye thers liave tracts from 500 to 1,000 acres. That is pretty good, neighbor, but los Angeles county ave secded some 10,000 acres to wheat; Nadean has been running forty gang plows, and las over
5,000 acres of barley and a consideralle quantity of wheat ; another party, whose name we lave argotten, has 1,800 acres of barley on the Cen
iuela raneh ; Lucky Bald win has 4,000 acres barley and some wheat, and is preparing to seed who have seeded over 1,000 acres, whilc scores and scores have seeded from 100 to 1,000 acres MENDOCINO.
The lumbrer Outlook.- Lieacon, Feb. 16: the southern coast and report says that many Wharves and chutes from Trinidal to San Diego
vere washed away and what is left will need were washed away and what is left will need
repairing. Such being the case, there will be
large orders in the spring for lumber to rebuild
these damaced wharves and perlaps will be built to supply the demand of the
country that cannot fail this year to yiel
iner increasing demand. More schooners will he required for trausporting, and more men will be
required to do the work. Sufficient rains liave fallen and most of the mills have a good supply of logs on hand.

## MONTEREX

Edrrors Press:-In ordinary seasons this is rather a dry portion of the state, but $I$ am happy to say that we have an abundance of
rain this year to insure good crops. Seeding is nearly all done, and nearly all lup, a kood por looks splendid. (irass is getting cood and stock is doing splendidly. Indications for good times for farmiers and stock men were never better. J. M. Walker, Gionzales,

Acreage. - Inder, Feb. 21: It is estimated crop in Monterey county this year. The wheat yield alone is placed at $2,000,000$ eentals, and there wil he large quantities of barley, oats, etc. Jas. Niller, who came down from 23: From Tuesday, we learn that farmors in that part o the valley have been compelled to suspend op eratious, owing to the hoggy condition of the their horses, for, according to our informaut, it
would require at least two weeks dry weather would require at least two wee
hefore work could be resumed
A Large farmer- - Soledad Cor. Santa Cruz largest farmers in Solinas valley is puttin largest farmers in salinas valley, is putting in a
great quantity of grain this winter; he acres on the Chualar grant, known as his head quarters; 600 acres on the soledad rancho alout three miles northwest of Soledad, and
1,000 acres on the old Mission grant, on the west side of the Salinas river, opposite Soledad, making a total of 3,400
SAN JOAQUIN
Beactifyng tueir Homes.- Independent,
Feb. 22: The fact that orauges will thrive in the san Joaquin valley and adjacent foothills, having been satisfactorily demonstrated at va leut fruit, is stimulating many to plant orange trees this year. W. B. West, the nurseryman informs us that his orders the present season have been larger than any previous year of his
experience, and that a great many farmers are taking home a few trees to plant ahout their places.
Tне
ances it may be confidently predicted that the brain crop of the San. Joaquin valley for the There ion will be as great as ever before. hut the land has been in a better condition than usual to receive the seed as our furs have generally come to the conclusion that thorough tillage is most profitable. Comparatively little damage has yet heen done by the overtlow of the streams, and although the great works of
reclamation and irrigation that have been so vigorouly pro imigal the past six months, may he temporarily delayed general prospcrity among the people, canscd hy
if avorable season, will give them the means to continue tho prosecution of those enterprises which are nccessary in order to make this portion of the State permanently prosperous.
Socreract Timprr.-Independent: A couple on the outskirts of the city, weighing 20 and 2.23 pounds, respectively, were displayed at Browning \& Thompsons yesterday
Orasige Trees. - The cultivation of orange and lemon trees having proven eminently suc-
cessful in the ralleys and foothills of this section, W. 13. West, who is recognized as an authority on horticultural subjeets, has issued a circular giving a few simple directions for planting and cultivating them. He advises the planting of as large trees as possible, say from four to
seven years old, as the larger ones are hardier, and have the advantage of several years of growth. A sheltered position for the trees
should be selected, and they should be planted in sandy or loamy soil. Where not naturally
so the soil may be improvel by a compost of well so the soil may be improvel ly a compost of well
ootted manure and sand. large holes should be dug for them and goou drainage provided.
They should be transplanted after all dancer of cold and wet weather is past, avoiding the chill o roots, which causes them to lose their leaves
and ehcck their crowth. They may be safely ransplanted as late as June lst. To keep them growing well very little attention is required,
except to give them plenty of water, especially except to give
orange trees.
Cattle on. Float layd. - At the lower end of Rough and liady island a large gang of have heen at work for several days pumping out mous strean, and for direct action seem to be ahout the chealiest, and most effective pumps
ever invented the land is all dry and the gardeners are husy t work, fearing no interruption. Venice island
is entirely under water, the flood having is entirely under water, the fion having cone
over from the Sacranento after devastating AnIrus and Staten islands. Many cattlo wero removed. We were informed that there are
evcral bands of cattle still on the island, living u patches of floating sod land that have risel
rith the flood and have never heen suhmergell. with the flood and have never heen suhmerged
This is an econony of nature which is not easily
comprehended by those unfamiliar with the
peculiarities of fresh water tide lands of CalSANTia.
The Cheese Factory.-Advocate, Feb. 23 : Association, at their meeting last Wednesday, elected Henry Reeves and $\widehat{J}$. H. Ellis as sales home and foreign dealers, for which they re ceive a compensation of one-half of one per
cent. Mr. Davidson is to receive one-third of this allow
dividends.
The Outlook. - The rains continue to fall in ood just at preseut, the ground being thoroughly saturated with the 15 inches that have highest lands, and rendering a harvest in Santa Clara valley this year that will make the farmOctober 22d, we have had no less thau 42 days in which rain has fallen. Wheat uever looked more promising than it does now. In some localities, though,
for plowing, and will probably not be seeded
nutil late. But experieuce has ofteu shown late crops to be the best.
SANTA CRUZ.
Scotr's Valley.-Courier, Feb. 28: Up to ain, and the last yard or so might as well have been spared to bless some thirsty desert. It great deal of bottom land has gone to the bot tom, leaving nothing but the "ragged edge." orlorn at present.

## SONOMA.

Alexander Valley.-Cor. Healdsburg Enterprise, Feb. 21: The raiuy weather is be-
coming an injury to our farmers, but brings joy o the stock-raisers, grass is better, for thi season of the year, than it has been for some time past. Early grain looks fine and promises some damage to farmers by washing away land and fences. Knight's Valley creek has been higher this winter than for many years past.
Brooks' creek has been likewise, and its water have damaged the lands of Messrs. Chitwood Brooks Bros., aud others. Flood-gates and mall branches between Frank Bedwell's and Windsor.
Sheep Killing.-Petaluma Argus, Feb. 22:
Sheep killing dogs have become a Shcep killing dogs have become a great nuisance
iu this county, and their depredations have iu this county, and their depredations have
caused heavy losses to sheep-raisers. Some caused heavy losses to sheep-raisers. Some sheep are kept and kill them. A few days ago sheep are kept and kill them. A few days ago protection of sheep, etc., from dogs. It assesses
a tax of $\$ 2$ on each first male dog, in rural dis tricts; $\$ 3$ on every other owned by one person; and $\$ 5$ on all female dogs. Owners of dogs are
made liable in double the amouut for damages to sheep or Angora goats.
Notes. - Flag, Feb. 28: Reports from ranches in the vicinity of Cloverdale, go to
show that the increase of the early lambs will show that the increase of the early lambs will
be very light. Trouzelle wheat is being sown in Rincon valley, by Henry Weatherington, peed enough was raised last year from a pound package to sow 20 acres this year. We learn ranch near Cloverdale, last fall, there now remains but 300 , the rest having died from the
severe wiuter. The prime cause of the extra severe loss was the over-stocking of the pasture.
STANISLAUS.
The country-Grayson Cor. Modesto Herald: tivity seldom witnessed before. The farmers tivity seldom witnessed before. The farmers by putting in a great deal of grain in a ver
short time, and to givc you some idea of it short time, and to give you some idea of it, I
will refer you to Mr. L. A. Richards of this
place. That gentleman has between 15 and 20 teams at work plowing and sowing on an aver-
age of about 125 acres per day. J. R. McDonald's rain table says 11.64 inches for

## TEH AMA.

Esq., of Henleyville, was in 21: M. A. Jones, Esq., of Henleyville, was in town to-day. From him I learn that sheep men are losing quite material benefit, particularly to the farmers on the uplands.
VENTURA.
Full Fields.-Every acre of availablo land in Ventura county, not reserved for corn, has
been sowed with wheat or barley. The early grain is about 12 iuches high.
YOLO.
YOLO
ing well. If any complaint could beps are look-summer-fallow is too rank and liable to fall. DAMAGE TO The County. - Democrat, ke
28: Yolo county, as a county, has 28: Yolo county, as a connty, has suffered
greatly by the floods. Many of the bridges and
culverts along the pulic away. The the public roads have been swept away. The mountain roads are well nigh de-
stroyed, and great damage has bel
graveled

The Free Labor Exchange Report.
The Free Labor Exchange, established some months ago by philanthropic gentlemen of this city, continues to do good work in bringing em ployers and laborers together. The followin ist shows the transactions of the Free Bureau IN November last:
Male Department-472 orders received, call ing for 934 persons. The number of ticket issued was 994 . The engagements made num bered 735.
Female Department-796 orders received issned and 335 eugagements made.
The abo e numbers are subject to doubtfu railroad and about $10 \%$ faborers sent to the refund their tickets where not positively engaged. The nationalities of persons employed
range as follows: Americans, 285; Irishmen, 481; English and Scotch, 80; Germans, 185 Swedes, 21; Frenchmen, 17; Italians, 7; and th remainder Swiss, Belgians, Spanish, Mexican,
Austriau, Russian, Portuguese, etc. A Zeehandelaar, the manager, considers the positive ber compares favorably, considering This num depressed labor market and the prolonged inclemency of the weather, with the engagement for its last niscal yer Caliornia Labor exchang Nearly every order for male help is instantly filled, but Mr: Zechandlaar reports that only a small proportion of the denands for housc se vants get supplied. The laboring man who is
called upon to do the hardest manual labor for called upon to do the hardest manual labor for 10 hours a day, readily accepts work without board or lodging at \$1 a day, while hundreds o female servants refuse from $\$ 0$ to $\$ 15$ a mont The managcr of the Fxchange believes that the numerous girls of the Atlantic Statcs who andy been trained to work from infancy, aud
only receive $\$ 8$ to $\$ 12 \mathrm{a}$ month, should come here, receive $\$ 8$ to $\$ 12$ a month, should come
Five these Institution havo bcen distributed throughout California, and, from general indications and inquiries, the manager is assured that the cry o "No work" will stop very shortly, as ou
ests win
labor.
labor.
The cost of running the Free I is about $\$ 500$ per month, and there is money enough on hand to keep it going for about two years.
Siuc
Siuce the spreadiug of free lunch tables by the church ladies and Benevolent Society mana change perceptibly diminishes when the attendance becomes small.
Women patronize the Exclange as readily as
the men In their waitincroom the men. In their waiting-room they discuss
the best families, the ordiuary families, and the "noaccount" families. They regard the offer ing of good wages aud light work as the highest attribute of the noblest family. The merit of
San Francisco families is measured by that San Francisco families is measured by that
standard. Very few of the women care to go to the country. In all cases preferences i
given to the city.-Bulletin.

## News in Brief.

Trie Black Hills papers are begiuning to agitate gainst the Chinese.
Miners in the coal pits of England, are pro Tited smoking under severe penalties.
The low rates of coal have forced many of The Nova Scotia mines yank yied 8,200
The last year.
nubic air ordinance.
Mos of the churches in this city continue He work of relieving the poor.
HENow storms in Utah and regions adcent last month
TuE amount of fines and forfeitures paid into e Police court last month was $\$ 5,595$.
Officer Coprola, who was killed last week ft an estate worth about $\$ 7,000$.
There have been 1,000 polygamous marriages Salt Lake city the past year,
ITaLY, it is said, will not protect the Pope THE attempted division of Butte county THE attempted division of Butte count Fredreick W. May, accused of attempting poison ex-Supervisor Drucker, is thought to The pallic debt statement for February shows
decrease in the debt for the month of $\$ 2,250$, decrease in the debt for the month of $\$ 2,250$, Guy R. Skinner, aged 31, committed sui-
ide in this city March 3d, by swallowing ide in this city March 3a, by swallowin
chloral hydrate.
Wm. H. VAnderbiler lias not, as was reoorted, agreed to settle with those con
his father's will, paying them $\$ 1,000,000$ THE rainfall in this city to date is 30.6 inTHE rannali in this city to date is 30.6 in-
ches. To this time last year it was 9.87 , and he year before, 26.10.
DanLy wages of carpenters on the bonanza paid to underground miners.
Benjamin Franklin $W_{\text {ade }}$ ex-U. S. Senator from Ohio, died on the $22 d$ inst, of typhoid
fever.
TuE elevated railroads in New York city, are uearly completcd. Twenty locomotives of 14 ons each have beeu ordered for their use AFTER a lockout of eight weeks the English
miners have yielded to a reduction of $12 \frac{1}{3} \%$ of wages.
A kILL to restore the death penalty for murder in the first degree, has passed the Senate of

Tie Gentiles of Utah protest strougly against the proposed law providing for their disinfrau-
he prop
The French Academy of Sciences has long
offered a prize of $\$ 20,000$ to any one who may discover a pure for cholern any one who may
The Germans are well pleased with the appointment of Bayard Taylor as Minister to that ountry.
Archishop Wood pronounces the pretended restoration of a young woman to life by a Cath-
olic priest, at Mauch Chunk, a delusion. Despite the rains, the San Joaquin river is waters is becoming very difficult.
Boston has doubled its police force within 10 years, and many citizens want it still further ncreased.
Tre internal revenue receipts for Fepruary
were $\$ 500,000$ less than for the same month last
During the first two months of the year our tal treasure exports were $\$ 8,070,021$, against \$5, 080,409 for the same time last year
Concerning the effects of the Silver Bill,
trariety of views.
trariety of views.
The death, rccently, at Rome, is reported of
Enest Liviugston
Charles O'Conor
The Board of Mamiactures of Fall Liver
weeks iu March and two weeks in April.
In the brach of pronise case of Dickey vs. Titns, at Hamilton, Ohio, the jury
verdict awarding the plaintiff $\$ 6,000$.
crdict awarding the plaintiff $\$ 6,000$.
iver, says the Ute Indians aro acting in Snake river, says the Ute Indians aro acting in a very head of cattlc, and threaten to go on tho wa path when the grass comes.
The total amount of assessmeuts collceted by Hit mining districts, during the past 13 years, are $\$ 55,825,236$. Aggregato amount of dividends paid $\$ 108,915,690$, leaving a balance of dividend

Free lunches to the number of 1,831 were
iven to the poor on Saturday. Since the given to the poor on Saturday. Since the
weather has improved the attendance at the free lunch tables has fallen off.
Thee wages of stablemen iu the employ of the
The North Beach and Mission Railroad Company have been reduced $16 \frac{2}{3} \%$; that is, from $\$ 60$ to Reft Refugio Perez, a native of Mexico, 26 years Asylum. Cause, grief for the Napa Insane
Asyath of her husband. John T. ARNOLD, city marshal of Colusa,
was shot and killed on the 4 th, inst. by Dudley Shephardson, formerly District Attorney of Colusa connty.
nincent Westley, his wife, two daughters, nephew and Wm. Taylor were killed near
Rirh Hill, Keutucky, a few days since by a tornado.
IT is contended by a writer in the Chronicle truct done by Chinese labor. Barnes, through the cheek a few days sinee,
because, as slie says, he had, after squandering because, as slie says, he had, after squandering
all her property, abused and abaudoned her. John Runk, the young man who killed police officer Coots, has been sentenced to be hung on the 29th of this month. Only the Governor' pardon can now save him.
The wife of Wim. Fly
The wife of Win. Flynn, car driver, gave
birth to triplets last week, all girls, living and so much alike that it is difficult to distinguish
soll them. hemsly peris that portion of Dakota into a new Territory, to be called Lincoln.
It is proposed in London to do away with
steam fire engiues hereafter, and depend entirely on high pressure hydrants for water for fir purposes.
In Colusa county, Dr. Glenn lost 20,000 sheep by the tlood, and 6,000 acres of wheat. John
Boggs lost 2,000 sheep out of 15,000 and 600 The city police made 1,425 arrests during
February. Four hundred and fifty-two charged with drunkenness; 163 , violation of the cubi air ordinance.
The United States Treasurer hopes to pa salaries of members in silver next month. They will cach receive about 25 pounds of silve if he does.
Charles C. Nahl, the painter, died in this city last week. He was a uative of Germany,
came here in 50 , and was an artist of great
There is no foundatiou for the rumor of a hi uit to be commenced ly the wife of ex-Seuator Gwin to
In Madison county, Florida, is a family in which the father is 7 feet 4, the mother 6 feet
; two sons 7 feet 3 , and oue daughter is 7 feet inches high
A North Carolina paper prints what it calls 'a matrimonial guide,", iu which the names of
"the belles" of the various Sonthern States are sed with uncommon freedom.
The illicit distillers sell whisky to the In dians at Sitka. Under its influence the savages have become so dangerous that
threatening to leave the conntry.
Doring February the city Coroner investi gated 25 cases-1 of accidental death, 2 of man slaughter, 13 of suicide, 6 from natural causes, Parties representing various industries in
Penusylvauia strongly oppose the conveying of erude oil from the oil regions to Baltimore in pipes, as
industries.
Since July lst, San Francisco has exported 82 cargoes of wheat, embracing $3,131,000$ centaling
valued at $\$ 7,257,000$. During the corresponding period in the previous seasou we exportcd 277 cargoes of wheat aud flonr
r. Lowthian, the English expert, says the age of irou being passed, we have now reached the age of steel. Mr. Lowthian is probably
correct, only he has not spelled tho word quitc

Tue new King of Italy has put his sign man ual to the virtual abolition of capital punish ment. His first official exercise of sovereign
anthority was to sign the commutation of 85 death seutcuccs.

Cornell, koeper of a shooting gallery in Sacramento, shot himself through the head
dangerously, while attemptiug to illustrate how dangerously, while attemptiug to illustrate how
a man tried to commit suicide in his place a few nights befor
The cost per milo of buildiug railroads is, in ingland, $\$ 195,060$; Prussia, $\$ 105,115$; Unito cost is reversed In operating them the ratio I'russia, $\$ 58.45$; ; Unitcd States, $\$ 6.2 .50$.
The Monitor, Catholic organ in San Franmado in the cemeteries of that denomination, mado in the cemeteries of that denomination, populatiou in tho city.
in a freight car at the Union Pacific froight-house Welch, fatally injured by inhaling the fumcs. The car had in it 10 carboys of nitric acid for the San
Michael McAndreivs has been hung at Tiadersburg, Moutana, for tho murder of a man named Maver, last fall, with whom ho had traveled from the Black hills. The eviden
was cireunstantial. He made no confession

#  5 

To a Husbandman.


How the Widow Cummiskey was Won, The Widow Cummiskey was stauding at the door of her little millinery store in the Avenue
D, as Mr. Costello came along. Mr. Costello $\underset{\substack{\text { stopped. } \\ \text { siood }}}{\text { sta }}$
 wered the widow. "It's fine weather
 "Iskey, "but the winter's comin' athe tast, and
it eomes to all, both. great and small." it "Ah!" said Mr. Ceostello, "lutt for all that it doesn't como to us all alike. Now, here are
you, ma'an, fat, rosy, an' good lookin', equally you, ma'ann, fat, rosy, an' good lookin', equally
swate as a summer
winter reenin', a fall Iiplin, or a winter russet- hould "Arrah, hould yer whisht, now," inter-
rupted the fair widow, laughing. "Much an old
bachelor like you knows about andes or women bachelor like you knows about apples or women.
But coine in, Mr. Costello, an take a cup of But cone in, Mr. Costello, an take a cup of
tay with me, for I was only standin' be the doore, look in at the people lassin', for come.
pany sake like, and rin sure the kettle numst
have sung itself hoarse." Mr. Costello needed and he followed his hostess into invertation, roon. There was a bright fire buruing in the little Franklin stove, the tea-kettle was seud ing forth a cloud of steam that took a ruddy
glow from the fire-light, the shaded light on glow from the fire-light, the shaded light on
the table gave a mellow and subdued light to the room, aud it was all very suggestive of
"It's very cozy ye are here, Mrs. Cummis-
key," said Mr. Costello, casting a look of ap-
probation around the aynurtment. probation around the apartuncnt. "Yes," replied the widow, as she laid the supper, "it is that whin I do have company." some for you with only the cat and yer
cup o 'tay., "apure it is," answered the widow. "But yake a sate and sct down, Nr. Costello. Hep look at thim; they're splittin' their sides with Mr. Costello helped hinself and paused. Ite
Minghin looked at the plump widow, with her arms in
that graceful position assumed in the pouring out of the tea, and remarked, "I'm sinsible of
the comforts of a home, Mrs. Cumniskey, the comforts of a home, Mrs. Cummiskey, though I've none meself. Miud now, the dif.
ference between the taste $o^{\prime}$ tay made and
sarvel that way and the thy an 'atinghouse.
"Sure", said the widow, "there's nothin'
like a little home like a little home of yer own
never got marrit, Mr. Costello.
"I I "I was about to make the, same remark in
riference to yersilf, ma'am," answered Mr. Costello.
"God keep us," exclaimed Mrs. Cummiskey, "aren't I a widder wonan this seven year?", thinkin' I was why ye didn't get marrit again.,
"Well, it's sure I amm," said the widow, thoughtfilly, setting down her teacup and raiswasa better husband to any woman than lim that's dead and gone, heaven save an' rest his sowl, He was that asy a cliild could do any-
thin' with hin, and he was as humorsome as a thin witli hin, alld he was as humorsome as a
monkey. You favor lim very mueh, Mr. Cos. tello. He was about your light, an' dark
eomplected like you." complected like you."
"Ah!" exclaimed Mr. Costello.

Hie often used to say to me in his ban to a nan whin his wifc is a wilder?' manin' to a man whin his wifc is a wrider? manin',
you know, that all the timpttation an 'luxuries
of this life can never folly a man beyant the grave. 'Sure, Nora,' says he 'what's the wor-
ruld to a nan whin his wife is a widdcr?' Ab, poor John!" "It was a sensible sayin', that," rcinarked
Mr. Costcllo, as he hel ped himself to more fisl?
"i Inind the widow. "He knew everything to the last the widow. "He knew everything to the last, and
about four in the afternoon-it was 17 minutes
past five exactly, be the clock, that he died-
he says to ine, Nora,'
anys he, 'you've been a good wife,' says he, 'an' ''ve been a good hus.
gand,' says he, 'an' so there's no love lost betune us,' says he, 'an' 1 coull give ye a
char-ak-thur to any you could do the sanne for me where l'm goin,
says he, 'but it's casc e nual,' says hc, 'every do says he, 'bunt it's casc e pual,' says hc, 'every do
has his day, and some has a day and a half,' says he; 'and,' says he, 'l'll know more in a bit
than Father Corrigan' himself,' says he, 'luut
Int than rather Corrigall 'himself, says he, 'that
I'llue son now, says he, 'that I've allays been
true one cluurch,' says he, so I'tl not trne son o the church, says he, so sas, so
hother my brains about it, and he say
he, I lave ye in wood hands, Nora, for I live ye he, Tave ye iu god hands, Nora, for llave ye
in your own lands,' say he, 'and if annyy
time ye see anny wan ye like bettler nor me, marry him,' says he. 'Ah, Nora,' says he, for
the first time spakin' it solemn-like, 'Ah, Nora, what is the worruld to a man when his wife is widder? And, says he, 'Iave say for masses,
and the rest I lave to yourself,' says he, 'an I ueedn't tell ye to be a good mother to the ehil-
dren,', says he, 'for well we know there are dren, says he, for well We know there ar
none., Al, poor Jon.h. Will ye have auother
cup o' tay, Mr. Costello?" "It must have been very hard on ye," sai
Mr. Costello. "Thank ye, ma'am, no more."
"It "It was hard," said Mrs. Cummiskey; "hu
ime will tell., I nust cast ahout me for m own livin', an' so I got iutil this place, an' here
I am to-day." "Ah!" said Mr. Costello, as they rose from
the table and sated thenselves before the fire
"en'" "an' here we are both of 118 this evenin'".
"Here we are, sure enough," rejoined the "An' so I mind ye of of him, do I?" asked Mr. Costello, after a pause, during whicl he had gazed contemplatively into the fire
"That ye do," answerell the wido
favor him greatly, Dark complected an' the
same plisint smile.
there forninst me sittin' here, and you sittin vere marrit again,", said Mr. Costello, insinua ${ }_{\text {tingly. }}^{\text {iAh }}$
Aha, go way now for a taze that ye are, ex
claimed the wilow, mussing her clean apron hy rolling up the corners of it, seeiu' amy man you liked betther nor hint,",
said Mr. Costello, moving his ehair a little " "ILe said, said he," answered the wido "lum wher apron ""N ' plump white hands, "'Nora,' said he, 'if anny
time ye see anny man ye like betther nor me, "Did he say anny.thing about anny wa
liked as well as him?" asked Mr. Costello.
"I don't mind that he did," answered $t$
idow reflectively, folling her hauds in her lap.
"I suppose he left that to yersilf!" bursued Ir. Costello.
"Faith, an' I don't know thin," answered Irs. Cummiskey.
"D' ye think $y$
") ye think ye likc me as well as ye did forward to look into thic widow's eyen, which "Ah, go way now, for a taze," exclaimed the idow, straightening herself, and playfully He moved his chair still nearer and stole his "Niver her waist.
"Nver you thiuk I'm tieklesome, Mr. Cos
tello, said the widow, looking boldty at him. "ell me." he insisted, "d'ye like me as wel as ye did him?"
nuch I liked limost disremember now ho "uaturally embarrassed by such a question. his question by gentle squceeses of the widow' round waist, "d'ye like me well euough
meself!"
"Hear the man," exclaimed Mrs. Cum-
miskey, derisivcly; "do I like him well enough as himself?"
Ah, now, don't be breakin' me heart,

"It is," whispered tho widow; "an' there
"Glory bo to God," exclained the happy
ver, and he drew the not nuwilling widow to his bosom
A few moments after Mrs. Cummiskey looked "Hut, Jam-es, ye haven't told me yet how yaid liked yer tay." "Ah, Nora, me jewel," answered
tello, "the taste of that first kiss would toke away the taste of all th.
brewed."-N. Y. World.
A Remarkable Dons Story-A gentleman of the name of Ewing, who lives in Yernon county,
tells a remarkalle story of the sagacity of a dog tells a remarkablc story of the sagacity of a dog
whiel aecompaned him in his travels. While in the Short Creek timber, on his way to Joplin his doy jumped and canght the horse by the
lridle-rein. Mr. Ewing drove the animal off, ceins until the gentlentan concluded it must be mal. Under the impulse of the inoment he
pulled his revolver and shot the animal, which hicn ran back along the road over which he had come. In a few mmutes Mr. Ewing missed his He turned baek to find it, and after riding ahout a mile, not only found his coat, but his dead.--Jefferson City (N.Y.) Tribene.

A Fearfol Risk for Girls.-The pastor of
a church in one of our large cities said to me, achurch in one of our large cities said to me,
not long ago: 'I have otficiated at forty wedd-
ding sinee 1 came here, and in every ease, dings sinee 1 came here, and in every ease,
save one, I felt that the bride was running an
wful risk awful risk. Young men of bad halits and
ast tendencies never marry girls of their own sort, but demand a wife above suspic-
ion. So, pure, sweet women, kept from the ion. So, pure, sweet wonnel, kept from the
toueh of evil through the years of their girlhood, give themsel ves, with all their costly dower of bomanhood, into the kepping of men who, in
base associations, have learned to under-value all that helougs to them, and then find no repentance in the sad after years. Thcre is hu
one way out of this that I can see, and that is for you-the young womeu of the country-to
require in associations and marriage, purity for require in associations and marriage, purity for
purity, solbriety for sobriety, and honor for honor. There is no reason why the young nen of this Christian land should not be as virtuous as its the price they are forced to pay for vice, they will not pay it. I adnit with salness that not all our young woinen are eapable of this high there are enough earnest, thouglitful girls in tho society of our country to work wonders if faith fully arouscl. Dear girls win you help us, in
the name of Christ? Will you, first of all, be true to yourselves and fod; so pure in your in-
uer and outcr life that you shall have a right to ask that the young man with whom you marry
shall be the same? The awful gulf of dishonor is close beside your feet, and in it fathers, brothers, lovers and sons are going down. Will you help us in our great work?
The Formation of Hallstoxes. - Prof. Os borue lieynolds, in a paper recently read before the Manchester Library ant Philosophical so ciety, propounds a new theory to account for
the formatiou of lail, which is thus summarized by the American Manufucturer. He consilers that both the shape and structure of tho hail stone are such as would result from the larger particles of the eondenining moisture of a eloui
descending more rapilly than others, and consequently overtaking those beneath them. By
the combining of these particles a still greater velocity is
rapidity of rapidity of growth, of the stones. The shape of the hailstone is not that of more or less inniler
feet spheres, as appears on a cursory cxamination, but rather that of imperfect cones or pyramids with spherical base fron the war In proof of his theory Prof. Osborne has sucjecting a stream of fog against a small object. Here the cloud rises to neet the stone rather
than the stone falling through the cloud. In than the stone falling through the cloud. In
this respect the experinent would appear to bear almost equally well in support of the well-

Cleopatra's Nerdle.-The stean-tug Angla, with the Cleopatra in tow, passed Mar
gate on the 20th of Jannary in and Gravesend about 11 o'clock on Monday forchoon. At fravesend she was made fast the Shortly before onc she cast off and proeeeded
up the River Thames, her departure bcing witnessed by a large number of persons who crowded the pier and raterside, anotly hefore three oclock, and the Cleopkitra was saiely
placod in doek. The Cleopatia has not shipped the slightest quantity of water. The tug . 1 n glia whs navigated by Captain John Tracey, had a crew of 17 hands all told. The Cleopatra was manned by Captain Carter and five hands. Queen ictoria telegraphed to Mr. Clixon her
gratification at the safe arrival of Cleopatra's gratificat
Vcedle.

The Yocth's Directory.- The annual repori of this enterprise, to which we have frequently
alluded, shows that 10,365 boys, aged from 10 to 21, of all races and erceds, lave been placed in service-that is to say, $t, 130$ in town and when the citizens of Nan Francisco organized the Youth's Directory. During that time, also, incidentally been supplied with situations; thus making a total of 11,938 persons who have obthrough the agency of this Bureau. From factories, shops, stores, farins, and othcr places of industry, throughont tho state, letters are received commendatory of the youthful toilers
sent out. The work secms worthy of encouragehis ottice is $1+17$ Howard street, S.F. There is no charge to those asking or ohtaiuing help from
"An Abbr

says that at the Merionethshire Quarter Seas syons, the tector of LlanfairpwllgwnyllgogerLoeal Board with olstructing the high way near that town. Llanfairpwilgwyngyllgogertysilio gogogoch Bridge, and, the Neves adds, it may in terest our readers to known that the name we
have given is an abloreviation of the full title of the village.
Live and learn.- Vicar's daughter: "And
why did Aaron make a golden calfs" Sharp cause he thadn't got enough gold to mako a

## Evenings at the White House.

The President and family receive informally the evening, sometimes in the red room and hy those made hy intimate personal friends, ance to call in anted through their acquaint in the library arecial manner. The cvenings eultivated men and women gather in littl cheerful a partment, and wit sparkles and anec dote enlivens frequently disappears. He has a private library where he retires when any gentleman preseut wishes to speak with him on matters of policy or as unruflled as if the reat sea of public opinion had settled into a perfect calm. Mrs. Hayes entertains her visitors in an easy, courteous, cordial manner, moving among them with Great grace and seattering pleasant words, whole domestic life of the President's fate the Little Fannie, the only daughter, a bright child of nine years, the pet and favorite of all who ing with my little lacly," remarked Mrs. Hayes, with a smile, "as I found her growing old too fast for her years. We serve her dinner in he The which she esteems a high compliment. The private dining-room of the President ments which is the reat main foor of th White House. The meals are breakfast, lunch and dinner, instead of breakfast, dinner and tea, as in the time of Madison. No unusua
forms and ceremonies are observed in the service further than those of any gentlewoman' table. The hospitalities of either lunch or dinner are frankly tendered to any familia guest who may chance to be ealling at the speci-
tied hour, and not infrequently accepted tied hour, and not infrequently accepted March.
Mhlions of Stofen Money-The thirteen lift ompanies which have collapsed since that scr ceivers. There is not the least probability tha any of the baker's dozen will ever get a fresh
start. Each proved so utterly rotten when day light was let into it that it could never again ment gave permission to go alead. The whole latel) standings- who attend the fashionable churches, and think it way be good thing to take Not having the tigures at hand just now, I can not say exactly how many millions these re
sprectable, religious, suffrage-restriction gentle meu have stolen, or permitted to be stolen, from the coming policy holders, who were crenous no trifle. The liahilities of the Contiuenta fout up, $\$ 5,300,000$, and the receiver thinks they may thedollar. The lialifities of the Security amount armotho ser paid. It would not be much out of the way to put down the aggregate stealings, $\$ 15,000,000$. A larce part of this sum was a uuestionbly A large part luas sum was unhut another large part was certainly spent by Hartjorl Times.

Too UGLy to Live-"One day,"said Ir. Lin coln, "when 1 first came here, 1 got into a fit of musing in my room, and stood resting my
elbows on the hnreau. Looking into the glass, it struck ine what an awfully ugly man 1 was The fact grew on me, and I made np my mind It so maddened ne that I resolved, should I ever sce an uglier man I would shoot himat sight present) came to town, and the first time went round the, streets waiting for hinn. He soon came along. 'Halt Andy,' said I, pointing my to shoot you.' 'Why, Mr. Lincoln, what's tho oath that if I ever saw a man nglier than I am, so make ready to die.' 'Mr. Lineoln, do you 'Well, Mr. Lincoln,' replied Andy, deliber ately, and looking me squarely in the face,
'if I an uglier, fire away!" "-Harper's Maga-

A Case of Mote and Beam, - Our London took us to task for using the caption "women farmers " instead of "farming women." Phy venera heal thysels lieals a paragraph "A boy farmer's work," which is not a case of outrage and cruclty at all, but
of a bright farmer boy.

A litrle boy who was nearly starved by a
stingy uncle (his guardian) with whom he lived, meetiug a lank yreyhound in the street, was asked by his guardian what made the dog so
thin. Aftor reflecting the little fellow replied; "I suppose he lives with his nacle."


Taste in Jewelry.-Taste, if slowly, is really improving, says the British Trude Journal. The
gaudy mixtures of colored gems in jewelry are gaudy mixtures of colored gems in jewelry are is being more generally recognized; the theory
that a jewel should have but one prevailing color, that a jewel should have but one prevailing color, in jewelry are less florid ; they are simple, and generally have a geometric basis. The delicate wire decoration, now often adopted, is on a good classic plan, and the spaces well arranged.
Lastly, aud, perhaps best of all, we are no longer getting all our best designs from Paris. English
jewelers are beginning to have ideas of their jewelers are beginning to have ideas of their lead of the modern Athenians. It has been much remarked lately by visitors to France that
British styles of jewelry are beginning to preBritish styles of jewery are beginming to pre-
vail there, in place of the peculiar Parisian style which has so long held if the Birminese things are healthy signs; and if the Birmingham jew-
eler is only true to himself and to his calling, if he resolutely sets his face against mere cheapness and sham, if he regards his manufacture as an art and not as mere comurercial speculation, if he insists on excellence in finish and style, ,he need not
fear to lose his position amid all the foreign comfear to lose his position amid all the foreign com-
petition that can assail hiun ; but he will find his wares annually more esteemed in the markets of the world.
in his Anecote or Liscolv.-Noah Brook's Scribner tells the following: ${ }^{\bullet}$ While the ceremonies of the seond inauguration were in pro-
gress, just as Lincoln stepped forward to take gress, just as Lincoln stepped forward to take
the oath of office, the sinn, which had been obscured by rain-clouds, burst forth in splendor. In conversation, next day, the President asked, "Did you notice that sunburst? It made my heart jump." Later in the month, Miss Anna
Dickinson, in a lecture deliverod in the hall of the House of Representatives, eloquently al
luded to the suuburst as a happy omen. The President sat directly in front of the speaker and from the reporters' gallery, behind her, i had caught his eye, soon after he sat down.
When Miss Dickinson referred to the sunbean, he looked up to me, involuntarily, and I though his eyes were suffused with moisture. Perhaps they were, but next day, he said, "I w,
Miss Dickinson saw me wink at you?"

Culugre Needed by Editors.-That impor tant results can be arrived at in chemistry and
the arts dependent upou it, or in law, or iu medicine, without profound learning no one pre--
tends. In literature, too, which is essentially progressive, and the influence of which now ex higher education is of the utmost importance It is true that one may edit a newspaper and far as the press is a blessing and not a curse, in ofar as it furnishes its readers with sound
views, accurate informatiou and healthy amusement, instead of pandering to their appetites for its conduct ability, but every and which knowledge


## Young Folks' Column.

## The Cock and the Sun.



The sun, as he quietly rose into vicw,
Looked down on the cock witb a shic

What a Dull Boy Came To.
" How many children have you, sir?"
"Better than a dozen," said my father, smiling and rubbing his hands.
"Is it possible !" they would reply, "what a family, 13 children

Why, no," said my father, "you mistakeonly 10 , which I presume you will think better than a dozen."
My father was inclined to look upon the dark side of life, but my mother was an exceedingly practical woman, full of life and euergy, an
excellent butter and cheesc maker, while she excellent butter and cheesc maker, while she
could cure the best hams and bacon in the county. She was always busy, and consequently had no time to be gloomy. My father used to
trouble himself about one of the older boys who trouble hed was atupid. He used to tell his dis-
he fancied was ste mal forebodings to my mother. al forebodings to my mother.
"That boy will never make anything," said he. Ask will stare at you as though he never
and
heard of a pitch-fork in his life. Tell him to heard of a pitch-fork in his life. Tell him to
go after the cows, and you'll find him two hours after sitting on the fence staring at vacancy."
Therl he would shake his head and say "Oh Then he wonld shake his head and say, "Oh
yes, Dan will have to be provided for all his days."
My
My nother exercised the most sense in this matter, I think, for she made the best of the young man's laziness, as we all called it. Sole
used to put Dan, when he was quite a young man, to churning, and she used to put me, a mere child, as I was one of the youngest chil
dren, to watch him. She used to Harriet, you stay around the dairy, and when Dan stops you start him up."
Tum, tum, tum, went the paddle of the dasher for about 10 minutes, then it would slowly stop and the churner would be lost in
thought. Then I would remind him, but a few minutes after he would stop again and bring out from his pocket a small Euclid, while again I
would faithfully give him the necessary admonitions.
My father kept several hundred sheep, and after the shearing, the wool was stored sometimes or months in the large wool roon, built
for that purpose, next to the granary in the brick
"Where is that boy ?" asked my father. "It is not much that I care for the work, but it distresses me to think of his growing up in such
indolent habits. Hat, go and fiud him, and tell him to go to work cutting turnips.
I was not long in accomplishing this errand.
Behind the immense pile of fleeces I could al ways find my gentle brother Dan, not whittling, nor whistling or wasting his time (as we all know now), but diligently pondering over a large vol-
ume, which he had borrowed from the village ume, which he had borrowed from the village
schoolmaster. It must have been a book on schoolmaster. It must have been a book on
chemistry, for there were mysterious words and characters in it-gypsum, silica, alumina, car-
I used to look at him, then at the sigus, and think to myself, I don't know, but there is certainly something queer about the boy. Why don't he read some intcresting story book, or
borrow Shakspeare, like my older sisters, and read that on the sly as they do. I had learned
a sense of honor from the boys, and I never told a sense of honor from the boys, and I never told
my father of the readings (in their various charmy father of the readings (in their various char-
acters), either of my sisters or my brothers. think there was a mistake here; $m y$ father was an ntelligent man, and ir he had taken the trouble
to look into the different dispositions, tastes and habits of his children, my brother Dan probably might have been encouraged in his peculiar propensity to investigate
chemistry and science
But to cat the story short, my brother surprised my father one day by showing hinn a letter from a well-known professor in an experi-
mental college, offering him a salary, which enlarged my father's eyes in more senses than one. It was Dan who became the comfort of
my father's declining years, and who was nade my father's dectining years, and who was nade
the administrator of the estate. It was Dan who closed my father's eycs, and received the dying charge to help my mother control the sisters, a commission most faithfully fulfilled.
Mrs. T., in American Cultivator.
A lutcle boy asked his mother to talk to him,
and say something funny " "How can ${ }^{2}$," she askel, "don't you sce I am busy baking these pies?" "Well, you might say "Charlie, won't
you have a pie?' That would be fumy for you."
Cockney Zoolosy.-Prococious young lady
"Law, ma, here's a heagle." Mamma (re-
"Law, ma, here's a heagle," Mamma (re-
prochully) "A heagle; oh, you hignorant
irlt Vy, it's a howl"" Keeper of the menago girl
rie (res
'awk."

Good Heqlity.
My Liver.
What makes this world so drear and sad?
Why an I tever, thever glyd ?
What is it drives me nearly mad?

 Iy liver!


 he ills to me prescnt ${ }^{\text {M }}$ y liver !

- Phrenological Journal.
Cure for Burns
Glycerine, which may be considcred the tration to a most rcmarkable degree; it peneit is rhe solid bone. Being thus peuetrating, very best application for all feverish sores, for of penetration and want of evaporability; the first and highest value of any poultice is its capability of keeping moist for the longest
time; no one ever thinks of a dry poultice glyeerine keeps a part moist longer than an mixed with an innoxious dry powder, calle sub-nitrate of Bismuth, so as to make a thin paste or poulice. 1 t is one of the very best ap
plications known for burns, whether in child ren or adults, giving an almost instantaneou relief from suffering, by its entire exclusion of
the air and by its moistening, hence cooling the air and by its moistening, hence cooling, cess, always safe, simple and efficient. A few cents will buy half a pound of it at auy goorl
drug store, and every family should have some drug store, and every family should have some
at hand, in a bottle, plainly labelled, witk a bottle of glycerine at its sile

Simple Remedy for Cindere in the
Persons travcling much by railway are subject to zontinual annoyance from the flying cinders. On getting into the eyes they are no only painful for the moment, but are often the
cause of long suffering, that ends in a total loss of sight. A very simple and effective cure, i within the reach of every one, and would per-
vent much suffering and expense, were it more generally known. It is simply one or two grains without injury or may be placed in the ey and shortly they begin to swell and dissolve a glutinous substance that covers the ball of the eye enveloping any foreign substance that may
be in it. The irritation or cutting of the membe in it. The irritation or cutting of the men-
brane is thus prevented, and the annoyanc may soon be washed out. A dozen of these
grains stowed away in the vest pocket may
prove, in an emergency, worth their number in
Foreign Bodies in the Stomach.-L'homme a la fourchette, so famous in Paris a year or to dergoing imprisonment for being unable to re store a gold ring which he swallowed, being to the prosecutor. He is being treat-
ed by the visiting surgeon of the jail with the view of inaking him disgorge a large steel Al bert chain and a commou brass ring. The chain
can be distinctly felt at the bottom of the can be distinctly frit at the bottom of the
stomach, and the prisoner states it is now nine months since he swallowed it, and it is the only one he has had any difficulty about. The jail
or has a collection of objects, such as Alber chains, penknives, and riugs, which he has procured by making him vornit by emetics. The prison
three.
Coffer an Antidote for Strychnia.--In a foreign journal are given the details of some ex-
periments made by Dr. A. Lelli on the antidotal power of coffee against strychnia. The expcrihaving met with a case in which a large dose of strychnia was admimistered in coffee without fatal consequences resulting. The animals employed were rabbits, and by comparative trials he tound that a dose of five centigrammes proved fatal in a short spacc of time; when the same in a larger dose was given in a very strong in acted as a complete antidote in preventing the acted as a complete antidote in preventing thi poisonouss effects of the strychna, or that
materially diminished the violence of the action.

In-Growing Toe Nails.-Theso aflictions are a source of excessive discomfort and sometimes of almost insufferablo pain; formerly the pincers and drag the whole nail out, but now a prompt and panless cure may be cffceted
gimply by inserting the dry sesquichlorido of
nin iron betwoen the nail and the flesh and powderbandage

## Domestic Economy.

## Coffee-Leaf Tea.

The prepared leaf of the eoffee plant yields
n infusion which is said to be deficient neither an infusion which is said to be deficient neither in flavor or in stinurating properties, and in is
a fact thatin Sumatra, and indeed throughout the whole Fastern Archipelago, it is preferred by erry. The price of prepared coffee leaves in berry. The price of prepared coffee leaves in
Sumatra is about $1 \frac{1}{2} d$. per 1 lb , and they could be imported and sold in. England at 2d. with fair impoited and sold enuneration to the planter. Thcre could be no great risk in sending a trial consignment to
this market for there are always curious buyers on the lookout for new products, and if the article happens to hit the public taste a great
trade in it would undoubtedly be opeucd up. At anyrate we throw out the suggestiou for what it is worth. A correspondent, who has a China teas are cot what they poed ted out that he thinks that if it is their destiny to re, and the next nost suitable invader to fill up the to the opinion of all those who have tried it, the infusion is pleasant, very gratoful, and invig,
orating; which is very much more than can be said for the vast bulk of teas from Clina, or or mate as it is gathered and made at present. If found superior, it would lead to a change in abroad, for at present the pruning knife is freely used, so as to obtain as large a crop of berry
per acre as possible (in the quickest time and per acre as possible (in the quickest time and and unlike the tea shrub, with which a large crop of leaf is aimed at. It might happen that coffee tree for its leaf than for its berry.
Potash for Rats.-A writer to the Rural New Yorker says: My method of ridding myself
of rats in the cellar or about the house is to take quantity of refined potash, partially pulverize a quantity of refined potash, partially pulverize
it, moisten it with water so that it will form a sort of paste, and daube this about the botton of their holes or runways, so that they are com-
pelled to step in it in entering the premises. I have practiced this method for several years
with very satisfactory results. If the first application is not sufficient, it can, of course, be repeated with but little trouble or expense, and I ann confident of favorable results. Such, at least, has unitormly bcen my experience since
I first adopted the method, many years since. The theory is, the rats step in the moistened pot-
ash while eutering. Its canstic nature prod lice a smarting sensation in the feet. He at onc proceeds to lick his feet to alleviate the pain. tion in the mouth. He is compelled to renew his application in going out--result, he does not care to renew his visit, and probably imparts sance is at once abated. 1 prefer this method to the use of phosphorus, or any of the "rat
poisons" recominended, as it is not always safe to have the latter around, and we have no dead rats left in the walls or other out-of-the-way
places to infect the air with their offensive places
A Cieap Hangivg Basket.-Crochet a little saucer-shaped mat in red wool, loose open
work, and place inside a saucer, soup-plate or work, and place inside a saucer, soup-plate or
cover of an old glass butter-dish. Place in it a large sponge, with bird seed and a few hemp
seeds spriukled through it. Cut a slit in the top of the spouge and insert a hyacinth bulb. Now suspond the hanging basket by four rea the top. Then fill your saucer with water and wait patiently for a few days, and you will have just to of ember it it will make you happy Jone the way of all spars ater the sponge has less expensive hanging basket. Tako a turnip or carrot, cut off a slice from the top and hollow hollow with water aud hang up the turnip shell ly threc cords. Very soon the green sprouts
will appear and will grow almost like Jonah's gourd, curving upward in long, beautiful wreaths. When one gets too old, it may be replaced by another you had started a few weeks
later in the kitchen. It shows. us how much beauty and real poetry there is in very common-
 away for something lovely to delight both ey

Baked Ox-heart.-Clean the heart thor oughly; stuff it with the following force-meat:
One onion chopped fine, a tablespoonfnl of chopped parslcy, a saltspoonful of powdered saye or thymo, a littlo salt, half a small loaf o bread; mix thoronghly, fill the leart with it ace bake an hour in a good hot ovch, bastion it anll, when with tho hesoning it well with salt and popper. Scrve hot, with plain boiled
potatocs, peeled and baked in the pan witl the protatocs, pecled and baked in the pan with the
heart.-Misx Corron.

Orangie CakE.-Three eggs; one cup of su-
carc huttor the size of an egtr one cup of flour gar; buttor the size of an egg; one cup of flour
onc teaspoonful of cream-ot-tartar oute-half tea spoonful of soda dissolved ir a tablespoon
ful of milk; bakc iu three layers; put be-
tween each layer the whites of two beaten ege tween each layer the whites of two beatenc eggs
with gratod rind and juice of one orange and
powerel sur powered sugar.

## PACIC RUBGLL ,

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Ifutchison, Oakland, Cal. Earlicst Tomatos Ilutchison, Oakland, Cal.; Earliest Tomatoes Kuown,
B. K. Bliss \& Son's, New York; Thoroughbred Bulls,

## The Week.

This weather has become so depraved, that all attempts at reformation are of no avail. As
with the man who forswears tobacco, aud whose with the man who forswears tobacco, and whose
pledges quickly end in smoke, so this weather,
for the moment clear, soon lapses into the mel for the moment clear, soon lapses into the melfloods of tears. Again and again have the hillside farmers around the bay put the plow iuto the
mellow upland, and looked forward to soli I days of sunny, profitalle labor. Again and again
have the drenclied mornings consigned the have the drenched mornings consigned the
horses to the pasture and the men to the grocery, while the plow rusts in the furrow and the sea.
son flies none the slower for it. son flies none the slower for
How swift the transition
California. A few months ago we deptored in California. A few months ago we deplored the
drouth and apprehended its repetition. Now we pray and ery for clear days; aud we do well
for there are places in the State, where full six feet of water have fallen since last Oetober. Nor could such a fall be without its injuries.
Besides the losses from floods and overflows, Besides the losses from floods and overflows,
from ruined roads and bridges, there lias come in the northern counties, where the weight of
rain has fallen, a severe fatality among the stock rain has fallen, a severe fatality among the stock
which dwelt afield unsheltered. Many a floek master has lost all the increase of his flock, just and the market for the stock had doubled yalues And yet all
And yet all these drawbacks will seem small indeed after we are fully launehed upou the
prosperous tide of a fruitful year. Recuperation prosperous tide of a fruitful year. Recupcration
and restoration will be quick and general, and greater good will consign minor evils to the called to mind.

Rank Growth and Crusted Fields. There are two themes on which conditions call for timely comments. They arc diametrically opposite in character, and call for diverse treatment. One must have for its object to re-
strain too forward grow th; the other to promote healthful action in the plants.
The copious fall of water, and the general warmth of the air during its fall, have fostercd growth of grass and grain which no oue has this State. From many sections this condition has been reported, and in some it has goove so
far that early sown grain has alrealy fallen in
matted matted masses, and if left to itself would result sufficient heat to bear upon its suicidal luxuriance. In such eases there still remains a chance to the farmer to profit by the growth, by put-
ting in the plow and burying the wealth of vegetation bencath the surface. It is so tender
and succulent that it will speedily decay, and, and succulent that it will speedily decay, and,
cven in localities wherc more mature growths would rot but slowly in the soin, this fresh and a tinuc of the year, too, whenn moisture will be retained near the surface in a abundance, both to turn the crop into a fine fertilizer and to foster
a new seeding which may be thrown upon it. The excessive supply of feed, and the reduced number of hoofs, in most parts prevents this rank growth from having much, if any, market-
able value for stock, and it will now be placed where it will do most good by turning it under. There are other and more numbrous instances stage, but where the grain is rushing forward upright and strong, but too fast. It has been
slown by experimpee both in this State and elsewhere, that the grain may be held back, the plants strengthened and indnced to seud forth multipliel grain-bearing stelus by eropping it
close at this point in its growth. More than a month ago, this fact was brought to memory by
our correspondence and by quotation from some our correspoindence and by "uotation from some
of our well. informed intcrior exchanges. In many lucalities conditions still warrant the
practice. We have been told that slicep, which are most available animals for fceding down over-rank grain, cannot be had for this pur-
pose, because feed is so abundant that shep-
herds herds find no object in accepting every free feed upon the grain fiehlds. Then, too, shocp
are too few to reuler the wide service which is required. The recourse which remains then is
the mowing machiue, and the promise in inowthe mowing machine, and the prounise in now-
ing too forward fields is not only the saving o
the ing too forward fields is not onl the saving
the crop, but the returnu of an increased harvest,
which will of mowing Wore than pay the increased expensc was under diseussion at a meeting of intelligent farmers in Colusa county, last year, and the opinion and experience related was something
in this wise: One man mowell a part of his grain after it had all jointed and was falling, and at harvcst he got several bushels an acre
more from the cut portion than from the bal anee of the field. Another man cut his wheat for hay arter the kernal was formel, but while
the stent was still green, and he headed abont six lushels per acre from what shot up even
after the late mowing. The gencral point was concurred in, that there is no danger in mowing grain while the ground is still moist for growth,
and that cutting, even after the stem shows its and that cutting, even after the stemn shows its
ano
joints, has resultel in increased yield of grain. This experience of practical men may be of
much value to many at this time. nuch value to many at this time
The sccond of the theme
The sccond of the themes which we take up for eomment is the necessity which now exists
on many soils to break up the crust which the first few warun dry days will fix upon the sur.
face, On sticky, close soil like our adolec and red clay, the heavy rains have beaten the surface layer into a solid condition whicl the beaten will soon harden until it forns a tight
fctter around the plant stems and blades which now pierce it. To foster farther this growth this
crust must be broken. This is no new thing, crust must be broken. This is no new thing,
nor do we claim any right of discovery in it,
int but it is a cimcly word which ealls general attention to it. Although the value of the prac-
tice of breaking the crnst is unlisputel, there
have been erroneous ideas concernin why it was benefieial. The merne fact of laoseniug the soil surrounding the plant is but a part
of the advaitage. It was formerly believed and clained that breaking this crust was to enable the soil to absorb moisture from the atmosphere, but this has been disproved by the
demonstration that the soil does not absorb demonstration that the soil does not absorb
moisture from the atmosphere except in fog
and dews. and dews. The main value of breaking the active through sueh a crustation wrof. Johusan, expresses it, a shallow stirring of thc soil after just above the oil. Whent soil is erusted it
only ned only nceds cultivation enough to break this
crust; and deeper work which crust; and deeper work which throw up the
soil to greater depth to soil to greater depth to the action of the air has This nay not seem so much of a considerater. this dreuched year as on less gencrous seasons, so far as the loss of water is con-
eerned, but there is another reason why only, shallow work shoutd be done, and and
that is beeause heavy soil like elay, whon turned up wet does not crumble, but beeonese more
coupaet by the pressure of the plow, and assumes a most fatal and rebellious elaracter.
1 is a fortunate fact, thoon,
working which does not destroy the growing
grain is just what agrees best with the preser-
vation of vation of moisture and the best physical condi-
tion of the soil. The tool to acconuplish the tion of the soil. The tool to acconplish the
desircl results is the harrow with slarp teeth, which completely scarifies the surface, liberates the fettered plants and yet uproots but few of
thein, and does away with evaporation, which, as we have said, is rapid throughoration, whatd, baked the harrowing They han to fear the rew wide experience to be very henefifial, and to have re-
sulted in increased harvests. The subjcct sulted in increased harrests., The subjcet is
certainly
one which should receive certainly one
crusted fields this year than ever before, and any who have doubts about the wislon of tho pry harrowing a part of their fields and noticing by harrowing a part of their fiedrs and noticing
elosely the growth upon the differently trated portions.

## Hard Milking Cows.





This remedy, in the hands of a careful opera-
tor, as we know our correspondent to be, aften very valuable and salutary in its effeets, mind that there are "llard milkers" produeed from differcnt ealnses, and it is sometimes just as effective to use a geutler instrument than the knife. We can easily sce how the knife in the hands of a careless or nervous operator might
do needless damage to the teat, and less dangerous devices are always prcferable where they will produce aderguate results. In his treatise on "American Dairying," Prof. Arnold, the em-
inent dairy writer, treats of this subject in its several bearings, and in connection with our Prof. Arnold as follows: In some cases the milk comes down very by reason of hard milking. This may be ove eome. It is occasioned by too small a hole in arged. The following illustration and manner f doing it, copied, from a recent number of th . Y. Tribune, will sufticiently explain how: Make a small cone-shaped
metal, even hard wood, metal, even liard wood,
well oiled, as large as you well oilerl, as large as you
can well insert in the end head on the large end tho cone, and just abov tion (as shown in the fig. ure), the plug when insert-
ed in the end of the teat will remain and keep the will become sufficiently en-
largel to milk as easily as you desire. It may be re-
when the milking is done it may be inserted again, to remain till the next milking, sulul so on till the orifice beeomes permanently enlarged t To cultivate a habit of giving down rapidly and fully, fast and eareful milking are neees sary. Slow milkers scldon get all the milk
aud the bag gets ont of order in one way other. lifficult milking is occasionally pro-
dueed by a coutraction of the orifice in the diaphragm which stretches over the top of the
teat. The little cord which runs round the teat. The little cord which runs round the
edge of the hole, eontracts and knots up, clos edge the hole and making a harl bunch just at the upper end of the teat. Sometinnes it is
brought on by too much pulling down on the teats when milking, especially where the milk is drawn by "stripping," as it is ealled, with tween the thumb and finger tight enough to slide down the teat and crowd the milk out This constant and scvere pulling on the teats irritates the diaphragm and cord, and make them pull up and oceasion the buneh described, has been earried so far as to inake the bunch feel hard, there is no relaxation to it afterward. It has so proved in my expericnce. It ean be remedied by cutting the cord and diaphragm erable incision to prevent growing right up again. It does no harm to the uduer to mak ing a flattened tube as large as ean be crowded into the teat, and after pushing it np to the
bunch, make the incisiou by passing a blade bunch, nake the incisiou by passing a blade and cutting again.


## Quepries and Replies.

## Sowing Alfalfa.

Eitars Prens:- 1 baw in your valuable paper a slort
time ayo surme gentleman recommended 30 pounds of altime ayos sume gentleman recommended 30 pounds of all-
falfa seed to be sown to the acre. I have taken the pains
to have an ounce of seed weilhed to have an ounce of seed weighed by a drutyrist, and have
eounted the seeds in one ounce. There are 15,265 seed hy
aetual count, neeesanily making 244,240 one pound
There being but $6,272,640$ inehes in in aere, 25 pounds
 to the Inch. If the seed is good and clean ovls would be
entirely tho thiek. If the seed is uot elean then we must
make a ealeulation for dirt make a ealeulation for dirt. I have a traet of land near erable alfalfa, and find 20 pounds
B. Brows, Collinsville, Jan. 30th.
This is an inquiry in the right dircetion, and the same method could be applied with success to many of the seeds which armers use. In always be knowledre of the germinatin always be a knowledge of the germinating culation for dirt which our correspondent menamount of seed miglit ealculations as to the ity of the seeds themselves. It has been shown Collere erments at the Michigan Agricultural College that different samples of purchased seeds variel in germinatiug power from $14 \%$ to tioned the advisability of testing secds before sowing in former issues. If a few hundred seeds eotton, the perimentally, or sprouted in mois quality of the seed he proposes to use, and in the field would be guarded against. "In a few days a man can get facts whieh may save him a year's loss of money and temper.
Cranberry Culture

Editors l'ress:- 1 see a call for information in Califuther the cranberry can be cultivatel in Califortia. I once had the purpose to make a trial in the culture of this popular fruit. I found that a number of persons had tried and which it was stated that cranberries had never sueceeded south of the 40 th degree of north latitude. There is no doubt but that they can be raised very successfully in the Humboldt bay conntry and in Oregon. The only kind of land suited to their culture is one perfectly until the bercy can be kept eovered with water off. The land mist be a bed of sand or be cov ered with sand ly hauling and sprcading it six inches, in which the plants are placed and when properly rooted they will hold possession grow wild in Oregun. The eulture of the crantions, but it is very expensive to start the
plants properly.- $W$. Wrier, Centerville, plants properly.


Will some
Walnuts on Chapparal
Enitoas I'ress:-Will walnuts arow on eh
-Rkadre.
We presume our querist means English walnuts. We should say, as a general rule, such Who speaks from experience?

Thorovghbrel Horses Comina.-Our a ready fine stoek of blooded horses is bcing coninually augmenter by importation. We learn from the Kentucky Live Stock Record that Mr. L. H1. Dubois, Oakland, Cal., has been in Ken ueky for the last six weeks or two months pur hasing thoroughbreds for California, and $h$ has shipped 13 head, comprising the following well-bred animals: "Glen Dudley," bay foaled Dudley;" bay filly, foaled in 1876 , "Iadame ellow," dam "Planetarian;" bay filly, foaled in 1576, by "Bayswater," dan "Sally Wallace,"
by "Star Davis;" chestnut colt, foaled in $18 \% 6$, "Planet;" chestnut colt, foaled in 1876, by inip "Glenelg," dam "Planetarium," by "Planet; chestnut filly, foaled in 1876, by "Enquirer,
ann "Emma Samson," by "Rogers;" bay filly, dan " 1 l
foaled
"1"lanet,"
"lanet," ont of "Laura," by imp. Leviathan; "Sally Travers" by "John C. Breckinrilge," out on," chestnut filly, foaled in 1s76, by "Wa Locust)" by "Vincent Nolte;" chestnut filly onee 1." by imp, Australian;" "E1la Anderson," derson," by imp. "Anstralian,"," and a bay filly by "King Lear." The Record says: "We can rect, and no doubt th
good racers in the lot."

## Good and Bad Beet Seed.

Edrrors Press:-There may be trustworthy seedsmen,
and there may not, at all events I must tell you how I
und a neighbor of mine were caught this last season by and there may not, at all events I must tell you how I
und a neighbor of mine were caugh this last season by
having a popular seedsman of your city fill our orders for having a popular seedsman of your city fill our orders for
beet seed. My neighbor ordered mangolds and I ordered
aug beet seed. My neighbor ordered mangolds and 1 ordered
sugar beets. The orders must have been filled out of the
same sack, for both fields showed four kinds of beets, about evenly divided, and most of them were badly degen-
erated.-W. S. Dowsing, Half Moon Bay, San Mateo
We have heard of trouble and vexation of this kind before. It is in part the fault of the seedsman who sells the seed from his city store, and in part the fault of the seed-grower who furnishes him supplies. We have seen a field of beets grown for stock feed, of which one-half was fine, long and large mangolds of uniform size and form, and the other was a poor mixture of long, short, globular and many-fanged roots, more than half that of the uniform mangolds. The grower said that the poor roots were grown from California seed, and he would use no more of it. The fine roots were from imported seed. The seed, both imported and California, were bought from the same seedsman, and here the blame would seem to gravitate to the Califoruia seed-grower, who doubtless started with a lot of scrub seed, let it perpetuate its own mixed abomination, and sold the detestable seed to the countless farmers mourn. This is all wrong.
quantities by the plants, and supplied free of least, point aimed at in propagating beets with permanent peculiarities, was a high percentage of sugar in the juice, with as small a propor tion as possible of other soluble matter
Two men in Europe have for years systematically followed the improvement of beets in the above-described direction. Fred. Knauer o Groebers, and Vilmorin in Paris. The former has devoted his whole life to the propagation and improvement of the sugar-beet race, while the latter is one of the most extensive dcaler in seeds of all varieties. Many years ago Ferdinand Knauer of Groebers built a beet-sugar factory adjoining the village, which he supplied would teet from his own farms, and in which $h$ could test the quality of his beets and beet see
on a large scale. He was most particular in the on a large scale. He was most particular in th
selection of the parent beets from which he wa to propagate. Knauer followed his labor like an artist or scientific man, raising and propaga ting seed with a certain aud single"aim, using the seed to grow beets for his own sugar factor ies, and selliug whatever seed he had to spare, yet always protesting most vehemently when asked if he was dealing in seed. Vilmorin, on the other hand, deals in seeds of every imaginable kind, often buying of other dealers and producers. This probably accounts for the fact the farmers in Waterloo couuty, Canada, re-

## Woodward's Gardens.

The Central Park of the Pacifle
No one of the interesting sights of San Prau cisco more fully and justly attracts the atten tion of tourists, other visitors, and our own citizens, than Woodward's Gardens. Though the private property of Mr. R. B. Woodward, who spirited owner have now become thoroughly identified with the interests of the city. They Way be correctly termed the "Eden of the West," uuequaled on the American continent In them, Nature, Art and Science, are wel illustrated, and their aims are: Education recreatiou, and amusement. It is true that in no city in the world, unless it be Paris, or Lon remarkable objects of nature and art be found in one place, as at Woodward's. The celcbra ted Garden of Plants in Paris, and Kew Car dens near London, are, perhaps, the only real exceptions. Hence, for cducation of young and ment, and for all innoeent pleasure, no place surpasses these clarming gardens. For all these reasons, we deem it but justice to an en cerprise that has done so much credit to on city and State, to give the accompanying excellent engraving of part of the extensive grounds
and buildings, and a brief sketch of its numer
ager; M. E. Willis, Treasurer; Chas. H. Wil liams, Director of Amusements; C. Shuman tories; Prof. F. Gruber, Curator of Museum B. F. Roop, in charge of birds and animals; and C. J. Woodward, naulager of restaurant and freshment saloons.
In the art gallery, pictures have all been us anemals aud plant rearranged; the mineerrder; the conservatory ware in the very best ing and beautiful, the grounds never tooking more charming. The "baby-camel," born in the gardens, February 1st, attracts much attention. Not only does one of the best orchestral sions, lut daily visitors are delighted by the choice selection of standard pieces performe exquisitely by a fine large orchestrion-or full brass band, arranged like•an organ and run by elock-work--manufactured by Schoenstein, in Vil. lingen, Baden. Having 10 ora dozen separate cylinders, it performs 30 or 40 pieces. The vast colossal bust of Washington, 11 feet high, now in course of construction by Thos. Gagliardi, in the sculptor's stndy, deservedly attracts much attention.
Never does a week pass without additions of interest to some part of the already large collections of the curious, the wonderful, the rare, this, one of the most striking features of this


SCENE IN WOODWARD'S GARDENS, SAN FRANCISCO

No seedsman should contract for a lot of seed to be distributed to his customers without knowl edge of its quality, or satisfactory guarantee
thereof. In the case of the California seed, it would not be difficult for the seedsman to assure himself of this fact, by making contract in advance, and by personal inspeetion of the growing roots. With imported seed, it wonld be more difficult to get this surety, and yet it seems that foreigners exercise more care in this regard than we do ourselves.
Beet seed is one of the most ticklish agents with which the farmer has to deal. Wherever beets are grown there are the same difficulties.
It is possible to improve beets in the same way It is possible to improve beets in the same way that other farm plants are improved and dein the American Cultivator, that ever since the beet-sugar industry took permanent root in Europe, it has been well understood that the basis of its success was rich beets, and again good seed for the same. Beets have been raised much on the same principle as blooded eattle; certain points have been considered essential to selection of the seed bearers, these points have been made permanent. The first point of i portance was shape and size in the root. No lateral or side roots in addition to the central oot. A beet with but one root will enter the nourishment from a strata which is hardly ever reached by any other crop perhaps, excepting point, is the formation of the leaves. The nd oxygen from the air, where these most important ingredients are found in unlimited
ceived last year, contained larger or smaller quantities of wild oats, a weed one hundred times
worse than Canada thistle. Knauer sells all the seed he does not use in his own operations at a fair price, while Vilmorin charged for his "Vilmorin pure" 150 shillings or $£ 7 \frac{1}{2}$ the 100 English pounds, and "Vilmorin ordiuary" 40 s or f 2 the 100 pounds. These are quotations from his 1877 catalogue. Now either the 150 shillings seed is a fraud or an extortion, or the 40 shillings seed, even without the wil oats, is trash and dear at any price.
The above description of the ways
The above description of the ways of securing and distributing beet seed, which we condense
from the writings of M. Gennert, shows the from the writings of M. Gennert, shows the
way in which the evil of poor seed gains sway way in which the evil of poor seed gains sway.
It is wrong to distribute poor, wcak, and It is wrong to distribute poor, wcak, and
mixed seed, and it has been shown by decisions of the Eastern Supreme Courts that seedsmen who warrant their seeds are liable if their warrantys are not realized. Of course retailers of seeds are liable to be imposed upon by wholesalers and by growers, but their own business prospects demand that they should relax no efforts to reduce this cliance to a minimum.

Therc is another deduction from the European experience which is describer above, and that
is that cheap seed is an exceedingly dangerous is that cheap seed is an exceedingly dangerous
commodity. Of course pure seed is the result of extra carc and skill, and these must be paid for. We trust the remarks we have made will lead California seed growers and dealers to action to remove the evils which are now to be deplored.
Geongia and her industrial and agricultural
products will be well representod at the P'aris
exposition.
ous attractious. A mere euumcration of these will give some idea of their extensive character They embrace the museum, the botanical de orangery-the art gallery, seal ponds, plant and tropical grecuhouses, fern house, aquatic fowls, rium, trout hall, marine and fresh water aghaa its small aniunal house, bear-pit, smaller animal cages, large animal cnclosures, fox burrows and poultry house-a kiosk and refreshment stand, the fountain, aviary, paviliou and skating
rink, performances and exhibitions, open air rink, performances and exhibitions, open air
orchestra, a fine (xerman orchestrion, a 'Yurkish mosque, music hall, restaurant, eagle aviary Italian terrace, rotary boat and lake, gymna sium and swings, sculptor's study, canuera-obscura, and the small and beantiful Baxter steam engine. Every curiosity is genuine aud the best
of its kind. There is no attempt at deception of its kind. There is no attempt at deception or misrepresentation.
Theso instructive and delightful pleasure gardens are being placed in the finest condition possible for the rapidly approaching spring and smmmer. Many additions have been made to the already vast number of interesting objects. It is no exaggeration to say that by the arrival
of our usually fine spring wather, every porof our nsually fine spring weather, every por-
tion of the beautifnl grounds, the completc collections in the various domains of naturc, science and art-as well as the regular and attractive music and first-class performances or in a better and more thorongh condition than ever hefore. As usual with their proprietor, ncither expense nor pains have bech spared to accomplish this resint.
Mr. Wood
Mr. Woodward's ctforts are ably scconded by his assistants, Messrs. Win. Woodward, Man
popular place of resort is the low rate of adcents, and for children 10 cents. Apecial terms below these rates are made with organizations, schools and festivals gencrally, day and evening. Grand and special performances take place Saturdays, Sundays and holidays without extra charge. Every one who visits Woodward's Gardens feels more than repaid. Not only San Francisco, but California has good
reason to he proud of them. We may give our readers fuller details of some of their more attractive features hereafter.

## The Rainfall to March 1st.

We collatc from various sources the total rainfall at the places named for the scason to March 1st:


t. Helena..
Little elake
kiul. ....

Puno....
Vallejo..
Sartinez
Martine....
Marysville.
Tirfare were coined at the San Francisco Mint ast month si,00., 000 , probably the largest a time.
Arrer many years of warfare, peace has been store in Cuba, the insurgents submitting to the Spanish authorities.

Continued from page 147
land, a tough soil that holds moisture well is
the best; it is the reverse in noist land. When rich and poor land are both found on a place, people must not hesitate in plantiug coru in the
best land aud where it will produce a good crop of leaves and ears. In a word, do not refuse
your corn, if you can help it, the best land and your coru, if you plenty of inaure.
Whether planted Manures. yield of corn is like that of or poor land, the proportion to the amount of manyunre prop int into
the grouud; and corn can staud be the grouud; and corn can staud a heary manur
ing, becausc of the trentendous size it will grow ing, because of the treniendous size it wih grow
to, without being liable, like wheat for instance, to be blown over or fallen to the ground by it
own weight. Aloove all, corn replires such fer tilizers as lime, plosphate of lime, potash, mag nesia and nitrogen. Nlow manures will not do
for corn, unless they are mixed with some of for corn, unless they are mixed with sotne of
the above fertilizers. Stable or yard nanure, which is ly itself a complete fertilizer, eontain
ing all the ingredients of plant food, is, Ishould ing all the ingredients of plant tood, is, I sloonld think, considering the nature of our soil and
jeculiar climate, the very best manure we can gechold of for the growing of cornn even to it
maxiunum size, without any fertilizers. In some parts of Einrope, 200000 to 30,000 . 100nds of yard manure is used for ant facre, and at the thine viz: 200 to 300 ponnds of superphosphate of
lime; 75 pounds of sulphate of ammonia; or lime; is pounds of sulphate of ammonia; or tionate quantities, and according to the natur and

Drill and Broadcast Culture
It is particularly wheu sown in drills, that corn recommends itself to the farmers of councourse, make exception to this rule, for in thei luxuriantly and the stalks be teuder and succulent, and eaten iu that state with better ease by
cattle than the coarse stalks raised indrills, ani that have to be softened down in silos ly forthis state there are a thousand acres of dry, common land to one of rich bottom land; it is best one for us to resurt to, so as to enable us to irrigate our helds and raise a fair crop of fodder
Other advantages, besides, are obtained from this drill system, of sowing corn: First, the and be cultivated, which is an impossibility
when the seed is sown broadeast; second, sown iu drills, each plant occupies the center of cube of ground, which is indispensable to subterrancan and aerial development and maxi
mum growth.
Preparation of the Soil.
The land on which to plant corn has to be, especially in this State, summer-fallowed. Then
it is manured in the fall and plowed to a depth it is manured in the fall and plowed to a depth
of 10 or 12 inches. Iu March it is harrowed, of 10 or 12 inches. Iu March it is harrowed, some conutries after the fall manuring and plow ing, they sow at onee rye, whieh is cut green
for fodder in April, or the first week of May
No extra work is required for the raising o that crop, ouly the ground has to be heavily that crop, only the ground has to be heavily
manured to make the rye grow quick and tender. Preparation of the Seed. Corn comes up rather irregularly, and it is
quite important to have it come up at once and be uniform in growth. The best way to attain that end is to put the seed to soak into purre water, or water with juiee from the manure pile
mixed with it, or in which empty guano sacks have beeu pitt to sook. Seed so treated will all come np simultaneously. On the other hand
(for it seems the poor farmer, whichever way he (for it seems the poor farmer, whichever way he
does things, is bound to be inueh bothered), does things, is bound to be mueh bothered),
there is a little disadvantage to the soaking of there is a little disadvantaye to the soaking of
the seed in sections of country liable to late
froste for it frosts, for it makees the seed come up at once, it
might do that too soou, and a frost nip the young and tender shoots.
As to the time of sowing corn in the different parts of the state, and the best mode of doing part of your readers know more about it than nysself, and on that particular poiut they wonld learn nothing new from me. I will ouly say
that where late frosts are frequent, corn ought
not to be sown before the tirst week of not to be sown before the first week of May.
There are corn-planters drawn by horses for
farge fields large fields, and hand drills on wheels for fields
of a small area. On a smaller patcla hand-sowing is practiced, one or two seeds being throw into each hole. Corn is 1 linted in rows two
feet apart, and one foot in lhe row. feet apart, and one foot in the row. In the second part of this article, I will give your realers the varions nudes of har vesting corn for fodder, and a fnld description of ensilag. representing an empty and a complete silo.

## Nevala City, Cal., Yeb. 16th.




## Economy in House Keeping.





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 tions tothe notivo of tite public through the columns
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Cause of , rixutical kuowielge and selience, by assisting
 d. 1 Le lut worthy men.

## J. L. TuAR - San Francisco



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JOhn f. BYXBEE, Propriftor Thomas Rhehadson, Manager.

THE CLIMATE OF CALIFORNIA.
A thornuzhly stulied and ahly writen trentise on tlis





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The Redding Ranch,
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offcred for sale at low priees and on favorable terms of payment,

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The ranch was seleeted at an early day by Major P. B. Redding, one of the largest pioneer land owners in California. It is situated on the west side of the Saeramento River and extends over 20 miles along its lank.
The averago rainfall is about 30 inches prer anuum, and crops have never been known to fail fron drouth.
Tho climate is generally healthy and compartively desirable. The near proximity of high mountain peaks give cool nights during the "heated terms" which oceur in our California

Figs, Grapes, Peaches, Prunes, Alinonds, English Walnuts, Oranges and other temperate and semi-tropieal fruits ean be raised with sueeess on most of the tract. Also, Vegetables, Corn and all other cereals ordinarily grown in the State.
A considerable amount of the rich bottom land has already been eultivated.

## Deep Soll With Lasting Qualities.

The soil throughout the tilled portions of the ranch proves to be of great depth and enduring in its good qualitios. It is quite free from foul growths. The virgin soil among the large oak trees on the bottom land is easily broken up and cultivated.
The California and Oregon railroad traversce nearly the entire length of the tract. There are soveral sections, stations and switches, besides depots at the towns of Anderson and Reading-all of whieh are Iocated within the limits of the raneh.

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Land suitable for settlers iu colonies can be obtained on good terns.

## Town Lots

Are offered for sale in Reading, situatal on the Sacranento River, at the present terminus of the railroad. It is the converging and distrib uting point for large, prosperous mining and agricultural districts in Northern California and Southern Oregon. Also, lots in the town of Anderson, situated more comtrally on the raneh. Lota in both these towns are offered at a bargain, for the purpose of building np the towns and facilitating settlement of the ranch.
Purchasers are invited to come and see the lands before buyiug here or elsewhere. Apply on the raneh, to the proprietor,

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Forty niles from Cloverdale 20 miles from Navarro Ridge and one mile from the christine Postomice.
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feet, a Graurry, Whondshed clicken House and



Fine Orchard of Some 300 Trees, Of the chniccat varicties of Peach, Aplle, Pear and Plum,
as well as a
larree quantity of (irale erines, Currailt and Gooseberry buathes, and other sraille truite , Thrrant is 100 five inches, and tronisess ant abundant harrcest in the The owner has also alout 40 head of catcle, a few
Sheep, five horres, 150 licad of hoss, 100 Ilcns, and a larre

desircal. The neiphborliood is as good as could be desired, onl $^{2}$
 The owncr's reasons for selling are his wite's health and
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fowlis, White and Brown Leghorns, Plymouth Rocks,
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Five sizesare made to suit the dimensions of different
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Patents and dinventions.
List of U. S. Patents Issued to Pacific Coast Inventors.

By Special Dispatch from Washington, D. C.
Week Exding, February 19 fit.

Bee. Ferdish
Femitgatror.-F. Hanson, Nevada City, Cal.



A Few Words About the Mining and Scientific Press Patent Agency.
The Patent Ageucy of 1ewey \& Co. has been
oue of the most successful of the professional oue of the mnst successful of the professional
business cstablishments on this coast, being well aull favorably kuown to inventors ever where on this side of the Rocky mountains.
Mr. W. B. Ewer, the olldest member of our firm, becane interestal in the othice in $1566^{2}$,
and Mr. A. T. Dewey in 1563 . The former is well known as senior editor of the jouruals be-
longiug to the house, and the latter as the general lusiness manager of the firm.
Mr. (ieorge H. Strong (who has for some time been the manariug partner in the Patelit Department) connected hinself with the office in 1563. With the exception of one ycar or one
season, (most of which time he was occupied at season, (most of which time he was occupiel at
Mumn \& Co's latent Agency, New York city, he has been actively engaged with us for 15 years. During the past ten years but few, if any, patprepared as many applications for patents as himself, Mr. Strong's ellucation as a eivil en-
gineer was supplemented by practical meclianical knowledye acquired at the bench and lathe in one of the foundries of this city, and afterwards as instructor on physics and engiucering
in a leading school of the early days of San Francisco, all of which has specially fitted him for his vocation. During the latter part of the
past ycar he has, by a persoual visit to Washington and other Eastcrn eities, become acquainted with the inost approvel methods of Washington was occupied in atteuding to the numerons applications we had at that time pendiug before the Patent Office, thereby making many pleasant persoual acquaiutances.
Racently Mr. Charles it. Yale (one of the editors of the Mining and Sciestific Press for the past seven years) has taken a desk in our
Patent Office to assist iu more readily and promptly dispatching the busiuess of that department. Mr. Yale is well known in this city, where he has residel since 18.51, and is familiar with every part of the State. Since
his connection with the Minve And Scieviric his connection with the Minive and Sciemtiric
Press, it has been part of his duty to keep track of all new appliances, devices, or processes
which would be useful on this coast, and he has describel in detail all the new machiuery of any kind male at the city fominies, and the various new devices exhibited at our fairs or
otherwise brought before the public. After leaving colloge he entered a lal)ratory for
the purpose of further extending his chemical knowledge and more partienlarly turned his attention to cheminal analysis of ores, as -
saying, ete. Aftcr being here a ycar, he spent two years in the mining regions of this state of mining, metallurgical operations and miuing machinery, in which he is well postel, as he
hass since stndiel and written much on these subjects. For the past six years as Secretary of interested himself in keeping informed in the varions fields of scientitic research.
It is no egotism on the part of the firm to say that after so many years of a continnous conrse
of pateut soliciting, and scientific anl mechanical publishing lousiness, that there are but few of the best organized and practical offices in the United States so well and ably prepared to
intelligently secure full riglts for inventors i general under the patent laws of the United States and foreign eountries. For Pacific coast inventors we are more especially enabled to act
with superior advantages. We have original copies and files of thonsands of Pacific coast eases, which have passed through our hands, and a partienlarly full record and knowledge of all patents issued to inventors this sile of the liocky mountains. Many of these inventions
are peculiar to the coast, more espccially those in the field of mining, metallurgy and our remarkably progressive agriculture, and mechanical inlustry.
As editors and publishers of agricultural and mechanieal and industrial jouruals we have
access to, and have long been selooled by, important information which we constantly use for the leeverit of applicants-information that could not be expected of ordinary patent agencies, ith no other business eon
We have in our offices the most complete sets of home and foreign patent-office records, patent aw books, and scientitic and mechanical newspapers, text books and works of reference in any private office outside of New York or Washing. ton. These are all available to any of our elieuts
or thosc in need of information. We not only, on most reasonable terms, assist inventors in securing their patents, but take
pleasure in furthering their intcrests at the most opportune time, by sendiug information of all their worthy inventions abroad through the world, thirough the columns of our standard
industrial journals, the Mivinti AND Sctevtifir Press and Pacific Rural I'ress.
Alany inventors have been greatly aided-to the extent of fortunes in some instances-by the illustration and publication of their patents in our papers. Becoming familiar with the special merits of an iuveution, in obtaining the patent, we are generally able to present them to the eyes
of the pullic in more clear and forcible manner terins thau ordinary newspaper writers.
" One of your readers told me, the other day, that he cannot get along without the Press, although he has found it a hard year for him.
The PRENs is a stand-by and a farmer's frie Its columns are suited for all readers. The ' Young Folks' column pleases my clindren With its olld cuts, pleasant stories and spicy
sayings. When Saturday comes, the first thing is: 'TPapa, let's see the Press, and find ns the
good things it has opening year the Press will still incrense in popularity, circulation and in correspondence,
and continue to be alive laper anong the farr. iners and the intelligeut readers of the world."

Pacific Const Directony--We have eeived fron the publisher, L. . N. McKenney, a
"Busiuess Directory of Pacitic States and Teritories," for 187 8. As the title indicates, it is a eomprehensive index for business men in
every large and small town on the Pacifie coast, arranged under appropriate headings by state, been taken to have everything seemb to have arranged, so as to be easy of refercnce. The alphabetical list of names serves as an index to the classificd headings. Among other features is a classified list of the county officials of each county of the States and Territories.
Derive the year 1877 the Central Pacific Railroad Company expended for the purchase o
land $\$ 1,260,691.90 ;$ for construction land $1,260,691.90$; for construction of road to date, $\$ 133,35+, 291.33 ;$ for buildings, $\$ 1,345$,
200.08 ; for engines, $88,605,303.47$; for cars 84, 250.08; for engines, $\$ 2,695,303.47$; for cars, 84 ,
$993,367.75$. The amount received for transporta tion of mail, freight and passengers, during the
 During the year two divilends of st cach amounting altogether to $s 4,342,040$, were de-
clared. The indeltedness of the company is clared. The indebtedness of the company is
$993,05,7,669.37$, and the amount due it is $\$ 4$, , 293, 057,, 69
$537,272.22$.

## FarmersI Farmers

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their orders for any kiud of lalor to the "Free Lallor Exchauge," 33 and 3.5 O'Farrell Street of cliargesto. All hands carefully selected free clarges to employers and employees.

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## S. F. MARKET Report.

Nork-Our trade review and quotations are prepare
on Wednesdyy of eaeh week (our publication day), and a on tintended to representit the state of the market on sat
not
urday,

## Weekly Market Review.

DOMESTIC PRODUCE, ETC. San Frascisco, March 6th, 15,8 . and everything is rather quiet. The respite frem the rams was only long enough to give a
days enjoyment of the smishine, and the quick days enjoyment of the sminhine, and the quick
return of the storms throws everyone again upon the anxious seat until the weather perma nently clears.

Range of Cable Prices of Wheat. The course of the Liverpool quotation for days of last week has been as recorded in the following table:


Today's cable quotations to the Iroduce Exchange compars as follows. years lollow

## 

The Foreign Review.
London, March 5th. -The Mark Lame Express says: Peace prospects, the fairly abundant gran-
aried stocks and heavy anticipated arrivals, both from America and southern Russia, lave com state of depression. During the past week the state of depression. During the past week the sales it has been a matter of some difticnlty to record the flnctuation in prices. That the withdrawal of the prop which the uneertain aspect
of political matters furnished to the grain trade would depress values was anticipated, but the concession of ls@ l per quarter has failed to
improve the demand for Wheat, which it might fairly be expected to have done, having regard to the low state into which millers have allowe
their stocks to rum all over the kingdom. An cxplanation is probably to be found in the
cxplanation is probably to be found in the fact that the supplies in the prospective a
heavy to allow the concession offered to much weight, and until some definite idea ean be lormed of the anount of Wheat this country may expect from Odessa, Nicalalcff and other southern Russian ports, millers will only buy
from hand to mouth. That the accumulation of from hand to mouth. That the accumulation of
grain in the Black sea is large cannot be doubted or one moment, but we think a large proportion couditioned corn, as the demaud for transport during the war obliged inland growers to store as lest they iniglit on the spot, where, of course the appliances for keepiug grain in good condition in granary for so long a period would be, to a great extent, inefficient. There is a dragging trade for feediug Corn and Barley, Maize
and Oats all receded $6 d(1)$ s per quarter, with and Oats all receded 6 d @ 1 s per quarter, with
very little business. With moderate arrivals very coast, the floating eargo trade for Wheat Maize is fairly steady. Barley dull.

## Frelghts and Charters.

Wheat freights, says the Commercial Neves, have been extremely dull during the past week,
lut no great ehange has taken place in the relative position of Wheat and ships. The latter,
if disposed to hold for full tigures, have the if disposed to hold for full figures, have the advantage in consequence of the small anount market is, and has been, in a positiou which who desire to fix imnediately must expect to make concessions. As the market stands to-
day, it is impossible to give any aceurate quotations. The last iron ship taken was at $\mathbf{t 2} 10$ s
to Liverpool, at the close a small Swedish to Liverpool, at the close a small Swedish
wooden bark bas been laid on at an equivalent rate. The following charters are reported, Br $\mathrm{t}^{2} \mathrm{I} 10 \mathrm{~s}$-chartered in Fingland. Br ship Kat
 6d. Br bark Pond
Cork, U K; f2 10s.

Eastern Grain Marketa.
New York, March ?d. - The Wheat market has, most of the time, shown a strong rising
tendency on more warlike news fron Europe and, with an aetive export and speculative
trade, prices have adrancel 3c per bushel, spring grow ths closing $\$ 1.233$ ( 1.33 for ordinary to prime. Flour and Corn have advanced a
little, with a good export trale. At the elose, the tendency of Breadstutfs was towards
lower range. ular, strong and higher, with an inclination to alvance rapilly, aud, as a rule, to shallow the erops are reported throughout the northwest, for althongh the favoralle condition of heavy and lasting suows has been entirely wanting,
yet there has been none of that alternate thawyet there has been none of that alternate thawwhe
1.11 1 f C'orn was only moderately active, with
a firm and rising tendency and ranged nearly
2c ligher than last week. Sales of April were 2c higher than last week. Sales of April were
made at $41^{7}(\pi 433$. In Oats there is very little interest. Sales of April at 2412@ 25 c . Liye was pretty firm, but fluctuated considerably. Sales, cash, sold from $44 \frac{1}{2} \mathrm{c}$ to $4^{7} \mathrm{c}$

Eastern Wool Markets.
New Ork, March 2d. -There has beell a somewhat better inquiry, with fair aggregate of
business in pulled and Texas Wools, but at prices curreut buyers continue to avoid the better descriptions. London sales of Colonial opeued on the "fith ult., aud the following cable auction sales prices are firm at December auction sales prices are firm at December quota-
tions. Port Philip, shrinking $5.5 \%, 14 \frac{1}{2}$; Sydney, shrinking $57 \%, 13 \frac{1}{2} d$; and Adelaide, shrink and. An Australian telegram states is 57,000 bales. Nales for the week include
7,000 bales Mexican at $150 ; 3,000$ lbs choice Fall 7,000 bales Mexican at 150 ; 3,000 lbs choice Fall
California, 18@20c; 375 bales heavy do, 133 c ;
 orado, $17 \mathrm{c} ; 11,000$ lbs Western Texas, $15 @ 17 \mathrm{c}$. Pimladelphia, March 5th. - Wool is lirmer, ut not higer. 24(a27c. Masto March - There is a very indiffer ent feeling on the part loubtful if any considerable sales could be forced except at some concessions on even present low rates. Combing and Delaine Fleeces are more iuquired for, but the demand is from mall manufacturers. Pulled Wools are quiet in sympathy with the dullness for other kinds.
California Wool is dull, sales of the week caliornia
amounting to $739,000 \mathrm{tts}$, at 18@ 32 c c for Spring and $15 @ 25 \mathrm{c}$ for Fall.

Domestlc Produce.
The following table shows the S. F. receipts Domestie Produce for the week ending at
noon to day, as compared with the reeeipts of noon to-day, as
previous weeks:

| Articlese | W'zek. <br> Feb. 13 | Werk. Feb. 20. | Werk. Feb. 27. | Wrex. Mar. 6 |
| :---: | :---: | :---: | :---: | :---: |
| Flour, | ${ }^{\text {i3, }}$ | ,633 | 30,023 | 20,084 |
| Wheat, centals | 103,430 | 15,2, 25 | 74,519 | 45,604 |
| Barley, cental | 16,2,21 | 2,538 |  | 6.797 |
| Beans, sacks |  |  | 1,951, | 2,853 |
| Corn, centals | 3,821 | 3,193 | 1,101 | 2,293 |
| ts, cental | 8,946 | 2,116 | 2,700 |  |
| Potatoes, 8acks | 21,233 | 15,8.21 | 15,0940 | 1,798 |
| Onions, 89 | 474 | 259 |  | 2,551 |
| Wool, bale | 174 | 205 | 235 | ${ }^{43}$ |
| Hops, bal |  | 61 |  |  |
| ay, bales. | 1,016 | 594 | 1,22 | 1,191 |

BAGS-There is nothing new this week. askLE - Barley, both Feed and Brewing, sales showing improvement on them. We not sales: 1,200 sks Coast Feed, weevily, $\$ 1.25$;
2,500 do fair Coast Feed, s1.25; 250 do fair 13ay do, $\$ 1.27 \frac{1}{2} ; 160$ etls bright Bay Feed, $\$ 1.30$; coast Feed, weevily, at $\$ 1.20 ; 1,600$ do good $1.35 ; 500$ sks Coast Feed, weevily, $\$ 1.25 ; 80$ choice Bay Feed, \$1.40, silver.
BEANS-There has been a slight reductio in l'ea, Pink and Lima Beans. We note sales: 20 sks Pea Beans, $\$ 3.35$.
and small Yellow. We an advance in large lamaged small Yellow, \$1.621 $; 250$ do good do 81. 60 ; 161 . 100 e do, $1.87 \frac{1}{2}$; large lew sks large Yellow, $\$ 1.62 \frac{1}{2}$ per ctl. DAIRI PRODUCE- Trade is still depressed rom last week. California Hens' Eggs are EGGS-Fresh California Hens' Eggs are
nore plenty and the price continues its decline 30 c is the extreme for ehoice to-day
FEED-Bran is reduced $\$ 3$ per ton. Corn meal rises 82 per ton. Full prices may be found 56 tons good Wheat at $\$ 19 ; 45$ do choice Wild at, $10.00 ; 20$ do good do, $\$ 16.50 ; 40$ do good good Wheat, $\$ 19 ; 40$ tons fair Wild Oat, \$14 It will be noticed that a choice lot of Wheat Hay reached $s 0$ per tou.
FRUIT-Apples are still received in consid rable amounts from Oregon. The last ship neut sold at auction for are more
treme rat
HOPS-The trade is still inactive. The Call says that the stock on hand is estimated at called good, the balance being of inferior to common. The products of the Willow Grove shipped overland, destined for Englaud, the same going forward on owner's account. Nearly
all of the Washington Territory Hops have all of the Washington Territory Hops have
either been disposed of or shipped overland on wners' account. Emmett Wells reports the ary $22 d$ as without new features. "Fifteen thouNew lork city dealers; this is considered small, and goes to show that brewers have takeu stock bnyers.



FRUITS AND VEGETABLES.


Gold, Legal Tenders, Exchange, Etc





RETAIL GROCERIES, ETC.


Signal Service Meteorological Report. Week Ending March 5, 1878.


SEEDS
SEEDS. IMPORTED. Crosby's Extra Early
Marblehead Mammoth Stowell's Evergreen Early Canada $\}$ Yellow Flint Corn $\left.\begin{array}{l}\begin{array}{l}\text { Long Red Mangel Wurtzel } \\ \text { Yellow Globee } \\ \text { White Sugar }\end{array}\end{array}\right\}$ Beet Seed
also, every desirable variety of vegeta
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 from three to five days in sucecession, and in four or flye
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 a smali quantity so as not to blister. Saddle sores, Cuts, and all other sores where the skin is broken, mix the lin-
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## The "Water Glass" uniting the oil and pigments, the whole mass drying with a hari, RICHI, GLOSSY appcarance, and forming a covering which is entirely impenetrable to the weather; and

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Awarded the First Premium at the California State Fairs, 1875 and 1877, and the Stockton District Fair, September, 1875. Awarded the First Premium for Mill for all purposes, at the Missouri Grand Exposition, September, 1875, also, the Silver Meclal for the BEST GOVERNED MILL.


Mr. L. H. Woodin-Dear Sir
Woodland, February $14^{\text {th }}, 1878$.
I have been using one of the Althouse Wind Mills for nearly two years, and am well pleased with it in all respects. Hight to which I raise water, 70 fect; diameter of wheel, 20 feet; horse-power, I judge about five to six. The self governing capacity of the Mill is absolutely perfect. As the mill I am using has two banks of fans, making the wind surface in wheel about 240 square feet, and I have never closed it out of the wind for any of the gales we have had, and they have been the severest this winter that I have ever seen since 1 have been in the State. Yours truly,
J. W. PECK, Proprictor of Woodland Water Works,

## Buy the ALTHOUSE, the Cheapest and Least Liable to Gret Out of Order.

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<br>Or BAKER \& HAMILTON, San Francisco or Sacramento, Cal., General Agents.

#  

Volume XV.
SAN FRANCISCO, SATURDAY, MARCH 16, 1878
Number 11

## Egyptian Corn





It appears that this grain has been in cultivation in this State longer than many have thought, and it is a valuable fact that the longer growing the plant. Our southern exchange, the San Diego News, states that a party in that county Diego News, states that a prowing it in a small way'since 1863 and is each year better satisfied with it as a food for San Diego grower we quote the following points, some of which will answer the query above: The green stalks are good for growing and fatting
cows, horses and hogs, and for cows giving cows, horses and hogs, and for cows giving
milk, there probably is no better feed, either milk, there probably is no better feed, either greeu or cured. Hogs and horses will keep fat on dry stalks. All kinds of stock are very fond of it and will leave barley or almost any other kind of food for it. As a feed, some prefer it to any other grain. For egg-producing fowls, it has no
equal. For human food, it is toothsome and nutritious. As a popcorn it is delicious. As a prolific producer it has no equal. To grow Egyptian, corn plant and cultivate the same as for broomcorn or sorghum. Gophers do not molest the roots. It will atand the drouth letter than corn, barley, wheat or sorghum, but will do much better with plenty of water, year in and year out, dry seasou aud wet, colleetively.
One acre of Egyptian corn is worth more than One acre of Egyptian corn is worth more than
twenty-five acres of barley. The farmer cannot irrigate tweuty-five acres of barley from one well and wind mill, but he can irrigate one acre of corn, and insure a sufficient crop to one acre of corn, and insure a sufficient crop to
keep two or three horses and several nilk cows, every year, independent of drouth.
Egyptian corn may be sown like barley and nown for hay, or planted in rows three or four feet apart iu the row. In cutting for fodder, the ground, otherwise the old stalks will re main and make it extremely difficult and te dious to cut the next crop. Cut elose down and
there is no difficulty. The old roots will each there is no difficulty. The old roots will each time multiply the number of stalks, and, as
they get older, they become smaller. When they get older, they beeome smaler. and five or six years old, plow up the old roots and reor six years old, plow up the old roots and re-
new from the seed. The seed can be threshed and cleaned as barley. For feeding, threshiug is a waste of time. Ten to twelve quarts will plant one aere. Plant liberally and thin out to three stalks in a hill. It is a wonderful thing to throw out suckers from the roots and from tbe joints. The first stalks will run up and ripen a head of seed, then each joint will throw
out a sucker that will bear heads of grain. As out a sucker that will bear heads of grain. As the different crops of heads ripen, eut them off, ing on the suckers. If the eane is uot cut it will continue to increase by suckers, until th impassable.
Losses by the Floods. - The reporter of the associated press makes the following notes on he damages by the floods in the upper Saera mento valley: "I am satisfied that the loss of
wood, stock, houses, furuiture, levees, farming and Monts, wheat, etc., between Sacramento and may reach the sum of $\$ 2,000,000$. In inakng an estimate you must bear in mind that over least 200 miles of levees will have to be rebuil if the present system is to be continued. have now inspected the flooded district from ength, having traveled betwrough its entire miles, and I am utterly appalled at the desola large could make the same investigation and se the same sights, they would rise en masse and the Sacramento valley for the rectamation of er, to know that few lit have been lost, and people of the flooded districts. Their losses

A New Red Raspberry
We finish our series of new berries with an engraving of the "Pride of the Hudson," highly recommended berry originated by E. P Roe, of Cornwall-on-the-Hudson, New York. It has received the highest testimonials from Eastern fruit experts and growers, among others the well known Charles Downing, who says: "I regard it as the largest, finest, best flavorel, yet seen." Mr. Roc has had the berry under
vigorous grower of any good raspberry that
have seen, but thus far has suckered but mod erately. It endured the long drouth of last year better than any other kind on my place. One of its characteristics appears to be a long
continued season of bearing. During the fall of 76 there was no long succession of frosts to ripen and harden the wood, but the bitter wiud the canes still green with leaves, the tips of and unripened from late growth. I gave the canes no protectiou whatever, proposing to fully
test their hardiness, and they were not injured to any appreciable extent. This seedling evi


NEW RASPBERRY-THE PRIDE OF THE HUDSON.
results of his experience tbe following points which are descriptive of its qualities. He says: I picked several this year that measured plump hree inches in circumference. I had bushes this year on which nearly every berry would easure two and a hall and two and threcuarter inches. It is more than twice as large third larger than the Hudson River Antwerp. Thus far it has been the best bearer that I have seen. On one sbort cane but three feet high I counted over 600 berries; on single branch 88 berries. It commenees to ripen in New York about the first of July, and lasts longer than any kind on my place, and on July 24th there was au abundance of green berries and blossoms on the vines. The seedling is now ive years old, and it has never received any

River Antwerp blood, although its eanes are de cidedly different in appearance. During Augus and Septcmber it manifested the only fault that I have yet seen in the partial dropping of the reen and growing to the end, and rewame vember 1st, the wood appears clean and well ripened. I cannot see that the canes have suffered any injury whatever, but in viow of $m$ rule to state all of the facts about my plants give this ouc. I intend that those who buy this raspberry shall know all that I know abou t. Like all raspberries it does oest in norther exposures, and in cool, moist, rich soils. A little shade is also always beneficial to the large and choicer kinds of raspberries."
San Francisco put up 1,250 buildings last

## The " Milk Inspector.

The proposition to dire and equip a milk inspector for the city of San Francisco has been before the Legislature since the beginning of the session. We said at one time that the institution of an inspectorship of milk might be good thing if it were not merely created to give place and salary to some onc who was aboring for personal advaucenent under the guise of the public service. If the reporters of the daily papers are right in their conclusious, the project is of the kind to which we took ilk ius and the man who desires to be the is pushing his scheme at sacr ento with persistent button-hole power. N ames are given in the dispatches, we have no idea who it is that desires the office, hence we an secure no direct proof of his fitness or unpoints about the proposition, as it now stands, which would The oricinal propequipment of a laboratory and a salary provided for tbe inspector, which would command the services of a competent man. The measure was finally passed by the senate, but so
amended that the salary was but $\$ 125$ per month, and yet, the reporters say, the wouldbe inspector is urging the proposition even on wholly. We do not believe that a man fully skilled in the testing and analysis of milk, and and be eugaged for $\$ 125$ per month. It is not every adulterated or uot. It is true that appliances for this work have been thoroughly tested and given a legal standing during the last few years. We are fully acquainted witb the facts in this connection. The fact remains that milk is a delicate substance to handle witb a view to determining its purity, and it is an easy tbing
to overthrow any evidence which an unskilled to overthrow any evidence which an unskilled tester may bring into court. For this reason we seriously distrust any inau who proplic in the capacity of milk inspector at a low salary. If he is merely to aet as a policeman or detective and trust to the examina-
tion of experts in the material he may suspect, then of experts in the material he may suspect, then the city will have to pay these experts for
their labors and in the end the expense would be greater than the sum required to secure and equip a man competent to make his own tests and give testimony coneerning them.
We also distrust a low-priced inspectorship because it is easy for au unprincipled man to get the place and drive a lucrative black-mail business among mikmen who fear disclosure. If the city is to have a milk inspector, and it needs one less than any other large city we ueh a one cauot be hat for policenen's wage

A Phylloxera Eater. - The London Farmer says that at a recent sitting of tho I'aris Academy of sciences a letter was read from M. Laliman, in which he deseribes a larva or grub
which had been seen to devour 94 phylloxeras in the course of 10 minutes. He proposes for it the name of "Plyylloxera cannibale." M. Balbini says that the larva belongs to the genus Syrphus, or some closely allicd one, but declines to elassify it more closery destroys the phyllox ra by scizing upon it and suckiug out its fluid con by scizing upon it and suckiug out its and this mancuver it repeats uutil satisfied. Repletion is not readily reached it apvears, for it thinks nothing of 12 dozen victims or a mere early breakfast.

Jersey Breeders.-The Monthly Bulletin of the American Jersey Cattle Club is a publica tion of much interest. The eriginal design of Col. Waring, the secretary of tbo Club, scemed
 ow that he is iutroducing much matter of inerest conceruing the dairy qualities of the Jer seys, and dairy practices generally. The California members of the Club are J. B. Maggin, Sacramento; and A. Mailliard, of San Liafael.

## 鱼orrespondence

San Luis Obispo County Notes.-No. 1. Edrrors Press:-After a delay of two days beyond the time of sailing, owing to rough
weather outside, the Pacific Coast Steamship Company's steaner Los Angeles, left the wharf, February 10 th, at 10 A . м., with 35 cabin passengers, booked for various ports ou the sonthern coast. The weather, though calm, was not assuring, for the sky was overcast and a breeze from the southwest seemed to indicate that the
storm was not yet over. This steamer is fast and well officered. Capt. Johnson, with (quiet manner, plain dress, short-trimined beard and a cigar, that is oftenest a boon connpanion, re-
minds one of another, who was captain and minds one of anothcr, who was captain and
went to the war from Galena-first-mate
Lyon, who, nine years ago, salled in command Lyon, who, nine ycars ago, salled in command
of a vessel in the English East India trade. He
issues his commands iu the brevity of the hest issues his commands iu the brevity of the best
nautical language and in a most positive mannautical language and in a most positive man
ner, that insures the greater rpecision in hand
ling the vcsscl. They twain beget confidence. ling the vesscl. They twain beget confidence.
The passage over the bar and through the
heals was of the heavy "swell" order and conhearls was of the heavy "swell" order and con-
tinued so all the way down. When ontside, tinued so all the way down. When outside,
the wind increased a little and a sail was hoisted to steady the boat. Night found us opposite
Santa Cruz, whose light was plainly visible, Santa Cruz, whose light was plainly visibl
while fainter dowu the coast shone that Monterey.

## Port Harford

Is the first port at which the Orizaba and $L$ o.s
Angeles land. We arrived at this place just 24, Angeles land hours from the hour of sailiug, three hours
behind the nsual time. Port Harford is the principal shipping point for the county, and is
nained after Mr. Johu Harford, one of its most eaterprising citizens, whose early and persisteut efforts were the means of cstablishing the
narrow-gauge railroad, $10 \frac{1}{2}$ miles in length, which connects the port with the town of San
Lais Obispo. Arrangements have been recently LMis Obispo. Arrangements have been recently
effected by which steamers will stop as often as enece in two dlays to land or receive freight of
every nature, whereas, formerly there was but one freight steamer per week, Sevcnty-five
tons of freight was landed liere, including merchandise of all descriptions, delaying the One and one-quarter miles south from this At this place is another landing, called the At teople's whare no now out of repair, The place
consists of a few stores aud dwclling houses. consists of a few stores aud dwclling houses.
A new lumber yard has recently been estab.
lished here, a branch of one iu San Luis, owned A new humber yard has recently been estab-
lished here, a branch of one iu Sain Luis, owned
by funtington \& Co. by Huntington \& Co. inundated with poems on the beautiful snow, the editors of California have flowing in upon them thick and fast prose items, recording solid
inches of beautiful rainfall. San Luis O Ohispo inches of beautiful rainfall. San Luis Obispo
county is no exception to the rest of the Statc. county is no exception to the rest of he statc.
According the the raingange, kept at this place
by Dr. $W$. W. Hayes, the rainfall for the seaAccording to the rain-gange, kept at this place
by Dr. W. W. Hayes, the rinfall for the sea-

son, up to February 16 th, amounts to 18.97 | son, up to February 10th, amounts to 18.97 |
| :--- |
| inches, while J. J. Simmler, P. .I., records an |
| aggregate duration of 16 J | aggregate duration of $16 \bar{J}$ hours steady rain

from December 13th up to the same date. About two inclese have fallen since my arrival
and it still continues. The long, luxuriant and it still continues. The long, luxuriant
herbage and the plump ribs of grazing cattle
show the show the good effects already wrought, while the broar acres of growiug grain and the quick-
ened pulse of the business community presage a ened pilse of the every interest in the county.
rapid stride ind
expect to find abundant material for notes in my course through this section.
On arriving in Sina Luis Ohispo, we were
driven in a stylish four-horse conveyance to the driven in a stylish four-horse conveyance to the
Cosmopolitan hotel, on Montcrey street, in the east cnd of town. Its entcrprising proprietors,
Messrs. Blackburn \& . Morris, spare no pains for Messrs. Blackburn \& Morris, spare no pains for
the welfare of their guests and render firstclass metropolitan accominodations. They ar
rewarded by a liberal public patronage.
San Luis Obispo, Feb, 18th, 1878

## The Labor Question.

Editors Press:-W. S. Prosscr has a very good article in your last issue, on the "Labor Question; lout I believe that he failcd to touch
the real cause of the present discouragements. the real cause of the present discouragements.
Machinery lias certainly caused a large share of the scarcity of labor. But should that state of things arise by labor-saving implements, man
will so perfect automatic appliances that hard manual labor will almost be unknown. If machinery is able to supply an abuudance of that
which is nceessary for life and its nses, what
is the necessity for is the nedosity for back-aching pains for the
production of an cxtensive overplus? laid at the machine shop \&door, but at the doo of the monopoly whieh selfishnness has created,
and the ease and rapidity of producing ly means of inodern inventive genius, The world at large should share the benefits of labor-sav-
ing maelinery. But the reverse is the rule and
not tlfe exception.

We will take sewing machines as an example
the evils of manufacturiug monopolies. of the ecils of manuacturiug monopolies
Until recntly $\& 100$ was requircd to purchase what $\$ 2.5$ produced. By such means the hard
earnings of the poor men go to weave a rope earnings of the poor men go to weave a rope
to bind thein still firmer in the toils of the money kings.
scarcity of life com one will deny but our granaries are full; our
marts of trade allowing goods to rot on their shelves for lack of customers; machinery lying
idle for lack of markets; banks are overtloving with concentrated coin, and the poor starving while monopoly rears its head amidst luxurious pride, hoarding millions by the hundred, as if
machinery and the gifts of (iod was ouly machinery and the
for their special use.
Suppose a committee of philanthropists were ural aud divine, complaining of the scarcity o labor, and the consequent great sufficrings labor. The appeal is made, the judge would ask that committee, "Is there plenty of brcal in the land?" there an abundance of water?" "Enough and to
spare," would be the silent whisper. Ah, how the soul of these philanthropic men would shrink in shame as they mentally gazed into th
real causes of destitution, selfishuess and mo nopoly, and not the heaven-born labor-saving Whachinery.
an ancient plow, and a pair of untamed steer to till the soil for bread, even to give the poor laborer a chance to labor? Better far give the
idle e laborer a few acres out of the monopolist's sershare aud some progressive machiners
so he can raise enough for himelf and house hold. The sanee principle will apply to all than an equal share, "cast thy overplus on the waters of divine love and it will return bless ings a hundred fold." Scarcity means fanine
Famine in the midst of plenty means selfishnes and monopoly. And as every wrong may con
tain the seeds of its own righting, warning may tain the seeds of its own righting, warning may
be of no avail until the storm and whirlwind swcep it from the face of the earth, and the earth's productions suffice for the good of all
God's created children. The strong should sustain the weak; the rich provide for the poor. Machinery will be the real producer; science
will be the guide, and wisdom at the helm. Then will there le time for nind improvement.
Ignorance is the hot bed of revolution. But how can it be otherwise, fighting the slavish battle of life with the woff howling around our dwellings. Education will be the people's next
savior. To educate, there must be time. Machinery when applied for the universal good will supply that want, and rich and poor will b
known no more forever. Nt . Pleasant, Feb. 26th, 1578 .

## Fertility of Soils.

Edrtors Press:--The preservation of the fertility of the soil should be, and is, one of the bjects of thorough farming. We also know that the fertilizing ingredients taken from the field in the crop should be returned to it artifi cially by manures. What these ingredients however elaborate the analyses of constituents may be, they are avowedly imperfect. Liebig, in his "Chemistry in its Application to Agri essential to the fertility of the soil are usually neglected in the calculations of the chemist nasmuch as the discovery of the mineral food of plants in the soil does not necessarily indicate its value. Again, cven if the mechanical analysis, which estimates the amount of sand,
clay, humus, ctc., goes along with the chemical, we cannot expect, although we may learn much the power to retain its fertility for an unlimited whether any such soil exists in the world. In M. Boussingault's "Rural Economy, Law's translation, you read: "I have seen, says Andes, wheat fields which have yielded excellent crops annually for more than two cen
turies. Maize may likewise be produced continually upon the same ground without inconvenience. This fact is well-known in the south
of Europe; and the greater part of the coast of Peru has produced nothing else, from a date aut potatoes may come again and again upon the same soil; they are incessantly cultivated at better quality. Indigo and sugar-cane may b brought under the sane category.
Liebig also mentions the condition of the country around Naples, where corn has bcen
cultivated for thousands of years without manure. He also mentions that there are districts in Hungary on which, since the memory of man, nate years without the artificial means of re storing to the soil the mincral ingredients car ried away in the crops.
In the western parts of the United Sitates, we also read, that 50 bushels of wheat per acre have been taken off the same fields for 16 years.
In the face of such evidence wo cannot doubt that a naturally inexhaustible soil does exist. notice in your columns, and perlaps you wio
invite the counmuniation of experiences o hose best qualified by
write upon the subject
I may observe, in conclusion, that, perhaps p to the present time the principle which imparts this natural fertility to soils has not been reached by investiyations of science, althoug
climate, i. e. heat and moisture, more es-
pecially. With a diversified temperature and ever varyiug rainfall, California has within her onn boundaries a large field for observation in
his direction, and from the intelligence usuall displayed by he ariculturisto I 2 inclinad to hispk something may be elicited to throw soun ght as far as we are concerned on this im prima subject. It seems to be acknowledged by the ospheres within my reach at prosent, hat a exhaustible fertility, and this is attributed to the fact that the gaseous food of plauts is
equally distributed by ever varying winds, all over the globe.
we must not forget to bear in miud in this investigation that the residue left in the 801
after the crops have been removed, I mean the stubble, roots, etc., are a source of fertility, "kept up" for a considerable time
As stated before, these observations are communicatcd with a view to ascertain whether any of your readers have had the opportunity of ob-
erving the successive cropping of land year fter year, without artificial restoration to the oil of fertilizers and without any apparent deerioration in the out-turn of the crop.
Kingsburg, Fresno Co., C'al.
[Has Prof. Hilgard something for us on this subject /-Ens. Press.]

## The Future of the Grasshopper.

Emrors Press:-The following passage taken rom the close of the introductiou of the report of the U. S. Entomological Commission, now going through the press, will be read with intersit. Te term "temporary region" refers
he fertile country beyond the Mississippi and south of the 40th parallel, which is more partic ularly subject to grasshopper ravages; and the con-
fident and encouraging statements of the Com ident and encouraging statements of the Com mission will relieve any anxiety as to the future of
that rich agricultural region: "We cannot well dat rich agricultural region: se cannot wel of our views as to the locust prospects for the mmediate future, since our opinions are con-
tantly being asked for. That the inscet will in the future, again pour down at times from it breeding grounds into the temporary region, unlcss by the co-operation of the two governments interested it is preventcd from so doing
by the course we recommend or by some stil by the course we recommend or by some still
more feasible course yet to be discovercd, there more feasible course yet to be discovercd, cher s the country becomes settled will the locust jury be more and more easily controlled. Bu opinion that there will be no serious injury in such temporary region the cooning summer, and probably not for several years to come. We minations the past autumn over much of the country named; secondly, on the reports of cor-
respondents in said country; and thirdly, on the eports from the extreme northwest on perma ent region. These show that none or any consequence that the temporary region renained to lay eggs; that carcely any eggs were laid by the scattering autuinn swarms, and that with few exceptions the permanent region east of the mountains is likewise remarkably free of eggs.
Washington, D. C., Feb. 2oth.

Buhach or Persian Insect Powder.
linitors Press:-Allow me to correct an error on the subject of my "Buhach," which appeared in the Press of March 2d, under the heading on "Agricultural Notes." The mistake that you have made is in the price of the
powder. Yon stated that we sold the last ear's product at the rate of 16 cents per pound prepared ready for use, whereas we sold it a the rate of $\$ 16$ per pound. It was put up in
small bottles of one-half ounce each, and sold at 50 conts per bottle.
I will further state we have only about 60 , 000 plants in fine cultivation, from which we blossons for the manufacture of ny "Buhach." The lalance of our plants have been destroyed
disastrous effects of a cloud-burst by the disastrous effects of a cloud-burst,
which took place on Sunday, Feb. 17 th, 1878 , which took place on Sunday, Feb. 17th, 1878 .
The plants that we lost never had been trans lanted, but were in the beds ready to be trans planted, while the great and destrnctive rise rying in its madness a portion of Chinatown at Comanche, with five Chinamen two Chin overtiowed a portion of Mrs. Hills' farm and
carried fences, trees and everything that would carried fences, trees and everything that would
float, beside uprooting trees and covering crops as well as our plants in beds with sedimeut too
deep to be within our reacli of rescue. But we are glad that our large plauts werere. beyond the reach of the
stockton, Cal.

## Col Eyre's Loss.

Editors Press:-On Wednesday, the oth inst., as my man was coming from Napa with the mail, in crossing a creek on the road he ran drowned and the buggy carried away. The man barely saved his life. Everything was swept away-buggy, horse, haruess, all mail matter and other contents of the buggy; and
went, turning over and over, down into Napa river.
My
My correspondents who have written previous to March 6th and whose letters are not an.
swered, will know that they were lost. Those who have sent checks and orders will please from me before they read this
M. Eyrr, Jr.

## Floriculture

## Ornamental Foliage Plants.

Filtors Press:-During the last few years, the introduction of what are known as colored oliage plants into the flower garden and conforiculture.
Plants with foliage of various colors, from silvery white to the brightest scarlet, or deepest, richest purple, are now extensively employed by andscape gardeners in dec
the
As a rule this class of plants delight in great lowering plants to droop and wilt In Califor nia, subject as it is to extreme heat and drouth during the greater part of the year, this class
plants must become particularly valuahle, plants mus
they retain
autumn.

## autumn.

A few of the finest varieties, which have summer sun are the merit in withstanding our embracing a large class of plauts, constitute one of the finest families of the ornamental foliago section. They are all propagated from sced very
easily. They should never be planted in a very rich soil or their handsome variegations will dulled.
A. salcifolius, eanmonly known as the " fo tain plant, T have tried for several seasons.
is a liandsome plant of pyramidal growth, gro anays attract attention family. The foliage is very large and of the deepest blood red.
out the floral world, ranking first in the list of foliage plants. They can be raised from seed, large, finely variegated folin of ine ats. appearance exceedingly gratifying to the planter. Of the entire list there are none which I know of, that are more certain to give satisfaction. merit. In a good, rich, loamy soil they make wonderfully handsome plants, which for beauty have no equal among flowering plants. There
are several hundred varieties of the colens, all very fine.
Achyranthus is a very fine plant, but are bet.
ter adapted for pot than border culture rilsoni is the finest red leafed plant in cultivation. Foliage begonias of many beautiful and distinct are also fine for border cnlture. They should be plantcd where
part of the day. In planting beds with foliage plants, the beet
effect will be produced by planting in the ribbon
W M. C. L. Drem $^{\text {R }}$ Eil Dorado, Cal.

## Propagating Roses.

Editory Priess:-My only experience in budding roses thus far has been cut fingers, for ths point of the knife so often slips arourd the cane bud fingers, and there never has one my forto is not in that direction. So some one else will bave to recommend budding. With cuttings I have always been successful. The year befor last I raised about 30 plants. They had bloomed uicely in the beds, but when the first rain cama enough to root well they died during last summer's hot winds. I have now over 200 planted, put out nicely alrcady. Some have leaves on,
and one has a nice hud, and I think will bloom shortly.
a year old (bui not often over two years), be fore they commence putting out new earl
ond
Cut ond good rain, so the ground is nice and
Cut off all the leaves carefully; cut the
the ground well cultivated; put the slips int the ground in rows about six inches apart each way; put them undergrow, a little better if the bed slopes toward the south, and the ships are little more even, as they get the full benefit of the sun's heat all day. Grape If I grow best this way too.
If I tind the ground is baking too hard I work taking care not to touch the roses. If I see taking care not to touch the roses. them rain water, if I have
will do), but not too often.
I sent to Dirgee \& Conard's for some roses this winter, and they are doing finely. I never saw any sent in better condition, they are so
careful in packing, and send such healthy plants. I have raised spireas, weigelia rosea, syringea, jessamines, etc., in the same manner States. This plan I have followed for the past 15 years. It is well to put in several cuttings of each variety, they can let it alone; but some generally do want to grow, so you will be sure to get one at weather and a a greare. This is a good year but year before last they grew better.
like roses best on their own roots. If anything lappens to the top, as long as the root
lives the sprouts will come up the same; but if lives the sprouts wila come up the sudded plant is broken off beow the top of a budded plant is broken of beew the
bud, you have lost your rose. Some varieties are much more difficult to get to grow than others. The Cora Berton, Glorie de Rosemond, Agrippina, Hermosa, Lady Washington, and La Marque are among the willing growers.
M. H.

Santa Barbara, Cal.
In Favor of Cutting
Editors Press:-Mrs. Childs gives some timely hints on the culture of roses in the RU-
RAL PRESS of the $9 t h$ of February, 1878 , and some to which I must take some exceptions. The first is to recommend budding rather than growing from cuttings, is decidedly a mistake,
as budding can only be resorted to at a certain as budding can only be resorted to at a certain
season of the year, while roses may be grown season of the year, while roses may be grown
from cuttings at all and any season of the year. from cuttings at all and any season of the year.
Again, the most skillful often miss at budding, Again, the most skillful often miss at budding,
but the most unsophisticated will succeed to their entire satisfaction when they learn the secrets in propagating from cuttings. Again, where budding is preferred, I cannot recom. mend the yearly bloomers, as the Castilian, for the reason that they are too vigorons in their growth; they need constant watching and al-
most daily pruning, or the rapid sprouts will most daily pruning, or it a failure
Half Moon Bay, Cal.

## THE DAIRY. $^{\text {A }}$

Corn Fodder-Its Culture and Ensilage.

There are three different modes of harvesting curn, according to its being cut for green fodder for each day's use, or whether it is to be preserved, dried in stacks like hay, or ensilaged green or partially dried in silos. It is not very
easy to tell at what time of its growth corn has to be cut for daily use as green fodder; everyone has to find that out himself, but when first commenced it must be kept on without interruption. It is well, too, to sow corn at different
times to obtain green fodder continually of the same grade.
I shall not here, for want of space, give your readers a description of the manner of building day, if needed.

Harvesting Corn for Ensilaging
As soon as the corn has formed ears, and the
grain is passing out of its milky condition and getting somewhat firm, then has the time come
for ensilaging. It is desirable that the whole operation be done quickly and by fair weather; the best, certainly, when a large field is to havc
the cutting, hauling and ensilaging done simul. taneously by separate gangs of nen.. The noost general way of harvesting corn for ensilaging is,
on the same day it is cut down, or the next day at the latest, to tie it up in well-arranged bales at the latest, to tie it up in well-arranged bales
of 12 to 20 pounds, which can be loaded and unloaded with ease by the hands. Some leave
the corn several days on the ground after having it cut, but $I$ am of the opinion that in this State one day ought to be suticient. If corn is to be cut up small, it does not matter which way it is piled up by the silos; but if corn is to be packed
entire, just as it comes from the field, then have the bales set up to prevent a too fast fermentation and even molung which would very likely
occur if thrown up in a heap upon the ground occur if thrown up in a heap upon the ground
When corn is ensilaged with stalks entire, it
it must be lett half a day will do. Rain does not hurt corn after it is eut, so
ing upon the ground till the rain is over withou
any
danger of its spoiling.

## The Object of Ensilaging Corn

gainst the cold weather in winter. Applied t
fodder against the inclemency of the weather,
but its action produces in the mass but its action produces in the mass a certain in some manner. Corn ensilaging, therefore shows that a silo may be regarded as a real gen erator of moist heat, and of which the farmer may get the benefit, either by improving corn
fodder itself, if ensilaged all by itself, or to ren fodder itself, if ensilaged all by itself, or to ren
der it more substantial by adding to the cut der it more substantial by adding to the cut corn such substances as cut straw or the like.
We have no idea to what improvenents in agri Cultural economy may be gained by the ensilag ing process; and the fact must be borne in mind hat such a process is almost in its infancy, and the road to mproving $1 t$ open and every intelli boast of having her fair share of them. I say that it is in the province of every oue to make experineuts, and if successful to keep on, improve om them, and make known he resu of all. Not only have we in this State to find the stantial, eheap fodder, easily raitites a sub mented corn seems to present itself to us, bu why shouldn t we improve on that by making rate use of stock, milch cows, sheep hogs,

## Leaving as

Leaving aside the chemical theory of the fer I will now come to the making of silos.

Silos in General.
A silo proper is a trench in which grain, fod ing is the packing of fodder, roots or grain int
there would not be time to get done with the covering of the last section, it is well to cover
it with a few inches of earth and next it with a few inches of earth and, next day,
complete it to its full thickness of 18 inches Before throwing up the covering of earth a Before throwing up the covering of earth a
dressing of straw is spread over the pile, and aressing of straw is spread over the pile, and even codder in close proximity with the earth, jets molded by both the aqueous and gaseous emanations produced by the fermentation of
corn, and that straw and chaff getting most of corn, and that straw and chaff getting most of it protects in that way so much more of the华daer. A little waste has, of course, to takc place, though it does not amount to much. The a greater depth than two to four inches. After greater's work the open end of the sil. After ered with straw to prevent access of the air to the interior; and when work is resumed next day the straw is removed, and the work goes on till the whole crop is ensilaged. For over a week after the pile is completed it has to be very watched, as also alter a heavy rain. Every nisure resulting either from the rain or
the settling of the fodder within being dilisently repaired

Trench-Silos.
In our State, where the ground is dry and the standing water not so near the surface, the trench-silo, far more economical and perfect than the surface-silo and on account of its holdquantity of earth, ought to be preferred. But, as a trench has to be dug out, it is important to select a plot of good, clear ground. Now, to render the subject clearer, I will give you, with

a silo. There are three kinds of silos: temporary ones, surface and trench silos, and permanent face silos are more generally used; in dry land trench silos are preferable. Whichever way a
silo is built, it must be done so that it will be easy to put in and take out fodder and drain the surromndings from the raius and subterra-
nean waters. The size of a silo has to be in proportion of the fodder to be ensilaged. Finely cut and packed solid,
weighs about 800 pounds.

Surface Silos
Consist simply in packing the fodder very com-
pactly in piles above the ground, which piles
two cuts, a full description of a trench-silo, as built in Wurtemberg (Germany), one cut repre one. Let us commence with Fig. 1. A, $A$, repre
sents the surface of the soil; $D, B, C, E$, sents the surface of the soil; $D, B, C, E$,
trench, dug to a depth of five feet and a width or 10 feet at the bottom. I will remark that trench-silos are not all dug to the above depth. The depth varies, according to the nature of the soil, from five to two feet. The top of that
trench, shown in the engraving, right at the trench, shown in the engraving, right at the
surface, $A, A$, is $12 \frac{1}{2}$ feet wide instead of 12 feet, as tigured on the plan. As to length, it varies also according to the amount of fodder to pactly in piles above the ground, which piles trench, $D, B, C, E$, is represented on each side

fig. 2. THE SILO FILLED AND COVERED.
are then covered with a layer of earth. This kind of silo is the one most in use with begin-
ners, who are naturally cautious before willing ners, wno are naturally cautious before willing are so much more durable and clean. But it is likely that after ensilaging will have come to be
of general nse, there will be no more reasons of general nse, there will be no more reasons silos have to bc made over every year, it is a
fact that corn fodder keeps very well in them, fact that corn fodder keeps very well in them thin layer of straw preparatory to covering it with earth, thus preventing the too fine earth to drop among the fodder.
When a silo is built upon the surface of the ground, the botton, according to the nature of
the soil, is either made slightly concaved or the soil, is either made slightly concaved or
convex, and between nine and ten feet in width. The fodder is then packed on that bottom to a hight of six feet, and on a length varying with hight of six feet, add on a length varying with
the amount of fodder to be ensilaged up to 100 yards; the earth covering being about 18 inches in thickness, and the shape of the silo being riangular, or like a prism. The earth is thrown up from along both sides of the silo, leaving a ditch which serves for draining the surface made somewhat hollow, the botiom of the ditch on each side
The plot on which to build the silos, having
The plot on which to build sected foen carefully selected and prepared, ne to that spot and packed, is fodder is hanled up to that spot and packed, if
cut, on a length of 15 feet at one time. After cut, on a length of having been packed solid to a hight of six feet, having been packed solid to a hight of six feet, care has to be taken to make a perfect lunion between the two sections. If the corn instead
of being cut is packed entire, the bcst manner make the sections unite well, is to have
result in that covering of earth, and from which oozes out a rather pleasant smell, like that of paired. Once or twice after that, it will be necessary yet to watch the silos; then they ar let alone. A covering of two feet of earth may be sufficient, but some people prefer it thicker On many places stone or brick silos, whic certainly are more perfect and elean, are use in preference to earth ones; and very likely that if the ensilaging of green fodder becomes gen ral none others will be built on a well-to-d arm, at least.
Another important advantage derived from the ensilaging of fodder, is that it does away with large barns, which are often very costly with less barns less danger of fire. Stone and brick silos are built both upon the masonry, very often two silos are built contiguous to each other, so that three walls only ar required. This may be called a double silo Experience will tell what kind of silos will do the best, and in regard to our State, the ques ten is so new with us, that, I believe, it is belt
ter to wait till some one will give us the results ter to wait till some
of his experiments.
The fodder must be taken out of the silo just The fodder must be taken out of the silo just spoils by exposure to the air. The exposed end poils by exposure to the air. The exposed end
of the pile has to be kept well covered with bundles of straw pressed tightly against tha end to prevent the air from getting to the inor the mass, and a
And now I will say: Friends of the Press
Felix
Nevada City, February 14th, 1878 .

## The Apiary.

## Bee Notes

Edrors Press:-Now that the merry hum of the busy bee is once more heard in every
field and garden, the beekeeper should begin to prepare for the year's work. Believing that all owners of colonies of bees have had sufficient notice that a rich honey yield is going to be harvested this season, we will venture to offer few suggestions that should be seen to as soon as possible.
As we have noted before in these columns hat a large number of hives would be starved out during the last winter, it would be unnecessary to say more on that subject, were it not that many stands are now in amishing condi tion. There are many that are also queenless, Queens are very the year. We would give some of the causes of this loss, buy to tell how to save here, for we propose
such ill-fated swarms.
If the stand is a populous one, that is if would advise the introduction of a queen, provided there is one at haud. If no queens have been kept for this purpose, the next best way would be to unite them with another colony having a prolific queen; a weak swarm would be preferable. Should there be two or more swarms iu a dwindling condition they should be
united, and thus secure a good, strong colony. When thus unit a doubled strength, a greater animal heat will be naintained, and brood rearing will be carried crowded with workers in one-fourth less time than if they were left in a weak state. In the latter condition little heat would be generated, by them, and if breeding was attempted only a few square inches would be ound hand, several of the brood nest. On the other hand, several cards of comb will be f
stages of development.

> Uniting Swarms

At this time less trouble is experienced in uniting than in the fall of the year. It may be simply done as follows: If a queenless hive is to be added to one with a qucen, take the first named, and aiter smok or a roll of rags, let them remain five or ten minutes, that they may fill themselves with honey. Have some sweetened water, or, what is better, somo syrup made of "Coflice A" sugar (crushcd will do). Thns prepared open the hives and remove the frames, and sprinkle the bees and comb with tho above preparation.
Bees of both hives should be sprinkled. Place only such combs in the hive that is to hold the newly built up swarm as contain honey and beebread. Empty comb and frames containing to just so many frames as they will cover. Lay across the top of the frames a few pieces of sticks about lialf an inch square, and over this a few thicknesses of burlap sacking. Also let the burlap extend down the side between the brood nest and the compartment containing the empty frames or comb. When thus scen to, the bees aro in as snug a place as they could desire. If any trouble should arise by the bces fighting, some peppcrmint may be added to the syrup, so as to scent them more thoroughly, by following th

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h
 returns from a tunnel which they have pushell
or years at the cost of somethiny
live sbo their lauds.
then
then
nen
It was such a vigorous interior life as this, full of incitement and profit, which Bro. Cressey laid aside to serve the Oriler in building up the Grangers' Bank in this city. As we have said,
by devotion to this duty with which he was charged, he has been obliged to forego attention
to his interior interests, which would have better paid him for the time. But the Grangers' Bank, in its stability and record as a divideud paying institution, is a monume
Bro. Cressey is praised and trusted by the nembers of the Order who know him and his work, and his opinion is sought and respected.
His city life has thus, no doubt, been of pleasure to him in the wider friendship he has made as well as in the success of the bank to which he is devoted. It was here though that he has met the one great loss of his life in the death of rejoiced at his successes. The heartfelt expressions of sympathy which greeted Mr. Cressey as a bereaved brother, must have shown him as well as admirers of his success.
We trust that the vacation which he is takin brief and busy though it be, may bring him back to his city desk refreshed and renewed in strength, aud eager for the duties and responsi-
bilities which the future will place upon him.

## Solano Pomona Grange.

Editors Press:-The Solano County Poinona Frange inceting on Thursday, March 7th, at The morning bid fair for a pleasant day, with cloudless skies and westerly wiud. From the pluvial outpourings during the month past, all supposed there eould be none rescrved. The fathomless Paciitic, however, is near at hand, when atmospherie conditions favor. So a regular drizzle set in about ten o'clock, lasting several hours.
At C'ordelia, the railroad station and post office for Rockville, we met members from the upper part of the county who had come by an carly train, wishing to be present at the meeting; but having hecome discouraged at the prospects, jumped upon the cars which had brought
us and returned home. Water above, around and beyond; the whole conntry to the east and beyond; the whole conntry to the east of determincdly equatic venture any ing a determincdy equatic venture out in such weather aud roads rendered next to impassible Rockville Grauge took us (Bros, S, S. Drake, bupuy and your correspondent) to their hall, where we arrived about noon, and found the tables spread and waiting the arrival of their guests. There was a profusion of good things. A huge. roast turkey, weighing over 30 pounds dressed, towered up in the center of the tablc. sister Tiscall, who had donated the monster, ppeared is conceded by all who have participated in hese Granger set outs thate participated in of culinary skill. The ladies of Rockville range are not a whit behind their sisters
nowing how the lords of creation are ruled After the removal of the cloth, Worthy Maser, A. T. Hateh, called the meeting to order In the course of busincss, the reports of the committees upon taxation and the currency question were offered and discussed, and man suggestions offered, etc. Time passed so rap train when the Cirange closed.

To Quench a Burning Chimney Accepting the hospitality of Bro. Hatch, and intelligence. While seated good fceling and intelligence. While seated at supper we which proved to be the chinney on fire. Forked flames shot high into the night air, and showers of sparks and coals rained down on roof and house. Appearances favored there being a first-elass conflagration, with no chance to prevent it. By a timely suggestion in the free use
of salt thrown down the burning flue, it was of salt thrown down the burning flue, it was
finally subduel, with no further dainage than finally subdued, with no further damage than the cleaning ont of a ehinney which had been me say to your readers who may chance to ing out), that the most effective neans of bringing them under subjection, is to throw fine salt down their throats, and cover their cious remedy may save many from losing what is dear to them-a home.
South Vallejo, March 9th.

Deatil of Past Master Allen of Missourr. -We deeply regret to announce that siuce our last issue we have learned the sad news of the guished members of the National Girange, Bro T. I. Allen, Past Master of Missiouri State Grangc. He died at his home near St. Louis,
February, 4th. It is no dispargement to mauy of the good workers in our cause to say, that none have labored more ably, unselfishly, and
successfully in building up and maintaining the
range eause than Bro. Allen. His is the
fourth death of a member of the National Bras. Johnson the ten years of its existence Bros. Johnson of texas, Haynes of Tennessee, being the others. Ihis
death is sincerely lamented by a host of friends and brothers.

## Election of 0fticers.

Davis Creek Graxgf, No. 270.- George
Weston, M.; George Hutcel, O.; C. L. Sullivan, L.; Alvin Amick, S. ; Luke Mulkey, K ; Mary Tournidge, Ceres; Jenuie Henderson omoua; Irene Briles, Flora; Mrs. Lodicy F pray, L. A.
Elk Valley Grayge, Non. 255.-Installed
Feb. 13th: Jos. Bertsch, M.; Gco. Walton .; Joel Fairchild, L.; John Young, S.; Alex.
S.; David Griffin, Sec'y; Naney Lawless,
G. K.; Ellen Nickel, L. A. S. The following ofnccrs elected, not heing present Mrs. E. W. Smith, Pomona; Mrs. J. Fairchild,
Flora. Flora.
Fairview Grange. - Installed on the fourth Saturday in January: Edward Evey, 11 ; Byron
Clark, O.; John Taylor, L.; William Hill, S. F. P. Marsh, A. S. ; Amos Wright, C.; I. M. K. Kec Miss Frauces L. livey, Cercs; Miss Laura A. Lvey, Yomona; Miss Emina Clark, Flo
Miss Mary E. Kellogg, L. A. S.

Magnolia Grancie.-.J. N. Ritchie, M. Damiel Bulderback, O.; E. M. Denton, L.; C. C. ack, Sec y; H. Sinith, G. K.; F. M. Jenton, N. Ritchie, ! 1 lora; Mrs. Bilderback, L. A. S. Mercel Gbange, No. 7.-A. D. Turner, M.; John A. Perry, O.; H. J. Ostrander, L.; A
smith, S.; C. Heeley, A. S.; S. K. Spears, C. Mrs. A. Smith, T.; R. S. Clay, Sec'y; Eh O. M. Healey, Pomona; Mrs. M. Hall, Flora; Mrs. R. S. Clay, L. A. S.
Monoc Grange- W. H. Seits, M.; J. T Crawrord, O.; D. O. Bisscll, L, ; J. A. Glidden,
S.; F. M. Seits, A. S.; L. H. Henderson, C.;
E. V. Coffer, T. A. B. Crawforl See'y; W;
E. V. Coffer, T.; A. B. Crawford, See'y; W. Coffer, Stewardess.
San Bernard
Bernardino, Cal.-D. If. Wixom, M.; C. II Mero, O.; R. Shelton, L.; G. Lord, S.; A. D.
Clyde,A.S. $;$ James Cameron,C.; Mrs. A. S. Lord T.; J. D. Ousterhout, Sec'y; James Kennedy,
f. K.; Mrs. Mary Carter, Ceres; Mrs. S. G. K.; Mrs. Mary Carter, Ceres; Mrs. S.
J. Sawyer, Pomona; Mrs. Mary Wixom, Flora;
Mrs. Emma Stuchbery, L. A. S.

Wabaska Grange.-Installed, Jan. 26: J,
J. Fox, M.; W. B. Sanders, O.; C. I. Martin S.; E. J. Haltom, See'y; B. H. Reymers, A S. H. Sefton, T.; C. Hcrnleben, C.; G. Kıner
man, (G. K.; Sister II. Reymers, Flora; Sister Mimie Herulelen, Pomona; Sister Alice Z. A. Cleaver, I.

- Officers of Granges are requested to send list of off-
cers elect, date of election and day set for installation, to cers elect, date of
this otfice direct.

State Lecturer's Appointments for April. Ifawward, Alameda county, Jlonday, April 1st. Granges--
Tencesal, Centreville, Eden, Comanche. Livermore, Alamela
-Livermure, Sunol.
Elisis sian Joaquin county, Wcdneslay, April 3d. Granges
-Ellis, Dannille, Pointor-Tunhers.
Stoktom, Sinn Joanuin county, Thursday, April 4th
Grances-Atanta, Rustic Stockton, San Joaquin county, Thursday, April 4th
Granges Atlanta, Rustic, Liniden, Sockton.
Lodi, San Joaquin county, Friday, April 5th. GrangesLodi, San Joaquin county, Friday, April 5th. Granges-
Lodi, Castora, Eliott, Woodroridge, Liberty.
Sapril 6th Lacranento, Sacraunento county, Saturday, April 6th
Grankese Saeramento, Our, Iivcr, Florin, Congmes.
Galt, Sacranento county, Monday, April sih. Graule Gialt.
Eirove, Sacramento county, Tuesday, April 9 th. Granyes Elk Grove, Georkiana
Franklin, Sacranento county, Wednesday, April 10th. Grange- rallkin.
Enterprise, Sazerantento county, Thursday, April 11th. Grange-Enterprise.
South Sutter, sutter

## Roscrille, Placer count

## Wheatland, Yuba county, Monday April 15th. Grange-

 Wheatland.Yuba City, Sutter county, Weduesday, April 17th. Grange Grand lsland; Colusa county, Friday, April 19tb. Grange -Colusa, Funk slough.
Antelope ialley, Colus county, Saturday, April 20 th
Grange-Antelope Valley. Granye-Antelope Valley. Monday, April 22d. Grange Plana, Colusa county, Wednesday, April 2 th. Grango
Plana. Nord, Bute county, Thurslay, April 25 th. Grange-Nom
Tehama, Tehama county, Friday, April 26th. Grange Tehama.
Red $131 \mathrm{lff}, \mathrm{Tc}$
-Red Bluf

Frog Celture. - Frog culture is the latest Western industry, and is being systematically earried on iu Minnesota. It is a simple pro-
cess, consisting chiefly in the protection of eggs cess, consisting chiefly in the protection of eggs
and talpoles from birds and other enemies by means of wire screens. The product thus far reported amounts to 3,000 dozen legs, of which where
dozen.

## Aqpicultural Notes.

## California.

## ALAMEDA.

March 2: Last Saturday the Fruit and Veg ctable Preserving Company's factory at Cen
terville was sold, as previously advertised The highest bid was only $\$ 1,225$, and Mr. Jame lagan was the purchaser. This amount wil holders, in order to liquidate the debts of the old oncern Wach shareholder will have to ute about 81: for each share in order to prevent the creditors from bringing suit against raordinary good purchase, and will probably put the establishment to use in making tin eans BUTTE
Notes,-Record, March 9: We learn froun Ir. Bowers, that the loss of sheep in the viein of flocks. The weather has been particularl severe on the increase. On the Gerke ranch Messrs. Bullard \& Baylis, lessees,! have un has not damaged them in any respect. A fairer prospect for a large yield has never bee all over the ranch.
CONTRA COSTA.
Seed Time, - Gazelte, March 9: The rains old on annoyingly to those who are waiting of our grain in 1862 was put in later than the prescnt date, and indeed, very little of it be stances extending to the middle of April, mak ing good crops,
sults this year.

## FRESNO.

Trade in California Tree Seeds.- Repub.
ican, March 9: Professor W. A. Sanders, rom an exteusive acquaintance with seedsmen, has ascertained that thousands of dollars are yearly sent to our State for seeds, especially
seeds of those trees peculiar to California. And believing in the ability of our region to supply that demand more fully than one order from one of the largest New York
an
firms of seed dealers. This is for tree seeds only, and will embrace the "Big Tren of Cahi-
fornia," of which our county has more than al fornia," of which our county has more than all firs, cedars, ete., of the Sierras; and he will push his labor of gathering seels away uI
the "Switzerland of America," 10,000 feet the sea, a climate of alniost frigid cold, where grow dense foliaged firs and larches, never yet grown in the Atlantic States, but sure to stand prairies, and undoubtedly in the future to beand ornamental trecs of that vast region of country. He says that he is going to fill this ordo
in a manner that must be satisfactory as to quality and price, and surely th

## SONOMA

Shearing.-Petaluma Argus March
Sheep shearing has eommenced in this vieinity We are informed that in this part of the county the yield of wool is up to the average in quan
tity. Sheep are generally in good condition

 trees in the northern suburbs of Healdsburg, | The trees are now full of young almonds; some |
| :---: | plum trees will also produce a heavier erop than usual.

Hog Losses. - Nore losses of hogs by disease are reported. Fllward Price, five miles west of ter in a drove of I10. David Hopper's
four aud his son-in-law's ( $\mathbf{N} . \mathrm{H}$. Cox) one; gentlemen have ranches just west of town. has made examinations which throw some li open he found that they had been killed by worms which had first gaincd access to the testines, then cut their way through into
lights and liver. Each earcass containe reast a gallon of the crawlers and their average
length was six inches. In shape they resenble the angle worm, but taperd more from
middle in both directions. As the disease
$\qquad$

are turpeutine, eopperas, indigo. He has the

## remedy

## LOS ANGELES.

Editors Press:-Bcing a reader of the Press for years and seeing many notices of prolific
trees, I will add my mite. Mr. P. Bowers, of Orange,
at three cents each, 812.50 worth of oranges,
He has, in the same orchard, two St. Michael trees one
tured fi
Morrow

## MARIN.

The Tosales Factory.-Journal, March 7:
The cheese factory has been in operation under The cheese factory has been in operation under
the management of Messrs. Lang \& Haskins, two months and has increased its product from
2 to 36 cheese per day. Starting with the milk unfavorable season and horrible roads, but for which the increase would have been much greater. The factory is paid two cents per
pound for making cheese. The January diviound for making cheese. The January
end - irst month- was $\$ 1.61$ per 100 pounds
of milk. Mr. Guldager, figures that on 7,092 pounds of milk, he made $\$ 32$ more than he
would by making butter. Mr. A. Marshall, who in January furnished 18,000 pounds of
milk, says his profit for January and February, is $\$ 200$ greater than if he had made butter.
Butter has sold at $18 @ 19$ ents equal with cheese it should bring at least 40 cenc. Ane the hat 18 c The factory now receives about 10,000 pounds of milk per day. the present management that at the end of two months, the patrons could withdraw. But not Mr. Lang tells us that this is a very favorable
place for cheese making. He averages a pound of cheese from 9.18 pounds of milk, while in
the Eastern States the average is and during such a wet spell as this it would take at least eleven pounds of milk to the pound oth of the the length of the grazing season, and the cool
nights, are very favorable. A late report of nights, ari
the American Dairymen's Association says that dairy States.
Cheese Making.-S. C. Percival, on the Lawrence dairy, has just completed arrange-
ments for making cheese, and the milk of his 200 cows will be turned to this product for the present.
Storm Damages.-The hillsides in Nicasio agidiromales They will have to be plowed again gridirons. Thed, because in their present furrowed and gullied state the reaper could not be worked in them. But the exceptional and important
item of loss is the damage to land. On one dairy ranch, of less than 1,000 acres, in Tomales, there have been 100 slides. But the
worst feature is the gullies that have been made. Many of these, which a child might formerly wide, and of frightful depth. This is irreparable damage. It cannot be estimated. It injures the whole field, and the entire ranch
sympathizes. They cannot heal over. The injury will grow greater with every soaking
rain Much of this loss was caused by a cloud burst, which occurred on Sunday, two weeks ago. The shower lasted less than 20 minutes, yet over three inches of rain fcll. On
the broad sides of hills the water was six inches deep, not in places, but everywhere, and the ravines where centered the food from diferent directions were washed out bodily, and turned into these yawning and unsightly chasms. We
do not know of any large land slides, but the number of small ones is legion. In one little glen, comprising not over 40 acres, there are 20 . when roads and buildings have been replaced. MENDOCINO.
Edirors Press:-Up to Sunday night, we
have had 46.60 inches of rain, and only a delusive clearness yet developed. At Little Lake, 22 miles north, 70 inches of pluvial deposit make people thankful that this is a dry season. Very
few lambs are being saved, and the old stock few lambs are being saved, and the old stock
will hardly be kept good, unless this incessant pattering ceases soon.-A. O. C., Ukiah, March 4th.

## MONTEREY.

Losses or Hocs.-Argus March 9: David Castro has lost about 200 head of hogs by what appeared to be lung disease. Other parties
have lost hogs from exposure to the cold and stormy weather of the past two months, as felTripp \& Burns, $60 ; 200$ head of Cooper's cattle SANTA CLARA.
Cross Fertilizing Almonds.-Mercury, Feb. 26: A successful almond grower of this
county gives us this bit of practical information. He found that his King almond trees, of which he had a large number, blossomed fully,
but only those trees growing alongside of his Languedocs bore fruit. He cut branches in hower from his Languedocs and placed them in
the King trees at a distance remote from the former. Those trees were found to bear finely while the trees not thus experimented with nuts. He now perves all of his King trees in
this this way, and has no further trouble from bar
renness. SUTTER.
Water and Squirrels. - Appeal, March 8:
High water is High water is causing great destruction to
fences and buildings in this section. The water has driven squirrels, rabbits and wild hogs


23: The rain has been absorbed nearly as fast as
it fell. Yet, with what the people of other it fell. Yet, with what the people of other
places would consider an inadequate supply of rain to bring a crop, we have enough to bea
them from 10 to 20 bushels to the acre withou irrigation. The low bushels to the acre withou are under water, but less damage than benefit will probably result, little grain having been sown. The rivers, sloughs and ditches are runhave never seen such beautiful spring weather as we have had during the past few weeks in
Tulare county, since we have been here. There have been many drawhacks to the increase emigration to the county, for the past four years, which, happily, are disappearing. Lawlessness,
and that want of enterprise so essential to pro and that want of enterprise so essential to pro-
gress, are rapidly dwindling in proportion to the gress, are rapidly dwindling in proportion to the
increase of capital and population. The lack o rain is being made up by the construction o and clinate superior to others, on account of its dryness and heat, for the curing of certain crops, such as tobacco, raisins, and the production o superior and peculiar wines. No other county lands, and nowhere in the State are good land so cheap. No other land in the State will pro
duce such crops as ours on the same amount rainfall. Our lands lie together in large bodies capable of sustaining an immense population of coal, oil and minerals, the rapid development of coal, oil and minerals, the rapid developinen
of inh, in a few years, cannot fail to add greatly to the value of other property. With
plenty of wood, water, economy in our finances, and a reasonable reduction of freights and fares, we cannot fail to be 'prosperous in the future. Our people have paid out vast sums to the gov-
ernment for lands, and most of us, starting with nothing a few years ago, we see no cause for discouragement.

## TUOLUMNE.

Editors Press :-The sun shines again in splendor, and nature rejoices for the change.
The domestic linnet is again pre-empting his old homestic haunts. The wild-geese wing their
doay to the high Sierras or some other norther elime. The peach trees begin to bloom in beauty and the ever-welcome spring-time is bursting all around the foothills in flower, bud and bloom. it is ours again to sympathize with the dwellers
of the great plains. The foothills suffer but little from the Hloods, and but in isolated cases, from the drouth. For permanent homes, give
ne the foothills ; for sudden changes in fortune or exciting scenes, give me the great, plains. It is seldom we find an earthly paradise in one locality. It is something like a well-
appointed dinner table requiring a little from all nations for completeness. The plains have ad netho mar ity Th ity against floods, etc. Both combined would certainly create an Eden, which would make man loth to leave, even though the home of the spirit held out far greater inducements. Hence nature seems to distribute her giits, so we may remen-
ber that we are mortal and live to immortality. The incoming season promises uuusual prosperity. The spirit of iudustry and ambition has
taken the place of dogged despair. The farmer's taken the place of dogged despair. The farmer's
coin is now money, and has a real value in the coin is now money, and has a real value in the Laborers ill have rights worth protecting Laborers will find plenty of exercise for brain Large kitchens and ministering angels will rest for a season, having nobly performed the duties of the hour. But the record of such acts never sale philanthrod the necessity for such wholefoothills, although times of pinching and economy have been felt and practiced in isolated cases. Again we record a cheering note for the
future of 78 . The gloom of drouth and flood future of ${ }^{7} 78$. The gloom of drouth and flood
will soon pass away. The Christmas chimes of 78 will chant a song of thanksgiviug for abunPoverty and distress will be banished from the hearth and heart.-Joun Taylor.

## Nevada.

Charcoal Burning.-Sentinel: There are 800 coal burners employed in the Eureka trade, $90 \%$ of whom are foreigners, and about $50 \%$ of exceptions this force is in the employ of less than a dozen firms, two-thirds of whom are of foreign birth. The average distance that the coal is hauled by teams is 35 miles, 10 companies owning the outfits. There has been con-
sumed within the last five years $6,000,000$ sumed within the last five years $6,000,000$ bushels of charcoal, and it is estimated that there is timber enough standing within a radius of 60
milcs to produce $25,000,000$ bushels. The regmiles to produce $25,000,000$ bushels. The reg-
ulation standard allows 33 bushels of coal to one cord of nut-pine wood, but this is not cor-
rect, actual experience proving that it will not produce more than 28 . It will be scen that growth of timber on the hills and mountains, and probably one-third of this is not available. At the present rate of consumption our supply
will be exhausted in eight years, allowing that every stick of growing timber can be utilized. At the price ruling in Eureka ( 25 cents per
bushel), the article remaining to be marketed in do not give a larger output of ore than at prestimber growth
future supply.

## News in Brief.

The Papal expenditures are $\$ 3,000,000$ a year. Los Avgrles wants a branch State prison. as sold off 1,000 of his father's horses.
Јонг Morous saloon-keep horses. mitted uicide'at Portland on Saturday.
The population of France on the last day of 877 was $36,905,788$; of Paris, 2,410, 349 50,000 sheep in that county. IN South America the citi
Eighteen hundred revolutionary ladies ave recently been flogged in Russia.
Three members of the California Legislaturo ave died since the beginning of the session.
Goud dust at Deadwood, Black hills, passes Gold dust at Deadwood, Black hills, passes MANY of the Chinese.
MANY of the Chinese cigar makers in this city are said to be afflicted with leprosy.
Cattie in Ventura county are dying from Cartice in Ventura county are dying from
overfeeding on the rank growth of grass. VICTOR
$7,000,000$
Forty locomotives are abont to be shipper from Philadelphia to Russia.
A bill toappoint a milk inspector for the city of San Francisco has passed the Senate.
Governor Bradley, of Nevada, is a candate for a third term.
TuE colored voters of Oakland have formed a political club.
This is the first winter in 17 years when there has been so little s.
of eastern Oregon.
Simon Cameron and Montgomery Blair are now the only survivors of President Linoln's THE rainfall
season to 40.46 inches, at Shasta to 70 , and at The Callifornia Street Cable railroad, one of
Thinity county, 53 inches. the most substantial and well appointed ever built, goes into regular operation next Monday.
THE workingmen of Humboldt county, Nev., The workingmen of Humboldt county, Nev.,
will favor no man for a second term in a State office.
A biLL appropriating $\$ 10,000$ in aid of the
ufferers by the flood has passed the California Legislature.
Winfield Westlake, a native of Maine, 17 ears of age, has heen sent to the Insane Asy-
um. Eats rothing and tries to commit suicide Tue people of California are to vote at their next general election upon the question of CrviL suits are to be brought by the Government against several persons in Truckee, to re-
cover the value of timber taken unlawfully. IT is estimated that 750,000 people have
signed the temperance pledge in Illinois during
She year 1877 . against 301,020 last year, 3
Toral rainfall in San Francisce to date is 10.59 and the year

The Chinese have petitioned the Legislature to have their children, numbering, they say , 000 , admitted to the public schools.
THE 20,000 acres of wheat in Los. Anceles it is estimated will yield enough to give 20 bush els to every inhabitant in the county.
The Janissaries of Light have opened a coperative store on Howard street, adjoining heir hall.
THERE is a Spanish woman living on the Lit
the Colorado, Arizona, who claims to be 128 years
1600 to wek J. W. Sexsmith fell from the and was instantly killed. He left a wife and two children in Virginia City. The tah Legislature says, polygamy is sus-
tained by the Bible, is a divine ordinance; and they cannot legislate against religious belief and
Tue Australian government are considering the propriety of offering a $\$ 20,000$ bonus for
reaping, cleaning and bagging wheat on the ground.
A Los Angeles farmer bought an acre of ground for $\$ 50$, sowed it with alfalfa last year, aised six crops of hay which, at $\$ 10$ per ton
brought him $\$ 120$.
Henty Halsey Sanford, aged 53 years, ate County Surveyor of Yuba county, was
ound dead in his room last week, caused by an overdose of morphia taken to relieve rheumatic gout.
issioners of this city has absconded being a lefaulter to the amount of $\$ 4,700$, lost, as is upposed, in stock operations.
Tue receipts of the fair held lately for the amourted to $\$ 24,000$, of which $\$ 20,000$ are clear
Tire Rilbon Reporter is the title of a new weekly journal publislocd by Ada Hutchings,
and designed to fill the special field created
by the temperance agitatiou.
Governor Irwin having declined to interfers in the case of George Butts, under senteuce o to suffer the extreme penalty of the law.
Frank M. RIree, committed suicide at his
home, near Halsey, Oregon, by shouting him
home, near Halsey, Oregon, by shouting him-
self through the hcart with a rifle. Dceased
has been in the came despondent. He was aged 40 years, and
leaves a fanily.

The best throw of dice.-Throw them away,
THE Sucker mining boats of Orovile have roduced nothing but a big law snit.
Young Finlaw, who was accideutally shot at
 On Monday last a Miss Hyde, was struck and killed by a runaway horse in this city.
Tue citizens of Salinas elected their whole TuE citizens of Salinas elected their whole
municipal ticket, except one councilman, who as returned by the Workingmen
The snow blockade that has obstructed the raised, and travel resumed
Governor Irwis has signed the discharge Qapers of 29 prisoners whose terms at sau are to be restored to citizenship.
DUNCAN 'is now charged with perjury, and
with the embezzlemeut of 17,000 shares of stock with the embezzlemeut of 17,000 shares of stock
of the Safe Deposit compauy, amounting to $\$ 1,020,000$.
ONE of the Sioux chiefs from Sitting Bull's camp told a scout on this side that the band
were nearly starving and would gladly surrender they could keep their ponies.
TuE coinage at the San Francisco Mint last month was the heaviest in any month of its his. tory, aggregating $\$ 7,085,000$, the greatest in any previous month being $\% 6,878,000$. Two
hundred and seventy-eight thousand double eagres were coined. Mariposa, 28 inches; at Dutch Flat, 43 inches;
at Cherokee, Butte county, 52 inches at Cherokee, Butte county, 52 inches; at
Shasta, 70 inches; at Grass Valley, Nevada county, 40 incheses; 1 at Grass
Av incendiary fire destroyed the distillery of Av incendiary fire destroyed the distillery of
Sachman \& Jacobs, at Santa Rosa last Sunday Sachman \&acobs, at Santa Rosa last sunday
morning. Seventeen thousand gallons of wine
and one pipe of brandy were destroyed. Loss, and one pipe of brandy
830,000 , partly insured
THE President of the State Geological Society
has been instructed to make a selection from such specimens sent to the society as he may think desirable to aid in the Pacific coast mineral exhibit at the Paris exposition
OLIVER SYMONDS while at work last week in
the shaft of the Watt gravel mine, at Moore's the shaft of the Watt gravel mine, at Moore's
Flat, was, as is supposed, seized with a faintFlat, was, as is supposed, seized with a faint-
ing chill or fit and fell 170 feet, to the bottom
of the shaft, mashing his head and shoulders to a jelly and killing him instantly. George Grey, while under the influence of Hunter, bookkeeper of the Con. Virginia
mine, Suuday last; cause, unwarranted jeal-
usy. largest single contract ever taken in
The
America from a foreign nation is the $\$ 17,000$, . America from a foreign nation is the $\$ 17,000$,
000 one given to the Providence Tool Company by the Turkish Government. The connpiay
now employs 2,500 men, who turn out 200,000 guns per year, or 600 finished guns per day. William linkien, 33 years of age, was last
week drowned by falling from a steamer at
Washington street wharf in this city. His Washington street wharf in this city. His
family reside in Brener Haven, Germany, and were about to start for this city.
TuE workingmen of Ricading, Shasta county, have organized and adopted a constitution and hy-laws. The platforn is anti-Chinese. They
claim on their roll of membership a majority the voters of that precinct.
The body of George $H$. Anderson, a native
Ireland, and 40 years of age, was found in of Ireland, and 40 years of age, was found in
the water near the Presidio last week. He left his home some three weeks ago in a despondent
mood, being out of work, and told a friend that he intended to commit suicide. preparing for the coming season's work, Large
forces of men, white and Chinese, are beiug en. gaged, and if the run of fish is ordinarily good, employment for a vast arny of men will be supEdward D. Knigut, long connected with the press of this city and sacrainento, died at
his residence on Jessie street, last week. He was a man of ability in his profession and possessed of rare social qualifications.
At an election held in Oakland, on the 11th, inst, the Workingmen's party elected Andrus,
Mayor; Clark, Police Judge; Byrne, District Mayor; Clark, Police Jade; Syre,
Attorney; Knob,.Justice. III Sarranento on
he 12th, the same party elccted the Mayor and City Attorney. stabbed and almost instantly killed by a young man named John Welsh, a painter by trade, at the corner of Tenth and Franklin streets, Oakland. They were related by marriage and
grudge existed betwecu then. The stabbing was done in self defence.
Tue crop prospects thronghont California
were never better. Even in the flooded districts, there will, with small exceptions, be a heavy yield. In the central and southern countics tho crops will be enormons, much more land havin! been pianted everywhere than over before.
Ir is reported that Charles Laugenberg, one of the boys employed on the training ship
Jamestown, committed suicide on last week ly jumping overboard, in consequence of allegci in-11sage which he had reccived of acceased had been on the ship ono ycar.
Julia Donaiy, 40 years of age aud a nativo of Ireland, has becn committed to the Napa insane asylum
pictures on
uires restraint. She is violcnt at times, espoof age and a native of Frauce. He imagines
that he sces God in the clouds, and is noisy, that he sces God in the clouds, a
checrful and melaucholy ly turns.


Selections.
Human Builders "All are arelititects of fate Working in these walls of time,
Soure with masie deces and grea,
some with ornaments of rhyme.




A Beautiful Simile




order, and settue down quiety to the charming gane of "paste.pot and scisors"" I used to
Inake a low table by laying a board upon two chairs, and if rough cover it with a newspaper Then the little ones could draw up their low and pictures froun old papers und alm manacs, and pasting them into any old volume that may ve condemmed to this style of decoration
 of the youmg artists over their green horses,
pink cows and rainbow tinted © imans and ladies, will eonvince any reasonable mother
that art culture in its rudest forn is a paying that art culture in its r
thing for the little ones.
in
thing tor the hittle ones.
Playiuy sohoo is a great treat for the older Payiug sohol is a great treat for the oliter
ones. especially when mother can take a
little
 haps, sone of the pleasant forbiddent thiuss of
her own school days. In the district school when I was young, drawing a picture was a,
capital crime, and the unlucky artist, if caught, was doomed to stand out in the floor a weary
long time, and hold at arun's length his poor little scraw1 for the school to giggle at.
Times are now so changed that drawing has
its honored place in our beet schools, and also, I hope, in the rainy day entertainment of these Thope in the rainy day entertainment of these
farm children I ann thinking about. Then there is learniug to write, at first with copies on
slate, then with all the dignity of peil and inky slate, then with alt the diginty of pen and inky
blots, and finally the tremendous business of a reat, letter with clean en enelope, postage stan
and everything regular. Ny children felt tretty and everything regular. My children felt pretty
far advanced when they could write me a conti. far advanced whin they could write me a conti
dential letter with the news that they "wood dential letter with the news th.
like to mak sum molassis sandy.
Reading, spelling, geography and multiplica. tion table may havc a share in the rainy-day
pleasure, if they will leare off their airs and pleasure, in they will leave or their ars and
not be too bookish. Readiug by turns anood story, reading in concert, "spelling down," tak.
ing journeys all over the Atlas into new coun-
 singing the multiplication table to the tune of
Yankee Doodle is a very good closing exercise for our "play-school.
Some mothers find good use for the busy little
hands in cutting and seving carpet rags, braid hing and knitting rauss, piecing quilts, etco; and fair amount of work makes play all the
merrier, if the mother has sol loved and governed
 her diliden orn pleasure. This loving and dov.
for bunines.
erning must be thorough.going, quiet and stead.
 didesome and naxggin, for the Gold den Rule applies
here as well as elsewhere, and to remem ber our here as well as elsewhere, and to remember our
own young days and how we ought to have been treated is often a very good guide now that we we
hold the governing power. Affection for chil hold the governing power. Affection for chil
dren in mot to much a matter of curre a a most excellent things that may be cultivated and will al ways fourish in a gooil soil.
I have known a few parents who were always
read y to confess that they never loved their chill ren, and several inore whose actions told the same story. We are all sure to weet at
some lleak corner of life the sour aull surly parent, who is always grumbling that his chil. dren are stupide aws ward, never atle to speak
up for themselves, etc., and we can see with up tor thenselves, etc., and we can see then so rudely they conld not possibly acquire the self.
ruespect and uncouscious ease so essential to good manners.
But thi
But this is not properly stated, for what I
mean is this: If children are treated as they mean is this: If children are treated as they
ought to be they will nerer need to accuire selif respect and ease of behavior, which are, or shoull be a a precious birthright, not to be de.
stroyed by the parent, but wisely encouraged. stroyed by the parent, but wisely encouraged.
Let no one nneer at this by anying that two
the thirds of the children need to be spanked for heir impucence, sent to the Industral school
or their laziness, and generally brow beaten for their laziness, and generally
and snubbed for their other faults.
Again, I say it is the parents who should be blaned and "trounced," if you pliease: for they
 and then by neglect, or indifiterence, or lateful.
ness, or silly oreriniudulyente have spoiled them, or failed to bring them forward in harmony with the lest and nollest conditions of life.

Total Depravity and Original Sin Are comfortable doctrines for those who will not study so earnestly the and other farm products, or the business, whatever it is, by which they hope to make money.
It is said that Mark Twain will make no conIt is said that Mark Twain will make no conhe "respects them for the sake of their father. This seems to have a slight taint of selfishness, by the shortest-sighted seltishness. Can we not see that old age will find us the weaker and perhaps even loved by our children? Do we say they owe us respect and affection, be-
cause of the food, clothing and shelter given to their helpless years? But do not ue owe them all that care of helpless years for having dared
to bring them into the worll? When it comes to bring them into the worli?. When it comes fection, we may be disappointed if we expect fection, we may be disappointed if we expect mothers said to me: "I shall be sure te give somebody. I wonld rather see it dead this
mimute than to think it wourd grow up such a minute than to think it wo
failure as some children are

## new tin. Some of those half-dollars are about the house yet, and the sight of one reat

 an old game ofWhen children are tired of active plays, they
will, if properly taught, put the honse in prime
ll the your child. Keep it close in your hear all the way if you wish to guide its future. N
sham or pretense of affection will do; and eve with genuine love and pation will do; and even tudy all the way along how to manage most wisely. But then there is no other business in this world so noble as this of raising good and happy children-no other so worthy of carefnl
study-no other in which self-sacrificc is so sure to bring happiness and the reward of well doing." I did not really get off this speech, so
sleek and smooth as it lias been written. There seek and smooth as it lias been written. There
were in the course of it about a dozen peevish were in the conrse of it about a dozen peevis did not wish to listen to such stuff. Ah, in hard time of it
About a year ago one of my congregation told that she thought I was doing more harm conld not nake people over, and was far mor likely to offend them. So she hit me pretty hard in return for a suggestion that her big girl
of 11 years old should be taught to dress and of 11 years old should be taught to dress and The mother and daughter werc visiting me, an was never more ostonished than when th ormer-who has nearly always lived on a farm and worked hard for a living-acknowledged that this stont, bright, healthy girl could no pon herself change her little aprl four-year-ol is easily taught to do. Of comrse 1 tried to im prove the occasion by talking in a geueral way ry, I had no rights that my friend was bound to respect, and so I lost my friend then and
Still I am not cured, but go on riding my old hobby at such a pace that to-day it has carried me far off the track and away from my prom gested certain alvantages we have in educatin children on the farn, and promiscd to show up
the bright side of them. Perhaps everybod can see them as plainly as I cant, but if the spirit moves me strongly in that direction I may

A Unique and Interesting Work of Art.
(Written for the Press by J. W. A. W.\}
mong the many curious and instructive ob jects to be seen in our deservedly popular tainly meritorious work of art, now in proces of completion, and one which naturally at tracted especial attention about the $22 d$ of Feb uary. It is an cxtra-colossal bust of Washing the artist constructing it has devoted to it his constant attention, it will not be entirely fin he fill late in March or early in April. Se nize in it an admirable likeness already of the "Father of his Country" "
We call it extra-colossa adequate idea of what we mean by the term as here applied, consider the following in length, the entire hight of the bust be 4 inches across. When tinished in plaster bronzed: or cast in solid bronze, it is to be ous point in the podal feet ingh, at a conspucu Thomas Gagliardi, an Italian sculptor of skil and celebrity, from Rome, who came to Califor nia some two years ago. The work is entirely
his own in design and structure, and follows Houdon's bnst and Stewart's portrait-the best uon the model in his shop near the bear-pit pon the model in his shop near the bear-pit it progresses. This adds another to the many valuable educational features of these gardens. The anount of potter's clay already used wil enable your readers the better to appreciate its
size. Although much of the framework is wood, there are now nearly five tons of clay in the model. Were it all made of clay, some 20 inishenld be required. When this model is pieces
Nlr.
Mr. Gagliardi is a thoroughly trained sculp try. Me was engaged for some years ly Gen. City, executing in marble the model designed by Thomas Crawford for the tympanmm of the Sen ate chamber, and the marble decorations in the banking room of the Treasury Department. He of the noted Lincoln monument, at Springfield, lllinois, though the statuary was made by Lar-

Mr Gagliardi merely looks upon this admi rable bust-which is many times larger than the colossal bust of Washington in the Centennia Alemorial building-as a stndy for part of a colossal statue of
he would like
mounted on a pedestal 15 feet high, say on Tel egraph hill. the thre it would worthily be one o approaching our Qucen City of the Pacific from the Golden (iate or across the bay. Certainly his is a fine conception, which the enterprising and patriotic people of San Prancisco would
well to carry out. His estimate is that such a colossal statue, cast in bronze, woulld cost abont $\$ 60,000$. It would be a merited tribute to our Pater Patrice, could every St
monument to his greatness.

Mr. Gagliardi-as is always true of the genuine scientist-has an enthusiastic devotion to
his noble art. California is fortunate in the does his work equally well in clay or marble. Before coming here Mr. fagliardi worked chiefly pointer of statuary. It is only since his resi-
lence in San Francisco that he has devoted his attention to composing and modeling studies in
his art. IFence he rightly claims to have been born in California as a sculptor. Last year he received a diploma from the Mcchanics' fair. He deserves well the kind encouragement Mr. Woodward has given him.
He has lately made excellent busts of Mr. a fine statue of Medea, when she slew her two chitlren in a fit of jealonsy. Also a statue of Juarez, for Mazatlan, seven feet high, which on Fremont strect. It is to bc hoped he will soou realize his wish to make for San Franciseo, or California, his colossal statuc of Washington. Popular criticism certaiuly gives him full credit noble features in this huge bust. Every lover

## A Tribute to the Vasty Deep.

Eirtors Press:-We have just made a pilgrimage over the troubled waters from San Francisco to San Luis Obispo. Nlany airs be fitting the occasion were indulged in, as, for in stance, the dismal, the melancholy, the don't care, the feeble-I-rather-like-this don't-you air; and truth compels me to aver that the characters sustained themselves heroically in the roles they assumed, though that was nothing to the llany remarks wse made of the view from the Cliff House the day before, and some there were who regretted that they the same place the succeeding day. After enpitching and beam end rolling for a time, we icate excitability. Few Hattered the cook by any heavy trencher work, and some, among fortunate, spon ascended with strines huge and hasty to the deck above, where they paid forced
tribute to the might motion inspired by the rolling deep.
That saunterer, Charles Dudley Warner, has raphically described sea-going as "walking up finding yourself at the bottom of the hill," and again "watching your chance to dip a spoon into a plate of soup when it is high tide on your
side of the table." We have been there. We apprcciate that book as few can, and must say
of it that it is delightfnl reading, but singularly therwise in vivill experience. Warner wasted no affection on the sea, though some who went betore him have wasted whote its delights, much of it being about as true to nature, as the Iutch artist's famous painting of a camel which was evolved from the

Russian Exiles in Siberia.-The Pall Mall Gazelle has a harrowing account of the life of Rrssian offenders who are banished to Siberia. The exiles who live in the mines are convicts of the worst ty pe and political offenders of the best. They never see the light of day, but work and leep all the year the extracting siler and quie orders not to spare them. Iron gates, guarled by sentinels, hafts, locles, or streets, at the bottom on nother in gangs of twenty. They sleep within ricesses hewn out of the rock-very kennelsinto which they must creep on all fours. Prince oseph Lubomirska, who was authorised to visit ne of the mines of the Oural, at a time when
it was not expected he would ever publish an accunt of his exploration in French, has given an appalling account of what he saw. Convict produces; men whose hair and eyebrows had were kept to hard labor under the lash. They have only two holidays a year, Christmas and Easter; and all other days, Sundays included them of the use of their limbs, when they are hauled up to die in the infirmary. Five year of thirty into an apparent sexagcnarian, but yome have been known to struggle on for ton
years. No man who has served in the minos is ever allowed to return home; the most he cal
obtain in the way of grace is leave to come up and work in the road gangs, and it is the promis of this favor as a rewarl of industry which op-
erates even more than the lash to maintain discipline. Women are employed in the mines as men. Polish ladics by the dozen have been sent men. Polish ladics by the dozen have been sent journals were declaring that they were livin nectel with Nihilist conspiracies have bee tence of hard labor. It must always be under stood that a sentence of Siberian hard labor
means death. The Russian goverment well knows that to livo for years in the atrociou
Incidents of the Flood.

EuItors Press:- $\overline{\text { Your }}$ illustration in the Press of March 2d presented a true picture of
the situation in the Comanche creek in all its details, except the boat full of white people I have just returned plantation, and I must say that lnever drom my fuch fine prospects for a large yield of blossoms. The wheat fields throughout the San
Joaquin valley are one grand gift of God's our farmers.

Atockton, Cal.
As our correspondent makes allusion to our en-raving-intended, as it was, to call forth feelings f true sympathy for the suffering ones-we can but say that continued evidence indicates that personal deprivation and hardship were not ex aggerated. We trust the wholesome lessons eelings in the stoutast hearts, will be appreciated by all. The reporter of the Associated Press, who has lately made a thorough explora tion of the flooded district, returns the follow ing, among other tales of hardship: At Colusa we began to hear of adventure by flood and eld, and the future will unfold many
One family living on the low lands were re posing confortably in their cheerful dwelling, embowered in trees and vines, a sweet ren dezvous for the affections, whon the waters from upper breaks began to crawl around them wrathful turbulence. The father hastened pon the lower floor of the house. The current was too rapid and the water too shallow to per mit the removal of his family. He tied the boat hrough the windows of the second story, to which everything had been removed by the areful wife, and waited for events. The flood oon they bid a sad farewell to all the loved surroundings. On Wednesday morning, the day of the great tempest, they were at sea. The reat wind broke careened and righted itself hour by hour. It for the waves were high and the currents boat or the while they waited for death the mother took her three little children into the attic, fastened them securely in a blanket, and tied it to the rafters. Her only hope was that some kind person would find their bodies and give them Christain burial. But even natur was kind, and the wind at last swooned down and the waves ceased their clamor. Uncertain could go, they gathered what they could, and ommitted themselves to their frail boat. Afte hours of hard rowing, they reached a place of safety, while the family nest drifted into de A lady
A lady tenderly reared in the happy valley a gorgeous robes of a bridesmaid in the peaceful gorgeous robes of a bridesmaid in the peaceful Colusa attending to business when the flood en gulfed the intervening conntry. There was no while his wife was battling with the floods. Th house was surrounded by water and accumulated mud, and she remained 16 days solitary, with out a human voice to cheer her. Gradually
everything disappeared - outhouses, cattle, was nothing left but water. The heceded, and there ast, and she continued to perform the duties of At last a brave man came with a skiff, but he could not approach the house with safety. She saw the distant signal, and walked on a half submerged fence for a mile, reaching the boat thoroughly exhansted. The brave woman re Colusa in safety. She has lost her home, but she regained her husband and saved her own

The historian of the great flood will have many similar stories to relate, and the children parents.
Celebrating Fourth of July.-Potter American Monthly publishes, in its department ment concerning what is called a "Fourth-of-Ju ly Family" living in Allentown, Pa. The pamarried a little more than ten years, and the July 4, 1869, a daughter, Bridget, living; July 4, 1871, a son, James, dead;
July 4, 1872, a son, Barney, living;
July 4, 1873, a son, dead.
July 4, 1874, a son, Charles, living;
July 4, 1875, a daughter, Mary Ann, dead;
July 4, 1876, a son, dead;
July 4, 1877, a son, Winnie, living.
It is mentioned in the statement that " Some able to take part in Fourth-of-July celebrations

6,000,000 Roman Catholics in the
tates, $1,237,000$ are said to be Cor-

## Young Folks' Column.

Baby Marion in Church.

Tree got my new boo dess on,

So Marion went to meting in
She piped up in the singing
And bowed her h head in prayer.
She waved her wee laee handererchie And tried to wipe a subbeam
From off hor mamman's face.
She threw kises to alaly

She climbed upon a footstool

Then Marion went home again
And
jumped on lapapis skiee;


What our Boys are Reading.
Professor Sumner, of Yale, has been examining the flash story papers so widely read by boys, nd in Scrioner for March gives some earnest
words of warning to parents, accompanied by specimens of the types described in the stories.
Here is one: Here is one:
Another type of hero very common in these stories is the city youth, son of a rich father,
who does not give his son as much pocket money who does not give his son as much pocket money
as the latter considers suitable. This constitutes as the latter considers suitable, This constitutes
stinginess on the father's part, although it might oung men drink champagne every day, treat young men drink champagne every day, trow billiards for $\$ 100$ a game. The father, in this class of stories, is represented as secretly vi-
ious and hypocritically pious. In the specicious and hypocritically pious. In the speci-
men of this class before us the young man is "discovered" in the Police Court as a prisoner, whence he is remanded to the Toombs. He
has beeu arrested for collaring a big policeman o prevent him from overtaking a girl charged with pocket-picking. He interfered because
he judged from the girl's face that she was enocent, and it is suggested, for future de velopment in the story, that she was running way from insult, and that the cry of "stop to seize her. The hero, who is the son of a man worth five nillions, and who is in prison under an assumed name, now sends for his father wise he will declare his real name aud disgrac his fanily. He gets the money. He then sends or a notorious Toombs lawyer, to whom he
gives $\$ 500$. With this sum his release is easily procured. He then starts with his cousin t nitiate the latter into life in New York. The oo to a theives' college, where they see a young
ellow graduated. His part consists in the takng of things from the pockets of a hangiug fig with wing the bells to ring Of this full-page illustration is given. The two young men then go up the Bowery to a beer saloon
where the hero gar familiarity with the girl waiters. Next chey hear a row in a side street. They find a crowd collected watching a woman who hangs from a third-story window, while her drunken
husband beats and cuts her hands to make her hasband heats and cuts her hands to make her fall. The hero solves this situation by draw.
ing his revolver and shooting the man. As he ing his revolver and shooting the man. As
and his friend withdraw unobserved, the for mer wards off the compliments of the latter by saying modestly that hewd not and knowing what to do, so he just did the proper thing. Next day the hero, meeting the thieves college graduate in the corridor of the Fifth Avenue hotel, agrees to receive and hold for him any booty he may seize in the bar-room;
which he does. At night he and his friend go to a which he does. At night the and his friend go to nizes his father in disguise amongst the dancers Securing a place in the same set, during a pause in the dance he snatches the mask from his own
and his father's face at the same moment. This edifying incident is enforced by a full-page illustration. A friend suggests the question put such brutal and vulgar faces on the men put such brutal and vulgar faces on the men
In this class of stories, fathers and sons are rep.
resented as natural cnemies, and the true posiresented as natural cnemies, and the true posi-
tion for the son is that of suspicion and armel peace.

Somebony out West has invented a paten bug-buster, which is worked by an air-pump.
All tho apertures in a room arc stopped but one at which the deadly bug-buster is placed. B exhausting the receiver, the bugs are drawn
with thc outgoing curreut through the air-pump
into a hopper, where they are placed under the infuence of chlor

GOOD HEALTH.
A Cold Poem.
 But, whed wud is sdezil'g frod borli'g
It's rather bodotolous-ab 1 dot right?
It


 Idside of by head-praps by braid-pad is red
That's dothi'g to what it cad do whed it trios!
The


## Airing Beds.

No housekeeper has any valid claim to neat-
ness, cleanliness and tidiness, says the Watch-
ness, cleanliness and tidiness, says the Watch.
man, who makes her bcds as soou as they are man, who makes her bods as soou as they are
vacated; or if she has such a claim, it is based on the condition of ignorance. To demonstrat
this, let it be remembered that of all the fool this, let it be remembered that of all the fool of the system through the outlets of the skin-
the pores, about seven millions in number the pores, about seven millions in number.
This waste and effete putrid matter is dead and poisonous, passing off more rapidly by night,
and becoming more or less entangled in the bedding aud ou the surface of the body. Hence
the necessity for bathing and brushing, with the necessity for bathing and brushing, with
still greater neeessity for airing and purifyug
the bedding. This is done most effectually by the bedding. This is done most effectually by
exposure iu the light of the sun and iu th morning air. "Indeed, the sun is the great pi-
rifier, and "nothing is hid from the thereof." And here it may be remembered that the bedding of the sick, so soon saturated by the filth of acute disease, by being changed
once in at least six hours, and exposed to the once in ant east six hours, and timeosed to the free suniight for the same time, will be safe
with half the washing otherwise absolutely
needed Such clothes cannot be kept to clean needed. Such clothes cannot be kept too clean,
while there is no dauger of too much care in these respects, as one of the means of controll-
ing such acute diseases as fevers and iuflanma-
The Dutch method of placing all of the movable clothes of the bed on two chairs near the might well be copied by Yankee housekcepers.

Cold in the Exes.-The white matter appearing at times, usually in the morning, on the
eyes and around the eyelids, is caused by a cold setting in the eyes, irritating them and causing mucus deposit not very unike the mucus de similar causes. As the eye is quiet and closed during sleep, at night, this deposit forms in suficient quantity to be perceptible in the morning, and sometimes, frequently in the case of children, gums the lids together. As to the
cure, it should be strictly observed that this matter must never be pulled or picked from the yelids, nor the eye opened by any force. The best thing to do is to wash the eye very care-
ully in tepid, or lukewarm water, nothing else, using a soft sponge, until the white matter is require patience, as it must be soaked off, not nflammati If the eye then shows any signs nflammation by redness, or pain, a wash will ng a small piece of conmon borax in a cupful of strong green tea, and wash the eye with it
often. Another is made by putting a few drops often. Another is made by putting a few drops But if the eye be very red, the nearest druggist will make you a weak solutior of sugar of lead andled with great care. It is a rank pison astes sweet, it must be locked up where it cannot be mistaken. If used on children's eyes, be careful they do not put their fingers to the eye and then suck them. Should the eye grow worse, call in a good doctor, and do what he says. You cannot afford to run any risk at all
with your eye. During all such abnormal conditions of the eye as indicated by these secretions and inflammation, it should be carefully haded and rested. Especially bright lights, reading of all kinds, exposure to sudden changes rom light to darkness, etc., must be studiously may easily bring on inflammatiou of the optic nerve, or chr in a dak room, and very probale permanent injury to these very delioate organs.

Life Lenethened. - In all countries and all latitudes, the well-to-do hivo longer than the poor by an average of eleven years; this shows
the deleterions influcnce of an anxious mind ou the bodily health, the anxiety for to-morrow's bread. Pensioned persons live indefinitely
longa poor-houses of Ureat Britian call any day turn out a large army of men and woinen among
the eighties and niucties who have been in tlose nstitutions for twenty and thirty years, owing in great part to an habitual fecling of coufidence that anple provision is mads ior the future, and the inind is an rest; but it mustnot, e e forgotenliness, the plain food, and the reg ular habits, compulsory in
contribute greatly to the end.

## Domestic Economy.

## Cheese from Potatoes.

A foreign journal describes the process of making a sort of cheese fron potatoes in Thuring collected a quantity of potatoes of good quality, giving the preference to a large, white
kind, they are boited in a caldron, aud after becoming cool, they are peeled and reduced to a
pulp, either by means of a grater or mortar. To five pounds of this pulp, which ought to be as equal as possible, one pound of sour milk
and the necessary quantity of salt. The whole al allow to tor up and allowed the he for thre or four days, ac-
cording to the season. At the end of this time
it cording to the season. At the end of this thime in little baskets, when the superfluous moisture escapes. They are then ayes in large vessels, shate, and placed in layers in large vessels,
where they must remain for fifteen days. The
older these cheese are the more their quality improves.
Threc common is made as detailed above; the second, with fourl parts of potatoes and two parts of tatoes and four parts of cow or ewe milk. These cheeses have this advantage over other kinds, that they do not engendcr worms, and they are placed in a dry situation and in well
closed vessels.

Bakivg-Powders.-The modern baking-pow
ders, as a rule, consist of tartaric acid and car bonate of soda, which evolve the necessary gas,
when in contact with water, to make the bread when in contact with water, to make the bread da. In practice, they are made by mixing to
gether these two substauces (first thoroughly dried and pounded) in nearly equal proportion,
and then diluting the mixture thus made with and then diluting the mixture thus made with any cheap material-such as flour of rice-so a
to add to the bulk, and enable an apparentl greater quantity of bakiug-powder top be sold
for a given sum. Many excellent food author ities have objected to the use of baking-powders thus made on the ground that it behooves us
to be careful how we add to the already to be careful how we add to the already
sufficiently large amount of mineral matter which we naturally consume daily. We should hesitate before we advised the whole bread of a
family to be thus prepared, though for sone of the minor articles of food only occasionally used, they may do little harm. Unfortunately, some
of the manufacturers of baking-powders are guilty of the addition of alum in cousiderable

Tomato and Bean Sour.-For two quarts of broth, soak a quart of beans over night, in,
plenty of clear water. In the morning drain, plenty of clear water. In the morning drain,
and put them into the broth, together with a Let all tomatoes, and two quarts water then mash them through the cullender and strain the broth onto them. Put this into a clean saucepan and return to the fire. If too til thick enough, then season to taste with cat sup, pepper, and essence of celery. An onion
added to the soup while boiling, will improve it for many, and fresh celery roots also, if they ar to be had-ill which case the esseuce of celery
may be dispensed with. Dried pea soup made may be dispensed with. Dried pea soup made
in the same manner is excellent. To make in the of these soups without the broth, use our quarts of water, alice of salt pork, a few scraps or bones of beef or veal, to a quart of peas reans, and a quart of tomatoes. It wilr quire about three hours boiling. Cut stale oread into small diamonds; iry them in boiling
drippings; drain well, place theni iu the bottom
of the tureen, and turn the socip over them.

Syrup of Orange Pefl.-A. Martin, in foreign paper, recommends tho following process: The peel is dried by leaving it eight days in a dessicator, consisting of a tinned vesscl, lime, the cover secured by a luting of flour paste, It is then easily powdered; the powder is ex hausted by pcrcolation with cold water; the in the albumen; filtercd and converted into syrup the albumen; fittercd and converted ina se peel
in the usial manuer. The syrup of orange in the usnal manuer. The syrup of orange pee
is chielly used by pharnacutists in their pre parations, but some of our orange growers may like to know how it is made.

Baked Indian Pudding.-Mix a coffee cup meal smoo thly with a teacupfill of inohasses, and a tcaspoonful of butter; butter a pudding dish; pour in the mixture, and sct it aside for
two hours to thicken; just beforo putting it in two hours to thicken; just beforo putting it in but do not stir it in, as this forms the jelly. Bake threc hours in a slow oven.

Flannelsiminking. - To prevent the shrink age of flannel a. Freuch manufacturer has found
high-pressure steam of great value. He folds high-pressure stean of great value. He folds
the flannel loosely, and then places it iu a box containing a perforated bottom through which super-heated steam is admittcd; the latter en
ters the fabric with a certain forco which fixes the fiber of tho wool in such a manner that the fiber of tho wool in such a mancer that
fulliag, as well as washing, causes no shrinkage

## PACIC RUMAL axpresouls

DEWEY \& CO., Publishers.




 our hatet forms so to presess Wedinestay evering Quack Advertising positively declined.
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SAN FRANCISCO:<br>Saturday, March 16, 1878.

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## The Week

Again the days have passed through an area of sunshine and plunged into a region of clouds It gave us a foretaste of the warn months
whicl are at hand, and called to view the power of growth which plants possess when
warmth above and moisture below combine to push them forward. The growth of grase and The soil, too, iu nany parts, reached a workable condition under the suushine, and the hill
sides and higher parts of the plain of the Alameda valley were dotted with plows, harrows and seed-sowers. The whole state was awake, plunged in the shear. Wednesday morning
lorings back the rain, and operations are again suspeuded. How much of a deluge these new
Hew
surn reason to fear then. Four or five days of sun-
shine showed that old Sol has not forgotten his mission, and each new glance which he will give
us as the days protress will have the us as the days progress will have the greater
power. It would lie well, indeed, if liis rays could fall on growing graiu instead of unsown
acres, lut the season promises to be late, and late seeding will do bettcr than many think. It
may be that the lower lands must needs be in some cases sown to some quicker maturing crop soaked uplands which will yield abundantly soaked uplands
will make good all losses from lands too late $f$
staple grains. The promise is great iudced.

## A Legislative Boomerang.

## The average man's opinion of legislatures is

 not apt to be greatly elevated by the cvent which are transpiring at Sacramento. There has always been something about law-makin bodies, of late ycars at least, which the averagecomprehensions cannot master and generally comprehensions cannot master and generally
the feeling is not one of speechlcss admiration, like that evoked by majestic mountain or illimitable ocean. The lack of comprehensiou generally takes pleuteous words, such as a man, from a bog, frecly consigning to perdition the depths of mire which he believes may exist
below the point to which he penetrated. It is below the point to which he penetrated. it is
with regret we say it, but the fact is within terns applied to our law-making bodies, during
the last few days, which would highten the perfune of a pole cat and taruish the reputation
of a horse thief. We hear such expressions everywhere, on the cars, on the streets, across
restaurant tables and elsewhere. We do no believe in the use of such terms. We would not apply them to even the most insigniticant
creatures which food has male, for purposes which he best knows. Wo would not apply them to law makers, for in them is vested the
wolfare of the commonwcalth, and they deserve respect for what they are-if not for what they do. But the fact that such expressions are
common iu the minds of men is significant o one thiug, at least, and that is that people are
dis,leased with the course which many importaut measures are taking at the hands of the law-making power
We have seen
We have seen enough of railroud building to
know that there is sometimes know that there is sometines used au arrange-
ment of three curves of track, by which a train may go whizzing of towards the right, ruu and then come thundering back from the left $t$ the startiug point. The only difference in the neaded in an opposite direction from that toward which it started. The locomotive is
just as fiery and powerful as ever, but it is squarely turned around, and just as little is
really really accomplished as though it had quietly
run on a turn-table, without venting so much run on a turn-table, without venting so much
steam or putting on such a bustle of progress.
To the averave intelligence it alpears that just To the average intelligence it aplpears that just presont Legislature on the railroad evils, which
the people connmended to it for fair adjustment. At election timen, the anti-railroad feeling ran so high in caudidates' spcechhes, that we really
had a fear that our railroals would be crippled had a fear that our railroads would be cripplec
by the onset at Sacraneuto, this winter. The zeal, we thought, might pass the point of wise
regulatiou which is neoded. The movement at election was towards the right, but under what out of sight last fall. There was an occasional after the bell and whistle from a distance ater the votes were eouuted.
early weeks of the session, there were still
sounds as though the train was in progress and we listened day by day for the crash which should tell that the barriers against an equita-
ble adjustment of freights and fares were burst motions and postponements. At length, wonderful to behold, last wcek, the traiu came toward the lunch house of the railroad company. This great force, which was stored up last fall, had evidently fallen among the switches and
side tracks, until it lost its head, and it has come whirling back, like a boomerang, to the
point of starting. point of starting.
this question. We Wigoted nor prejudiced unduly on presented by the somewhat unfortuuato railroad commission were worthy of adoption. We do not believe un obstructing the building of new
roads in sections which need thein, nor in crippling minor corporations which have restricted
or dithicult work to perforin. In short we have or difhcult work to perforin. hy short we have
no desire to inflict wrog or hardship upou any
corporation workiug for the development of the corporation workiug for the development of the
country or in the people's interest. But what we consider the plain duty of the present Legislature is, not to cousign the discriminations
and inequities which now exist, to perpetuity, nor co cutrust their adjustment to weaker hands The failure to arrive at the right of the question two years ago, and the miscarriage of a
well-directed but imperfect effort then, would, we thought, enable this Legislature to discover
a few sinple but comprehensive cnactments a few simple but comprehensive enactments
which would right the wrougs of which the poople complan, and at the same time foster
and promote such farther enterprises as the State demands. It does not now appear that this expectation will be realized. Indeed, the
prospect is that nearly all the discriminations in persona and produce carriage, of which
complaint is made, will still be in the power of the corporations to perpetuate.
It is not for us to
choose men for this purpose, and it seems to us that, so far at least as this question is conWhose fault has it leen that the propositions Wh ose fault has it theen that the propositions
of the committee, if they be indeed so defect-
ive as the vote in the were not long ago pushed aside, and an equitable were not ong ago pusher aside, and an equitable
solution of the questions brought forward and
enforccd. We cannot see why the selected in.
telligence of the Stato could not discern the
path which should be paved with justice both to the people and the corporations. It has been
clained, and perhaps truly, that most of the enactments proposed did the corporations wrongs. It is also plain that existing regula-
tions do the people wrong. Two wrongs do not tions do the people wrong. Two wrougs do not
make a right, nor do they preclude its dis-
covery. We cannot see why the covery. We cannot see why the 1 leople may
not bring a charge either of neglect or petenee against representatives who have per mitted the time to pass so far without devising
measure so just that all well-disposed me could unite in its support, and so strong in its right that interestcd corporations could not acabout our Legislature which the average mind

Large Farms Here and Elsewhere.
When we mention the fact that the holding of our productive area in large tracts obstructs our development and prevents the uprising of thousands of happy homes, we are apt to think from the fane are thus oppressed. This is far our large holders of farming lands are dividing heir possessions, and making room for th small farmers upon whose effurts our growth in productiou aud population depend, there that han many of our large land holders are tired on taxes, and too oftel, in justice, not enough o fies a a ood year for selliug, and we know. scveral larye holders who will unload themselves
of possessions which return thenn little, but of possessions which return them little, but
which, iu smaller divisions, would l bring prosperity to thousands. In this disposition we ar nuch more fortunate than the country of which are held so firm by law and custom that no even the
division.
Series have been intercsted in a perusal of a published in our English exchanges upon th general subject of land holdings in creat Britain,
and though most of his points are of local interest only, he alduces figures concerning the large holdings of laud which are of interest in that our largest holder, who, we beleve, holds , The total area of England and Wales is, afte deducting the fuantity within the metopolitan
arca, 37,243 , 599 acres. How is this vast extent arca, 37,43, ,59 acres. How is this vast extent
divided among the inhabitants? Sixty-six persons own 1,917,076 acres. One hundred per ons own $5,42,7,64+$ acres, or nearly sons own
the enclosed land of England and Wales.
of Enclad twenty-three persons own one-fift persons own one-fourth of England and Wales. Eight hundred and seventy-four persons ow
$9,267,031$ acres. And it is to be remembere $9,267,031$ acres. And it is to be remembere
that in uone of these calculations are the ex tent of woods, commons and waste lancis in Iuded.
ling. The total acreage of Scotland is 18,946 , hing. The total acrcage of Scotland is 15,946 ,
694 acres. One owner alonc has $1,366,000$
Ond acres in scotland, and also 32,095 in England has 431,000 acres, a third owner has 424,000 , a fourth owner has 373,000 , a tifth owner has 306,000. Twelvo owners have 4,339,7:22 acres, or nearly one-quarter of the whole of neotland
But let us turn to Ireland. The total area of
 persons own cach more than 10,000 acres, 90 lersons own each inore than $\overline{50,000}$ acres,
three persons own each more than 100,000 acres, one person owns 170,119 acres, 292 per
sous hold $6,45 s, 100$ acres, or abont one-third o the island, 744 persons hold $9,612,728$ acres, o about onc-half of the island
Taking the acreage of the 12 largest owner lowing result: In England, the 12 largest own lowing result: In Englanc, the 12 largest own
crs hold in the aggregate $1,0.88,583$ acres, and $\begin{array}{lllll}\text { their } & \text { respective } & \text { acreages } & \text { are } & 186,397 \\ 132,996, & 102,785, & 91,024, & 87,515, & 78,542\end{array}$ $5,022,68,066,66,105,61,018,57,802$ and
50,600 . Iu Scotland, the 12 largest owners hold in the aggregate $4,339,7202$ acres, aud
their respective acreages are $1,358,545,431,000$ $424,000,373,000,306,000,302,283,2533,221$ In Ireland the 12 largest owners hold in the aggregate $1,297,888$ acress, and their respective acreages are $170,119,1156,974,121,3,3,118$, , 0707 72,915 and 69,501 . In the Unital Kinglom, the 12 largest owners hold in the aggregate $n$
less than $4,40,46 i$
acres. Two thirds of the whole of England and Wales are held by only 10,207 persons. Two-thirds of the whole o
scotland are held by only 330 persons Mcotland are held by only 330 persons. Two
thirds of the whole of lreland are held by 1,942 jrersons.
of none turns in bewillerment from this maze think of our better fortune and bil God-speel to the farther division of our idle areas.

## Queries fnd Replies.

## Mexican and California Limes




 them, alter standing 12 hours, is not in the least bitter.
As there is some differcuce lin the price of the two.
want to raise the best, if phossible. Can it be done in
The difference in price which our correspond ent notes arises rathcr from the degrees of qual-
ity which exist in the fruit as it comes unon tho market, than from any difference in kind. That is to say, that the Mexican limes are generally reigh ected fruit. The growers have much that it is wise to ship only the best. On the
other hand California limes come other hand California limes come upon the
market in all shapes and sizcs, and sometimes market in all shapes and sizcs, and sometimes
smutted with tho black fungus, which mars their appearance greatly.
Our fruit men with whom we have talked upon the subject say that they discover no eslimes California grown has a thicker skin, but others have found no difference in that respect, when they have taken the best Californians into the comparison. It is probable that many of the growers are seuding fruit from trees obtained
just as Mr. Whitmore's were, and from such rees, with the same care in seleeting fruit for be no reason for the disparity in price which is quotations One dealer with ruling rates in said: "I went out to-day to fill an order for both Mexican and California limes, and I found a lot of California limes for which the same price was asked as for Mexican. But in the
same store I saw a lot of California limes which were small and uneven enough to warrant the lowest price which has been named. If grow-
crs iu this State would select their fruit, and keep the poor small fruit for home consumption less freight, aud lime juice, they would pay, We kuow of no reason why as good limes ties which grown here as in Mexico. The qualteristic of his fruit would apply to the best of the article. As for grafting or budding limes, there is the same room for propagating tine ra-
rieties as with other fruits, but we do not know of its being done iu this State. If any one has mproved varieties of limes we should like to rom then thell. The tree bears so much sooner the same reason for gaining time by budding.
Editors Press:-Is it true that decisions ol the Supreme Court rendered the old trespass law inoperative? If so,
what is the tresjass law as it now stands ?-RRADER, We stated recently, in answer to a similar have since learned that it has been interfered with in some way by the Supreme Court, and that the enactment of a new law has been found
necessary. Two laws were proposed, one by necessary. Two laws were proposed, one by
Assemblyman Waters, of Can Bernardino, and he other by Senator Lambert, of Yolo. Just what condition the law is now in we do not by gentlemen in Sacramento to whom we have much from telegraphation. We know this ernor has signed oue law of this kind, and we expect ere long to be able to makeits conditions. Waters provided that in the case of unknown animals proceedings should be taken on a veri-
fied complaint in the District court, and that the clerk should enter judgment by default While the bill was passing through the Legisla ture, the members from Colusa, Tehama, Sacramento, Di Dorado, San Joaquin, Dan Luis included in the provisions of the bill, and it has become a law in that manncr. The bill pro-
posed by Senator Lambert provides that the judgineut of a Justice's court in these cases
against the owners of unknown animals shall have the force of an attachmeut lien. This legal action in the premiscs, for clerks of District country where the evil to be met exists. We expect to give mo
subject hereafter.
Jersey Cattle.
Eimions Press:- Will the Prexs explain the difference 1,etweelil Aldcrney and Jersey cattee; and in no difference,
do they both class and number together in the herd boks
I have been inforined that the males of the Alderncys are

The difference between the Jersey and Alderncy is but is the name, and of course they sit in adjoining pews iu the herd book. The distinc
tion is the same as between Durham and Short horn, and the term Jersey, like the term Short-

## Cruernse islands,

It is gencrally conceded that the

A Monster Apple Tree Borer.
 Cordelia, Cal.
The "grub" which we received from MF. Hatch is much larger than we ever saw from a rately, but carelessly speaking it was thre
inches in length and as thick as one's litte tinger. In order to identify it, and to connet
the larva with its perfect form, we consultd Henry Edwards, our eminent Pacific coast ent. mologist, and he kindly furnished us the folloying statement: "The caterpillar you sent ne (probably that of Prionus Californicus, le of its attacking the apple tree, but I do wot
think these borers are particular in their choie of food when that on which they are accustomed to feed is not near at hand. This species of prionus mostly attacks oaks, poplars and cotton Such being the classification of this appar-
ently new pest of our fruit trees, we hare thought allusion to its class of insects would be of interest. Harris states that the Prionian beetles, or Prionidoe, derive their name from a
Greek word signifying a saw, which has been applied to thein either because the antennæ, in most of these beetles, consists of flattened joints,
projccting internally somewhat like the teeth of projecting internally somewhat like the teeth of a saw, or on account of their upper jaws, which
sometimes are very long and toothed within. The largest insects of the capricorn (or longiThe largest insects of the capricorn (or longi-
corn) of the tropical species measuring five or six
inches in length and one and one-half inches in inches in length and one and one-half inches in
breadth. Of course this statement is concerning the perfect beetle. The grub sent by Mr.
Hatch is the larval form. It is the larva which penetrates the wood of the tree. The egg is
deposited on the tree or near the surface of the ground, and the grub quickly hatehing eats its way into the root and generally upwards into
the trunk. It lives, perhaps, from one to three the trunk. It lives, perhaps, from one to three bark it form and undergoes its pupa which it bites off and undergoes its pupa state, the bark to live for a time in the open air and re-
produce its species by another deposit of eggs at the roots of a tree. Of course the size of the bore which is made in the tree depends upon
the size of the grub, and if these Prionide are coming to possess our orchards, we may expect
to find our trees more thoroughly drillied than is done by the common borer (Saperda bivittata), with which most of us are painfully familiar.
As another writer aptly expresses it, our little As another writer aptly exper borer is but a gimlet by the side of apple tree borer is but a gimlet by the side of
an inch auger in comparison with the large Prian inch auger in comparison with the large Pri-
onians. We have not found a grub yet which carries an inch auger as they do in the tropics, in that direction.
There are several considerations which are this new foe in our orchards. The researches o the agricultural entomologists for years have
shown the tendency of the forest and wild land insects toward the invasion of our fruit trees and our cultivated fields. Perhaps there are no more notable instances of this fact than those of
the Rocky mountain locust, the migrations of which hang like a dark cloud over the agricul Colorado potato beetle eastward across the continent. Neither of these were of much account in their native regions, and each became a abundant food which cultivated areas afforded. Thus it becomes a matter of great importance to us, when we find that our forest insects dis-
close this invading disposition. More thau this, we are importing insects from all countries with
which we have dealings. We are inporting new plants from all the world nearly, especially
from the tropics where insects are exceptionally abundant and gifted with great devastating power. Our practical agriculturists and our son, pests which they never saw in California insect growth. There is apparently nothing to fought in the fields States, are following them here. What are w our farmers are fighting them as best they can know the nature of their foes nor their vulner
able points. The State has done nothing to
protect its agricultural interest from this
$\left\lvert\, \begin{aligned} & \text { nent danger. } \\ & \text { season should time should be lost. Another } \\ & \text { not elapse before a con }\end{aligned}\right.$ entomologist is put to work earnestly and diligently to search out the insect evils, which are our agriculturists the knowledge necessary to protect their trees and crops. The success which hise been gained in the Eastern states in this live of protection to agriculture, shows that practical, and pecuniary value of which its cost
is but a small percentage. There are many seremes for the advancem our agricultur occupying the attention of the Legislature and
prblic press, but we know of none of more gen tection against insect depredations, and this is a most wholly overlooked. We sincerely hope may not long he thus ignored.
Ornamental Aquarium and Bird Cage.
The very pretty combination of bird cage and aquarium, shown in the accompanying engraving, is formed by an ingenious application of
philosopical principles, on a plan devised and patented by Matthew Palen and Daniel Sexton, The invention consists in constructing an arluarium in such a manner that a portion of
the water can be raised into a chamber, which extends above the level of the water in the main tank, so that the fish can pass from the
main tank into the elevated chamber and back again. By combining this style of aquarium with a bird cage, a very pretty effect is pro
duced, as the birds appear to be flying about in companionship with the fish, and at first glance


Easterday's Seed Planter.
Our illustration shows an interesting arrangement for seed planting, which can be attached to any turning plow and which has been found to work well iu dropping corn, beans, peas, broom corn and other seeds that may be planted as he ground is plowed. It is the invention of W. T. Easterday, of Watsonville, and was pat-
ented through Dewey \& Co.'s Agency. The machine is made so as not to interfere in any manner with the working of the plow, and is easily regulated in all its parts so as to drop he desired amount, and distance apart, and is easily thrown out of gear so as to drop only as esired
The invention consists of a donble alternating ing hopper and carries it to the dropping spout, being actuated from the bearing or traveling Wheel below, by gneans of a le
tions, as shown in the engraving
The operation of the planter may be briefly described as follows: The machine being drawn over the ground, the wheel revolves and the
in upon it comes in contact with the end of the pin upon it comes in contact with the end of the
lever, forcing it forward and drawing the upper attached to it. The hook catches a pole in one of the slides, which are shown above the plow ing around a pulley causes the other slide to move forward. As one slide is drawn back it withdraws a pocket from the hopper, and it
passing beneath a brush discharges its contents
into the spout which carries the 'seed to the ground.
As the pin upon the wheel below passes and
releases the lever, a spring throws it forward again, and the hook before described acts this time upon a hole in the other slide and the mo-
tion is carried forward with that as with the tion is carried orward widh thas the slides alternate regularly,
first slide.
and the result is the regular deposition of the and the result is the regular deposition of the
seed in the ground at the distance required and according to the adjustment made. The seed planter has been tried in Santa Cruz
county, and we have seen letters from several
parties approving its work. The planter is

being manufactured and introduced by Brew Alfalfa in Shasta County.
Notes concerning the growth of alfalfa in different parts of the State are of interest, because where this plant will grow there is surety o success in diversified husbandry. The latest
information, which we have from a section not hitherto mentioned in this connection, is fron
Shasta county. Mr. James McNullen, who lives on the north side of Cottonwood
just above Cottonwood station on the just above Cottonwood station on the C . P. P.
R. R., put in three.quarters of an acre, frst, as
an ent an experimint six acres. He has mown from this field about 60 tons of hay, lesides getting considerable feed from it. Last seasos he mowed amour once
 to the acre. The hay was sold on the ground for $\$ 15$ a ton, and at Reading, 18 miles distant,
it is worth $\$ 20$. He sowed barley and wild oats it is worth $\$ 20$. He sowed barley and will oats
with alfalfa, but does not cousiller this good practiee, although the barley and oats ,
teet the alfalifa from frost, when young. teet the alfala from frost, when young.
This experience will be of value to setters the Reddiug ranch, which lies near Mr. Mc Mnlen's. It is quite evident that atatata can bic
proftably
grow in that region, both from the prontaily grown in that region, buth trom the experime of afalfa which have been made on
sowimg on
some sections of the Redd ing grant.
It be well to make further experiments. The rosult seems, howe ver, well assured when irriga
tion is affordell, and that is easily seurod.
A Tmabrr BhlL-Representativo Wren has introduced a bill in Congress anthorizing citi zens of Chithrial Nevala, colorad. or any eral lands for miniug or domestic purposes,
 provided that no timber shall be cut in mountain regions within thrco miles of the upper timber liue.
ON File.- "Rotting Straw Piles," A. O. C and R. C.; "Nineteen-Twenticths," C. L. A
"Malva and Lavatera," J. M.; "Oregon Mist,
T. T.; "Egyptian Corn", W. J, R.; "Pruning," T. T.; "Egyptian Corn," W. J, R.; "M
M. P. O.; "Farm House Chat," M. M

## Chufas.

 The chufa was fully described in our issue of ebruary 26th, 1876 , and notes on its growth in the points which will still be The chufa, or "earth-almond," is, botanically,
the Cyperus esculentus, and is, in fact, a sinall the cyperus esculentus, and is, in fact, a small tuber, abounding in rich oil and of a sweet
flavor. It grows best in a light, loamy soil, Hich in decomposing vegetable matter. Although
rich best in a light, loamy soil, it will grow in poor soil, it shares with most ther plants a liking for rich ground and in There are some different methods proposed and practiced in cultivation. The following, as practiced in Alabama, will answer our conto metlods which we have already described Western Farmers' Almanac, for 1878 , as follows: First prepare the ground by deep plow ing and thorough harrowing, leaving it mellow,
with a clean, smooth and level surface. Then with a clean, smooth and level surface. Then
lay it off in drills, two feet apart, and plant the lay it of in drills, two feet apart, and plant the drill and cover two inches deep. The time for planting is the same as for lndian corn. One will soon sprout and seud up a few slender shoots or spikelets, when they immediately eommence throwing out laterally beneath the onts, on which tubers are formed and new shoots sent up as far as the rootlets extend, forming, when the crop is matured, a solid mass The only cultivation required is, in the early stages of growth, to keep the ground entirely by hoeing and hand-weeding. They require level culture-no hilling up around the plant After they shall have ceased sending up new will if the soil be rich, the crop will need no urther attentiou. The two all important points in cultivation are, first, a thorough preparation
of the soil, without which it is useless to try to make a crop; and, second, to kcep out all weeds and grass until the plants shall occupy the Concerning the proct
and its uses as a feed for hogs, the same writer says: While the chufa is highly relished by all
kinds of stock and poultry, its principal and greatest value is as feed for hogs-for making pork. It is exceedingly nutritious, swect, oily
and pleasant to the taste of "both man and beast." There is no food that hogs are so fond of, nothing on which they will grow and fatten so rapidly, nothing on which they can be fat-
tened and made into pork so cheaply. One
season, as an experiment, we planted in the season, as an experiment, we planted in the
same field sweet potatoes, peanuts, cow-peas
and chufas. About the first of October the and chufas. About the first of October the
hogs were turned into the field, with the privihogs were turned into the field, with the privi-
lege of helping themselves to such as they liked
best, and, notwithstanding their well-known fondness for sweet potatoes and peanuts, they
at once commenced on the chufas and would not touch either potatoes, peanuts or cow-peas short to meet the demands of appetite. Hogs
will also leave corn to feed on chufas, and will also leave corn to feed on chufas, and that, pound for pound in flesh-producing quali-
ties, the chufa is fully equal to corn; and, when we take into consideration that on a given mount of land the chufa will produce four to former for making pork is conclusively estabished. Land that will produce 25 bushels of chufas the acre will yield 100 to 150 baving been chufas. A bushel of chufas, aiter having been pounds, varying according to the quality of tho
tubers. Four to five months aro required to mature the crop. When the tops begin to die, you may know that the crop is matured, and then, after saving tubers ellough for seed, turn
in the hogs and they will gather the residue of the crop for themselves as wanted. The tops may also be utilized. Cut, say in August, when They make excellent hay, and their cutting will be a decided bencfit to the tuhers, causing them to grow larger, riper, better and attain more sulstance and solidity.
Hogs may be turned into the elufa field usually by the nirst of October, and tho supply
should be sufficient to furnish full feed uutil tho first of December, by which time, no natter how poor they may have been when turned iu, ive them 10 days' fect on corn and they will be fit for the knife and the pork will be "fit for be fit for the kuife and the pork will be "fit for
the gods." Sonc maintain that the corn feedthe gods.
ing is unnecessary. A neighbor of the writer,
last season, lutchered his hogs direct from the "chufa patch," without giving them a kernel pork in his life. And he is a man of large experience in pork-making. But, notwithstan
ing, we would prefer "topping off" on corn.
Tine Pifyloxera in Australia.-In consequence of the recent outbreak of Phylloxera
vastatrix in Victoria, the Govermment of South Australia have decided to strietly prohibit the importation of vines, vine cuttiugs,
and grapes. Arrangements have also been made for seizing fruit that may come to Adelaide

Continued from page 183
The modus operundi for uniting weak swarms, where each has a queen is about the saine as the prcceding. If you have any choice in queens
destroy that wlich you care the least about. This last operation may be done a couple of days before uniting, or it may be done just at the time of performing the job. If you should not care which queen may be the future mother of the new colony, the bees and all may be place
in the hive, as given in uniting queenless swarms. in the hive, as given in uniting queenless swarme
One of the quecns will be sure to be killed, an Ofter that everything will work like a charm. after that everything will work ike a charm.
When the hives are moved to any distau less than two miles they will return to their old home, and when a stock is united with another many will return to the old stand, and if there
should be a large number of hives in the apiary should be a large number of hives in the apiary
the probability is that many bees will be lost. the probability is that many bees will be lost.
If the hives are not so numerous, or when only If the hives are not so numerons, or when only
two or three are in the bee-yard, the loss will two or thre are in the bee-yart, the lhe other hives in larger numbers will be unheeded ; the
will pass with the Several methods may be adopted to remedy the above. The one we are about to give is as
good as any we have tried, and we have never heard of its being uscd, whence we would like some of the Ruralss beekeepers to try it and
report. Pcrhaps some have already used it; anyway let us hear if it is the best method, replace it on its own stand arain, and in hive, half an hour change stauds with the reinforced live. By doing this several times duriug the that the last-named hive is on the stand that it always occupied, and close the entrance to the hive that is miuus bees. The next day a few bees will return to their old home, and on find ing the door shat against them, they will recol lect that the last place they left was else where,
and they will seek it. and they will seek it.
this: If the hives are 20 feet but more tedious is this: If the hives are 20 feet or less apart, move few feet a part. 'This will insure better result in saving bees.

Stimulating Weak Swarms. Feeding weak swarms, to stimulate early but those that have tried it know what a vast
difference there is between a swarm that is fed and one that is not. The queen, on finding that there is an abundance of honey (? ) being stored, naturally thinks, for she seems to have this
faculty, that the honey season has really faculty, that the honey season has really opened
with a large yield of ncctar, proceeds to deposit eggs. At this time a pint of syrup, made of any swarm, be they weak or strong. We feed any swarm, be they weak or strong. We feed
it to them by taking one of the outside frames
fren from the cluster and pour the liquid, which should be so cold as not to melt the wax, ele vated a distance above the frame or comb, which
is laid on a board or table. The syrnp, falling is laid on a board or table. The syrup, falling
from a hight, is forced into the cells. Whe one side of the card is finished, turn it over and do the other side in the samc manner. Allow these to drain, or, if time cannot be spared fo
this, they may be wiped off and once in the hive. The bees will generally move it to various parts of the hive In the greatcr part of Califoruia, all the bee bread required iu brood rearing cau be gathered by the becs at any season of the year, whence We never have recourse to "placing some rye
meal, or other substitute, on a board in a sununy and sheltered part of the bee-yard," as our Eastern brethren do. We never yet saw a day collect pollen from some half-dozen than flowers. About the middle of this month the weather will be warm enough for comb building, and, hasten the generation of heat, help the bees to increase their numbers as much as possible. Now and then put an enipty frame in the cen ter of the cluster. Care should be taken to have the quilts of burlaps snugly tucked in and the entrances quite small, so that all the heat may be kept
To be saie fr
worms, it is only necessary to have strong stock worms, it is only necessary to have strong stocks
of bees-I talians at that. If any worns should be found in the hive or on the combs, it should be dispatched, for every worm killed now save a good deal of vexation in the future, for it is
said four generations of this pest are produced siad four generations of this pest are produced
in a season. To-day, March 4 4th, bees are out in full force
while the sun shines While the sun shines, but who knows how long the plcasant weather is going to last. There is
an abundance of wild Howers now in bloom, and if the sky is clear and the sun shines out with honey. U. K. Lypmus North Ten

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scluolhouse, as well as one-liall nile from a church The ouncers reasong for sclliuy are his wite's health and

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Convinced of the superiority of the climats of Oakland for those suftering from discases of a malarial origin, an chronic disenses generally, tho mudersigned have opened the above nanied linstitute as a resort for invalids, wher
all the facilities for the thoroughand scientific treatment of dissases have hech introdued.
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 all appliances and remedies of ostablishool nierit known to
the medical profecslon. The building is one of the thest
the the In the city, and the rooms large and comfortablo. No of
fort will je sparcd to make the patients feel at hone
Lying -in-rooms conuceted with the institute. Clargee
ind including board, ete, from 81
urther information, address
Oakland Health Institute, Oakland, Cal. J. H. BUNDY, M. D., \& C. W. IfANSEN, M. D., Prop're

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The Bank was opened on ths first of August, 1874, for tbs transaction of a general banking business.
Having made arrangements with the Importers' and Traders' National Bank of N. Y., we are now prepared to buy and sell Exchange on the Atlantic States at he best market rates.


One new Straw-buruing Portable Engine, made by Ransome, Sims \& Hcad, Ipswich, England. This is a very superior engine, sent here ay a sample engins for exhilition; one second-hand Straw-burning Engine, $8 \times 10$ inch cylinder, (Rice); ons second-hand Wood-burning Engine, $8 \times 12$ inch cylinder, (Hoadley); one second-hand Wood-burning Engine, $7 \times 10$ inch cylinder. (Hoadley); one second-hand Woed-burning Engine, $5 \frac{1}{2} \times 10$ inch cylinder, (Hoadley); one sccond-hand Wood-burning Engine, 6x12 incb eylinder, side snginc; one new Stationary Engine, independent cut-off, $12 \times 24$ inch cylinder. [Tho Straw-burning Engines named ars frec from infring. ments. $]$
One largs sized Rock Breaker, Varney \& Rice, sizo ox15; one Wood Splittug Maehins; one 36 -inch cylinder Russel Separator, (with extra cylinder,) and Lauffenberg hoe-very chcap, on account of owner's doath; (will be sold with or without any of above engines.) All of the hauled, and-liand engines havs been in shop and overWach, and are in good working order. Various other Jlachinery repairs solicited. Specialey of Commission. Jlachinery repairs solicited. S
gines and Boilers for threshing.
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It is not surpassed by any dining house in the city The saloon is new, commodions, clegnut and comfortable, and all visitors to San Francisco, who wish good food well prepared and properly presented, at reasonable prices, should try the "Palaee." Boing new, it is fitted with the latent and best approved cooking apparatus

Tip-top Dinners, 50 Cents,
re given from 5 to $8 o^{\circ}$ clock $p$. . . It will pay yourself and friends, too,) to go considerably out of your way to ERNEST SCHNUTENHAUS, J. V. WEBSTER,

The Growth of San Francisco.
A great number of interesting items concerning the city of San Francisco may be gleaned by
a perusal of Langley's dirctory for 18 ; 8 ; everything, in fact, concerning the history of the city for the past year, as to its commerce, real estate, improvements, population, etc., being given.
From it we extract the following figures and From it we extract the following figures and
facts, whicl will be found of general interest: During the year there has been a notable decrease
in the number of new buildiugs construeted, as conpared with the preceding year, but the
character of the improvements has bcen quite as character of the improvements has been quite as
good. The number of new buildings erected 42 are of frick. The aggregate value of these
improvemiuts is estinated at $\$ 9,000,000$. The improvements is estimated at ity is estimated at
number of buildings in the cithe
$2 S, 100$, of which 4,430 are of brick. The federal census of 1570 returns the aggrecate number at
$2,2,266$. The returns of the $\$$ pring Valley water $2.2,266$. The returns of the spring Valley wat
works for thle year ending December 13 st, $18 \overline{7}$
new show that 1,235 new taps were made, and it is
estimated that the number of new building from which no new orders were received will
more than counterbalance the orders from old ones.
Duri Duriug the eyear 1877 thcre were 3,085 sales
of rcal estate, of the total value of $\$ 15,549,991$. In 1876 there were 3,840 sales, aggregating a
total value of $\$ 24,058,666 ; a$ reduction in the value of transfers of nearly $85,500,000$, the re-
duction in number of sales being 755 . In the general character of sales made, the same ten.
dency which marked the transactious of the year 1876 has been observed, namely: the purchase of small estates by pcrsons of moderate
means, for hoinestead purposes. The estimates
of
 Total permanent population.........eito oion 303,215
0




Total population, Feb. 1st, 1678................. 30,215
The estimate of the number of Chinese30,000 - of which 2,200 are women and 1,500
children-is based upon the judgment of relia-children-is based upon the judgment of reliament of our papulation. Owing to local causes
during the past year, this elenent iu our popuestimate for 1577 gave 32,000 against 30,000 this year. Acording to the United States census of
1877 , there were 12,018 Clinese of all ayes residing in the city, of whom it was estimated
7,000 were engaged in different departments of 7,000 were engaged in different departments of
labor. At the present date reliable data sive
the number, including domestics, at 18,000 , the number, including donestics, at 18,000 ,
which, if correct, fully warrants the figures in which, if correct, fully warrants the fignires in business in this city on their own account is
950 of which over 400 are engaged in the laun50, of which over 400 are engaged in the laun-
Iry business. About 200 establishments, of which one-half are owned by Chinese, are engaged in the manufacture of cigars. The num. 4,000. The returus of the Six Chinese companies in San Francisco show. that there are
in the United States 155,000 Chinese, of which 60,000 are in the State of California. The indications for 1898 promise to at least
maintain the figures of the past year. The building associations have fully as much con-
struction in progress, and the demand for residences is improving, sales in all cases bcing readily effected. The Western addition is still
the more favored locality, the Nission additiou ranking next.
The banks
of interest, money still further reduced the rate tainable at $7 \%$, and it is expeeted that the
volume of money loaned on morttanes will fily volume of money loaned on mortgages will fully
equal that of the past year, which was the largest ever knowu to the eity. This fact, iu
conjunction with the present clieapness of mate rials, must operate as a great stimulus upon the
work of the coming year. work of the coming year.
Infleesces Toward Agricclutural Ad.
Vaccement.- We should avail ourselves of
every source of iuformation. We have periodievery source of iuformation. We have periodi-
cals devoted to agriculture in every part of the country. Among these the IVRAL PREss, of
our own State, stands high. At the East it is sporen of as having no superior in this nation.
Prof. Wickson, its agricultural editor, is devoted to our interests, The public 1 ress generally de-
votes a portion of their columns to useful infor-
matiou for the motes a portion of their columns to useful infor-
mation for the farmer. The laboratory at the
University of California, under the skillful nanavement of Prof. Hilgard, is at our service for the purpose of analyzing soils and plants, His
last report to the President of the University contains inuch valuable information. And the
report of our State Superintendent of Public report of our State Superintendent of Public
Instruction is full of practical suggestious of Instruction is full of practical suggestious of
great value, in short our sources of information
are such as warrant rapidi improvement in agricultural processes. Are we equal to our r privi-
leges?- Worthy Master I. C. Steple, in Patron.

The Valleys of the Sierra Nevada. The magnificent valleys of the Upper Sierr
ave as yet attracted but little attention have as yet attracted but little attention Hitherto they have been used mainly for graz
ing purposes. But it is safe to say that Califoruia possesses an empire of arable land in these val leys, second in importance to no other part on
the State. We venture the assertion, with entire confidence in its accuracy, that the arable areagle of these mountain alieys is equal to the
aralle aereage of the Sacramento valley. A general idea of their great extent may be obtaine Mohawk, American, Indian and Honey valleys Besides, there is anotlier class of smaller valleys,
which may be estimated as reaching the number which may be estimated as reaching the numbe
of 10,000 . The foothills of these valleys can b of 10,000 . The foothills of these valleys can be
cultivated, and the arca of these foothills have the same relative proportion to their valleys a
the foothills of the western slope have to the the foothills of the western slope have to the
Sacramento valley. The average elevation o these valleys is abourrouding ridges and forest that the disalvantages of elevation are immensely decreased. The snowfall is great, but the temperature is in all of them less scvere than in
the states of Ohio and Kentucky. The abundance of wood and stone as material for fuel
and building removcs many of the difficulties which adhere to the colder clinates. The health fulness of thesc valleys surpasses that of the
foothills. While malarious diseases exist to some little extent, the troubles incident to weak lungs are not felt at all. And we may safely of the State will be mainly replenished from the population of these higher valleys. The pro-
ductiveness of these valleys is no longer a matter of doubt; they produce everything that man needs. And as all the surrounding mountains may be made to produce abnndant pasturage,
the agriclturists of those regions will be able to combine all the departments of their calling The great valle of intelligent people who by a hardy race of intelligent people, who have all the qualities that can be desired. They now
produce hogs, grain and most of the vegetables. The soil of this region is a rich vegetable
mold, and generally very deep. The supply o water is abundantand irrigation is not a necessity. These ralleys never sutfer from drouth. At
the present time a market is found for all surplus production in adjacent mining regions, But as the population iucreases, narrow-gauge
roads will provide an exit to the markets of the wark. Cntil trazing will furnish prescn scope for the enterprise of the people. The at tractive scenery, the productiveness, and thy
healthfulness of these high valleys, will alway make them desirable places of residence. The
appliances of civilization can be found in every appliances of civilization can be found in every
one of these valleys, and their present state of development is prophetic of grand ad vancenen in the immediate future. - Record-Union
Suxday on the Railwar.-The following
advertisement appears iu some of the English papers. Perhaps some of our readers who feel strongly on the subject of Sunday labor by hands in competing for the 8600 in prizcs The International Federation of Lord's Day be less than $£ 80$ for a literary work, 'On the
Sunday Toil of Public Servants, Especially on Railways.' Full prospectuses of the competition may be had on application (with stamped ad dressed cover) to either of the honorary secre-
taries of the English Central Committee of the Federation, Rev. John (frjtton, 20 John street,
Adelphi, London, W. C.; Mr. Charles Hill, 13 Bedford low,"

At Law. - We learn that Col. M. Eyre, Jr, of Napa, has opencd an office, for the practice of Clay street, S . F . Col. Eyre will be in this poultry Monday to Friclay of each week. His
 tion to the Colonel's reparding them as his
clients on Saturdays. We hope he will find all success in his wider field of labor.

San Frascrsco Direcrory.- We have re-
ceived from Henry G. Langley the new city
directory for directory for this year, a volnne, which aside
from its usefulness as a look of reference, con from its usefulness as a hook of reference, con-
tains much information of interest and value. liled for this directory, regarding the popula tion of the city, extent of manufactures, etc.

There is danger of high water in the Feather byer, if the deep, snow-banks are brought down
by warm rain. At Buckeye, there are five
1llains, there arc 17 feet of snow and still falling



## Farmers : Farmers

Throughout Califoruia are requested to send their ordcrs for any kind of 1 iabor to the "Free
Labor Exchange," 33 and 3.0 'Farrell Street San Franciseo. All hands carefully selected free of charges to employers and employees.
S. F. MARKET Report
 not intended to represent the state of the
ardhy, the date which the paper bearg.

## Weekly Market Review.

DOMESTIC PRODUCE. ETC
, everything is quiet. The respite from the rains was again only loug enough to give a few days
eujoynuent of sunshine, and the storms have returned. There is some little novelty in the incoming of a lot of the spring clip of Wool,
and the beginning of the Lenten scason has its nsual effect on the different kinds of produce. The course of the local heat math the
lownward, in sympathy with the

Range of Cable Prices of Wheat. The course of the Liverpool quotation for
Wheat to the Produce Exchange during the days of last weck has been as recorded in the following table


To-day's cable quotations to the Produce xchang as followas

| 1876 |
| :--- |
| 1877 |

$1876 \ldots$
$1877 . . .$.
$1878 .$.

The Forelgn Review.
Lonvoy, March 12th. - The MHark Lane Ex ress says: Imports of forcign Wheat into Lon don and Liverpool have bcen large, and buyers
were enabled to satis!y their wants on rather were enables to satis!y their wants on rather
easier terms. Trade has been somewhat less depressed than of late, but the demand neverdepressed than of late, but the demand never. interest centered for the moment on Black Sea place in Odessar but in what condition these supplies will reach us, after having been storcd in up-the-country districts of southern lussia
for many months, is a matter of conjecture. for many months, is a matter of conjecture.
There will be some delay in shipping Wheat ron this source, the transport service being to hand freely in good condition. Feeding tuifs anurn lower to sell, but Oats of whicl arrivals from abroad have been light, fully maintaincd rates. Arrivals of Wheat cargoes at
ports of call have been moderate, but the trade rulcd exceedingly dull and prices declined $2 s$ per quarter. Maize and Barley are also neg.
lectcf and values gave way Gl@ 1s per quarter, with a firmer feeling at the close.
Wheat freights, says the Commercial News, have been at a standstill during the liast week, the state of the Euglish market having been
such that exporters were unwilling to take up tonnage. Ships continue in light supply and as the begnnuiug of the new cereal year approaches rates for inmediatc loading. In the absence of and we can only at ť2 10 s to Liverpool direct for a small wooden

## Eastern Grain Marketa

New York, March 9th. - The continued ing probabilities of large shipments from th granaries of Southern Russia have had a depresgrowths haviug declined froun $\$ 1.27$ to $\$ 1.15$ for declining tendency, and mnch lower prices are declining tendency, and mnch lower prices are
predicted by the "Bears," who have things pretty much their own way.
CHicasio, llarch 9th.- Buyers are apparently scarce and sellers are rushing in from the
country. It is pretty coufidently predicted
that Wineat will country. It is pretty coufidently predicted
that Wheat will soon cxpcrience a heary de-
cline and just at present it cannot he learucd cline and just at present it cannot be learncc
that it has any friends. Wheat led the decline and largely shaped the course of the other mar
kets. Sales of April were at $\$ 1.023 @ 1.07+$ Corn was unsettled, irregular and siteculative in its character. Oats were quite steady, but rather more am $24+\mathrm{c}$ down to 233 c for April Rye was easy and a shade lower than last wcek,
but maintaince the uniform price of 5 jo for
 The closing cash prices are: Wheat, \$1.043,
Corn, 41; Oats, 23í; Rye, 5xc; Barley, 4 6c ork, 89.25; lard, 86.95. Ilogs have decline Eastern Wool Markets.
New Yozk, March 9th.-The condition of
the Wool market has not changed in any particular. Manufacturers complain of a slow out let for goods, and, in consequence, eviuce no
disposition to stock beyond thic most pressing needs. On the other hand, holders generally
are ready to meet buyers at casier figures, offer. ing them stocks freely, but low prices at present
at $13 @ 13 \frac{13}{c} \mathrm{c} ; 8,000$ ths Fall do, $16(a 20 ; 2,000$
lts Spring do., $17 @ 20 ; 3,000$ lts Utah, $25 ; 15$, lus pring do., 17@ © $20 ; 3,000$ lis Utah, 25 ; 15 ,
000 ths Colorado, $17 ; 28,000$ Western Texas,
17 In

 BosTos, March 9th. Wool is very dull and pros contilute low and unsorocement wanu
 owing to dull trade for goods. Fine Flecees are
about ta depessed as reviously noticed. Sales of the week include 80,000 ths Ohio and Yenn.
 heavy New York, 34; Combiug, 48; Oregon, doing in California Wool, about half the sales for Fall, 20@331 for Suring. The tial domestic Wool for the week were 805,700 pounds.

Domestic Produce.
The following table shows the S. F. receipts noon to-day, as compared with the receipts of Articurs.



BAGS-Dealers add a fraction to the price of Graiu Bags and report an upward tendency. ${ }^{11 \mathrm{fc} \text { c. }}$ BARLEY - Barley is slightly lower than last Week. We note sales: 1,000 sks small Coast sks choie Island Feed, $81.27 \frac{1}{2}$; 400 sks Feed, weevily, $81.25 ; 600$ sks good, $\$ 1.30$; and 914 BEANS-Beans
BEANS-Beans have scored an advance on nearly all kinds. We note sales 180 sks Bayos CORN.
We and note sales: $1,000 \mathrm{sk}$ White, private terms;
and 160 small round (some cob), $81.70 ; 150 \mathrm{sks}$ choice large Yellow at the eopuivalent of 81.62 s
 per ctl.
eak apparently ratcester than merchants can place. EGCS unclianged.
or monthetggs are lower than they have been California. Other Fggs are proportionately

FE1ED-Bran and Middlings fall in sympathy is sm $\$ 14 ; 40$ tons fair Wild Oat, $\$ 14 ; 11$ tons Tame Oat, $\$ 15 ; 3$ car-loads good stock, $\$ 13$ per ton.
Poor Wheat Hay sells low. We note sale of a cargo at $\$ 11$ per ton. erries have arrived from Acare. The first Straw-HOPS-There is nothing new in the local trade. The New York market is reported by Emmet Wells, for the week ending March 1 st , as follows;
scarcity in Ilops in the country do not seem to be verified by the large reccipts which foot ap this week to 3,079 bales; such receipts would
ordinarily tend to depress our market, but with ordimarily tend to depress our market, but with
the small but stcady demand for home use, and the inmense quantity of nearly 4,500 bales kept remince our last circul the market can fairly be quoted without change.
tots. We note sales: $\$ 1.70 ; 200$ sks choice Humboldt Feed, for China, 81.75; 1,226 sks fair Feed, $\$ 1.50$ per ctl.
ONIONS-Onions have stepped down again. The top price for the choicest is $\$ 1$ per ctl to-
day. day. P OTATOKS-Potatoes are improved. Our
list below gives the price for ach variety, Some list below gives the price for each var it
new Potatoes
l'Rovisions-There is little doing in fresh Mleat, owing to the incoming of Lent. The
Mutton market is at present overstocked. About 2,000 Sheep and 1,000 Lambs arrived on
Tuesday. The Hain and Bneon market is Thesday. The Hain and Baeon market is quiet. The supply from the East is grcater than the
denaand. All parties holding Hams seem anxious to sell, and many are reported to be trying sympathy with the notable decline at Chicago
RYE-Simall jobhing sales of choice Nebraska, from warehouse, at \$\%.40.

C per Iti 1 bit a pound, and Rhu barb is becoming more
plenty. Beets rise to $\$ 2$ per ctl. Marrowfat

## WHEAT

perceptible. Shippers will not mention any. thing higher than \$1.80 to-day, but sales have
bcen made above this mark. We note sales
during the past six days as follows: 200 etle

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DOMESTIC PRODUCE．


FRUITS AND VEGETABLES．


RETAIL GROCERIES，ETC．

| Butter，Californls |  |  |
| :---: | :---: | :---: |
| Choic | $\begin{array}{ll}40 & \text {＠} \\ 18 \\ \text {＠}\end{array}$ |  |
| East | 25 ＠ 30 | Sgrup，\＆F Gold＇ı 75 |
| ra，Cal | 18 ＠ | Dried Apples，11．． 10 ＠ 14 |
|  |  | Ger．Prunes．．．． 121 （c） 10 |
| Flour，ex．fam，bbis | ${ }_{2+\text { en }}^{00}$ |  |
| Sugar wh．ershd | $12 ⿰ ⿳ ⺈ ⿴ 囗 十 一 ⿱ 一 土$ | Oils，Kcrosene．．．．．． $50 \times 60$ |
| Light Brown | 8 8 93 | Wines，Old Port．．．． 350 （ 5500 |
| Coffee，Green． | ${ }_{50}^{23}$＠1 35 | French Claret．．．．${ }^{100}$ 00（a2 50 |
| Fine Black．．． | ${ }_{55}^{50}$＠1100 |  |
|  |  |  |
|  |  | Frenca Brandyr．． 4 00 es |



METALS．



Gold，Legal Tenders，Exchange，Etc．





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counties．


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## ABOUT RIGHT，＂Etc．

Mary Miantain＂is about right when she
Iy of ehildren whio riad the Rlinal Parks ，



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For YOKOHAMA and HONGKONG．
WILMiNGTON．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．Mareh 16th
For Champerico and San Jose de Guatemala．
Granadi．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．Mareh 19th For Panasa and New York，calling at Acapulco，San Jose
De Guatamala，La Libertad and Punta Aienas． Hereafter the Panama stcamers will leave on the 5th Tickets to and from Europe by any line for sale at the
lowest rates． CITY OF NEW YORK，March 18 th，at 12 o＇lock，noon
or on arrival of the English Mails，for HONO－ \＄10 additional is charged for passage in Upper Saloon．

For HONOLULU
CITY OF PANAMA．．．．．．．．．．．．．．．．．．．．．．．．．．．．．Marbh 21st．
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$\begin{aligned} & \text { ing the AMES Engines sold by us, and they state } \\ & \text { that our Eugine is an infringement of the Rice }\end{aligned}$
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fringement of the Rice or any other patent.
decided that our Engine is an infringenient of the
Rice machine, and we challenge them to proluce
the record to show that fact
United States Circuit Court a arainst suit in the
they alleged we iufringed the Rico patent. We
filed our answer and were ready for trial. At the
$\begin{aligned} & \text { present term of court, on their own } \\ & \text { and against the protest of our attorneys }\end{aligned}$
They Dismissed the Suit.
Fourth, We charge the fact to be, that they
$\begin{aligned} & \text { dismissed that suit because they were not willing } \\ & \text { to test the question in the courts of the conutry }\end{aligned}$
and because, as we believe, they preferred to harrass
prosecuting an action against us, therely hoping to

foree the ning community to buy their inferior Eifth,e adlnit two suits have been tried in the Unitotates Circuit Court relating to the Rice pate oue Rice against Heald, the other Rice agaidinnight, in both of which they sued for $\$ 10,00 \mathrm{mmages}$, and in both compromise verlicts werendered; in one, oue dollar damages and in course sppeal to the Supreme Court of the Uuited st. These athe Facts as the Records Show. Thesene parties who have, are themselves to embelhtheir advertisemeens, arinst them by Joseph Eht, of San Jose, for infringement of his patentthese same Rice Engines.
Returu F Boilers we offer, Returu Fl Boilers we offer. The Fireing and Steamingtronger aud better through the use of The commulor.
mprovems for Strox Evgives with patented improvem for Straw, Wood or Coal. There
are none er than the Ameg Fire Box Boilers They are 10 pounds lighter aud 10 inches smaller in diametor the same powcr than any return flue boiler Hundreds of them are now in use in this Statering perfect satisfaction, and many are PORTANT NOTICE
Rase, Wisconsin, February 27th, 1875 . No one California has the sale of the CASE sale excelpaker \& Hanilton, of their agents-all othes arquitations and frauds on the farmers.
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# 9 1 

## Volume XV.]

SAN FRANCISCO, SATURDAY, MARCH 23, 1878
Number 12

The Centennial Premium Devons.
At our request, Dr. J. Cheston Morris, of
Philadelphia, prize taker for Devons at the Centennial, had his prize herd and some of the individual animals photographed and engravings of these photographs appear upon this page. The photographs do not do the animals justice -indeed photographs seldom do. But the engravings are of much interest and the presentation of them enables us to make a few remarks upon the breed in general and to introduce Dr. Morris' own reasons for selecting this stock for his farm.
Devon cattle are well known throughout the United States, as they have now been bred here since 1817, at which date they were intro duced by the Pattersons and Caton, of Maryland. There are several fine bands of Dcvons in this state, and in the East they have their champions fully as enthusiastic as the advocates
of other breeds. The Devons are of timeof other breeds. The Devons are of time-

honored lineage. Horace Miles Scssions, editor of the "Devon Herd Book," claims the Devons as a race rather than a breed, making a distinction that a breed is the direct work of man, bnt "races are varieties molded to thcir peculiar man and uo intermixture of other varieties-that have continued substantially the same for a period beyond which the memory and knowledge of man does not reach." He claims also that "there is no race in England that ean | claim such undisputed antiquity as the Devon." |
| :--- |
| So much for the old. The fact of the present | is that we find the Devons widely disseminated

in amoug us and universally acknowledged to be Devon ox is so well known for his working will and quality that he needs no praise. In the line of beef and milk, the testimony of Devon breeders is very satisfactory. E. M. Danforth, of Oshkosh, Wisconsin, clains that his Devon
eow "Cora," 1,514 yielded three pounds of eow "Cora," 1,514, y
butter per day while tested. Coleman, in his "Europcan Agri
culture," culture," reports North Devon cow which, for several
weeks in succession produeed 21 pounds of produeed 21 pounds rovernor Hyde, pion brecder of Devons, is quite sure they ired that can be de Devons, "Gem," of the made 136 pounds butter in 60 days., An oher, $\begin{aligned} & \text { old milk in } 95 \text { days }\end{aligned}$ that made 1950 day of butter, averaging ver two pounds butter per day. For eef-making qualities he following recor in favor of the Devon, Ayrsmpared with the transirctions of the Worester (Mlass.) Ag The stock fed we ealves, last scason's and two Devons, one ery near the spring, n every particular different wed two cattle were weighed days at each time. The that they consumed. It was found that 100 pounds live weight of Devons ate 2.10 pounds Ayrshires ate 2.86 pounds of hay daily, eating one-third more than the Jevons. The Devons gained in Hesh the first 10 days, 34 pounds; the


CENTENNIAL PREMIUM' DEVON HERD, OWNED BY J. CHESTON MORRIS, M.ED and three bred by Gcorge Wm. Hall, both of alike for milk, butter, beef, and work cattle. Harford county, Maryland. They were bred ly This can be said, so far as I know,
them from latterson stoek, with one cross by them from Patterson stook, with one cross by "Matilda," owned by Strandberg, of Easton Maryland. I used a bull bred by Patterson Maryland. I used a bull bred by Patterson;
then "Prince of Wales Secoud," bred from "IInperial Prince of Wales" by Hilton, and sinee then bulls bred by myself. I have paid attention

Ayrshires, 20 pounds. The Devons gained in espeeially to milking qualities and butter-mak flesh the second 10 days, 28 pounds; the Ayr-
shires, 20 pounds." It may be fairly objected find the average yield from each cow is
from 170 to 175 of pounds butter yearly. I do not that testing the Devons for beef with the comshires would not be so good a beef test as to fords, and yet the test is well enough when the raras, and yet the test is well enong when th Chester, Pennsylvania, since $1866^{5}$, having com-
menced wi h three cows bred by Lloyd Norris,
feed heavily, as the natural tendency of th Devons is to fatten easily, and I believe that for My cattle are not large, but fiuely onade well-knit, the oxen docile, strong and


IDEVON COW "CLARISSA," OF THE CENTENNIAL HERD. The standing of the Devon is very firmly and $\mid$ and all of them gentle. While the Jersey rim Dr. Morris, whose cattle we are showiug. size and rapidity of growth, I think that for In a letter to us he writes as follows: "I have Chester beng Devous at Ferillank, 11ear West general farming purposes the North Devons are eneral sarming purposes the North Devons are
the best, the most easily kept and hardiest

The Olive in California
In a long and carefully prepared paper, lately read before the Academy of Sciences, Hon. B. B. Redding maintained the adaptation of our tate, for a much wider culture of the olive. He showed the faet that the United States were buying nearly $\$ 500,000$ worth of imported olive oil each year, aside from the large anount paid for imported pickled olives. In order to show that California may set her soils to eatch the trade, he showed in several ways. The temperature required for the successful growth of the olive was established by citation of many foreigu authorities, to be a mean throughout the ycar of $57.17^{\circ}$; the mean for the coldest month must be as warm as $41.05^{\circ}$, and at no
time must the temperature fall below $14^{\circ}$. Ap. plying this range of temperature to various
regions of our State, Mr. Redding found by meterological records of 27 diferent places from San Diego on the south, to leading, in Shasta theoretically adapted to olive growing. The olive is summarized as follows: "From this evidenee it would scem that in the olive we have a tree that can be grown on our dry plains its limits of profitable cultivation are as far north as the south of France and as far sonth as Cairo in Fgypt. Wherever on the coast from an Diego to Mouterey, and wherever in the
interior of the State within the limits of temperature stated, there is an annual fall of rain sufficient to produce barley or wheat on rocky
hills or sandy plains, when once rooted, this hills or sandy plains, when once rooted, this
tree will thrive and bear. In the valley its exreme northern limit is at Reading, for at Fort ledling, but 12 miles distant and within 116 cet greater elevation the mercury in the ther-
mometer fell to $11^{\circ}$ in December, 1855, which would be fatal. It we imagine two lines starting from Reading, which has an eleration of ing from Reading, which has an elevation of
5.58 feet, one on the west side of the Sierra and the other on the east
side of side of the Coast range, gradually as.
eending as latitude is deereased until they meet at Fort Tejon, mountains, at an elevation of 3,240 feet,
we would have the probable limits in the adjacent mountoy and below whi mountains, could be successfully cultivated." searches into the na-
ture of the soils on ture of the soths on around the Mcditerranean are of interest to elined to plant the trecs in this State.
This tree will grow in almost any soil except that containing inuch moisture. Marsh states, "that it pre-
fers a hight warm ground, but docs not
thrive in rech alluvial thrive in rech alluvial
land, and grows well on hilly and rocky surfaccs." Beruard says "that it thrives and is most prolific in dry,
calcareous, schistous, sandy and roeky land must be naturally or artificially, well rained. Its great enemy is excess of moisture. it rejoiees in the mechanleal looscness of sandy, stagnant moisture." Brande asserts that it only grows well and yields large crops "in a warm and comparatively dry climate."

## Corresponoence.

Reclaiming Alkali Soils.
Editors Press:-I see in the Rural of Mareh 2d, a description and analysis of some of the
alkaline soils near Stockton, recommending the use of gypsum to reclaim alkali soils, etc. As I an somewhat acquainted with those soils from two years' experience, I am at a loss to know of what practical benefit it will be to the
farmer who is so nulucky as to be the owner of farmer who is so nnlucky as to be the owner of
such laud to use the gypsum alone, as there are several other ingredieuts that are just as destructive to crops as the alkali, which the gypsun will not affect or destroy. I see from the
analysis that there are three other substances, an excess of either of which will prevent crops
from groving where there is no alkali. Now from growing where there is no alkali. Now
the question for the farmer to decide is, which is the eheapest and most effectual way to rid the ground of all those minerals whiol, are poison to crops; and 1 am to and effectual as unmode now known so cheap and effectual as un-
der-draining; as all of those minerals in the soil are soluble in water and can be takeu out
of the soil ly under-draining or tile drains,
which have heen proven to work well in this Which have heen proven to work well in this
State. In this county, thorongh tiliug has proven to pay all the expeuse in two seasons in the
extra yield of crops, and that on land that pays expenses to eultivate without the tiling. The experience that I have had with alkali
was in Los Angeles county. I cut open ditehes was in Los Angeles county. I cut open ditehes
a few feet apart on the strongest alkali land, banking the dirt near the edges of the ditch, thus forming a pond water. The water leaching out through those witches earried the alkali and
salts off; and it looks reasonable that if those salts off; and it looks reasonahle that if those
ditches weredug, say 40 feet apart and three
feet deep and laid with three-inch hollow tile, feet deep and eitch eovered or filled up it will
and then the
worl work more thoronghly and will draw off the
water almost to a level with the tile. I would like to hear through your valuable
paper something more about the soda salts aud paper something more about the soda salts and Will the plaster neutraize and destroy all of an expense for no oood, from the faet that an
excess of either salt or soda will destroy vege tation. It is worse during dry seasons than wet ones. I hope those questions will be answered,
as I am interested in the reelanation of alkali as 1 am interested in the reelamation of alkali
land. I would like some one who writes for the Rupal to aner these questions

Santa Rosa, C'al., March 4th. Prof. Hilgard's Comments on the ForeEntrons Press:-Mr. Forist's exceptions to the ellicacy of gypsum in the reelamation of
alkali soils apply only to that class of lauds whose soil will, during the growing season, contain several per cent of soluble salts. So far as I an aware, such soils form but a very smanl
proportion of the alkali lands of the State. If Mr. F. will refer to my report on the subjeet, lately published, he will see that I have espe-
cially speeitied drainage as the only remedy for cially speeitied drai
lands of this kind.
But drainage is expensive, and is especially objetew to on that seore oy owners of alk and curs in the State) cost only from $\$ 2$ to $\$ 3$ per aere. The point to bl kept in view is, that the
arbonate of soda which is destroyed by the gypsum, is so much more injurious to plant
than the other ingredients, that its transformation into glanler's salt will, in the majority of
eases, relieve the soil suffieiently for protitable eases, relieve the soil suffieiently for protitable
culture, desyinite tlie presence of the other salts;
witness the experiments in witness the experiments in Los Angeles eounty.
Mr. F.'s assumption, that in the soils referrel to "there are other ingredients that are just as
destruetive to erops as the alkali," is simply and ratioclly wrong. It takes (aceoriimg to
the nature of the soil), from five to ten times as much eommon salt or glauber's salt as it does of earbonate of soda, to work material injury to
eropz. But there is another point that Mr.
Fer Forist has overlooked, and whieh is plainly
stated in the article regarding the stoekton stated in the article regarding the stok ton
soils, viz: That the presenee of the carbonate
of soda renders of soda renders gool tillage impossible, and
Arainage, therefore, of exceeding slow effieiency in relieving a soil, frem a snrilus of salts: so
that, even where drainage is necessary, the use of gypsum would still be profitable in removoving
the cause of the "phldlded" condition of alkali soils, and replacing it by the loosening effect
of lime; thns facilitating the washing out, of lime; thns facilitating the washing out,
and allowing the use of the sil one or tuco
semsons sooner than conld be done where drainage alone was used to relicve it.
Moreover, there are cases, and especially in Los Angeles county, where drainage is imprac
ticalle on aecount of the "lay of the land," atated by tho inhabitants. Here, if gypsum
does not afford relief, uothing will. But it seems that gypsum lios done it,
In fine, I liave never reoonnnended gypsnm
as a panmea, even for land althicted with ear.
bonate of soda. It is true that in every sueh
$\left\lvert\, \begin{aligned} & \text { case it will mitigate the eril; but I have ex- } \\ & \text { pressly stated that dop }\end{aligned}\right.$ pressly stated that deep and thorough tillage is
always an advisable adjunct, and drainage in always an advisable adj.
some cases indispensable.

The Alkali Soils of Tulare.
I have heretofore expressed my belief, based
upon the examiuation of specimens from upon the examination of specimens froml points
somewhat far apart, that the alkali soils of the interior of the State, from Stock tou south to Los Angeles, are substantially the same nature; that they coutain as au ingredient, whieh injurious even in very sumall quantities,
he carbonate of soda, and that in the majority of cascs the amounts of salts present in the soil would not be sufficient to cause injury to the
crops, if they were all of the indifferent nature crops, if they were all of the in
of glauber's and comulon salt.
This view has obtained additional confirma tion from the examination of soil specimens
received a few days ago from Mr. F. G. Jefferds of Farmersville, Tulare county, acting ou hehalf of Farmersville frange. Time has not yet, of course, permitted an exhaustive analysis, but
indications derived from a prelininary examina.
in tion are sufficiently definite to serve as the basis
of large scale experiments by the farmers of that of large scale experiments by the farmers of that
region, and I therefore deem it desirable to pubregion, and Itherefore deem itde
Mr. Jefferds transmits three specimens, viz; of the same, from 12 inches depth; No. 3 , no alkaline soil of the Tulare valley, "constituting abont ene-fourth of the available land of the valley," while the alkali covers the rest.
The two kinds of surface soil are very
The two kinds of surfacee soil are very nearly soil is lighter in color, from the extraction of the vegetable matter by the alkali. Both alike are rery light, evidently a fine, sandy sediment,
glittering with gold-eolored mica scales; and both are very easily tilled, as there is uot clay enough in either to produee the "tamped" con-.
dition which so obstructs tillage in heavier soils.
The
The uon-alkaline soil is reported to be the same to the depth of 12 feet; has produced be-
tween 30 and 10 bushels of wheat without dimitween 30 and 10 bushels of wheat without dimi-
nution sinee it was taken into eultivation, whenverthere has been water enough.
The alkali soil ordinarily produees little or nothing, unless the grain is far advaneed when
the dry season sets in, when at times it has done almost as well as the other. In other identieal, exeept as to the alkali. My examination shows that the good soil contains barely a race of earbonate of soda.
The surfaee soil of the alkaline land is very strongly alkaline, from the presence of carbou-
The subsoil of the alkali land is feebly alkaline, showing that even in the rainy season the
bulk of the alkali remains near the surface, and can be neutralized there.
The neutralizing agent is in this case also, of course, gypsum or laud plaster. 1 should advise
experiments to be tried with it at onee on three plots, dressed respectively with 300,600 and Moos, pounds per aere.
The final results of
will be communicated the quantitative analysis University of Cal., Berkeley, March I5th.
A Murderous Plant-Darlingtonia Californica.

No plant indigenous to the l'acitie coast is
more profoundly interesting than our Darling. tonia Ualifornica. The eye of the uncultured tonrist or listless stock-man, no less than the studious naturalist, is at once fascinated wheu
first its seeret haunt is invaded in the fastresses of the Sierra Nevada. A startling mass of rreen, yellow and crimson snake-leads, high raised in air and thrusting enormous, flaming, frked, eurling tongues in every direction; a developed warning principlo in the passive veg. etable kingdom; a table-turner upon an old
eternity-eudured enemy; a coming ploter against an alert foe; an ingenious delnder of the insatiate vengeanee-taker; a holl, watchfnl, cold-blooded, confederated assassin-the Darlingtonia forms a frightful specter of the shadowy
swanp, a horrid incubns of sulsequent dreams!
"A Ahorreal shape! That only grace of beauty takes,

## A Consummate Villain

The paraphernalia whieh the Darlingtoniu empons seeper and the ('yprians, gandy ofolors, apartments. Its maehinery for destroying them is that of the highwayman and the arch tiend, deceitful traps, tripying obstaeles for the feet,
sinooth declinel planes, pointed darrer-thrusts secenth deccilimel plpanes, poonted dayygrer-thrusts,
sinoon behind and silent wells of oblivious waters.
from rom behind and silent wells of oblivious waters.
What of ene hantment and bewilderment is not furnished by the many-colored, revolnte, honey-eoated mnistache, inviting to the spacions,
vanlted, sugar-lined, many-windowed hood of Vanted, sigar-lined, many-windowed hood of extra hy sen suspending a A Hlaunting a array of
flagstaif and
green, gold and erimson bunting loosccy eufecling nectaries of scented sweets, the eurious
lower of the Durlingtoria. Surely no member flower of the Durlingtonia. Surely no maninucr
of the vegetable kinglom has so remarkable and unmistakalle a mission, none steps so far
out of its normal state to perforn it and none
exeeutes its trust with more ingenuity and
suceess Modus Operandi How the Darlingtonia is constructed and the
node and results of its warfare have been made mode abd results of its warfare have been made
the subject of scarching expeditions and claborthe subject of scarching expeditions and clahor-
ate essays by Darwin, Hooker, Gray, Cauby, and recently by a fellow menber of this academy, Harry Edwards. But 1 trust that an eu-
thusiastic botanist, whose facilities for observthusiastic botanist, whose facilities for observa-
tion have becı most fortunate, may be pardoned for presenting a few facts, gained, not without mauy diffcrent interviews of this
rogue, at less than 60 miles from one loealities where the Darlinutonia is found in it best estate-Buttertly valley, near Qnincy-1 make yearly pilgrimages to its hone, I canp, by
its battlo-ground, I conquer my repucuance to its hidcous aspect and its cruel work, become accustomed in time to the stench of its rotting
victims and I carefully study its woondrous mechanism. I note its aspects and appliances varying with the seasons. I feed it with other
food-Hlesh, tish, fowl and farinaccous diet, sugar, vinegar, salt, pepper, oils, saleratus,
acids, etc. I wituess the welcome of agreable diet, the sickening effect of poisons agreable with unusual captives-frogs, snakes, miniows, talpoles-and note the arrival of new forces of the alaptation of combined powers to incet the uew conditions. I recognize the tcnacity of
purpose, the almost intelligent nse of means and reverently I humble ny spirit before the evelation of iufinite wislom and power.

## Thoughtful Inquiries.

I lave reported these olservations so often and fully, that every year brings increasiug in quiries from thinkers in distant lands, asking to have this or that mystery eleared up; or t with the history of the famous plant. One Wilmington, Del. The facts elicited forme the theme of a most exhaustive essay, that was
read before Ameriean Academy of Sciences and reprinted in inost of the languages of Europe.
"Why are the Leaves Twisted One-half
Was Canby's last demand. It will be the espeeial object of this essay to answer this ques
To diseuss this subjeet thoroughly and with the expectatiou of arriving at the truth, we puzzles-with embryology, the infant state. The seed of the Darlingtomia is a lirownish,
hairy, Indian-club shaped object, about three lines long. It would be a bur, but for the hundreds by the larges, bursting pericarps, they fall upon the running water or mossy carpeting of the bog. A seed here and there is caught own a tiny radicle in search of and sends whereon to erect a nnique charnel-house o many tall, feeding funnels. The 1 recursor of
the prospective phalanx of rapaeious, eylindrihe prospeetive phalanx of rapaeious, eylindri

cal stomaehs, is a very innoceut looking little | $\begin{array}{l}\text { that sto } \\ \text { eal stom } \\ \text { affair. }\end{array}$ |
| :--- |

Infant Form of Leat.
The plumule first levelops a thin, flat, falcate, green leaf, about half an ineh long. Soon
it lecomes redulened, tubular and veiny, while it recomes reduened, tubular and veiny, whinle curving inward, the slender, dorsally flattened, crimson, naked midrib, representing the trre
leaf, of which the tube below is the petiole. Along the inner face of the petiole, a broad wing extends from the lower edge of the in cined orince, down straight to the collum of the root, where it divides and elasps the stock.
This primary leaf is construeted similarly to the latter genus the true leaf or lamina is short the latter genus the true leaf or lamina is short,
broad, and is bilobed, or many lobed, and forming a border nearly around the mouth of the pitcher-like petiole. IJuring the tirst season of equal size generally, apparently in a whorl, but inspection reveals their alternate arrange ment. All faee inward, or rather upward, as
the leaves first push out horizontally, then the leaves first push out horizontaly, then
ascend npward. The uncovered opening is $f a$ vorably presented for the recepltion of moisture, insects, or any objects obeying the law of gravi
tation. Also, the mouth parts and interior of the tube are armed with strong hairs, pointing inward, while inspection of the eontents reveal minute inseets (generally of the Ichneumonide
and T'inumen families), entrapped, drowned in water and being des, entrappes, tiny rogues whter and being digested by these tin
thus early playing their little game.

## The True Darlingtonia Leaf.

During the second year the ereeping, rhizo-
matic eharacter of the plaut is manifested ; also, it increases rapidly in size. The whorl of leaves now produeed, from one-half an inch to several
iuehes heyond the first whorl, are long and large, two to three inches long by half an inch wide, the whole striated with longitudinal veins, and colored with yellow and crimson. Often, too,
the other kind of leaves make their appearance,
forming one or more of the first members of the whorl. So very different are they at the very
heginning, that it scems impossible that boti forms should lie found on the sance plant.
They may be larger or smaller than the infantilo forin (often but half an inch long), but still they
will be perfeet types of the true Darlingtonia leaf --the twisted petiole, the swelling, light-
adnithing hood, the small, round aplerture facing
dowiward, the enorinous, depending, curling,
flaming, and, in the season, honey-smeared, two parted lamina or true leaf.
The fourth year's leaves aud all subsequent are
plant is of taue, is mature; but occasionally on offsets and runners from wcak plants at any ae the infant former of leaf is found, but no graded transitional stagcs have yet been detected,
though much research has been applice in thi particular dircction, as bearing upon the popula theory of eqolution. The linear, strict petiole with upturned mouth anil long, uaked, midrib, adways accompanics the infant form, while the
adult leaf is never dcficient in the least chaeanteristic feature of its wondrous organism.
I should have noted before the manner of ornation or budding. In the bnd, the petiolc tension. The midrib of the infant is but minute, subulate spur ; the future mustaehe o the adult forn is a pair of involuted, elose-rolled,
awl-shaped horns, not unlike those waxen pilose appendages which the incipient dandy sometime displays

## The Saccharine Secretion

Not at all times of the season is a prominen did tures of thet one of the most distinctive fea This phenomenon was the sacharly secretion several years after the discovery fo the On the 4th of Jnly, 75 , in company with Mrs, Anstin and fanily, I went to celebrate the na tion's holiday beside our peculiarly Californian curiosity, located in a large oval bog in th center of a grove of alders. Much to our sur
prise, the tall, erowded cobra heads, upreared anong snowy parnasicts, azure erigerons, yellow with glistening drops of honey. The catching operation was in full progress.
This saceharine tlnid, of the consistence honey, is secreted by glands of the hood, both margins of the expandel windows of the balloou-like hood. It is often so abundant as to unite and flow down, that on hood, that on the outside smearing the mustache ompletely, in addition to a similar seeretion of the latter. Not only was the curling, erimson border of the wing in its spiral curve half-round down to the root was gemmed with a line of honey globules. These globules in the oldest ing a not-to-be resisted decoy to the groundling below.

The Waters of Death
So of the watery fluid found in the lower portion of the petioles at times. Only at a cer tain season-just at the opening of the months above, may this phenomena be deteeted. The main veins on tha fuside of the tubes the o seen gemmed from top to bottomath bead oo abundent as to thow, down and form the well of death. When the trap is favorably placed, or the quantity of inseets is unusually large so that the gormand gets his stomach full, or when fed hy hand to the top, slowly, with flesh oool, the Huid is seereted as demanded by the overflowing. Late in the season the water is overflowing. Late in the season the water is
evaporated and only the skeletons, wings, legs,

Again the arrangement and different altitudes
of the leaves are not at onee observed-and eannot be made out clearly from the usua of the world. Only young vigorous, solitary plants display the typieal plan of growth-a
plan conformed to the wants, or rather, the wicked designs of the Durlingtowia; and her we are brought ronnd to the solution
question under partieular deseription-
Why the Twisting Leaves?

First as to the facts. The leaves of mature each twisted one half way round whateve the length, whether one half inch, or over thre
fect. All the leaves on one plant turn one way but exaetly half (aceorling to repeated count ing one wasy and half the other. The four place. Each turns half-ronud and holds out its tlanuting lures into spaee in a direction radia-
ting from the center or axis of the plant. The ting from the center or axis of the plant. The
reason for this twisting of the petiole mist he to farther the design-the manieious animus of of inseets coning from all quartcrs.
$\qquad$ their food, and their mouths borThe full-grown, full-armed Darlingtonia, with its added attractions of gay eolors, fragrant wholesale capture of insects necessary to satiato its rapacity, by decoying them into a brillianly
lighted ehamber, over the eciling of whieh are lighted ehamber, over the eciling of which dered, however, and nltimately shut out by
herlges of slort, stiff hairs that topple the vie-
tim from lis footing. A high rim prevents return by the apertnre. A long portion of the in-
ner side of the tnbe, cummencing just on a level
with the edge of the oritice, is smooth as
glass, so vainly the joor victinn stretches his
legs for rescuing aids to stay his descent. legs for rescuing aids to stay his descent.
About half way down long, stiff, declined hairs
begin to be met with, which give way easily
from above but close up behind, and with mul. tiplied numbers, as the struggling victim nears nd crowds him beneath the silcut, feeted, decomposing waters of oblivion.

The Climax of Cunning.
Now, why the peculiar characteristics of the machinery answer as well? Let us see: A tube so capacious as to hold a half piut or insects, must be very wide or very loug. If wide, there secretion, since it must surround the mouth and smear all the approaches - an expenditure uot to be incurred by our economical plant. If
long and prostrate, it would be interfered with by other plants, also would be in danger of visitation and right with mouth upturned, it would be abright and with mouth of insects, while its tion of rain and dew; but, most of all, other plants are created and set to work on this prinfornia must be expected to produce a finished insectivorous plant, with all possible improvements; hcnce, the matchless Darlingtonia, with its high reared, inflated heads, downwart open-
ing mouths, sugar-plum, winding roads to lead foot travelers up; ingenionsly, brilliant and
honey-coated decoys to attract flyers; and the enormous mustaches obviously turned outward by twisted petioles to catch the eye of distant voyagers in every direction; no feature of all the
[The above fascinating aud accurate description of this famons plant was read before the
California Academy of Sciences, February California Academy of Sciences, February
18th, 1878. We are glad to know that Prof. Lemmon is now at work on a course of three lectures on the conifers of California, and we are confideut that they will be of excep-
tional interest and excellence; first, because of his full acquaintance with his subjects iu their habitats; and, second, from his brilliant and vivacious style of expressing his facts and ideas.
We hope these lectures will be widely heard, not only on this coast, but beyond the moun-tains.--Ens. Press.]

## Horticulture.

## The Germination of Seeds.

Editors Press:-How to develop the germinating power of seed which is tardy, and under ordinary circumstances quite lost, may be of
some interest to your readers, at a time wheu so some interest to your readers, at a time wheu so
many failures to germinate "coffce seed," are constantly reported. The germinating power of even old seed of any kind can be easily reThe use of camphor water, will uot only hasten the development of the germ in perfectly fresh seed, but likewise restore the lost vitality of a dried up, worthless article. This has loug been known to botanists, but, strange to say, never
has beeu much used by the general public. The has beeu much used by the general public. The
seed, if of sufficient size, may either be soaked seed, if of sumicient size, may either be soaked
iu the canphor water unti it swells, or if
sown at once, be daily sprinkled with the same, sown at once, be daily sprink ed with the same,
as we are in the labit of doing with common
wit water, by keeping the surface inoist until the
seed has sprouted. Another advantage of ussecd camphor water is, that the young of plast,
ing
show greater vigor in their growth ever after. show greater vigor in their growth ever after.
I give the following experiments made by my-
self on diverse The diverse seeds with camphoriwate
The seed of Ipomea quamoclit or cypress
vine, being immersed in camphor water at a
temperature of $60^{\circ}$ Falirenheit, germinated in temperature of $60^{\circ}$ Fahrenheit, germinated in
from six to cight hours, every time. Ordinarily the time required for the same is from 36 to 48 hours.
Some seed oi Mathiole amnut or ten-week
stock, was sown iu plats iu the usual way, and the surface well watered with aqua camphorra.
It was given another sprinkling with the same It was given another sprinkling with the same
in the course of the day, and in 19 hours after sowing, the seed had sprouted and lifted the
surface covering of fine mold. The usual time surface covering of fine mold. The ustal time
of germinating is from two to three days.
I took one of the hard, round seeds of Ne. Iumbium one of the hard, round seeds of Ne-
rosecoluryn flore roseo pleno, or double sacred lotus of the East, and rose-colored sacred lotus of the East, and
placed it in a glass jar fillcd with camphor wa-
ter. These bullet-like seeds or ered by a very thick, unyielding, horny shell, one end with a pen-knife, and will then germinate
in from three to four weeks. The inside of these seeds are nearly all a vercetable albomen, high-
ly nutritious, and in many places of y nutritious, and in many places of Hindostan, apan, China and other countries, are used for
oord.
But $I$ am digressing from my sulpject,
and will now state, that the camphor water germinated the seed in less than samp days.
My friend, Petcr B. MIead, Fsa., of this city, My friend, Petcr B. Mead, Esq., of this city,
formerly editor of the New York' Horticulturist
and a better vegetable physiologist than whom
nowhere can be found, and to whom Imate nowhere can be found, and to whom I made
known my experimeuts at that time, carried
the investigation still farther. He subjected
the seed of Stipa penata or feather grass, a
very difficult seed to germinate under the most
favorable circumstauces, to the constant effect
of camphor water used from a very fine rose. of camphor water used from a very fine rose.
Suffice it to say, that all the seed germinated in
less less than two weeks, and thus, said Mr. Mead,
" more seed seemed to cone up then more seed seemed to cone up than 1 put in of gerininating seeds, requires from two months and over to deevelop its gerninating power.
The sane gentleman treated some cactus seed of the genus Jammillaria in a like maned and positively asserted that the growth which the young plants have made since is twice that observed
stauces.
Several
Several vegetable physiologists of Europe have long ago proved the efficacy of campho
in calling the dormant vital priuciple of in calling the dormant vital priuciple of secds
into action, and I therefore consider it my duty into action, and I therefore consider it my duty
to help diffuse useful knowledge. Sced, which appeared to have lost its germinating power
from age, was restored to life by the wonderfully stimulating treatment of camphor. It should be stated, however, that some seeds naturally retain this germinating power for mauy
years, as, for instance, melon seeds, which has years, as, for instance, melon seeds, which has
been known to germinate after having been kept 40 years
Camphor water may be had at any of the drug stores, and persous wishing to use it in
large quantities can make it very easily by oblarge quantities can make it very easily by ob-
serving the following directions: Take two drachms of canphor, pour over it from half $t$ one teaspoonful of strong alcohol, and with
mortar or the use of a large earthen bowl potatoe-mashcr, rub the camphor into a very fine powder. Then mix with it four drachms of carbonate of magnesia, previously reduced
to a powder, aud when both are thoroughly mixed, gradually add two pints of water, a lit tle at a time, in the manner of stirring, water
into flour for making a batter. Lastly, filter through bibulous paper, or in lieu thereof, a double thickness of ordinary newspaper may be
substituted for a filter. A piece of uubleached substituted for a filter. A piece of uubleached as well. Water, in the presence of magnesia,
takes up and holds in solution a small portion only of camphor,
Muray Hill, N.

To Prune or not to Prune.
Editrors Press:-"How shall I prune these trees?" said a customer to me, to whom I had
just sold a fine lot of fruit trees, for starting an orchard. Don't prune them at all, said a nurseryman, who was standing by. I know Owen will tell you to prune, but I am an older man
than he is, and have ben longer in the business; and I advise you to set your trees just as
they are, and not cut them all to pieces. The are fine trees with nice heads, already started and it is a shame to have them spoiled by cut ting the tops and limbs all off.
be acquainted with fruit culture, I will divide th
matter between you; and prune half of them, according to one practice, and set the other half
according to the theory that "nature will form the branches of fruit trees best, without the aid of pruning shears.
When I had
off of the two-year-old trees, and about halt the straight stern of the yearlings, he went home and set them out very nicely, and made a
splendid growth on them that sesson ing planted them pruned and season; and hav ing planted them, pruned and unpruned pro
miscuonsly through the orchard, he had a good opportunity to test the two theories.
Well, as I was passing his placelin the next fall, he asked me to coll and look at his trees. Now,
said he, I find by experience that one fact i said he, I find by experience that one fact is
worth a dozen theories. Here you see that the trees that were pruned, have made twice th growth that those have mude that were not
pruned. And more than that, they have thrown out limbs low down ou the trees, so that I can form the heads low down, and thus protect
the trunks from the heat of the sun, and the froit from the elfects of the strong wiuds. I also have it in a more convenient situation for gather
ing than it would be on the high topped trees. The old "nurseryman" refered to, had planted an orchard, twenty years before that date, and
his orchard was all dead, or nearly so except his orchard was all dead, or nearly so, except
his cherry trees, for he had adhered strictly to his theory of letting nature do her own prun ing; and as nature hall formed forks in many of his trees, the high winds tonk the advantage
of them while loaded with fruit, and split them down to the ground, and spoiled them entirely. trees were literally being over-burdened with fruit, for they bor regularly every year, until they began to die. set this winter thronghout the State (hut not half as many as ought to have been), I mention
these facts for the benefit of those interestal. I have tried both theories for twenty-five years, and I advise you to prunc close at setting out,
and then thin out cvery year after, and don't let your trees fork-keep one main stem, and
let the limbs grow out on the sides, and low down. Some trees are inclined to grow very he cut back, and encouragcd to spreal out. zenberg apple are of this character. The yel.
low belle fleor is of the opposite character, and must be trained up a little, but needs good deal of thinning out.
Soquel, March 5th 1878.

## Arboriculture.

## Firewood to the Acre.

In a good deal of observation on the subject, says Marsh, the largest quantity of marketable gin forest was 104 cords, or 493 cubic yards, yield. This estimount is fansidered a very fair given to the statistician of our department o agriculture, which are as below:
In Franklin county Me., the best woodland yields forty cords per acre; the average is about
twenty-five. Iu Sagadahock and Hancock counties the average yield is thirty cords per acre. New Hampshire, the average yield is put
In Nom twenty to forty cords per acre in the difIn Vermont, the forests yield from twentyfive to fifty cords per acre. Some forests are
estimated to furnish 200 cords. In Rhode Islaud, about thirty cords per acre In Connecticut, sprout lands yield about
weuty-five cords per acre every twenty-five In N

New York, from thirty to sixty cords per
The original forests in some of the coun ties are estimated at sixty-five cords.
In Delaware, well-set second grow
In Varyland from thirty to forty acre.
Iu Oregon, however, among the cords, etc and oaks, the yield seems perfectly astounding. In Douglas county there are thousands of acres acre. Oak-timbered lands yield an average 100 cords per acrc. Says the annual report of the
land office, in relatiou to this land, "it will proluce from 25,000 to 300,000 feet per acre," and
"there are vast tracts that would cover the en tire surface with cord wood ten feet in hight." The report speaks of forests of pine trees
"f rom one to fifteen feet in diameter, and 200
to 300 feet hish " and red and yellow to 300 feet high," and red and yellow pines of
gigantic growth, often attaining a hight of 300 gigantic growth, often attaining a hight of 300
feet, and from nine to twelve feet in diameter.

## Various Woods.

The following are iuteresting items concern ing the commercial value and properties of the
better known woods, as laid down by the American Builler:
Elasticity.-Ash, hickory, hazel, lancewood, chesnut (small), yew, snakewood.
Elasticity and Toushness. - Oak, Elasticity and Toughness.-Oak, beech, elm, Even grain (for Carving or Eugraving).-Pear, Dine, box, lime tree.
Durabity (in Dry Works).-Cedar, oak yellow pine, chestnut.
Building (Ship-Building).-Cedar, pine (deal), fir, larch, elm, oak, locust, teak, Wet construction, (as piles, foundations, flumes, etc.). -
Elm, alder, beech, oak, whitewood, chestuit, ash, spruce, sycamore.
Machinery and Millwork (Frames).-Ash beech, birch, pine, elm, oalk. Rollers, etc.--
Box, lignum-vite, mahogauy. Teeth of wheels. Box, lignum-vite, mahogay. Teeth of wheels.
-Crab tree, hornbeam, locust. Foundry pat-terns.-Alder, pine, mahogany.
Furniture (Common).-Beech, cherry, pine, whitewood. Best furniture Amboyna, black ebouy, mahogany, cherry maple, walnut, oak, rosewood, satinwood,
sandalwood, chestnut, cedar, tulip wood, zebra wood, ebony.
Of these
Of these varieties, those that chiefly enter ash, elm, cedar, black walnut, maple, cherry, butternut, etc.
Ambrican Axes in Eveland.-Ex-Premie Gladstone has become the Horace (ireeley of angland, and wields the American axe as freely nouncement is made that the American style of axe has been introduced by enterprising En glish mannfacturers, and they have ground the crank. The narrative is in this wise: A Sheffield firm about the year 1873, commenced
the sale of an excellent American patent axe, the sale of an excelient American patentaxe,
which was shown and attracted cousiderable notice in the trade at the South Kensington cxbest polished stecl and the handle of hickory, and, inspired with a happy thought, the firm
receutly proscuted one of the highly-finishicd specimens to the statesman woodman, who not only accepted the gift, but has also used the
axe. Acknowkedging the gift, Mr. Mladstone
writes: "Gentlenent, I am so glad you have added that useful articlc, the American axe, to
the list of our home productions, and I thank you for favoring me with a specimen, which scens, as much trial as I have made, to possess
all the merits of the original. I find it necesand the merits of the original. I find it neces-
sary to study efficiency in proportion and
weight, and it is under this issue that I think weight, and it is under this issue that I think soft and free-grained woods. The handle is, I think, excellent, but 1 always wish it were cut
 cember 13th, 1877 ." This inake for the future,
wo understancl, is to be termed "The Gladstone

## Notes on Preserving Wood

An increased demand for one of the residual coal tar products of gas manufacture is likely
to arise, at no distaut day, for the purpose of to arise, at no distant day, for the purpose of
preserving wood from rot, and from the action of the various marinc worms that so rapidly destroy woodwork iu salt water. By permis-
sion of the Directors of the American Society of Civil Engineers, a paper of great interest in Mr. E. R. An. hibited which has been treated 20 years, and in constant use in railroad ties which showed no signs of decay. The process, as described, wood, placed "in vaccuo," sap from "green
villing the pores thus emptied of their sap with creosote
oil under a pressure of from 60 to 100 pounds. under a pressure of from 60 to 100 pounds.
Results obtained abroad have established the racticability of the process, and its perfect success in preserving timber.
ollowing on preserving fence posts: What I ould recommend with fence posts is: the ma. terials, when felled, to be directly sawn into posts, and stored under sheds thoroughly venilated, where they will remain at least a year
xposed to suu anil wind. The neck, or part etween wind and water, of each post should be slowlv charred over a strong fire-slowly,
because our principle means heating the timber because our principle means heating the timber
thoroughly to the heart, so as to extract any and hardeniug a crust on the surface of the and hats.
posts.
Afte
Afterward, to prevent the posts absorbing water, they shoul we well coated with coal tar, The tar shonld be thoroughly boiled, to evap. orate all watery matter, and applied boiling
hot. A large tank holding the posts set on end, and filled with the scalding tar from a boiler, nswers the purpose very well. Of course the placed 'in place.' I am fully convinced coal imber, is far more effectual in preserving posts than creosoting, poisoning, kyanizing, or all the
paraphernalia iof iron prongs, sheet-iron wrappers (an American in inention), etc. One great iecommendation in favor of the above process
is that it requires no skilled labor, and the cost is a mere trifle.
Preserving Wood ey the Aprlication of Lisk. - The method of preserving wood by the
application of line, as pursued by M. Svostal, is published in the French journals. He piles quick-lime, which is. gradually slaked with water. Timber for mines require about a week
to be thoroughly impregnated, and other wood nore or less time according to its thickness, The material acquires remarkable consistence
and hardness on being subjected to this simple and hardness on being subjected to this simple Beechwood has been prepared in this way for hammers and other tools for iron works, and is sid to become as hard as oak without parting
with any of its well-known elasticity or toughuess, and to last much longer that when not

Intration Ebony.-Ebonized wood is much in demand nowadays for painted pauels and is preferable to the genuine ebony. Apple, grained, may be "eloon, especially if fine process: Boil in a glazed vessel, with water, nces of gall-muts, one ounce of logwood cr halle all ounce of vitriol while warm, and bush the wed verdigris; filter whio number of tines. The wood, thus stained black, is then to be coated two or three timcs (being
allowed to dry completely after each coating) with a solution of oue ounce of iron fillings in a quart of good wine vinegar. This is to be prepared hot, and allowed to cool befor
Choosing $A$ Scymic.-The dispositiou of
steel in a scythe is to be best understood by seeiug one which has been broken across the "naked", so that all the steel shows itself at once on the top sidc of the blade, but this plan
is not to be reconmended. It is better to have ron on both sides of the itself along the edge, and runs in toward the back to stulfeu the blade and to forn a coustant cutting edge as the tool wears away. Now, in
buying a tool, bear in mind that the most steel may show in the one stecled naked, because all that is there is in sight, but iu the othcr caso for carrying an edye, although it would show
and less because the bulk of it would be hildden botweent the iron. It will not do, then, to bo depend on a good maker for good stecl and suffi cient of it.
Plain and Galyanized Iron Wire.-The Telegyraphic Journal says that in reply to a com-
munication auldressel to them by Mr. G. B. Prescott, the well-known American electrician, tions have without exceptegraph alministra ire experience as in favor of galvanize pears from these reports that the duration of non-gal vanized wiro for telegraphic purposes in
Suropo is from 15 to 20 years. Galvanized wire that has been in use some 25 years gives little sign of deterioration.

Pafrove or Hosprapr.
Correspondeneec cordially invited frona all Patrons tor thi
Removal.



Exorbitant Interest.—No. 3
Objection to Usury Laws.
Editors Press:-In this number I propose to answer the objections commonly offered to the
passage of nsury laws in the State of California. passage of 1su
First, That " a stringent usury law, restrict ing the ratc of interest to $6 \%$ as a maxinum, Woule." I think not. Such laws have been enacted in nearly all eivilized States, and who
ever heard of wealthy citizens leaving such ever heard of wealthy citizens leaving such
States in any considerable numbers because of such laws? Few wealthy Californians would
leave this State, where their capital is invested, for any other country. And if they should ern States, not in Europe. Nor would they governments are so ussettled and where capita fear that any respectable amount of capital
would leave this State iu consenuence of the enaetment aud enforcement of a decent usury law.
Second, It is objected that
"such a law, however wordel and however guarded, would
be sure to be evaled by the capitalist aud thus made a dead letter." If this objection is based on fact, then the money lendcrs are, as a class,
utterly disloyal to the itate, whose laws they utterly disloyal to the state, whose laws they
despise, evade and trample under foot. If we have such a elass of men among us, who set at
naught a solemn enactment of the sita and defy its power, then it is time for us to wakc
up to the fact and see if we can't make rich up to the fact and see if we can't make rich as farmers and merchants, and mechanics and
working men. If there be such a class or if the working men. If there be such a class or if the
money loaners, as a class, are sueh lawless men, money loaners, as a class, are sueh lawless men,
they are the men who ought to have restric-
tions put around their tions put around their power. But 1 do not loyal. I believe the majority of them will olvey
the law when enacted. In States where I have lived they have done. so. We have mado lawe
lagainst buying votes aud fraudulent voting. against buying votes aud fraudulent voting.
People said we could not enforce it; but we have People said we could not enforce it; but we have
in a large portion of the roting precincts of the
State. They used to say that we could not enState. They used to say that we could not en-
force an anti-gambling law in San Francisco. But we have and we ean enforce a usury law i we set about it. At least, before we say
we can't, let us try. If among the provisions
of such a law there be this, that forfeiture of of such a law there be this, that forfeiture of
the principal shail be the penalty for auy
attempted evasiou of the law, I think the cases attempted evasiou of the law, I think the cases
of evasion would be few, especially after a few lad been punisleed in that wa.
Thirl, It is objected that " Third, It is objected that "capitalists would
hoard their money rather than lend it at hoard their money rather than lend it at such
rates." Not nuch. They love money too well rates. Not much. They love money to well
to leare it unproductive in vanlts when they
nen can loan on good security at $0 / \%$ Nor will they can earn more than $6 \%$ oper annum in this state.
Fourth, It is objected that "mouey is sometimes worth more than $6 \%$ and therefore it is just that we should pay more." But I reply,
sometimes it is wortl less than $6 \%$. What we want is to fix upon a rate whieh will fairly
represent the average value of money as usully represent the average value of money as usulally
invested in this State. Do legitimate investments in this state, in general, pay an annual.
interest of over $6 \%$ ? There is but one answer to this otestion, and a usury law ono anld repree
sent the fair averacc value of investments and sent the fair averacec value of investments and
fix the rate of interest accordingly It is further objected that we right to set bounds to the interest capitalists shal exact for the use of their moncy, than we have
to fix the prices at which men shall scll their to fix the prices at which men shall scll their
whent, horses wool, salt, coal, etc. This is a very serious objection aud inore commonly urged
than any other that 1 know of, against the passhan any other that 1 nnow of, against the pas.
sage of isury laws. I propose to give it a some-
what extended, and, I hope, thorough examininaWhat extended, and, hope, thorough examina.
tion. I reply then, first. The value of money,
coin, gold and silver, stands on a different basis from that of wool, grain, provisions, etc. Iu
the first place the State conters a special value the first place the State conters a special value,
not small, upon mouey, in that it crauires all
(axes. to be paitid in that particular kiuml of property caxes to be pait in that particular kivul of properfy
alone. If it would take for taxes, wool, hay,
grain, etc., there would be rastly less dernand
lor the preeiong netals grain, etc., there would he vastly less demand
for the preeious inetals. But it wont. It says,
" you must pay in the precious metals or money alone." This enlaneces the eldemand for money mey,
and, of course, increases its value. Let it say;,
" + , and of course, increases its value. Let it say,
"taxes must be paid iu wool only," and wool
will rise and the wool holders will have us in will rise and the wool holders will have us in
their power, and all the people will be found
kneeling before the sheep corral. 13ut it happens kneeling before the sheep corral. But it happens
not to be wool or grain, that is thus favored
with this patronage of the State with this patronage of the state. And the
State, having by its
spaak, fatronage, its pape, so to giant, with power to crush at will his brethe ought to be so hampercd and held in, that the
public shall not be damaged thereby. Again
this valuation and power of gold or money is this valuation and power of gold or money is
innnensely incrensed
by the sita government, when it complels all men by severe
ouvs o pay all tebts, puthlic or mivate, in whone nuss to pay all ilebts, public or prirate, in money. tender to pay the nyriald debts, the
one to another. No, the law says, go to the cunitatisist, and buy from him his muis coin,
for that only shall be received for debts." This for that only shall be received for cllbts." This
increases immensely the power of the capitalist increases immensely the power of the capitalist,
that is, the holder aud loaner of money. The governnent has, by this law; ereatel an un-
limited demaud for his coin. The wool-holder by his side, though a millionaire in pounds of wool, finds no such increase of demand for his
property by reason of the action of government. property by reason of the action of government.
The goverument, having, therefore, by its laws, placed immense power into the chands of the holders and loaners of money, is bound to see
to it that that power lye not abused and perto it that that power le not abused and per-
verted, as to paralyze enterprise, cripple indusverten, and oppress the masses on which the State leans for support
Lows more plain still of the State to pass usury hall turn around and favor the wool interest, as now it does money. Let it decrec that thence.
forth it wont take money for taxes at all, but will take wor insteaney or taxes at and an tons. Let it make all delets payable ouly in noud would at once spring up for wool. Coin maud would at once spring up for wool. Coin
would go down and wool go up. Everybody to pay debts and taxes. This great inerease of would quadruple the wealth of the wool-holder and wool-grower, and give him immense power to oppress, Could he not say to us, "You must
pay thus and thus for ny wool, or your taxes and debts may go unpaid." The argument is
this, that the state, which by its patronage and laws so largely creates the gigantic power of money, is bound to restrain it so that the public
be not injured therelyy. And how much sense vould as I have supposed above -holders cry, if fa with crushing power, "what right have you to say what terms I shall demand for my wool ?' ust as much as the capitalist has in crying ou
gainst usury laws. I will pursue this subjec arther in my next.
Sin Buenaventura, Cal.

## Floating in the Current.

Edtrors Press:-Insurance in its varied appications is a feature of civilization of comever, a recognized necessity with all commercial nations. There ean be but one opinion as to the benefits resulting fron an honestly conducted
business, embodying the equitable principles, business, embodying the equitable principles, It is questionable if many, or
the scores of corporations, associntiot, any of dividuals representing insurance at the present time contine themselves strictly within the rul. ings of the original code. So widely has this departure separated the interests of the assinred
and insurer, that, if not directly antagonistic they are no longer equitable or mutual, save only in name.
It is not my
It is not my purpose to diseuss the merits, few figures and ask for a solution of the problem few igures and ask for a solution of the problem.
This may be arrived at more understandingly, if put in forn as follows:
Query-First, upon what basis were the cal
ulations made in establishing the present rate of premiums, charged for risks upon property
endered ten times extra hazardous from the upidity of solicitors, in their auxiety to effect Secand quary: Who pays the lossess incurred
Second
granting excessive insurance apon property by granting excessive insurance upon property
effected most frequently in the interest of un secrupulous persons, who adoptrt this method as
the readiest means for realizing, thus who ar virtually offiered a bonus for incelitliarism?
Thirl ouery: Who supports, in princely style,
the host of officials, agents, clerks and attaches who tenant the marble palaces npon the princi pal thoroughfares of all the great eities and
towns, and with supercilious condescension le stow their attcntiou on the great nn washell ? Query fourth: By what rulo of aldition ar turned to stockholders, in marine, fire, life, and score of other kinds of insurance companies tention, inasmuch as it owes its existence to a spirit of benevolence; a desire to advance the
welfare of humanity by cxtending a lielping hand beyond the grave. Affording to policy-
holders the consolation and comfortiug assurholders the consolation and comfortiug assur
ance that all which is required of them, loe sides paying their premiums with punctuality counts on the books of the hereafter, and by in life, and had to die to secure. have labore
This is not howe diagnosis, which is esseutially mundane, and
will be presented in the formn of an account will be presented in the form of an account,
which will be more realily understood whicn in Arabic figures, than in in thosc of speceh Which are current with the oily-tongnel persist
ent solicitors, who insist upon a policy in tlie io company being equivicalcnt to fully pail-11p stock
in the philosopler s stone, or a controlling in
terest in the purse of
impossible to empty.
The following figures are from a ledger, with for $\$ 5,000$, payable in ease of death of the ass. sured, or when he should reach the age of 55
years. The premiums to be paid in 10 annual payments:

Ifr Rexowyent policy -DR.

## 


The policy stands debited at the expiration
of 10 years, when the last premium was paid, of 10 years, when the last premium was paid,
$\$ 4,435.21$, calculating the interest on the net anounts paid for premiums at $7 \%$. Supposing policy to the company and thereby cancel their obligations to him, what annount ought he in justice to receive?
Wilith professions of liberality unparalled, they will give under certain conditions $\$ 2,200$ or $2,23.21$
holler, and $\$ 2,545.62$ cost of the policy to the
$\$ 2$ in premiums would have amounted to had it been paid in rested in $5-20 \mathrm{U}$. S. bouds, with in terest pasd annualy; instead of semi-anm
as it has been on that class of securities. fiuaneial ability is required and but a slight knowledge of book-keeping to deterinine upon which side of the ledger such an aecount must be balanced, or who supplies the funds for
maintaining tho multitude of magnifieent idlers some of whom are receiving salaries and perquisites double what is paid to the chief officer of the nation.
What has been said relative to insurance will suffice for the present. While our pencil is in practice, it is suggested to test the truth of
what we have hearil and seen for some time about the evil results whieh would follow the restoration of silver to its rank on the list of precious metals. No account will be takeu of
the oceans of ink, reams, bundles and bales of paper, or the vast amount of oxygen consumed
by the adrocates of the so-termed single stand. by the advocates of the so-termed single stand-
ard, fyold, this condition of mind is not creditited to the interference of the gods in their displeasure for the insane worship of this Hebrew (money mania) which is hopelesssly in nanial (money mania) which is hopelesssly inperversions of facts, erroneous conclusions, etc., coming frequently from otherwise candid
and intelligent persons, who cannot be accused of any pecuniary bias in the matter.
What we had iu mind for test
ruth of the has in mind for testing was the would the assertion that remonetizing silver national obligations; that it would be breaking aith with the foreign boudholders, who had pail for them in that eherished standard of all values, golh
their mone
During the year IS6it, when the greatest number and amount of Uuited States bonds were 1 issued and sold, the premium on gold averaged it averaged $10^{\prime \prime}$ prenium. Let us to our fig ures again, as they need no explanation

## To cash paid for \&1,000 5 -20 U. S. S. bond, in Lon.


Total..................................81,044.04
By 13 years interest, received semi.annualiy on



This is the showing that the loondholders' ledger offers: $\$ 1,211.12$ netted on an investineut of less than 8500 , after charging the investment
with the iuterest-amounting to 8591.44 -which in justice should appcar on the other side of the account, as it is really a gain to the holder o
the bond, going direetly into his poeket. Thi
account would then show $\$ 1,502.56$ to be what
the suivilled londholders have realized by taking advantage of Uncle Samulel 8 necessitites-
tritte over $2 \frac{1}{2} \%$ a month for the 13 years which the moncy has becu iuvested in these blasted Yankee bonds
For what purpose wcre brains giren if we
never use them, but allow others to think and
never use them, but allow others
act for nis?
South Vallejo, March 1, Isis.


## AGRICULTURAL Notes.

## California.

FRESNO.
Sheep Buyers, - Expmositor, March 14: Peo ple who are fortumate enough to have iat cattlParties representing san Francisco and Oakland slaughtering establishments are traveling
through the country purchasing fat sheep and cattle. For sheep they pay $\$ 3$ per heald, and for cattle the average price paid is $\$ 30$ pcr head
Sumakr Fallowinc. - Republican, Mareh 16: J. H. Clark who, with his brother, owns
several sections of land between Fresmo and Fresno slough, has commenced summer for and ing a bout 10 miles west of Fresno, and near Dr horses with a four- gang pow at work and Mr Clark will start another team in a few days th say that the soin is a rich, black loam, and thinsit equal to any in the county
and pumps will be put in sufficient to irrigat an orchard and garden right away, and the feasibility of irrigating with pumps on a large
scale will be thoroughly tested. Mr. Clark is greatly pleased with the appearance of his land after plowing, and feels certain that it ean al All of the teams on the liggers ranch are summer fallowing, and more than 1,000 aeres wil of the McNeal place (Gould farm) has been uncultivated this year, and now is one great paradise of howers. them all under and another season will witness grain growing in their stead. Along the foot practiced leretofore, but farnuers have come to realize that it is the only perfectly safe way farin without water, and hercafter large tract
now idle will come under cultivation in thi way

## LOS ANGELES.

The Bees, - Outhook, March 16: In company wileasant horseback ride up through Old Santa Honica canyon W'e foupd the apiaries in good trim, aud the little lonsy bees working away as lhough they intended
Edortors Press:-Theodore Skillman of Pet. aluma, breeder anil innprter of thoroughbred horses, has just arrived in Los Angeles with by him from Dillon's in Illinois. "Ironelad," a bright bay colt, two years old past and weigh
ing 1, 6 :jo llss, is a perfect show. The other, "Sen sation" is three years past' of a dapple gray color and weight 1,5025 lbs. All who see this impor. tation say it is just what is needed is this lati-
tude, where roadsters are so scarce, and few choice farm horses are now bred. Mathemati"Ironclad" when he is matured, for fear the figure will be too high up. -
MENDOCINO
Tie Season.-Editors Press:-The amount of rainfall to date at Pomo, in Potter valley, is 41.25 inches, and for February 14.66 inches. It
looks as though the spell had broken, and that we would henceforth hell hav basant weather. I have resided here for the past 18 years aud
never saw it rain so steady, and had it not been never saw it rain so steady, and had it not been
for the fact that the world is to be destroyed by fire, we would have ieared another general
flood. At Willitsville, in Little Lake valley, m Pomo about 20 miles, they had upin altitude thau Pomo, but I think the main that it is situated near the great redwood belt of timber, and near the divding ridge that separates the waters flowing direct to the coast and
iuto Fel river. This is not an isolated circumstance, but only one instance of the great dif. ference in the amount of rainfall with but a
few miles separating the localities. Some of the crops hereabouts of cheat among my volunteer grai
Bliki.ow, Potter valley, March 10th.
monterey.
Work. - C'astroville Argus, March 16: The the bottom lauds to resume seeding, such work has been actively going ou until the unsown
area is limited to a few small parcels in the lawer portion of the Cooper rancho or borth and east of town, and the bottoms south, preseut an almost unbroken sheet of grecn grain, and it may tinly be said that never
before was the crop prospect in March more favorable than now, the remark applying as
well to other portions of the valley as to this well to other porty
immediate vicinity
The Salixas Falizy. - Inder, March 16: The past two weeks have teen very favo plows running diligently on lands not previously
seeded.
It is estimated that the quantity of and cultivated in the county is increased this友
NAPA
Fitions Press:- We have had a down-pourin apa valley, which will satisfy the nost exact far day, ever since the 14 th of January, and
the rain gauge at St. Iclena marks 45 inches.


March 16: The grain is reported in a flourish pecting large crops and are farmers are expecting large crops and are preparing for it
already. And arrangements are being made to summer fallow land. The ground is at present too wet to cultivate
Dreos.-Tribune, March 16: During the last week or 10 days a considerahle numher of farmers have been sowing, and some plowing vill not sow. The rain of Wednesday was just whe not sow. The rath of thednesday was just,
the thing needed by the grain recently sowed. TUOLUMNE.
Orasge Growing. - Editors Prrss:-The artivation of the orange is to he thoroughly Ir. Win this county, this and future seasons. gent at Shaw's Flat, who has sold many tree of the different varieties, at prices varying from
$\$ 1.50$ to $\$ 3$, for choice selections, according to age, etc. A Mr. Schell, of Knight's Ferry, has slanted 200 trees. Knight's Ferry or La Grange, dering the great plains, cannot be excelled in the State for early vegetables or tropical prorange and lemon culture Ventura county is also engaged hauling wel selected varieties in a wagon. The selling party was quite elated with his success, expecting to
sell his present load within a few hours after eaching Sonora. Prices vary from six bits to one dollar, for trees from two to four years, all budded or grafted. Almost every settler by the wayside is adorning his surroundings by the
beautiful evergreen of the orange. There seems o be a universal desire to cultivate the usefu and richly flavored tropical fruits. The lemon be eagerly bought up if offered for sale. For郎 present, the orange tree seems to be the as the orange, lemon and lime, not merely for their pleasant Havor and appetizing effects, but as lealth promoters. A morning's lemonade or
an orange seems to he a natural blood cleanser. an orange seems to he a natural blood cleanser. In sickness they are invaluable, and why should
they not be invaluable in warding off sickuess. they not be invaluable in warding off sickuess.
If oranges were more freely used, the morning's itters at saloons would not be so freely used All this tends to urge the neccssity of a more
bountiful supply of the luscious morsel, and it bountiful supply of the luscious morsel, and it
is with satisfaction that I record the fact, that this county will soon supply the home consumpon, binging p to the J. Ralph, a Sonora farmer, has just left from Oakdale, with three Buckeye mowers, rakes and plows for the farmers above Sonora, an eariest of prosperity and progress. - Jo
Ileasant, March 17th, 1878.

## ULARE.

Irrigation-Delta, March 16: Pertinent obervation of a man while traveling through tation be significant of the quality aud capacity of the land in Tulare county, then does the and around Farmersville, and from there suutheast to Porterville, thence to Deer creek, and an the land between Tule river and Deer creek, as far west as three miles from Woodville, take
he lead of the famous Mussel slough country the lead of the famous Mussel slough country.
It is at least equal to and comprises a greater It is at least equal to and comprises a greater
area than that district, and is notably susceptble of irrigation, with superior advantages as to supply the whole of the land drained by both Tulc river and Deer creek. Whell the farmers fully understand that water fallowing should precede summer fallowing, they will surely realize good crops every season.

## VENTURA.

Editors Press:-The weather is warm and ovely, the ground is mostly too wet to plow Almond trees are in full bloom. Seedling peach Almond trees are in fult bloom. Seeding peach
trees are commenciug to bloom-R. Lyov, Verıtura, March 4th.
YOLO.
Notes.-Mail, March 14: A friend informs that in an extensive survey of the wheat crop Yolo county, he is somewhat surprised to ind so much of it drowned out in Egypt counnear Willow slough. He is a threshing machine man, consequently takes an acute interest in this matter, but we hope his present opinion may not furnish a correct estimate of the out-
come. The people living in Hungry Hollow come. The people living in Hungry Hollow
seem to think that the plains have the better of them in the wheat prospects this year. It has been a little hard ou the farmers in that
valley this year. The continued dry spell of Nevember and December, and up
of January dried them out badly.

## Oregon.

An Orbgon Medal in Illinois. - Reviev,
Moline, Ill: The Molinc Plow Company have eceived from Portland, Oregou, a very flattering testimonial relative to the Evans' sulky
plow, in the slape of an claborate bronzc medal, and one side bearing the arms of Ore-
gon, the other carrying the inscription, gon, the other carrying the inscription,
"Awarded to Knapl, Burrell \& Co., of Port.
land, Oregon, for Evans' Sulky Plow, nanufactured by the Moline Plow Company, Moline, Kuap, Burrell \& Co., write: "At the Ore-
gon State fair 1876 , we took first premium
with the Evans' sulky plow, and at the last with the evans sulky plow, and
one, 1877 , we took a bronze meda,
scnd you by registered letter mail."

## News in Brief.

Los Angeles is sadly pestered with burglars A Turkish soldier fights for $\$ 1.50$ a mouth Lloyd Bell, the
The Chinamen at Virginia City, Nevada, a Juilding a $\$ 750$ Joss house. sylum recently uder cultivation ty has one-fourth more la JAMES HAM1LTON, the distinguished mar painter, died in this city on the 13th inst.
JohN Morrissy, the pugilist aud memh Johr Morrissy, the pugilist aud memher Congress f
The wages of workmen in the Fall Rive Mass.) factories have been reduced $15 \%$ inning April lst.
There was a fox-chase in participants were 50 men, 100 dogs and one fox. The rainfall iu San Francisco for the seaso mounts to 32.28 inches; for $1877,10.59$ inches, nd for 1876, 29.40.
thomas Kell, a native of England and ioneer of 1849, died at New Almaden lately, HENRY QUEEN
Henry Queen, colored, native of Maryland, ged 60 ycars, was fouud dead iu his cabin A Grenus last week.
A GERMAN Count named Hasso, discourage hangiug himself at Merced, March 12th THE number of fat cattle shiphed 12 th.

## rom Winnemucca, will reach 25,000 . A lib

## ,

IT is estinated that Oregon will have ove
000,000 bushels of wheat to export this year The increase the last ten years has been rapil. AT Kingston, Fresno county, Bonz Anderson, 13 th inst., hy the disclarge of a shotgmn, while hunting.

Paris letter says the Exposition buildings, upon the Champs de Mars, are risiug with astonishing rapidity and great changes ar
wrought in a single day.
The American Trausfer Company is building in Pcunsylvania, two of the largest pump sta-
ions in the world, one at Carbon Ceuter and the other at Freeport. nia Seuate allowing James W . Marshall, the
gold finder, $\$ 100$ per mouth for two years, gold finder, $\$ 100$ per mouth for two years, pr
vided he lives so long vided he lives so long.
AN extensive deposit of gypsum has been sisovered in the mountains north of Los An
geles. This is a valuable fertilizer and cspe ially useful on alkali lands.
SAMUEL DUNCAN, a young physician, disheartened at his failure to secure practice, com-
mitted suicide, in this city, by shooting himself through the head with a pistol
OF the 5,000 envelopes asking subscriptions to the Robert E. Lee monumenten, sunt to citi-
zens of Richmond, Virginia, only 38 have been eturned, containing an aggregate of $\$ 10.32$ TIE 40,000 trout placed in Marlette lake the summit of the Sierra Nevada, a year ago,
have been making it specially lively for the resh water slirimps, which are disappearing.
Monroe l. Pierce, a well-to-do citizen
Los Angeles, committed suicide, last week, by Los Angeles, committed suicide, last week, by
shooting himself with a pistol. He had bee divarced from his wife and took it much to C. W. Tappan, who kept a lodging house
Deadwood, Black hills, was shot aud killed Deadwood, Black hills, was shot aud killed on
March 14th, by a young man named Chas. W. March 14th, by a young man named chas. en.
Hunt. There was no provocation, Hunt being crazy drunk
Patrick J. McGinn, a carpenter, out of work and disconsolate from the death of his
wife, jumped from the wharf, last Sunday wife, jumped from the wharf, last Sunday
morning, and, though secured before being drowned, died soon after
J. A. Liseinas, formerly employed in the ailroad ticket office in the Grand hotel, in
despair at the loss of his savings in stock specudespair at the loss of his savings in stock specu-
lations, shot himself through the breast, on lations, shot himself through the
Tuere has been a heavy rui on the Fi Cent Savings Bank of Boston, which has 71, calls were promptly paid, the bauk not insisting calls were promptly pald he batk n.
on the 60 days' notice allowed them.
$O_{N}$ receiving their pay the employees of ${ }^{-}$the California mill donated the sum of $\$ 293$ to be sed in assisting the sick and destitute of Vir ginia City. The employees of the Con.
mill donated $\$ 236$ for the same purpose.
Tue mother of Runk, under sentence of death, called on Goveruor Irwin, lately, and besought him to commutc the sent che or soin. De spie must refuse to interfere, lcaving little liope for his escape from the gallows.
Commodore Graham died of apoplexy a few day since in New York. He was one of 1 ofticers who, during the last war with hagland,
attacked Black lock in the night, and nine o whom were killed or sevcrely wounded, Graham being so hurt in the ankle than amputa tion became necessary.
ON the 8th of Marcl, a snow stornn commence the snow lay five fect dcep on a level and from 40 to 50 feet deep in the canyons. A great
many houses wero broken dowu, business of all kinds was stopped and a number
lost. Alucl stoek also nerished

Plocre has a foot of snow.
BIRT1Is in New York last week, 522; deaths, ${ }^{483 .}$
They have had a very mild winter in Mon tana.
Arizona
Resse has left for an extended Thip to Europe
hoot the Chinamen.
Omaia sends eggs to Sau Francisco and Colo G
Garibaldi will be the guest of Victor Hugo Tue masons's strike in
en acceptiug the in he, ended, the Eddie Schreiber died in Alameda, last week, from eating poisoned mishrooms.
TIIE late warm weather lias
ought out the TuE law forphids killing quail in California until the 15th of September next

## Tue Louisiana Supreme Court Thomas C. Anderson to be released

As uuprccedented yield of grain is promisc throughout nearly all parts of California.
Trie Pennsylvania Legislature stupidly talk nacting a law to prevent creination.
Tne London T'imes says American potatoes The first cargo of graill from the Black sea THE first cargo of grain from the Black sea
ince the raising of tlie blockade, lias arrived a since the ra
Falmouth.
Tuere is a prospect that the Vulcan Iron Works in New Lork, now idle, will soon be AMERICAN car wheels, both for street and railroad cars, are now offered in the London

Tue United States is the only country that hows au increase in both exports and import Joun l'Extrs while ou his way home from carousal the other night iu Bodie, fell into The English
THE English government is taking steps to lar press of India.
IMMENSE numbers of beef cattle are being
shipped for San Francisco from the Winng mucca station, Nevada. health office this week, against 98 last week and 97 the week previous.
ANother million and a halt is asked for th Brooklyn bridge, which will bring the expendi tures up to ten millions.
The Gila river is sending down a flood of
water. This is owing to requen rain Arizonla, a thing unusual at this time of year Our of 25 smelting works formerly operatiug in Utah, only four are being run at present.
The low price of lead is the cause of the sus

Tue annual consumption of sugar in thi country is about $1,900,000,000$ pounds, the revenue
annually
There were 129 failurers reported in New York city during the month of January, the pauic of 1873 . The liabilities amount to $\$ 7$, 000,000.
TuERE are about $1,000,000$ operators engage the iron industries of the United States, The entire value of m
year is $\$ 900,000,000$.
Tue storms of the last week extended over the upper Missouri valley, lasting three days. The snow on the stage road to Fort Buford is from one to 15 feet deep
prospects in Washington Territory are ood. There will be no diminution of acreage crease in barley, oats vegetables and fruit.
Tue French, German and Boheniian Socialist clubs of New York on sunday evening celebraRed flags, badges and roses were numerous. State detectives at Tewkshury, Mass., hav arrested a number of men on charge of living in open polygamy. An attempt is making to
establish a polygamous colony at Tewksbury. Gus Jounson, the murderer of a negro ferry Gcorgia, on Friday. A tremendons crowl was present. Johnson confessed to four murders. Tire Nevada bank is expected to open an office in New York the 1st of May. The man street lately occupied by the Mercliants' Bank of Canada.
Sister St. Cluarles, of the Ursuline convent, in Brown county, Ohio, died recently. he was a dallghter of Gcll. A. S. Rosecranz number of ycars.
Tur raiufall the present season has been in inclics at the several places mentioned as fol lone City, 17; Jackson, 29; Weaverville, Trin ty county, 5
alareretary Evarts thinks the reduction in
salaries of Ministcrs will prejudice the diplo-
matic scrvice. The Minister to England, he
said, unust pay $\$ 30,000$ to $\$ 40,000$ yearly more
Between 5,000 and 6,000 Oldhami weavers
ers of operators in other departments are kept dle in consequence of the stoppage of

What Comes of It.
[Writen for the Rerat Prrss by II. W. Rick.]









 Ile answered no, r m grie eved to say,
And cold and hungry 1 welt away.







$\qquad$

## Our Paper.

Emrors. Press:-I have never traveled ove any section of conntry, where the lictral Press was more favorably regarded than in this, Los
Angeles county, and many not getting it promise it to themselves as soon as they cau reach it in the great straigh ts the drouth of 'it las left them. My last sulscriber was a lady, 82 years old,
who has been reading it for four years, and says she does not see how any intelligent person ca read that paper at all, and not be interested i its practical information. .Some one may remark, the mother of miae clidin, alf of maturity and settled in life. She is able to butter-making, and at the time of my visit was
also waiting on two sick persons whose micals also waiting on two sick persons whose neal
were carried to then at their rooms. Age lay
bowed her body forward nuch, but had not yet were carried to theni at their rooms. Age had
bowerl her body forward nuch, but had ont yet
interfered with her sound ratiouality. If her's was a case of dotage, would that there was more
of it in the country, that would conbine her intelligence and industry. She would not admi the task too great to add another to her family
of five for the night. of five for the night.

Contrast
When not outside this same county limits your agent was very kindly and conrtcously
treatcd by the host in his orange grove to all he sunset, and cloudy, and actually springkling rain, the host said kindy he would like to have me
stay all night but they had a Chinco was "out of temper, when there were any extra
ones." That Jolin surely was an erlucator, and the lesson and its proper application might be
plainly this: The husband should have a duc con sideration for the wifc, and not too frequently add uuexpected burdens to her regular labors in
the families, where slie not only is the cook, but cares for and supervises all the domestic affairs a discourse from Pomo corresponcent will mak excels in the ability to give plain hints on do-
mestic matters, without any offense. 13 ut as I only aimed to montiou the kind appreciation o the RURAL, I would only add here that the corre.
spoudent feels much indebted for kind and cour spondent feels much indebted for kind and cour-
teous treatment, cven if it was bestowed only for the paper's sake. for a new sulbseriber, ant in a real estate office and was askell, "Do you take the RURAL PRELSe? "Yes, and 1 expect to take it as long as I live,"
I soon learned that the respondcut was one of Los Angeles' most ext-isive and successful nursery To indulge in still another: When visiting
the nursery of anotber old subscriber, who was
selccting the choicest of his orange-rooted lemon
trees to the uprooted by his fogce tress to be uprooted by his force of Italian as-
sistants to fill an order for 1,000 trees, zold for \$1,500, he went on to remark of his appresiation of the Rcral, as it wint compare excellence over Eastern papers, aside from its special adapt-
ability; and would not stop nutil he claimed, in important particulars, some points over any
known journal of its class. Would like to add other and similar testimnomies.
Los Angeles, March 14th, 1878.

## Going out to Farm.

For several years past I have been acquainted with a fool. In order to relieve any anxiety
which this admission may suddenly create in Which this admission may suddenly create in
the public mind, I will add that the said fool is not a mcmber of the family. He belongs to
a different nationality, was brought up in a different State, and hasn't the least fanily a dif blance. 1 have known this Fool (I use a lig Fin this time) to sit on the bank of Iletroit river, for a whole day, watching for the water to all
run out. I have known of his starting ont to rua out. . hate known of his starting ont to
cut a saw-log in two with a pen-knife. I have
seeln hime put his shoulder to a brick clavel seen him try to push the edifice over. He was recorded as a Fool in public documents, acted
like a Fool and had puy sympathies numtil the oner day. Not laving seen him playing in the dust, or grinning at the lamp. porsts for a
week or so, I asked one of his brothers if Toin week or
was ill.
was ill.
"We made up our minds that he would never amount to any thing around town, and so we sent hin
hiin!
His
him! "' words didn't strike me dumh, for I have known nany other fools (with lige F's and little fs) to be sent out on the same errand. Thore
was the case of Hinchman. He liad been in the grocery business for 40 years. 11e knew
enough to weigh sugar and tea, and to measure ont potatoes, aud figure-out the cost of two
brooms at 2.5 cents each, but he didn't know much morc. He was good-natured, quiet, andl
law-abiding, and inight have died anoms his law-abiding, and inight have lied amony his
musty licriugs and faded clothes pins, if fire musty harrings and fatced clothes pins, it fire
hadnt lurued liin out. His loss was \&ifi4 and a cent or two, with no insurance, and he was a ruinnect man. he was owasnt, either.
After reflecting that he was 60 years old, wcighed 105 pounds, and had nuscle enoughl to
lift a bag of bran, he eoncludcd to lift a bag of bran, he concludded to rent a
farm, do all the work himself, and come into the city again at the culd of tive years with
money enongh to start a bank. When 1 asked nome if he kncw anything, abont farming, he
him
replied. eplied
Farming: Why, any one can go out aud
I'erhaps they can. But I kept track of Mr
Hinchnam Hinchman fror a year, and I found that he didn't
make a great deal of money. He didn't make a great deal of money. He didn't
plaut dried apples, hut he sowed his corn broadcast, aud planted, his oats in lills aud polcd
them. He didn't boil his potatoes before planting them so as to raise a crop ready for
the table; but he did cut out and throw all the "eyes," so as to raisc smooth, nice, and sil the "eyes," so as to raisc snooth, nice, and
synnetrical potatoes. III didn't sow any bran
lecause lie forgot it; but he sowed oats and wheat together, in order to get two crops off
the same field at once. When I canght him in town one day he wouldn't admit that farming ras a science, and that a good farmer must have the intelligence of a sncessful mercliant;
but I didn't care to argue with him. Hle was but I didn't care to argue with him. Ule was
getting ready to luild a few rods of rail fence, and was buying a step-ladder to enable lim to
carry up the fith and sixth rails. HIT e lied af-
tcr of us went out to the auction we found that he of us went out to the auction we found that he
had been planting rutabagas under an old shed, where the loor things wouldn't get sun-struck
That casc wasn't more singular than Black
stone's. He was a midile-aged, corpulent stone's. He was a middle-aged, corpulent,
wheezy-voiced lawyer, and might have been a leading light at the bar a thousand years before knew hin. He had a consumptive son, a only get around on crutches. When Black that he wanted to lease "a modest, compact eligilily situated, romantic-looking
asked if he lad had any experience.
"Do you think l'm a fool!" he roared, in re ply. "I guess a man who has practiced law
for 34 ycars, and who has been justice-of the peace, postmaster and assessor, knows choongh
to run a farm! I want rest and recreation, sir; and my family waut rest and recreation, sir, and we take a farm, and rest up, and make
some moncy, and by and by return to public life, sir.,
I did I didn't argue with him; but I didn't for-
get to kcep track of his case. He secured a farm and took posscession. He trimmed the orchard out of season, and killed nost of the trees. When he should havc been sowing his wheat he was inventing a patent hen's-nest, and amuse his poor daughter. He was dulishte when his corn slot up two feet high and grew no more, as it wouldn't be so much troulle to
pick off the ears; and when wheat, oats, ryc, and punpkins were all growing together in one ficld, he wished he had only thought to mixin in
a few potatoes and cucumbers. He didu't
plow a few potatoes and cucumbers, He didu'
plow his land as other farners do, luat sct
stake in the center of the field and plowed in
circles around it. The idea was original, the
field looked field ioo
planed:

Nature has made every thing to work to to frosts, to seasons, to trade and finance, and why shouldn't there be a center to a corn
There was a centcr-it was half an acre o mull-hole. Blackstone insisted that he gath
ered 15 ears of corn from that field: but law ered 15 ears of corn from that field: but law
yers always exagyerate about half, you know The son died while trying to cut wood enough
to cook dinner. The daughter got the idea one day, that oue of the eows had the headache and shc was inathing the poor creature's brow
with canphor, when the animal struck her in the face with one of its horns and inflicted injuries which soon ender in death. Blackstone theu went iuto stock raising; but, after a year laving collected togethcr an old lilind horse
and a yearling calf, he and his wife moved away in the night, and have never beeu hear or smce.
Adian didn't know nuch about farming side of the Garden of and wife on the wron around and posted himself as fast as he could question of bread and butter and vegetables. His ways have leen improved on, and improve ments are still being made; but it don't nec
essarily follow that beeause a man can mix essarily follow that leeause a mans can mix
hair-oil, hammer out a horseshoe, spout law hair-oil, hammer out a horseshoe, spout law
or pull a tooth, he can alsu take a farm and Dr. Beech wa
Duessed hed was remarking, last year, that he cine and pursue agriculture for a while. I didn't want to vex him; but while I was wouder ent thed soak his seed corn in arnica to pre the back, and if he woulln't alminister chlo rofornn to his calbages to give them a quict night's rest, he olserved:
What ails the farming community is the On my farmin nothing shall be wasted. livery aninal and fowl with too great an appetite
shall be toned down with medicine. Every one with a weak stomach shall be toned $u n$ by daily doses. There shall be bugs to eat the plants, grasshoppers to eat the buys, fowls to eat the grassloppers, aud 1 shall eat the fowls. Me tried farmung, and the shcriff ate him.
If any reader has an idca that I am a farmer If any reader has an idca that 1 am a farmer, fariner to split 100,000 rails in exclange for a old gander and a broken-down fanuung-mill,
but after splitting 15 rails I deciled uot to take advantage of an innocent man. I know carrot from a bect, especiatly if it has a sig hung to it, and once in a great whe whe cau oats
a fiel of barley from a field of wheat or but 1 don't ambush fariners on the highway and make speeches to them on the rotation of
crops. There are some things alout farm work crops. There are some things alout farm. work
very pleasant to me. I like to sit in a rocking. very pleasant to me. Ilike to sit in a rocking.
chair on the veranda and sce the booys digging in to save two acres of fresh-cut lay fronn a apple-trees, loaf around the currant bushes, take my chances at the dinner-table, aud give my opinion on a two-gallon jug of eider. Beto ine, and al ways will be (ertain of iny friends have received written instructions to the effect that in case I becane a lunatic, or my heal gets soft, to keep a watchful eye on
me, and to push me iuto the river the moinent they hear me talk about taking a farn.- M. Quad, in Western Farmers' Almanac
A Parafrapli prom "Lecy Maria."-"You ask how much 1 am learning. A great deal:
and not only learning, but unlearning. I uscd to think, 'Oh, these rich ones, they don't have to work and worry.' Sonetimes, when I've becn turning old dresses, catting aud contriv-
ing, I've said to myself, Now if $I$ could only buy new, and save all this time for reading.
Rut these rich people have no leisure. Mrs. Calloon conies home from a forenoon's shopping as minch worn out as mother is after a har their trilnulations. P'oor men's wives worry because the bread won't rise or the stove won't draw; or the clothes. line breaks, or the milk burns, or they can't afford to hire help. Rich mens wives worry because the preserve-dish finds out how a party dress is trimmed before the party, or because their help 'sasscs' em, break up tea-sets, sloil dinners, get drunk, and
cut up the sheets into underclothing. Causes cut up the sheets into underclothing.
vary, but worry averages about the sane.
Tue New Dollar. - The mints are at wor on the new dollar and some of them will soon coming coin: The olverse of the coin bears a iree-cut hand of Liberty crowned with Phrygian ,ples of the country; the legend "E Plurilus Unum;" 13 stars; and the ycar of coinage. $\mathrm{On}^{2}$
the reverse, surrounded by an olive wreath, an encrse, sith outspreading wings, bearing in his talous a branch of olive and a bundle o arrows, emblems of peace and war; the inscrip
tions " U, S. of America" and "one dollar: nd the motto, "In (iod we trust." This speci nen, while it possesses all the requirements hw in devicc and superscription, lias been
elected not only for the beauty of its desigus, but also for the exceptionally low relief of
devices, insuring protection from abrasion.

## A Pioneer Gone.

Editors Press:-Hon. B. D. Wilson died at his Lake V'ineyard residence on Monday, March 11 th at 7 A. M., of heart disease, aged 67 years; born in Tennessee in 1811. On Saturday the 9th I met lim in Los Angeles, he looked hale and hearty and was in his usual cheerfnl and social mood. Everybody knew him aud seemed to enjoy the pleasure of meeting him.
His sudden removal falls upon the community as a public calamity, all are saddened and bereaved. Being a pioneer of 1841 to this county, he has always held high and lonorable repre sentative positions, both during the Spanish and American domination. His early services before the ceding of California to the United
States were very valuable. He was elected in 1850 as the first mayor of Los Angeles; in 1855
10.5 elected to the Caiifornia Senate, and in all served three terns by the choise of the people.
For nearly 2 ?. years he has been building up his For nearly y.5 years he has been building up his
lovely home in the San Gabriel valley. He was a carefnl and practical experimenter in the horticultural and agricultural problems of this tions were valued by all, and all the nore valued loz the frec and disinterested manuer of the giver. Being a large property holder at Wil mington he liad taken a very decp interest in
the developunent of all its interests and resources. Wilson college at Wilmington is a young and 1 romising school founded by hime by His eariest desire was to have a good institul tion, to comphine thorough secnlar and also poos
tive Christiau religious teaching-1uot sinple In lis divorced froun all religion.
In fins In his death Los Angeles couuty suffers the
loss of one who was always ready to help and loss of one who was always realy to help and
encourage lier true alvancenent. No touris had seen Los Angeles until he had made the 10.
nile drive to the older Mission of San Galriel valley, and enjoyed the elegant rustic hospitality and scenery at the Lake Vineyard inansion allcy.
Thousands in every part of our country, while saddened by this bereavenient, will earnestly sympathize with Mrs. Wilson, and again with
pleasure recall the former visit there, and enjoying perhaps for the first time the kind juvitation to reach to the golden fruit aud pluck all they might desire. 1 will close by quoting from
the closing remarks in the Los Angeles Erening E.rpress: : "If we could in our humble we" pa trilute to the many points of excellence in the character of the deceased as it should be done, the taski would be one of the most willing of
our life. 13ut in the hearts of those who liave our life. Buat in the hearts of those who laave
been his constant companions and fricnds since been his constant complanions and fricnds since
those times which tried men's sonls, there is a lixel picture of stern, unbendiug integrity, of slining moral worth, of good will toward all menly demean. We can ouly say, with hundreds
onl of this good man, peace be with his ashes

## L.os Angeles, March 16th.

## School Excuses.

 me wemp to the sehool teacher, when desiring her to
exense my child for num-atteldanee at school: "Mise
eve
 is required, what must 1 writ
sutficient excuse." Liswrs.
We du not profess to be arbiters ou points of but give it. We believe the form given em bodies the parents' will in a definite manner, and would, therefore, cover the case; bint if we Were writing an excuse we would add words
which would convey to the teacher the assurance that the boy's absence was for some good reason. If for no other purpose, we would use should not be kept from school unless there le a good reason for the act on our part.

Inlesess.-"Want of employment is the ciety," says a recent writere lics; if it were worth while to lie awake nights in order to think out the solntion of any problem, it would
be this: how to open doors of opportunity for be this: how to open doors of opportunity for not to obstruct their access to honevery; but if each onc would make room and work for
those nearcst, there wouldn't be much crowding.
The Latest Slander.-A writer in the ives the following as an objection to California: "Another objention is, that the orb of day and here and there except along the const, where of coursc it is seen to set. In Iowa there is nothring to hide this grand sight
are necessary for our rains.

A nopertl minister says that he has no bers of a church choir will behave just as well as other folks.
A limtie girl, suffering from the mumps, declares that she down into her neck.

Highland Crofters' Cottages.
Dropping into one or two of the Barvas houses
after nightfall one comes across not a hopeful after nightfall one comes across not a hopeful
sceue. In the first cottage eutered, a cow lies
seres across the doorway, and, after a leap has been after ainking many inches in the dung. Dividing the byre from the dwelling-house is a low
wall, in the middle of which is a wide opening closed in the meantime by a broken gate throw across it. On the outer side of this gate, in th stock are taken in during their first winter) an five eattle; on the innerside of it are ranged, in th light of a fire, the farmer's family. Of furnish duty as a couch, on which the head of the faes ily is stretched at length; a young man sits hat on head, on an indescribable bit of wood; the nother, wearing a cap blackened by a week or worner; works at a spinning wheel away in en floor with an almost naked child on her knee and two more dirty youugsters squat round th peat fire. In another cottage the family circle
is even more mixed. Division betwecn dwell ing and byre is not thought of; seven cattle four lambs, one pony, a dozen fowls, the ten ant, his wife, and mother-in-law, all reside in small sleeping closet. The cattle and pony ar content join the circle round the fire; while im tact with a stranger's hat, roost the fowls, After several visits to such dwellings it is no surprise to hear that in this locality as in many typhoid fever), is al ways moreor less prevaleut hight of an years ago this disease rose to the from a small township near Barvas. Wer the liabits of the people at all cleanly the isl
and might, medical men say, be entirely exand might, medical men say, be entirely ex hills are allowed to carpet dwclling houses, and noxious matter must sink, a clear bill of health

## Chaff.

Critic (to artist): "Don't you think that ture?" Painter of the picture: "They had modern tables in them days as well as now." An Irish baronet had so many rabbits on his "And, to prove the fact," said he, "the moinent terrier dog came into the room, the candles "Is your master at home?" inquired a gentleman of the servant of the
calling. "No, sir," replied the man.
will he be back?" asked the visitor
say, sir," said the man; "When he sends me At the close of the sittings in the Illinois
House of Representatives, the clerk read the the Rev. Dr. McFarland will deliver a lecture, this evening, in the hall, on "Education of
Idiots." Members of the Legislature are invited attend.

Do you know," remarked a rather fast Newark youth, the other day, to a stuttering
friend, to whon he was slightly indebted-"do ou know that I intend to marry and settle was the reply, "bu-but I think you had b-bstay single and set-settle up."
They have been engaged for a long time, and one evening, not long since, they were reading
the paper together. "Look, love!" he ex-
claimed. "Only $\$ 20$ for a suit of clothes!" claimed. "Only $\$ 20$ for a suit of clothes!" "It's a business suit." "Wcll, I mean business," she replied.
A gentleman took his little boy to a model hey had been thenders of the place. After fellow ran crying to his father, being at the was trying to get a piecec of bread out of his
hand. "What, iny boy," said the father, "are you afraid of a turkey? Why, you ate part of little fellow," wiping his eyes, "but this one

EtERNITY.-" "Eternity has no gray hairs!" old and dies; the world lies down in the sepulcher ages, but time writes no wrinkles on the brow The ever-present, unborn, undecaying, and un-God-the golden thread, entwining the destinies of the universe. Warth has its beauties, but time
hrouds them for the grave; its honors, they are re but as the gilded scpulcher; its posscssions, the untried bourne. In the dwolling of the day will know no darkening-eternal splendors
forbid the approach of night. Its fountains will Its glory will never wane, for there is the ever present God, Its harmonies will ne
exhaustless love supplies the song.

## Young Folks' Column.

Baby's Belongings.
What may the little baby eat?
Kisses and midk
Kises and mik both warm and sweet,
These mad the little baby eat.

## 





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| :---: |
|  |  |
|  |  |

## A Task for Young Mechanies.

It is time we gave our boys a chance to show what mechanical skill they possess beyond following plang of making a chacap and neat ne
book-case, which has cost only a few dollars. book-case, which has cost only a few dollars.
The case consists of two end pieces and two
shelves, with movable sheives between the two rigid ones. The two end pieces are one and a quarter inches thick, eight iuches wide and four shlf eight inchcs wide is neatly fitted into gains in the end pieces, and six inches below the upwere driven through the end pieces into the end of each shelf. The shelves are eight feet long.
Betweeu the two end uprights, two ight pieces eight inches wide are fitted between the two rigid shelves, thas dividing the pace between the upper and lower shelves into
three equal spaces or divisions. Serews are put through the shelves into the ends of the midale puright pieces. Those 16 screws hold the parts
together with desirablc firmness. The advantoge of nsing serews instead of nails is, that iu case it were nccessary to transport the book-
case, the screws could be takent out, the parts cased together firmly, and the book-case would occupy but little space, and the varnish would
be marred less. Before the parts were screwed togcther, gans were cut in all the upright
pieces to receive the ends of the shelves. I employed a joiner's dado to cut the gains, A
dado consists of a small plane somewhat like a abbit plane, with which a small gain can be
cut true and neatly, in about a minute. I nade gains two inches apart in the upright pieces, so
hat the shelves hetween the bottom and top that the shelves hetween the bottom and top
shelves can be adjusted to suit large books and mall ones. After it was finished, the surface was sand-papered, after which a hcavy coat of
boiled linseed oil was laid on evenly. After a few days, the surface was again sand-papered,
and two eoats of shellac varnish were laid on, which gave the wood a beautiful and glossy, piue, but boards of any other timber, such as phestnut, butternut, tulip, basswood, sugar
chaple, or oak of any sort, would look beautimaple, or oalk of any sort, would look beauti-
fully if sand-papered and varnished with sliellac. Such varnish can be procured at most paint
stores. In case shellac cannot be procured convenes. In case shellac cannot be procured conured three boards about eight inches wide, and ne board 16 inches wide, or nearly that width
as could be found, all 16 feet in length. Hence as could be found, and was fet in length. Hence 55 square feet, at five cents per foot, $\$ 2.75$.
Sixteen wood screws, 16 cents. Oil and varnish 30 cents. The labor, nothing, as the case was made when I would have been doing nothing else. A book-case with glass doors, that would
contain as many books as this cheap affair, would cost $\$ 60$ to $\$ 80$.
The President's Advice to boys. - The current number of the sunday School Times con-
tains brief articles from the pens of President Hayes and the Governors of the original thirteen states upon the lessons which arc afforded to the young by the life and career of Wash-
ington. Presideut Hayes writes thus: "The
only American whose birthday is only Americalu whose birthday is generally
known and widely celebrated -the Father of throughout all the world for what he did and and what he was. Nonc of my young friends
are likely to have an opportunity to do such are likely to have an opportunity to do such
great deeds as were done by Washington.
But be like hin in character. They call have
his love of country, his integrity and his firmness in doing right. To have such a character is better than rank, wealth or fame. It is a
possession which cannot be taken away. As
Webster said so inpressively of a sconse of dutyy, 'It will be with us through this life, will
be with us at its close, and in that scene of inconceivable solemnity which lies yet further

## Good Heqlith.

Notes on Sanitary Building.
This subject is of importance to all home makers. In Dr. Buchanan's special inquiry, southern counties of England, beyond the limit of the metropolis, were brought under detailed examination and the conclusion was reached
that soil-dampness is a most potent cause of that soil-dam
consumption.
consumption.
Some writers believe that soil-dampness i the cause of many other diseases. Dr. Bell, in his report on the drainage of Kings county,
N. Y., as reviewed by the Independent, cxpresses the opinion that not only consumption,
but intermittent aud remittent fevers rheunatic affections, neuralgia, croup, quinsy, diplitheria, pneumonia, pleurisy, bronchitis, cerebro-spinal
meningitis, erysipelas and diarrhcal diseases owe their origin in a great measure to this canse
These considerations indicate the importance of living upour a dry soil, and make it obligatory
upon any community whose terrirory is waterupon any connmunity whose terrirory is water-
logged, either wholly or in part, to drain such
territory of its surplus water.
By surplus water is meant that which is not
held in the soil by capillary attraction ; all that water which would run away from a quantity of earth placed in a barrel with holes in the botton. Such drainage can be easily accomplished. Un-
glazed tiling, with joints earefully protected, glazed tiling, with joints earefuly protectec,
laid at a depth of tliree or four feet, with proper
inclination, and at suitable distances, will drain inclination, and at suttable distances, will drain any sonl, however wet, in less than 24 hours.
To ascertain whether a given locality requires
draining, let an excavation be made to the depth draining, let an excavation be made to the depth
of three feet, and, if water is found in it 24 of three feet, and, if water is found in it 24
hours after the heaviest rain, the locality is
unfit for human habitation a unfit for human habitation.
The site selccted for
The site selccted for a house should be thoroughy drained to a depth at least a foot
below the bottom of the cellar; and the founda-
tion should be tion should be so constructed that the stormwater which accumulates in freshets in its
vicinity should be arrested and conducted away vicinity should be arrested and conducted away.
This can be done by sinking the foundation-wall a foot below the cellar-bottom, placing a tile-
drain outside of this, filling the excavation be drain outside of this, filling the excavation be-
low the cellar-flor with concrete, building the
cellar-wall of brick and covering the outside of cellar-wall of brick and covering the outside of
this wall with some material impervious to this wall with some material impervious to
water. It would be well to place above the
drain, reaching to a point near the surface drain, reaching to a point near the surface, a
quantity of coarse gravel, to allow the water more easy access to the drain. If the land be at
all springy, there should be in addition to all springy, there should be, in addition to this cross-drains, all of which may have the same
outflow.
Notes or Digestion.-In a receut lecture in London, Prof. Garrud gave an accouut of some
of the procsses of digestion. The action of
the seliver the saliva and of the gastric juice was demon-
strated experinmentally. Saliva, he pointed ont, does not affect allbuminoids, but it docs affect
starchy foods, and the conversion grape sugar by saliva was shown in test tubes.
This is now believed to be the part-the work of digestion-the saliva per-
forms. The nature of the work of the juice was shown by some which had been ob-
taiued from the mucous membrane of the stomach of a lion, recently dead. Albunen, fibrine, and casein cannot dialyse throngh the walls of the
alimentary canal till the pepsine of the gastric juice has converted them into peptones. After chaysised to albuminoids, but it is a curious fact
chanes again are that though albuminoids can be artificially converted into peptones, the peptones cannot
artificially reconverted into albuminoids. use of artificially made pepsine is of great service to people of weak digestive power, and
Prof. Garrod drew attention to Mr. Bullock's process, by which an "acid glycerine of pepsin"
is obtained from the stomachs of pigs, and has been found
great value.
Plea for Pure Air.-A few well-known facts will show the urgent necessity for pure alr.
The longest period of tine upon record in which The longest period of tine upon record in which
a man lived without food and water is about fourteen days. If water be given, but no foord, lif of air, hunan life may he extinguished in thrce minutes. This serves to show, in one way, and lation. Human life may be continned for a time by bad air, stagnant water, and decaying food; some fool, life soon loses all its freshucss. Most pcrsons make great exertions to obtain
good water and sound food; but unfortunatcly there is not often the same regard paid to the condition of the air. Is ventilation then of 10 importance? Should it not be studied by the
statcsman and the philosopher as well as by the physician?
Onion Juce for Stinos.-The Berliner Presse says that the pain caused by the sting of awclirg which often acconipanies it spcedily with the juice of an onioun. Probably it woull
be a useful application in the case of other insest stings.

## Domestic Economy

## Some Facts about Soap

The true soaps, says the Journal of Chemistry,
re all salts of potash and sodr the former being soft soaps, the latter hard soaps ; but these fatty acids unite with other alkalies and bases to form insoluble compounds, which are also often called soaps. If we mix a solution of common soal (containing stearate of soda, we will say) with
one of lime, the soda salt is decomposed stearate of lime is separated in an insolubble form. This reaction is a common one in the chemistry housewives It though not a popular one wit used with " hard water," which owes its bad name to the presence of salts of lime, magnesia,
etc. When soap is dissolved in sucl water, the lime of magnesia unites with the stearic acid to produce the insoluble curdy flakes which appear.
It is not until sufficient soap has been added to deconnpose all these salts and dispose of their bases that it becones available for its legitimate business of cleansing. The harder the water ical process. If onc has no hard water at hand, he can illustrate the reaction by dissolving a little Epsom salts (sulphatc of magnesia) in tion, and then rubbing some soap in the solufroth of the poring some soapy water into it. The will be formed. The sulphate and the soap (call it a stearate of soda) have "swapped" bases; sul phate of soda is dissolved in the liquid, and
insoluble stearate of magnesia is left floating a the white flakes
Soap is always an alkaline or basic salt, an its detergent power depends on the degree of its
alkalinity. The more nearly the soda is neutralized, the less capacity it has for combining with the grease and other matters which it is intended to remove. Of course this property in soap must be graduated to the purpose for which la is to be nsed. For the coarser work of the
laundry, the ordinary bar soap, which is quit alkaline, or soft soap, with its more active potash, is required; while for toilet use an
alnost neutral soap is wanted, as the other would not only remove the impurities from th skin, but partially dissolve the latter, leaving it
rough and uncom fortable.

A Hint for OUr. Grandmothers.- If the lady readers dislike darning socks and hose, as
most ladies do, they can save one-half the mending by knittung heels and toes double, like stand that, so I will explain. As soon as hal the stitches are put on the heel-needle tie on another ball of yarn, which may be white or
like the other ball, accorling to venience, and coarser if you have it. Wrap
voth threads around the little finger, pass them under the next finger, put the middle finger be-
tween the threads, laving the white towards tween the threads, having the white toward
you when knitting straight and from you when you when knitting straight and from you whe
knitting backwards. To make the white show most upon the wrong side, put the forefinge under first one thread and then the other whe kmitting; also, widen once in four stitches the drawing in. If knit in this way they will wear upon the the rest of the sock; wish is wite a iten when working for those we love-is mueh
better than conmon double heel, and quicke better than common double heel, and quicker

Cracked Wheat.-TYis excellent dish is often spoiled, says a lady in the Rural New
Yorker, by very good cooks who think they must stir it all the time to keep it from burning Too much stirring makes it like paste; puttin in more water whin ncarly cat ic has the same
effect. One-third of wheat, by measure, to two-thirds of water, soft, if you have it, will nake it about rig and be covered closely. In this way scarcely any stirring will be foind necessary. There is
a deliciousuess in this dish when cooked boove which is inere found if stirred whil cooking. The same may bo said of oatmeal,
only the latter should be quickly stirred into boiling water; cover closcly and let cook fo about 20 minutes. Wheat may be cooked
about the same tine, although it bears cooking longer.
Aprle Turnovers. - Make a paste of sou milk or buttermilk with a little soda and salt, ns for hiscuits, except that more shortening is and add the milk; then cut off a picce the size o a biscuit and roll out rather thin. Have ready spiced to taste. Place a large spoonful on one half of the rolled paste and briug the other hal over it, pinching tho edges sccurely together.
Fry in hot lard, turuing themn frequently to brown cvenly. Also, if you will mako up your soda biscuits for tea in precisely the sane fash son, and before putting into find it an agreoable variation from the usual way.

Grm Filter.-Dr. Angus Smith finds that ooton walding betwicen two layers of cotton air, and that even flour paste, left in an enclos-
ure of such material for days, devoloped no fungi whatever.

PAC FICRUBAL
DEWEY \& CO., Publishers
Ofuce, zoz Sannome St, N. E. Corner Pine. St. Tinis Ppren will he suplied to the trade through the
 Our latest forms go to press Weednesday evenng Quack Advertising positively declined.
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Saturday, March 23, 1878.

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## new acjertisements.

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proved Eagle Slowor, Geo A. Davis, S. F.; Rice's
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B. Styles in Hate, Hernnan, S. F.; Dinon's Dol S. F.; Styles in Hats, Hernnan, S. F.; Dinon's Dol-
lar Flower Garden, W. B. Dinon, Milan, Ohio; Farm for Sale, S. F. Reed, Glenville, Cal.; Seeds, Sevin Vin.
cent \& CO., S. F.

The Week.
Work is swinging along under more propitious skies. It is true the sun is operating
under the eight-hour law, and takes out meal time from that, but many things are better than if his fervor were prolonged throughout the solid days. The surface soil is parting with its moisture gradually and does not bake as
under a severe heat. Grass and grain are sendunder a severe heat. Grass and grain are send-
ing blade and rootlet quietly through the moist
and mellow soil, and perhaps before the torrid and mellow soil, and perhaps before the torrid
heat conies the carth will be shaded from the sun, and held from doing injury to the
tender roots. This moderate weather also holds growth to slower maturing, and warns the fruit trees not to put to much trust in the spring.
time, until the chance of nipping frosts is over. In the flocks there is great activity. IShile
In the the the
in the counties north of the bay the.e in the counties north of the bay the"e has been and chilling storms, the flock mastere of the
south and the great San Joaquin, have rejoiced in most favorable weather, and lambs are gam.
boling over the rich pastures in a manner to deboling over the rich pastures in a manner to de-
light the owners heart. Aside from preparations for slearing aud dipping, the prepara-
quiner is now turning a wider area to summer quiner is now turning a wider area to summer
fallow thau ever turned befure, and the only
limit to the work seems to be in the limit to the work seems to be in the scarcity of
mule and horse power. The harvest cones
apaog-the greatest California has ever known.

## Mother Hubbard Warehouses.

We do not know whether this age is more degencrate than those which have preceled it,
lut we do know that if the houcst ancients liad a harder time that if the houcst ancicnts it
their own property against milluight marauders and the swindling pestilence which stalketh at noonday, the dead past has our sympathy. The
spirit of gullibility seems to pervale us all, and we trust uearly all men's professions and enterprises, which liave fair exteriors, until their shclls break and we find traces of infamy after our substance and its despoilers lhave both passed beyond our reach. There is one thing
certain, this generation must wake up, or some one will steal its cyelids. Our people have
found banks and insurance companies with no capital but fuss and furniture; business enter prises naught but sand and sign-toards: mincs
which develop nothing but paper mills; lands which exist only in the inagination of the mapdrawer, and a host of other growths of fraun
which syriug from the diseased norals and
crininal extravagance of city scoundrels. Nany crininal extravagance of city scoundrels. Many
of our country people have been caught in these
specious traps, and have with reason come to specious traps, and have with reason eme to
distrust much of the gilt and marble which line our strects. It is now our unpleasant duty to
warn them of a style of robbery which has flourished nearer thcir homes, and which is all the more dangcrous, because mm
never dreamed of its possibitity.
There is a warchouse near thic
There is a warehouse near the railroad station been stored for months hy the grain growers of the neighborhool. Alout two weeks ago a
regular order for a certain lot of wrain ws po regular order for a certain lot of grain was pronounced insufficient by the man in eharge, and
the bearer, filled with surprise, returned to the party who gave the order for an explanation,
Suspicion was aroused, and the warehouse was Suspicion was aroused, and the warehouse was
taken in charge ly the railroad compauy on the taken in charge by the railroad compauy one the man in charge gige woultice of warrauts has fight, and astrong poultice of warrauts has
since failed to draw him from the unknown.
When When the warehouse was openel for inspection, it was found that the piles of sacked graiu had
been "drawn" like a dressed fowl, and, while the outer rows of sacks were still in place, the
nasses of grain from the interior had been ressacked and removel. Examination of the
books of the railroall company showed that books of the railroal company showed that
grain had been shipperd from time to time by the party in charge of the warchouse, iluriug a
period of sevcral inontlis. Thousands of dollars worth of grain have thus been feloniously relittlc more than bare floors where property ind littic more than bare floors where
they place their heaps of grain. The man who
owned the warehouse has not been seen for owned the warehouse has not been seen for
nnoutlis. His hireling, in whose name the grain has been rcceiptcd for by the railroad company,
has passell beyond the reach of the law. Noth. has passel beyond the reach of the law. Noth
ing romains but the evidenees of a villainous and carcfully plauned robbery, and heavy hosses of property withont the slightest alplarent
chance for recovery.
This sorry occurrence has more than an eleThis sorry occurrence has more than and ele lessons. Let all profit ty the relation of theme. It lase been the prevalent inmpression that ware-
houses were na mazines of security. Whatever house were inagazines of securitity. Whatever
tricks might be suspected in trance, a man thought when hix grain was stored and insured he was as sure of it as of his real-estate. Said
a prominent farnuer to us the other day: "It never entcred into ny head that there was a
possibility of iusceurity in a warchouse. I have possibility of iusccurity in a warchonse. Yhave
stored iny grain, and sold on my receipt inouths
fterward afterward, without ever seeing it ir iloubting
ite safe existence in storc." Sinch, we believe is the geueral feeling, notwithstanding the faet
that false bottomed lina have been operated in that false bottomed lins have been operated in
Chicago. The lesson of events is that this security may be only fanciedl, and that a warehouse is no inore infallible than a savings bank. It is unfortunate
perience teaches it
It is not yet dennonstrated what individuals participatcd in the crimes which we have deapparent ignorance of his whercalouts, are not
proofs of his innocence, to say the least of them. The receipts of the railrnal for the feloniously extracted grain reach back to a time when he is
known to have leen in the state, and we suppose close tracing of the shipments might show the guilt or innocence of the principal. The
active thievery and tlight of the owner's agent are so well known that, if he were caught, the
penitentiary would soon have its own. Thus, while we are unable to plaee the burden of
crime upou all the shoulders which perlaps crime ipou ane the shouldars which periaps remarks concerning the character of warchouse
keepers, and some definition given of traits keepers, and sonte
whicl are dangerous.
A warehouse owner to whom we would trust
our property, would not be an alventurer, our property, would not be an alventurer, of
whose anteccdents no one knows auything Hhose anteccients no one knows auything ; who
does not gain citizenslip, and who has no good and well-grounded reputation in the community He would not lee a man whose gaine is bluff and bluster, and whose refuge, when shown discrep.
ancies, is behind the shiekl of his own poinposity. He would not be a man whose receipts always slowed less grain than the farmer believed, and sometimes knew, he had delivered. He would
not te a man, who, when threatened by a patron
with exposure, becuuse of
existed, threw aside his own receipts and paid
for the shortage. He would not be a person with whom reputable city merclants refused to have dealings, and would not accept his receipts have dealings, and would not accepit his receipts
without the farmer's own bond as security against him. All such traits about a warehons
nan would be to us indication that there was man would be to ns indication that there was
possible rottenness in Denmark, and we should shun such a guardianship for our property. Tor the hase thieves who have tlus betrayed
trust, and brought our warehouses under the shadow and suspicion of fraud by their infamous deects, we have nothing but regret that they ar
not breaking stone in thic clain- gang. It is sign of weakkess sonnewhere in our systenı of justice, that such scoundrels are able to escap With their ill-yotten gains, and no chance of
ccoovering their losses remains to the plunderci farmers. Such matters must be inore closely
watched in future, and peoole nust look out for windlers in conntry weote must look out for city saviugs-banks and other iustitutions of

Isfringement of Engine Patests.-We Kcppel, of Butte county, stating that he has received from a firm in this city notice of al leged infringcment of patent in 11sing a portable
straw-burning engine which he purchased from straw-burning elgine which he purchased from
another tirm also in lusiness in this city. Mr. Keppel wishes to know why this notice encine
served upon the firm sclling him the engine rather than upon him and other farmers using
it. We can only reply by citinr the words it. We can only reply by citing the words o
the law against the infringement of patent rights. The statute grants to the patentee, fo a term of 17 years, "the full and exclusive
right and liberty of makiug, using and vending iuvention and dis cery," alld it gives a right of action for dann ages in case of "making, using or vending" the
thing patenter. An infringeneut takcos. place ion of the patentec in any of the thrce way enumeratccl, and thus suit can be brough against either manufaeturer, user or seller.
action is takem against the user, he must
to the manufacturer or vendor for remedy.
Intronecting Insects.-We emphasized the point last week that we are continually liable to importatious of tropical insects, because of our
extensive traflic with tropical countries. The danger we are in may be shown by a recen ochrrence reported from New York
the hatclies of the ship C. C. Chapman, which has just arrived at New York from Calcutta sprang from their warm berths a mongasshopperer the jute
span butts, where they stowed theinselves when they hat boarded the vessel in India four months come acclimated if they were landled here although the severe New York climate may put
an end to then at once. We are morc liable, an ent to then at once. Wich are inorc lab,
too, than New York, to such a visitation, be cause our trade with the tropical regions is more direct, and we are introduclug so many plants
and cuttings from thence. Shall we not have a state entomologist, alle and alert, to guard $n$ a state entomologist, anle and alert, to gua
Cuevalier Barley in Germany. - Ou
growers of chevalier barley may be intcrestca to know some facts 'concerning the growth o
this favorite l,rowers' grain iu Cermany. They have in Alsace each ycar, a special fair or ex
hilition, at which all the entries are of chcvalier barley and prizes are awarded for the best sam-
plcs. Ilescriptions are also given of the method y which the hest grain is produeel. Our con itions are so different, that (ierman methods may be of little practical valuc except from tho
principles involved. Attention was called to the disadvantages of sowing too thick, of using manure too highly nitrogenized, and of mixing tiou of crops invariably hinders the complete dessication of the graiu, and tends to give it a
moldy flavor, uttcrly unfting it for brewers purposes. The reporter especially recommends
early sowings, and one grower, after 12 ycars experiments on the point, has arrived at the conclusion that it is ly winter sowing that the
best types of brewing grail are to be produced.
Agrictutural Wages.- - Some of the abomin able tramps who are now parading the Stat at the points of threats and insolence, may be interested to kuow that, while they disdain to
work at prices which a farmer can afford to pay work at prices which a farmer can afford to pay,
farmers in central New York arc hiring labor ers for the summer at $\$ 12$ to $\$ 16$ per monthmen who, in many cases disdain stcaly work and fair wages for the scason, will parsue thei our grain growers to pay them two or thre
dollars a day, and then they will set out again on another eight month8 of mendicancyspect of industrious citizens, nor able to resplect themselves


## Queries and Replies.

## Incubators.


There are many devices for artificial incuba proper uniform heat around the eggs during the necessary period for hatching. Almost all of venn require exceeding close attention,
vent the heat rising or sinking below the range. The latest deviee we have heard of is nercury, is made automatic by a volume of lown the wick of the heating lamp aceording as he mercury expands or contracts, and thus reg ands of he inventor is saill to do There are also "artificial mothers," which are reported to operate well. This method of hatch ing and rearing chickens by incubators and ecause it ha a greater or less degree of succcss, but whethe it can be applied for general use to better adyantage than the natural
believe is yet demonstrated.

Grasses and Corn for Tule Lande

The fullest information which we have at hand on the subject of grasses on overflowed ands is contained in the paper read by Sherma men's Socicty, last Uctober. It was printed in our regular editions of October 27th and November 3d, 1877, and in the "extra" containing the full report of the Dairy Society's meetings, which may be had at this office. Anything ands may our cultivators of grasses, an bether they have fonnd any particnlar variet of corn especially adapted for tule growth, w

## How to Secure Fat Carp.

A number of our readers have carp ponds ow in flourishing condition, through the enter prise of introducing the fish by Mr. Poppe, o Sonoma. They may not all know of the wa he German fish farmers have for generation ecured fat fish. A recent foreign writer says chleswig-Holstein the carp lakes are periodi cally formed by sowing thic bottoms with rye grass and some other cereal, cutting it and
fterwards turning in the water and fish, to th manifest advantage of the latter. The good in nence of this procedure las bcen recognized by old Gervase Narkham, who, when speaking o an Extraordinary Bigness in a Pond," says yur pond begins to monh of April, that your pond begins to grow low in water, then, pond where the water is falling away, then sow me hay secds and rake it well. By thi will be a great growth of grass, which, when winter comes and the pond being raised by rain
to the top, will overtlow all that grass. Then to the top, will overHow all that grass. Then the carp, having water to carry them to the become as fat as hogs that are kept up for that ions of the old sportsman and the German plan, as the reader will perceive, is very slight

W'itil Malice Aforethovgift.-The Sut (er Banner stultifies itself by taking a four-line item, which was clipped and set in to fill out column of our paper, and giving the item force and bearing which it does not possess, alseliood and an outrage upon journalistic overtlowed land in the Sacramento valley was so enriched by secliment that it rented at a per acre." With this item as a text the Ban ner procceds to give us a standing
bris question which is so devoid o so redolent know us a
auestion i
roncest sued, we have published the uestion which have been furnished us by those csiding in the aftlicted region-in fact wo this subject, and our columns are always opeu how strong their facts and claims. It is a local question, the facts concerning which are no ition in the premscs the publication of let ters addressed to us by those who have the nalistic bearing of the attack upon us by the
Banner, that will be apparent enough to our

$$
\left.\right|_{\mathrm{Con}} ^{B a}
$$again

and lo
deep

## Honey or Wax.

 Eprors Priss:-You will greatly oblige a constanreader of your valuable paper by ansering the following
question: In what part of California is beeswax pro
duced the moot extensively? I Intend going into tha
part of the country to open a wax candle factory and part of the country to open a wax candle factory and
would deenn it a great favor if you would inform me of
the most suitable place for that business.-A. T., Desver, The leading honey-producing counties are San Diego, San Bernardino, Los Angeles and Ventura, recounting them, not with reference
to amount of production, but in their order of to amount of production, but in their order of the State. In this section of our State our cor wax he needed if he could offer a good price for it and he wonld find himself in the midst of earnest, progressive men, who would welcome him and his euterprise, if both exhibited the qualities of promise and practicability
The production of wax is oue which is now claiming the attention of the San Diego apiar-
ans. They labor under great disadvantages in ians. They labor under great disadvantages in the matter of transportation, and in other particulars, in their eftorts to market comb honey at the mecting of their society last month, the f comb and extracted honey, was urged in the able address of their President, Mr. This being the case doubtless the J. Fox enterprise of our correspondent will be an inter esting matter to the producers. In order to policy in the management of the southern apiaries we shall quote from Mr . Fox a com parative review of the old and the proposed
ystem of production. He prefaced his discusion of the new policy with a sentence discus orrespondent to the effect that the true profit of the apiary in southern California would be rom the wax and that the honey wonld pay the expenses of the ranch. The correspondeut, Mr could manage four times as many hivcs run for wax as for comb honey, and seven or, eigh Mr. Fox proceeds to show the practicability
Mry of this elaim as follows: Suppose the busy season for production of surplus honey to last 50 days. My observation in this county is that
with Harbison hives, fitted with main frames in the top, instead of section boxes, two good, experienced men can extract, by hard work about two casks of 280 pounds net, each, per
day. This would be, say, the yield of four good average hives, allowing them to produce In the season of 50 days, by steady work, the two men eould attend to 200 hives, or an aver age of 100 hives to each man. Now, to carry take out eomb houey from 400 hives, and thi is our experience also. From how many they could simply cut out the honey, put it into a strainer, barrel the honey and lay aside the cannot say, but do not think his estimate of 800 hives an extravagant one, as it wonld only
require 16 hives per day to each man. Now, which is worth 25 cents per pound here, or if which is worth 25 cents per pound here, or if
bleaehed, a very simple process, nearly double that price. The bleachiug consists in simply exposing the yellow wax to the sun in a lon tin trough slightly inelined so that it will melt and run down slowly, and it is worth, I under tand, 40 cents per pouud in New York

In the present condition of the houey busi ness, the low prices we can realize here, and the high price of labor, we must run our apiaries
as cheaply as possible. If a man has only 100 as cheaply as possible. If a man has only 10 hives he can realize more honey, aud make
more money by extraeting than by straining more money by extraeting than in my opinion, thau he can by produeing comb honey. If, however, he has 400 hives, believe he can make more money by simply straining and selling the honey and wax than in himself, without hiring any help
"It is well known that the eheaper an article from a firm in Liverpool, they told me tha if we could put our strained honey on the market at eight cents per pound, the demand
would be unlimited. It costs about two cents per pound from here to Liverpool, including all expenses. If, during the coming fall, ships wheat, for our grain crop promises to be large much cheaper, which would leave us a fair price. Good strained honey is worth
10 to 12 cents per pouud in Liverpool
"From all the above facts and arguments, I as honey producers depends on our making only as much comb honey as will supply the Pacific and freights, ship direet to New, York and Europe a fine pure article of strained honey and at the same time afford us a good price for production.
If to these advautages in the production of were added the chance for an extensive home market for the wax, by the establishment of a local candle factory, perhaps the proposed able in the eyes of the large apiarians.
Fine Horse.-The stallion "Young George
M. Patchen," owned by Joel Merchant, of Pet aluma, was shown on the strects in this city Tuesday, and excited universal admiration.

## A New Illinois Stock-Barn.

The older States have generally the advantage of us in farm buildings, although we have in this State some of the finest we ever saw The movement toward better buildings is con tinually in progress and it is only a question of time when we shall lead in this respect as in some other lines of agricultural advancement. We can sometimes learn much from the most approved devices of others and for the purpose of furnishing points of this kind to our readers we have secured engravings of elevation and T. L. Miller, Beecher Illinois. Mr. Miller has already been introduced to our readers, as a breeder of Hereford cattle, Berkshire swine nd Cotswold sheep. He is also a leader in agcultural architecture, and a progressive, en-

pumping, cutting hay, grinding and pulping
roots. From the ground to the top of tower, on which the mill the the top of the tower is built from the ground-eight fee square to the mill-room floor, built up with
the frame of the building, and from this point the frame of the building, and from this point tapers to
The water supply is obtained from a well five feet in diameter, and the supply is equa to the wants of 1,000 head of cattle. The pump is a double-acting lift and force pump, worked by the wiudmill, to which are attached twoinch pipes for the mains. Attached to this are different sized pipes, to take the water to the stalls, boxes and pens in the stable, and dis-
tribute to the cattle and sheep yards, tribute to the cattle and sheep yards, pig pens,
houseand garden. In all these places are hydrants houseand garden. In all these places are hydrants
so that cattle or sheep are not moved from their so that cattle or sheep are not moved from thei
pens or yards for water. There is a water tank pens or yards for water. There is a water tank
on the second floor of the barn-16 feet high and 6 fect in diameter-which gives the ne

## NEW BARN OF T. L. MILLER, ESQ, OF ILLINOIS.

show upon this page was planned from his own ideas and in accordance with his practice of feeding his cattle and small stock. His pur-
pose was to secure the economic handling of a pose was to secure the economic handling of a
large number of cattle under one roof. The uildiug is 100 feet square with a drive-way in front $32 \times 100$ feet. The stable (Fig. 2 ) is under the main building, and extends under this
drive, making the stable $100 \times 132$ feet. rive, making the stable $10 \times 1.32$ feet. There re three calf peus opening into the stable,
ach 24 feet square, and eaeh divided into two pens, witl yards a ttached to each. The stable pens, with yards attached to each. The sta
and pens will accommodate about 175 head. The for wing ismodate about $1 / 5$ head. er ing on the ground plan : $A, A$, Calf pens ter Calf boxes. $C, C$, Cow stalls. $D, D$, Horse
stalls. $E$, Well pump. $F, F$, Mangers. $G, G$,

The National Live Stock Journal, whence we take the data for this description, gives Mr. cattle, as follows: The feed used is almost $\epsilon$ n tirely of cut hay, with grain and pulperl roots. This is mixed in the feeding boxes and taken to the animals in baskets. After the mornin feeding is done, most of the cattle are turne
into the yards, unless the weather is stormy into the yards, unless the weather is stormy
and remain out until the time for evening feed ing. This refers to the cows in in ilk. The dry cows are not stalled, but run in the yards and under sheds, and are fed hay only. These cows,
as they beeome two weeks before, are taken into the stables,
to put into the boxes prepared for that purpose,
and kept there until their calves are from one to

##  <br> GROUND PLAN-SCALE 52 FEET TO THE INCH.

Water troughs. $H$, Shaft and pulleys. $I$, Feed Boxes. $J$, Pulper. $K$, Stairway. $====$
 Driveway
The floor above the stable is the hay room, except 32 feet square in the center. This 32 eet is made into three stories-the first is 16
feet high, the second 18 feet, and the third eet high, the second 18 feet, alld the third and
feet. The first is used for cutting hay and feet. The first is used for cutting hay and will hold from 9,000 to 10,000 bushels of grain; the third is the mill room, where the grain for the stock is ground and the meal stored until wanted for use. The hay room, comprising the whole of this floor except the 32 feet square in
the center, will, when full, hold about 600 tons of hay. A load of hay on a raek eight feet wide and 14 feet long, can be driven on any part of the floor, when empty, and whell the
barn is filled all parts are filled. Two double harpoon forks are used, and the team that hauls harpoon forks are used, and the team that hauls
the hay is taken from the wagon and used to mill is used-each 30 feet in diameter-for
two weeks old, when they are put into the stalls, and the ealves into the pens. There are now some 75 calves iu the pens and boxes, aged
from a week to nino or ten months. The calves are suckled by the cows, and fed ground corn and oats, mixed with lay, from the time they
will eat.
After
After the cows arc turned ont, the stalls and inxes are cleaned, and the manure shovele
into the main drive-way, and from there slioveled into the wagon and hauled to the ficld or the manure heap.

California Fresi Fisit Abroad, - An English paper tlus commeuts upon a Pacifi coast enterprise: Fresh salmon, packed in ice having reached Sydney and other Anstralian ports from San Francisco in a perfect state of preservation, the experiment vill shortly b English markets The British public will the Enghish markets. The British pubic will then at about fourpenco per pound, the present prico of codfish in Loudon.

## A Pleasant Land to Live in.

There is not in the world a more beautiful and, nor one so well adapted to make pleasant homes, as the foothills of California. This mag ificent region covers an area of more than 20,000 square miles, lying along the lower slopes of the Sierra Nevada and Coast Range moun-tains-the greater portion along the western declivity of the former. Among the more notable advantages of these foothills are an equable and healthful climate, pure water, plenty of timber, and a moderately good soil, which lent crops of vegetables, as well as the grains and grasses, is capable of growing almost every kind of fruit with the fewest
These districts are for the most part tolerably aecessible, being generally not more than from
10 to 30 miles from portation a part of the public domain, and where taken up can, as a common thing, be bought at moderate prices. As the great gold-bearing belt of the State stretches centrally along nearly the of the soil finds in the miuing towne cultivato he soil firk the ming tows camps a good market for his products, the prices for
which range ligher geuerally than iu San Fran-

Now it seems to us that a good many of our unemployed and homeless people would do well to strive and get hold of a piece of land somewhere in the region mentioned. The main ob-
jects to be kept in view in selecting a spot for settlement are proximity to a local market, and in the absencc of this, facilities for shipping to Sau Francisco. Water for irrigation is also a consideration of the first importance. As re-
gards soil, wood, climate, etc., there is not much gards soil, wood, chinate, etc., there is not much
room for choice, this region of country being so much alike in these particulars that it matter little where oue locates
It is not to be supposed that a man, in repair ing to these mountann slopes, will, with all their advantagcs, be able to live and get ahead, with out hard work, careful management and econony. If poor at the start, he may even count
on seeing some pretty hard times for a few years on seeing some pretty hard times for a few years at first. The summers arc hot, and at an altitude of 3,000 or 4,000 feet there is some snow
in winter. But this is rather higher than the In winter. But this is rather higher than the
zone that offers best inducements for settlement, and along which little or uo snow ever falls. Then, there is the drouth to contend with to laud culture in this part of the state But ditches are being multiplied every year and no considerable district will, after a short time, be without water for irrigation. The soil here, though warm and quick, is not, except in a few alluvial bottoms, remarkably strong, and, to make it produce well, will require careful
tillage, with all the manure at command for it enrichment. In short, the man who expects to raise good crops in the mountains, will have to see to it that the ground is well prepared and every year mated and that some additions every year made to its strengthening and pro-
ductive properties. While this is not much o a stock country there is yet enough natural a stock country, there is yet enough natural
pasturage to enable the small farmer and fruit grower to keep a few eows and hogs, with the aldition always of some sheep or goats if he desires it. Poultry invariably does well. As for health, these foothills are a perfect sanitarium. A more salubrious climate is nowhere
to be found. The earlier settlers in this part to be found. The earlier settlers in this part
of the State, being originally farmers, and eom. of the State, being originally farmers, and eom
ing, many of then, from the South and West ing, many of then, from the South and West,
will be found a hospitable and obliging sort of will be found a hospitable and obliging sort
people, disposed to receive new-comers kindly people, disposed to receive new-comers kindy
and assist them all they can. If the stranger seeking a home is, thercfore, the right kind of a man, he will be able to obtain from these pioneers much uscrul advice and sometimes
more substantial aid, if he requires it, all of which will make him feel at home and be otherwise of service to him.

West Side Irrigation. - The West Side Irri gation bill has passed both houses of the Legislature and goes to the Governor. The bill, as passed, eliminates altogether the King rive canal project owned by Lux \& Miller, which irrigates some 70 miles, yet it provides
grand canal 170 miles in length for irrigating grand canal the west side of tho San Joaquin the lands on the west side of tho San Joaqnin
iver, embraced in the counties of Kcrn, Tu lare, Fresno and San Joaquin. Bonds in the sum of $\$ 2,000,000$, bearing interest at seven per cent, are to be issued to complcte the work, the bonds to constitute a mortgage upon the lands. The bonds are not
than 90 cents on the dollar.
An Orange Within an Orange.-A gentleman in this city who purchased a large Los Angeles orange at a fruit stand to adorn his lunch the other day, was surprised to find a ded in thic pulp of his purchasc. The inclosed fruit was ucar the stcm end of its incloser, bnt raterally it was fruit will the center. The large iruit, which was fuly throe its hes in diameter,
gave no external sign of its peculiar tenant The curiosity, exhibited at Mr. Trumbull's store, has excitcd wide interest, few having been, however, several similar cases reported this winter in sonthern California papers,

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| and Breeders of Thporters |
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stock and general auctioneers.
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Horses, Brood Mares and Mules, THURSDAY, MARCH 28th, 1878,

11 o'chock A. m, under the Big Tent, corner of Mission and Seventh Sts, hy order of Adain Forepaugh, Esq.
we will sell
155 Head of Horses, Brood Mares \& Mules, ,
The above stock comprises Matched Carriage Horses,
Trotters, Gentleneven's Driving Horses, Fanily Horseen Truters, Gentleneen's Driving Horses, Family Horses,
Siddie Horses, Single-Footers, Heavy Draft Horses and Brood Mares, aiso, Ten Larre Young Kentucky Bre
Mules, 15 to 16 hands high.

The above stock was selected during the past fall and
The above stock was selected during the past fall and winter, in the above States; for the purpose of trans-
porting my show throughout the State of California, but poring my show throughout the state of California, but
owing to an arrangenent made with the Central owing to an arrangement made with the Central and
Southern Pacific Railroads to transport the show by mail Southern Pacinc Railroads to transport the show by rail
enables me to offer the choicest portion of my fine stock at auction, without reserve
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Strects, from Nock can be scen at Mission and Seventh
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## Week Ending, February 26 tif.

Car Truck.-James G. Divoll, S. F.
Spore Tenoing Machine.-Liobert W. Eaton, Watsouville, Cal.
 Cieorge K. (ilenn and Herry Fern, Woodland,
PとRFYNG CoAl- Yarker F. Morey, Oakland.
Ascuor.- Robert F. Spedden and Daniel F. Aschor.- Robert
Staford, Astoria, Oregon. Apralates foa amingering
Horses.-Henry Hartman, Camp Halleck, Nevala.



Rainfall in the San Joaqnin Valley.
Editors Press:-The rain measurement our Signal Sergeants at San Francisco and Sacramento, and of the Kailroait company at quite
various stations in California, having leen quite generally pullished, permit me to give in your columus the amount for the season to Marcll
ith, near Borden, Fresno connty-at a point on Thth, near Borden, Fressno connty-at a point on
the railroad witlinn a few miles of the center of our State, and alout 15 miles northwest of
Fresio city. I take pleasure in vouching for
the accuracy of the result, as the measurenent was male with the greatest care, by my frienl,
Mr. lussell, who in now living on the place i Mr. Russell, who i.: now hiving on the place
formerly owned, and who lhas the use of my
standard Smithsoniau gauge, made by James standard Smithsoniau gauge, made by James
Grecn, of New York. This very relialle iu-
strument was uscd by me to measure the rainstrument was uscd by me to measure the rain-
fall in parts of Sin Joaquin valley for several fall in parts of San Joaquin1 valley for several
years, lJeginning with 1868 , reports of which were made from tine to time in your
columus, as some of your readers may rennem. columus, as some of your readers may renem.
bcr. A letter frout Hr. Russell gives the fol-
lowing rainfall for the seasons of $\% i=\%$.



## Total...

 will be seen, this is only about 10.09 inehes of the rainfall at San Francisco for the same time, which has becn over 32 wheses; and abouttwo-thirds of the anouut at sitockton, which has becn over 15 iuches. March 20th.

Grand Mushal Festival. - We announce with pleasure a musical enterprise, which will excite and interest every music naking and loving person on this coast. Mr. Sumner W. Bug-
bee announces that he has in preparation a grand May Festival of Music, to be held in the Mechannics' Pavition, in this city, on thc afteruoons in the undertaking all the leading musiciaus of the city, and is securell the co-oneration of singers and players in all the interior cities and
towns. For this purpose, Mr. Bugbee is about to visit the in terior, and we coinmend his errand to all our music-loviug realcrs. It is proposed
to hold a festival of harinony, which will rival to hold a festival of harnony, which will rival
all the fanous jubilies which have been lield in the Eassern cities.
prise will be worthy prise will be worthy of the coast, and carry our
fame upon the waves of song to all parts of the
world

Cotswold Brerders. - A correspondent sends us the following list of the officers of the American Cotswold Association, lately chosen: Presi-
dent, T. L. Niller, Beecher, Ills. Viee Precidents, John C.'Suell, Edmonton, (Ont.
Chas . P. Mattocks, Portland, Me.; Robert C 1sstill, Lexington, Ky. Secretary and Treasu-
rer, Chas. P. Willard, Chicago, Ills. Board of rer,
1irectors, Sam'l E . Prather, Sherman, Ills.
Chas. A. Degraff, Janesville, Minu.
Chas. F. Chas. A. Degraff, Janesville, Minu; Chas. F.
Mills, Springtield, Ills, ; T. L. Ailler, Beechcr,
Ills.; Chas, 1 , Willard, Chicauo, Hlls. The
 the work having the endorsementr and support
of the best brecders of the country.

Parmest of Taxes.-Hon. C. H. Cooley, of
Sonoma county, has introduced a liill in the As Sonoma county, has introduced a bill in the As
sembly, anending the political code so that all
general taxes must be paid in legal tender of general taxes mast be paid in legal tender of
the United states, gold, silver, or paper. tax leviod for a spececial porpose may be paid iu



Ant Pnotoorapilur having a largo Camera Box galo will please notily "N. S.," at this office.

Note on the Cliff Dwellers in New Mexico. During the field operations of one of the parties connected with the United States fieo
logieal Survey of the Territories, in charge o Prof. F. V. Hayden, portions of southwestern Colorado, uorthwestern Ncw Mexico, and north eastern Arizona were traversed, embracing that broken-up country occupied in remote times by a race of people who were knowu as the cliff-
dwellers. This sulject is well known to readers in general, but we nust recur to it again so as
to be alle to reach the importance of the discovery to be described.
In one of the canyons, known as the Chaco,
Mr. W. H. Jackson made detailed investiva Mr. W. H. Jackson made detailed investiga
tious and measurements of the immense ruined buildings. In one of the arroyas or dry water deloosit was sectional view of of alout feet. Fourtecn feet beneath the surface, ${ }^{2}$
l:iyer of pottery aud debris came to view. This may not seem strauge, as, in a comparatively
narrow valley, dirt and gravel to the depth o 14 feet might dation walls of ancient buildings were visible, built upou another laycr of gravel and saud.
These were in times covered with the alluvium upon which now stand the fanious ruins, of
wlich no history is extant, and of the luilders of which no histary will ever be known. How
many ages have passed since the lower or tirst many ages have passed since the lower or tirst
bell was the surface, upon whiclh moved the numerons hardes of which all cvidence at present is hiddon behind the vcil of the dark past? pottcry, which is bencath two eras of occupa tion and semi-civilization. This sknll, in its
contmur, is unique. Its closest relatious are the aucient Mexicans, l'eruvians, Caribs, and of the upper postcrior portiou of the head (pos teriur parictie), which is evident in , those
ligured in Mortou's "(rania Americana." The contents of the skull as found, consists of sand,
which is now as hard as ordinary which is now as hard as ordinary agglntiuated
sandstuse, and las in nearly all portions, the appearance of liminite. The skull will bo de-
scribed and figured by Dr. W. J. Hoffman, of the Hayden survey, and it affords another strong link in the chain of facts and hypotheses of the cliff-dwellers and the ancient Nexicans bcing more nearly rel.
a.lnitted or supposed.

## Falling Mountains.

We had an accouut not long since of a mountain in the Savoy, switzerland, which menced tumbling dowu aul for 20 days went on stcadily disintegrating itself until much of it had rolled into the valley below, causing the the destruction of two tlourishing villages.
While this work of dismemberment was in process it caused a terrific sound and filled the air with clouds of dust. Immense rocks descended the mountaiu sine, a distance of a mille, inl 30
seconds, and bounding sonetimes 1,500 fect, Anusied the great pine forests like thistles. of anotler falling mountain. In the northern part of that Territory, distant from 1 lelena
30 miles, rises a singular elevation conspicuous 30 miles, rises a singular elevation conspicuous
for many miles around, called Bear Tooth mountain. It eonsists, or rather did consist, of two tusk. like peaks, hence the name, standing and grim, they lifted themselves to the hight and grim, they lifted themselves to the hight
of many huudred feet. A short time since a party hunting in the vicinity heard a heavy
souud that so shook the earth that they sup posed it to be an carthquake. On reachiug the Bear's Tonth a little after, they found the east. dicular mass of rock and earth, fully 500 feet high, 300 feet in circumference at its base and about 150 feet at the top. This iminense mass
had become dislodged, and coming down with had become dislodged, and coming down with
the speed of an avalanche had swept through a the speed of an avalanche had 8 wept through a
forest of large timber for a quarter of a mile, eutirely leveling it. The country around is
now covered with a and tons upon tons of rocks, many of them as large as an ordinary house.

For the Paris Exposition.
The Conmitte on Minerals for the Faris Exposition




 And S.ciektinc
of importance.

Farmers! Farmers!
Throughout California are requested to send their orders for any kind of labor to the "Frc
Labor Exchange," 33 and 350 'Farrell Street, San Francisco. All hands carefully selected fre
 not intended to represent the state of thi
urday, the date whieh the paper bears.

## Weekly Market Review.

DOMESTIC PRODUCE. ETC
Trade has beeu generally quict and with downward tendency in prices for nearly al kinds of Produce. The unsettled condition of
affairs abroad continues and events are still affairs abroad continues and events are still
possible which inay have a marked effect n1pon possible which inay liave

Range of Cable Prices of Wheat The coursc of the Liverpool quotation Wheat to the Proluce Exchange during the days of last
following table:

|  |  | L. Atringe | Cuss. |  |
| :---: | :---: | :---: | :---: | :---: |
| Tbursday |  | ${ }^{2 d(4118)}$ sd | 118 | $\mathrm{cd}_{612 \mathrm{c}}$ |
| Friday.. |  | - (1119 8 8d | ${ }_{118}^{118}$ |  |
| Mouday. | 118 | -cal1s 81 | 118 |  |
| y. |  | 1d(111s 8d | 118 | bide |
| Wedinesday....... | 118 | 1ddu118 8d | 115 | d |

 The Foreign Review.
Londos, March 19th.-The Mark Lane ExIress says: Winter.sown Wheat, although
samewhat thia on heavy lands, is looking trong and heal by hes pect tor a good crop is more promising than
the correspouding time for some years. Promising agriculturat uatlonk, large arrivals from in nort, and the carly re-opening of navigation northern Europe, liave exercisectarery
iressing effect aloul the British Corn trade already deprived of the doubtful support which
the warlike political appearances furnished the warlike political appearances furnished,
and with the influences thus combined upon the side of huyers, lower rates are current for nearly all varietics of cereals and producc
Deliverics of Euclish Wheat from the principal markets have been lighter than at any corresponding time in ten years past. But
in the face of this fact and the improved coudd tion of graiu, consequent upon a drier atmas llere, values have receded $1(a 2 s$ per quarter Inmports of foreign Wheat into London have
leen fair. At Liverpool arrivals have bcen unusually heavy. At both places business is prostrate, the operations of buyers having
leeen paralyzed by the weight of present and prospective supplics. Firmness has been the leading ieature of the tra slight rance. Prices which would iudicate values here aro perhap lower than the situation warrants. The actual lepressing power for the moment is the abstention of millers from buying, rather than a pressure of foreign supplies, and it seems scarcely 1ossible that business can remain in its present state of inanition much longer. With fair arri vals at ports of call, the floating cargo trade for Wheat improved 6d (a 18 ier quarter, with
some Continental demaud. $\quad$ Maize advanced 3ila 6 id per quarter. Barley is quiet
relgnts and Cnarters
Wheat freights, says the Commercial News
ave been very quiet during the week and onl two charters wcrè drawn. Rates of freight continne as last quoted at $£ 210$ to Liverpool dircct for iron ships, and proportionately less
for wooden vessels. The anount of disengage tonnage in port is light. At the close we have 25, 926 tons in prort disengaged, 8,243 tons
ellaneous and 15,465 tons to load Wheat.

## Eastern Grain Marketa

NEW York, Mlarch 16th.-Fxports of Wheat to Great Britain lave falleu off, owing to rewe have shipped quite freely to the North Sut and Baltic ports, French purchases in partienChichaving been quite extensive
Cmrace, Narch libth, - The prices for grain heavy closing of last Saturday, and average pretty firm at the increase. Wheat went steadily upward, with no very wide fluetua tions, but with undiminished interest and good speculative interest. Sales of April were:
$81.03 \underset{\sim}{\text { a }}$ (a) $1.07 \frac{1}{2}$. Corn was in fair demand with small Huctuations, and continually rose unti

 pretty steady at 45 @ 46 c for regular, and
47 zin for gilt cdge. Pork was active, but irreg
 \$9.50; Lard, $\$ 2.20$.

## Eastern Wool Markets

still re York, March 16th.-The Wool market prospect of an improvement appears to le quite to the Spriug clip of California, and already number of representatives are on their way thither. Of course, the manufacturing inter-
csts will also be represented. There is nothing
of, as the present limited demand is for medium
grades almost wholly, with prices about grades almost wholly, with prices about as last
reported. Sales enibrace so,000 llss Fall Cali. fornia at $10 @ 18 \mathrm{c} ; 50 \mathrm{bags}$ scoured do, 52 hec;
16,000 the Spriug do, 18 a.20c; 17000 the West ern Texas, 18(21c; 75 liags scoured Texas and 41(44.

The followingestle Produce.
Domestic Produle shows the S. F. receipts mostic lroduce for the week ending at
to-day, as compared with the receipts of


BAGS-Prices are mnchanged. Dealers report the market firm, and large lots of Grain cousumptive account. It is reported that Cal cutta prices for Jute materials liave been advauced.
BARLEY-Sales have bcen within former ranges. We note sales: 269 sks Bay Feed, $\$ 1.30$; \$1.95; 450 Nlilling, $\$ 1.90 ; 6,000 \mathrm{ctl}_{\mathrm{s}}$ Shipping at S1.97; $4,1,000$ ctls shippiug, $\$ 1.86\}$; and 1,000 ctls do, 81.85 per ctl.
BEANS-Hatcs are unchanged. Rec
CORN-There is nochange. Nlost of the de mand is for Mexico. We note sales: 200 sks Small Yellow sold at $\$ 1.77 \frac{1}{2}$, and 200 Large at 1.55 (0) 10 sitrable sales or Large lellow at WAIRY PRODUCE-The Butter market is verloaded and more unfavorable than1 last
week. The extreme rate of 25 c is only ly the single box for fancy brands. Receivers are packing l'iekled Roll from the excess which they have. Cheese is lower, say from 15 to 17 c . tyle are a rew sales of Cheese, of 20 ork EGGiS-Eggs are weak, thongh the best sell FEFED-Hay drops
ren because of the abundant grcen Feed and small demand for dry. The extreme is now at $\$ 18$ for finest wheat lay,
and there are no sales at that figurc. Bran aud liddlings are lower. We note Hay sales as Stock, at $\$ 14$ tou. Straw is 10 c lower per Fale. 1,000 bxs Oregon Apples sold at auction at $\$ 1.40 @ 1.25$ box. Strawberries are
now bringing 50 c basket. Limes and eocoanuts are lowe
IlOPS-Our quotations are dropped slightly all around. Much of the stock now on hand is
inferior and can only be sold low. The New inferior and can only be sold low. The New
lork market, for the week ending March Sth is reported by Emnet Wells as follows: "The market, on the whole, is a little wcak in sym. pathy with a dull market in London, and buyers looked for in the trade until it is definitely known how the roots have wintered. Although the winter has been a very open one, we do not
hear of any damage to the roots thus far by freezing. Hop-poles are moving in large quantities in some of the importaut districts of this State; this is rather an indication that all of prices that have latcly ruled, and that many new acres will be set to Hops this spring. We note sales; 200 sks good Washington Ter. ritory, $\$ 1.62 \frac{1}{2} ; 700$ sks Oregon, $\$ 1.55 \mathrm{per} \mathrm{ctl}$.
$0 N 10 \mathrm{NS}$-Alviso Onions have sold a point ower than a week ago. Other kinds are un-
changed. Large shipments are now coming in from Oregon. ave advanced $12 \frac{1}{2}$ acc per ctl. The market
or all kinds is firm. Sweet Potatoes have declined to $\$ 2.50$ per ctl.
PROVISIONS- Fresh Beet is in fair supply, the market is well supplicd. Hogs are firmer and the supply small. The market for Cured Heats is more active and prices are well maintained. No Eastern Meats have arrived during
the week, because of the blockade on the Union 1'acific railway.
oc per 1 t. Cable - Asparagus has fallen to 4@ are also lower. Green Peas are now iu, some
from Santa Barbarasellingat 6c, beingyellow and rather wilted. Fresh stock from Alameda
county sells at 20e. Horse Radish is now held at ic per it
WHEAT- The market is a subject of much thlk and interest, but there has been no marked secoud-grade Nrilling at $81.80 ; 660$ and 0,000 sks choice Milling at $\$ 1.90 ; 400$ sks do at
$81.92 \frac{1}{2} ; 2,000$ sks shipping at $\$ 1.85 ; 10,000$ sks sks smutty at \$1.75; 540 ctls Milling at \$1.90; 1,600 do at \$1.921; 400 sks Shipping at si.85;
and 4,000 Willing, delivered at Fallejo, at $\$ 1.82 \frac{1}{2}$ per ctl.
WOOL-Spring clip Wool is arriving more Dealers do not expect to see trade in any amount
in Spring Wools until after April list. The
outlook is for a good active demand for all
choice Wools which will be received. It is thought the clip will we about one-fourth less than last year, because of the loss of sheep by
drouth. The fall prices, which we quote, are merely nominal, as there are no sales except of inferior stock, to clear out the warehouses. We note sales of this description, 70,000 ths at 12这@13娄c per th.


FRUITS AND VEGETABLES.
[wholrsale.]

| Wedn maday m., March 20, 1878. |  |
| :---: | :---: |
| Apples, hox, |  |
| anuts, 1 | ${ }_{\text {do, }}$ |
| Cranherries, bbil 140 |  |
| Cal....i. 5000 |  |
| H17, hx...... 800 @10 | Asparagus, |
|  |  |
|  |  |
| 00 | ${ }^{\text {Ca }}$ |
|  |  |
|  |  |
|  |  |
| Apriots........ 10 @ 12 |  |
| Citr |  |
|  |  |
| ${ }^{\text {Fige }}$ |  |
|  |  |
|  |  |

RETAIL GROCERIES, ETC.


Gold, Legal Tenders, Exchange, Etc. [Corrected Weekly by Surro \& Co.] San Franctisco, March 20.3 p . m.





Signal Service Meteorological Report. Week Ending March 19, 1878.


 $12{ }^{2}$ $198 \mid 190$ $107|89| 127$ Rainy. | Clo'dy. | Clo'dy. | Fair. | Cloody. | Clody. I Clo'dy


## "Faith and Confidence,"

Messrs, Drwer \& Coo, Patent Solicito $\frac{\text { Livet. } 1 \text { St, } 1875 .}{}$

 annnections. I have received a flood of circulars fron
Enstern firms, desiring to deal with the hut

 Again thanking you for your prompthess in scouring my

RICE'S STRAW-BURNER ENGINES!

## We Again Caution All Farmers

AGAINST BUYING ANY

Straw-Burner Engines With Return Flue Boilers,

Except Those Manufactured and Sold by Us, or Our Arthorized Agents.

A!l Other return flue boiler straw-byrning engines are

## Infringements,


#### Abstract

And we believe the facts will bear us ont in our statement. In regard to the advertise ments and circulars of the agent of the Ames' Engine, we will say, that two years ago H. W. Rice commenced

SUIT IN THE UNITED STATES ClRCUIT CDURT AGIVST HEALD AND ENR GH I,


Manufacturers of Straw-Burner Engines-that the Court has decided in both cases, sustaining the validity of lice's l'atent, and maintaining that their Engines were infringements on the same, and prohibiting them from making or selling them. We did not at that time commence suit against the agent of Ames', as he and his alvising frieuls requested us not to sue them, that as soon as we won our suit against Heald, they would stop infringing, and settle with us. After we had gained that suit, they asked us again not to sme, but to await the result of the Enright suit. Believing that they meant only to gain time by their promiscs, we commenced suit against them, but made no provisions to go to trial because they told us, up to withiu a few weeks of the Enright trial, that the decision in that trial would virtually decide the matter of infringements, and there would be no necessity of a scparate suit against them. After the decision of the court which was adverse to Mr. Enright and in favor of Mr. Rice's Patent, they then stated that they proposed to avail themselves of all the delays the Court would grant them. We seeing their determination to delay as much as possible, and keep the matter dragging in the Courts, at once had the suit against them dismissed, and commenced actions against the parties who lave their Engines in use; that we might force the matter to a full and final decision be. fore the harvest season sets iu. We have, therefore, commenced suits against 15 or 20 farmers who have the Ames', Enright and Heald Engiues, to restrain them from further using them. not the least doubt that the former decisions of the Court will be affirmed, and that the farmers will be enjoined from using the engines. As to their offering StrawBurner Engines for sale this season, we would say:

First, That we shall immediately commence suit against any fariner purchasing a Return Flue Boiler Straw-Buruer Engine from them, (or from Enright or Heald,) as the courts have fully sustained Rice's patent, and we do not propose to allow any parties to trespass on onr rights, without compensating us.

Second, We caution farmers against buying Inferior Engines, manufactured to avoid the Rice's Patents, thereby rendering them inefficient in power, extremely dangerons to life, and liable to fire the harvest field.

Third, Beware of Straw-Burner Boilers which are poorly made and liable to explode in the field, as the Ames' and Enright's Engines have done, thereby causing great loss of life. (Particulars of the exploded engines, and names of persons who lost their lives will be furnished by us if desired.)

Fourth, They deny that their engine is an infringement on the Rice's Patent. Why then have they bcen endeavoring to negotiate with Mr. Rice to change their engines, which are now in the field, and make them Straw-Burners if possible, without infringing on his patent.

Fifth, Why have not Mr. Nice, or any other good practical engineer remodeled their engines? Simply becuuse it is impracticable so to do, and make thom efficient in the field, without infringing on the Rice's patent:

All farmers desiring to bny Straw-Burncr Engines this season will find it very greatly to their interest to call on and confer with us regarding the full facts of this

## Straw-Burner Engine Matter.

There are many points which we cannot explain in an advertisement, and no farmer will willingly buy into a law suit, if he fecls assured of the fact and can avoid it. The best informed lawyers in the city toll us that the suits now pending against farmers, in the United States Courts, will positively be decided against thein, and they be enjoined from using their Engines. Such being the case, immediatcly on the dceision of the Conrt, iujunctions will be issued, stopping all parties from using the Ames', Earight and Heall Engines, and there will be no possibility of farmers evading such injunctions, and using their lengincs. While the agents of other lingincs may say they are prepared to defend these cascs iu the courts, you will find that they will inform yon, after you are enjoincd, that they have done all they conld to defend your in-
tercst, but that the injnnctions of the Court must be obeyed, and that although they cannot fnrther aid yon in allowing you to use the Engine, they regret the position in which you are placed.

## Nurserymen.

bulbs SEEDS Trees
SEVIN VINCENT \& CO. GROWERS OF SEEDS,
Keep Constantly on hand a conplete stock of tegetable,
FIELD, GRASS, FLOWER \& TREE SEEDS.




Catalogues, Price-Lists, and Printed Directions free o
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Australian Gum Trees for Sale, at stratton's

## Cum Tree Forest Nursery,

Hayward's, Alameda Co., Cal.
These trees are from five to twelve inches high, trans-
planted rezularly into booses $30 \times 20$ inches square, weich-


 greater tha
Address,

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NILES, ALAMEDA COUNTY, CAL.
Fruit Trees and Ornamentals,


and terms, CLARK, No. 418 California St, San
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Semi-Tropical Nurseries,
Riverside, San Bernardino Co., Cal.

100,000 Orange, Lemon and Lime Trees


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Nurseryman, Seedsman and Florist Fast Twelfth strect. near Tublys' Hotel, East Oak-

Floral, Ornamental Fruit Tree \& Seed Line.
A large stock of Belpian Cumellias and Azalceas,
FRUIT TREES FOR SALE
1 wish to call the attention of those who expeet to
plant out fruit trees the conining winter to the tact that
 at the usual rates. These trees were crown principipally
for uyseelf, on good land, without iririgation, are stout anc stalky, ar
Eucalyptus Monterey Cylress. Call ou or address,

FRUIT TREES AT REDUCED PRICES
100,000 Apple Trees, also a large stock of other Frui
 MILTON THOMAS,

Fruit and Ornanental Trees. Evergreen Shrubs and Greenhouse Plants ORANGE \& LEMON TREES

 Agent for the Nurseries of B. S. Fox THOS. MEHERIN, 516 Battery Street, San Francisco, Cal
THE DIOSPYROS KAKI,


Six Best Varieties. All Grafted\& Reliable


 Taikoon, round, Muite layse, thale slighty grecil

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SEED STORE,
At TRUMBULL'S SEED STORE,
$419 \& 421$ Sansome St., San Francisco
 Now and Rave Mlants, Everyreen Trees, Howes, Plinhw. Fuchlas, and Geramlums a mur




PAJARO VALLEY NURSERIES, Watsonville, Cal.
For sale this season a larke and complete stock
Fruit anic Ornunental Trees; Evergreens; Shrubs; Flow


 JAMES WATERS, Proprietor.
THE DINGEE \& CONARD CO'S ROSES

## 


100,000 Blackberry Plants for Sale






GRAND TRIUMPH IN HORTICULTURE The erowing result of 1s years of care and toil-FEL
 GIBSON \& BENNETT,

FELTON'S WONDERFUL NEW BERRIES

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PETALUMA NURSERIES. WM. SEXTON, PROPRIETOR.

 WM. SEXTON, Petaluma, Sonoma Co., Cal THE TROPICAL NURSERY

 CHAS. A. REED, Santa Barbara, Cal. POMONA NURSERY

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SEEDS.
$\left.\begin{array}{l}\text { Crosby's Extra Early } \\ \text { Marblehead Mammoth } \\ \text { Stowells Evergreen } \\ \text { Mexican Sweet, New }\end{array}\right\}$ Sweet Corn.
$\left.\begin{array}{l}\text { Early Canada } \\ \text { Early Dutton }\end{array}\right\}$ Yellow Flint, Corn $\left.\begin{array}{l}\begin{array}{l}\text { Long Red Mangel Wurtzel } \\ \text { Yellow Globe } \\ \text { White Sugar }\end{array}\end{array}\right\}$ Beet Seed. Yellow Globe
also, every desibable variety of vegeta-
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SEEDS. TREES. SEEDS.
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 Comprising the \$lost Complete Stock CVER Comprising the alost complete stock

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B. K. BLISS \& SONS,



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## DOLLAR

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GARDEN

1. 1.ts Choive Amual Fiowers, worth

Jawe giladiolus bulls, worth
2 Double Tunherose Eulls, wort

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## OAKLAND POULTRY YARDS.

解
following varieties of Fowls: Dark and Light Brahmas, Buf hite and Partridge C Leghorn \& Brow ings, Polish Ham. burgs, Plymouth Rocks, Game and Sebright BanAylesbury and Rouen Ducks. No Inferior Fowls Sold at any Price. Satisfaction Guaranteed. \& F FiFor further information send stamp for illustrate
Circular, to GEO. B. BAYLEY,


EAL FOR POULTRY.
 EGG PRODUCING







thoroughbred poultry.
 Unlimited Range. Healthy Stock Largest Yards Largest Yards
on the Coast. Brahnas, Lephorns, Flynouth Rocks, Bronze Tur-
eers, Ceesc, Pekin Ducks, Guinea Pigs, Etc. 87TSafe arrival of Fowls and Eggs Giluaranteed. TA



M. EYRE, Napa, Cal.

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BURBANK $\&$ MYERS,
Imm
vorters and Brecders if
 ete. Alpo Ews Ror hatehing Iron
the finest imported sock Egrs
Rnd Fowis at reduced price Rnd Fowls at reduced prices.
BURBA NK $\&$ MYERS,


WHITE LEGHORN EGGS,
\$3 Per Dozen.

 35 Mission Markct, S. Stun Fruncige
H. H. H.

HORSE MEDICINE,
D. D. T. -1868 .

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ineut lail and half with auy kill
of oil, aud apply ii

WILLIAMS \& MOORE, Proprietors, STOCKTON, CAL

NURSERYMAN WANTED.
A practien and experien eced nurssrymann is wantect The owner of the land has the lest of goil and plenty of
witer. , one mile frount the railroad station. He wants a

 men, experien
this suljiject. DEWEY \& CO.

MONEY TO LOAN at lowest rates, ST-CLASS COUNTRY REAL ESTAT
OTHER APMROVED SECLRITIES,

Agricultural Articles.
 MATTESON W WILLIAMSON'S


Took the Premium over all at the great plowing Matci This Flow is thorou
This Pow is thoroughly und by praetical men who
have beon long in the husiness and know what is required
in the constretion in the construetion of Gang Plows. 1t is quickly adjusted.
Sufticient play is given so that the tonguo will pass over
 govern the aetion olf, he Plow correctly. It has yarious
points of superiority, and can be relied upon as the best
 circular to MATTESON \& WILLIAMSON, stockton, cal.

THE IMPROVED.
Lamb's Family Knitting Machine.


IT IS THE ONLY MACHINE

 Narrows offt the toe ${ }^{\text {Kity }}$ Kits $z$ soock or stocking complete;
 Forms genuline Ribbed or Seamed work;
Knits the Douhle, Flat, or Fancy wehs;


 Send for eirculars'to
J. J. PFISTER \& CO., General Agents, Manufaeturers of knited gnods and dealer in woolcn yarns
San $F$ Francisco
-20 SUTTER STREET, Roon 46 ,


## THE MAGIC COIN BOX







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HUTCHINSON $\&$ CO

DAVIS \& SUTTON,
No. 75 Warren Street, New York Commission Merchants in Cal. Produce.



Engraving. $\begin{aligned} & \text { Superior Wood and Metal En } \\ & \text { graving, Eleetrotyping and Ste- }\end{aligned}$ the Miywo Avo Sclestriect Preves, Sain Francisco, at of
 $50 \begin{aligned} & \text { Best Mixed Cards, with name, in caso, } 1.3 \mathrm{c} \text {. or } 25 \text { no } \\ & \text { two alike, 10c. } \\ & \text { outhit 10c. Dowd }\end{aligned}$

NURSERYMEN, FARMERS \& GARDENERS
WILL FIND AT

## DUNHAM, CAREIGAN \& CO.'S

A FULL Line of
HAND PRUNING SHEARS,
POLE PRUNING SHEARS, POLE PRUNING SAWS, HAND PRUNING SAWS. THE RED CLIPPER PRUNER,

## Hedge Shears, both Plain and Notched,

Cast Steel Transplanting Trowels, Steel Rakes, Spades, Garden Lines, Etc.

Also, THE AQUARIUS HAND PUMP,

Used for Forcing Liquids upon Plants for Killing Insects, Etc.

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SAN FRANCISCO, CAL.

## Winchester Repeating Rifle. MODEL 1873.



The Strength of All its Parts,
The Simplicity of its Construction, The Rapidity of its Fire,

The Power and Accuracy of its Discharge, The Impossibility of Accident in Loading,


## Ing measuring from center of taf tal get to to center of coell shot, 32 <br> 

Commend it to the attention of all who use a Rifle, either for Hunting, Defense, or Target Shooting
The San Francisco Agency is now fully supplied with all the various kinds and styles of Arms manufactured by the Winchester Repeating Arms Company, to wit:
Round barrels, plain and set, 24 inel-blued. Ootagon barrel, plain, 24 inch-blued. Octagon barrel, se $24,26,28,30 \mathrm{inch}$-blued. Octagon barrel, set extra heary, 24, 26, 28, 30 inch-hlued. Octagon barrel, set, 2 26, 28, 30-extra finished, oase hardened and cheek stocks. Octargon barrel, set extra heavy, $24,28,28,30$ inchextra finished-C. H. \& C. S. Octagon barrel, set, 24, 26, 28, 30 incli-beautifully finished-c. H. \& c. s. known as "One of One Thousand." Octagon barrel, set, gold, silver and nickel plated and engraved. Carbine blued, also gold, silver and nickel plated. Military rifie muskets, model 1873. Rifies, muskets and carbines, model 1866. Reloading tools, primers and parts of arms.
A heavy stock of Cartridges Manufactured by the W. R. A. Co., for all kinds of Rifles and Pistols, constantly on hand and warranted the best in the market.

Sole Agent for Dupont's Mining, Blasting, Cannon, and Celebrated Brands of Sporting Powder,
JOHN SKINKER, No. 115 Pine Street, San Francisco, SOLE AGENT FOR THE PACIFIC COAST.
C. \& F. NAUMAN \& CO.

Wholesale Commission Merchants, All kinds of DAIRY PRODUCE sold only $507 \& 509$ FRONT STREET, San Francisco Cuse (Bctween Washington and Jackson)
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DALTON \& GRAY, Commission Merchants,

All Kinds of Country Produce
$40 \pm \& 408$ Davis Street, San Francisco. 2TV. Consignnents Solicited

50 BEST CARUS, no two alikc, printed in Crimson or

## SCHOOL MUSIC BOOKS!

High School Choir. Emerson \& Tilden, $\$ 0$ per dozen. A standard, useful and favorite book. School Song Book. C. Everest, $\$ 6$ per dozen. Fine book for Girls' High and Normal Sehools,
Choice Trios. W. S. T:lden, $\$ 9$ per dozen Three part Songs for Fcmalc Collegcs, Seminaries, Etc. Grammar School Choir. W. s. Tilden, \$o pe Grammar School Chir. W. S. Tilden, $\$ 8$ per
dozen. Excellent colleetion for Highl or Grammar Schools. AMERICAN SCHOOL MUSIC READERS. In three books, each 35 cents, 50 cents and 50 cents. Carefully prepared for Graded Schools.
The following are favorite general collections of genial SONG ECHO..... MOCkING BIRD........................ W. S. Perkins, 75 cents. MUSIC TEACHER...................C. Everest, 50 ents OUR FAVORITE.....................I. P. Danky, 60 eents. Music Charts. By Dr. Lowell Mason. Large Charts,
containing 120 Blackboard Lessons, plainly visible to all, containing 1200 Blackboard Lessons, plainly visible to all,
saving nuch trouble, easily set up and uscd, and furnishing a complete course of praeti.
two rolls or sets. Eaeh, $\$ 8.00$.

OLIVER DITSON \& CO., BOSTON,
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Great enterphise:
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## Sierra Flume \& Lumber Co.

Have over 100,000 Acres of

SUGAR PINE, YELLOW PINE, SPRUCE,
Fir and Cedar Lands,
10 Saw Mills, 3 Planing Mills, 1 Sash and Door Factory,

149 Miles V Flumes,
10 Miles Tramway,
157 Miles Telegraph Line,
13 Telegraph Stations,
Employ 475 Men and 550 Oxen \& Horses.
The Sugar Pine is unsurpassed in quality, and the whole Coast can be supplied.
The Yclow Pine is firm, fine grained and superior to any other hard Pine for Flooring, stepping, etc.
Tbe Spruce has great strength, duralle when and especially adapted to Bridge and Ship Building, while the Fir and Cedar are as valuable for a great variety of
purposes. year thirty millions of feet were cut and the estimate for 1877 is fifty millions; ffifteen millions are now on
hand, thorouclly seasoned by the hot elimate of Rcd hand, thorouglly seasoned by the hot elimate of Rcd
Bluff and Chico. Large orders can be filled on a dayb' notico for ald
kinds of

BUILDING MATERIALS,
Rougb or dressed dry, by wbich elegant and substantial
work may be accomplished without delay at the usual cost for green lumber.
Orders for the interior filled at less than San Francisco prices and freights
Doond, SASII and BLINDS always on hand in large
quantities. Address

SIERRA FLUME AND LUMBER CO.
PRINCIPAL OFFICES:
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## LAND PLASTER.

## (Sulimate of Lime.)

rhis fertilizer is especially well adapted to California lands and climate, and is Destined to be used to imMENSE ADVANTAGE.

PRICES GREATLY REDUCED. In Bulk, $\$ 10$ per ton; in Barrels, $\$ 12.50$. GOLDEN GATE PLASTER MILLS LUCAS \& CO.,
Nos. 216 and 217 Main Street, San Francisco.

1878．WEFAT TO BUY AMV WIERE TO BUY． 1878.

# The Ames＇Engine，Pitts＇Thresher and Power，Case＇s Headers， CHAMPION REAPERS AND MOWERS 

Are the best Implements in the World－Unequalled for Durability，Economy in use and Adaptability to the Requirements of the Farmers
of the Paciflc Coast．The Pitfs＇Buffalo Thresher has earned a reputation and increased it for 20 years－In this State within the past ive years．The Russell，Sweepstake，Dayton，Pitts＇，Chicago Pitts＇and Vibrator have sprung up and disappeared．Some of them had good points，but their defects were too numerous．The same might be said of the many kinds of Engines，Headers and Mowers．We get the Best and Improve them from year to year at our own expense，and when given to the farmer it is ready for work，and is the BEST there is in the State．



#### Abstract

May，1876．Uuring the two seasons of $187^{-6}$ aud IS77，I have threshed I00 days．An ave are day＇s age day＇s work with me has been 733 sacks each saek holdiug two and a gnarter bushels． My repair bills during the time amounted t nearly $\$ 10$ ．I elain，with my Ames＇Eugine and I＇itts Buffalo Scparator，to have done bette Pitts Buffalo Scparator，to have done better work and more of it than auy one iu the busi－ ness in this county．I published my opinion o the merits of my machinery in the Dixon， Suisun and Vallejo papers，and challenged the proprietors of other self－styled improved ma－ chivery to show as good a record．No one ever atterupted to meet me or deny my claim of hav ing done wore aud better work than any machinc of the same size in this seetion．I have seen about all of the different cngines in use on this coast，and in my estimation the Anes is far ahead of them all in every respeet．If I was inelined to be personal，I might give you the names of some of my neighbors who have Iice Straw－Burning Engines and Gold－Meda last season，for the best reason in the wurl and let me thresh all around them，even the grain they had under engagement to thresh． some instanccs，hoping to sccure a fair pereent－ age of eustom by so doing．I have pleuty of witnesses to substantiate my statements．The farmers for whom I have worked have nearly all spoken to me and tried to effect an engage－


Price of Ames＇18－Horse Straw－Burning Threshing Engine， $\mathbf{\$ 1 , 6 5 0}$ ．

## OFIAMMPIOM FRHARERE de MIOTVER，

The best in the World，WROUGHT IRON FRANE，Steel Guards，Patent Pitman Connectiou，Malleable Iron Shoe，I＇atcint Tilting Arrangement for Picking up Down firain or firas

| TESTIMONIALS． <br> Cambria，February 2 Sth， 1578. |  |
| :---: | :---: |
| CAmbria，February 28 th， 1578 ． Messks．BakEr \＆HAMILYoN：－I have been acquainted with the workings of the No． 4 Champion Mower over three years．There are some six or eight of them in this vieinity and all are doing splendid work．We want nothing better for the purpose．Among others who own our Grange Master；Mr．James Coffe，a No． 1 farmer，and Mr．Brian．These gentlemen speak in highest terms of praise of it，and feel as though they could not get along without them． G．W．Proctok． <br> Say Luis Obispo．Mareh 31， 1878 ， Messrs． April 25th，1875，one of your No． 4 Champion Mowers．Previous to this time $I$ had been using <br> the Kirby maehine．I am confident that the superior to any maehine I have used or secn used iu this seetion of the State．I usually lar－ vest from 200 to 300 －acres，and have generally averaged from 11 to 12 aeres per day．My ex－ pense aceount on the Champion during the whole time I have owned and used it does not exeeed 81 ．I am eonvineed of its great utility， and would hardly know how to farm without it． C．H．Jesperson． <br> Lower Lafe，February 2sth， 1878. Messks．Baker house，and have used it in harvestiug dnring the past three seasons．I have ent in one day |  |
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Delano，Mareh 10th， 1878 ．
nlow：－In the spriug of 1870 ， Baker \＆Hamlutov：－In the spring of 1876,
I bought one of your No． 4 Champion Mowers I bought one of your No． 4 Champion Mowers．
During the season of $18 \% \mathrm{I}$ cut 175 aeres of
wild grass，and for the season of $18 \% \mathrm{I}$ eut 200 acres of alfalfa．I have been using such ma．
elinery for over 20 years，aud the list of mowers ehinery or ever enters the Kitchen，Union，
employel embraees
Woods＇，Buekeye，Bay State，etc．I prefer the Woods＇，Buekeye，Bay State，etc．I prefer the
Champion to any other for all purposes，I Champion to any other for all phrposes．I ean cut from 10 to 15 aercs per day with it，and not
he troubled with clogging or breakages． Santa Clara，March 13th， 1876.
Messrs．Baker \＆Hasiltos：－I have a Light Champiou Hower．Have used it three years． Have cut altogether probably 200 acres．My hay has always been very heavy and intermixed
with very heavy mustard．It has given satis． faetion．I have ised the Buekeye and Kirby
Nowers，but the Champion，in my estimation， far exeels either．It cuts easier，smootiner and grass．No expense for relsiog in heavy，damp grass．
tions．

$$
\text { Roo Vista, March I5th, } 1878 .
$$

，intron reply to your letter your Light Champion Nowers abont two years ago．I have cut，on an average， 230 aeres of
hay cach year，averaging abont 12 acres per day．I cannot say just how mueh I have cnt in any one day，for the reason that I never tried
to see what I conld do．It has cost ine 50 cents aunually for repairs．I can recommend it as a

## T垊 E CAS

 Racine，Wis．，March 6th， 1878. Messrs，Baker \＆Hamlton，S．F．－We notice several implernent dealérs in Californiaare advertising themselves as the agents of＂Case Header．＂While it gratities us to kuow that our popular，single Gear Header（to which was awarded the gold medal at the Cali fornia State fair），is such a favorite with rauchers and farmers as to compel other mauufactur－ ers to attach our name before they ean sell their uachines，yet we are equally certain
that the method thus resorted to is a very questionalle one．Let us say that our Header em－ bodies a uumber of valuable improvements not found on any other made，aud that uo one in California has the right from us to sell our machiues but yourselves，all others are imita－
tions aud frauds on the farmers．

Messrs．Baeer \＆Hamilton：－I bought one of the J．I．Case Anfiocif，Mareh IIth， 1878. Messrs．Barer \＆Hamiluton：－I bought one of the J．I．Case Headers two years ago，and
think it is one of the best Headers that ever eame to this coast．I have run all other kinds，

## 耳卫AD円卫S

and this is ahead of them all．I ran the 12 －foot cut as easy as I could the 10 －foot of the Ilodges The Hodiks Case Header failed and
The name sold the machine but failed to make
The Pitt＇s I＇ower we bought of you last year is the best we ever used，and we have nsed all kinds fur the last 20 years．It runs light and works well iu every respeet．－A．C．Lownos and Look out for bogns I＇itts＇I＇owers，none genuine uuless made by James Brayley．All others Farmers，buy only the best，do not be deceived or lcd to buy poor imitations of the Fitts is not benefited by the vasie．

Volume XV.]
SAN FRANCISCO, SATURDAY, MARCH 30, 1878.
Number 13

The Cinchona, Tree, Leaf and Blossom. We present in this issue engravings of a cinchona tree and its leaves and blossoms. The is derived the febrifuge quinine and its allied alkaloids. It has a special interest to Californians, because it is thought by those who have
given the subject much attention that Califor nia alone of the United States enjoys a possibility of growing the tree successfully, and thus reaping the profit of contributing to the world's stance. We have noted in former issues the fact that the cutting down of the trees in order to gain their bark, as has been the
practice in those countries where it is inpractice in those countries where it is intiplied its market price. We have also mentioned the successful efforts made by
the English and Dutch governments in the the English and Dutch governments in the and Java, and the more or less successful experiments in Brazil, Algeria, and some of the islands of the seas. In our issue of especially in its relation to our own State, horticulturist, William Saunders, in favor of San Diego as better fitted than any
other part of the United Statcs for successful experiments in quinine production. In addition to these facts, the announcement has been made that Sir William
Robinson, senior member of the Council of Madras Presidency, intends to visit his sons in this State, some time during the
present summer, and will bring some cinpresent summer, and wints with him. The experiments about to be made with these plants gives the subject a present interest. The tree influences. It will not stand great heat, nor will it endure even a touch of frost. Our coming guests must therefore be more kindly treated than those which have heretofore died on our hands, and a rest-
ing place for them must be most carefully choscn.

Cinchona, Peruvian, or Jesuit's bark is the dried bark of many specics of the genus cinchona, a tree belonging to the
order rubiacee and sub-order cinchonacea. The species which we have chosen for illustration is the Cinchona succirubra, which
is pronounced by Dr. J. E. Howard, the leading English authority on the cinchona, as the most robust in growth, and therefore most likely to succeed in new habitats. The tree, as showm in our engraving on page 201, grows to a great hight. The
bark has a silvery luster on the outside bark has a silvery luster on the outside. The foliage is evergreen, and the tree is one of majesty and beauty. The leaves, as may be seen from the engraving on this page,
are laurel-like, entire and opposite. The are laurel-like, entire and opposite. The tints, and an odor siland 2 at the bottom of the cut, show the blossom about natural size and in different stages of develop-
ment.
We have said that the South American practice of felling the tree to obtain the
bark had an effect upon the supply, like that of killing the goose with golden egg pro-
clivities. It has been found in the experience clivities. It has been found in the experience
of cultivators of the cinchona, that such practice is unnecessary. They discovered that the yield of some spccies of the cinchona in alka.
loidsmay be much increased by covering the bark with moss, and also that a longitudinal strip of bark may each year be taken from a tree without destroying it; the decorticated por at least as rich in alkaloids as before.
Of the products of the cinchona tree, it may be said that the medicinal value of its bark depends upon the alkaloids which it contains. idia, quinicia, and einchonicia. Another alka.
loid, called cincine, is found in small quantities in some of the inferior qualities. It is probable that the three latter alkaloids are artificial derithe bark contains, in varying propertions,
starch, lignine oil, yellow coloring matter, both insoluble and soluble, red coloring matter, kinic of the alkaloids, is crystalizable, and the sul. of the alkaloids, is crystalizzable, and the sul-
phate of quinia, or quinine, is the chief medicaphate of quinia, or quinine,
ment prepared therefrom.
In cultivating cinchona, the care and attention given is greatly repaid in larger proportions of quinia. his stated that Javan bark has excess of azotized matter in the fertilizers used, however, produces an excess of cinchonidine at the expense of quinine. From recent investiga-
tions, however, it a ppears that this is no disad tions, howe ver, it appears that this is no disad-
vantage. Dr. Weddell has pointed out that

The College of Agricolture. - In the re port of the Assembly Committee on Education Albert J. Young, B, F. Tuttle, Rush Mc Comas, J. A. Hicks and C. S. Abbott, the following reference is made $\qquad$ The Collo Hilgard, a gentleman of large information, keen perception, indefatigable activity and earnest devotion to agricultural interests, is conducted in such a way as to more fully meet the popular
wish and expectation. Our visit to this depart ment of the University, and our investigation concerning its


LEAVES AND BLOSSOMS OF CINCHONA TREE.
fully as energetic as those of quinine, while it |ment lcad us to think that, while it may never has the advantage of being more easily tol cran to produce intoxication and singiug in the head

Andrew Murray.-All who are interested in the coniferous trees of the Pacific coast, says the Gardeners' Monthly, will be familiar with the English of Andrew Murray, whose deceas the English papers have just announcci. He coniferous trecs of the Pacific coast, and we owe much of our knowledge of them to his labors. American botanists might differ with
him as to matters in relation to these plants, but he never allowed differences of this character to interfere with the nost cordial personal relations. The services which he had rendered to American botany obtained for him an elec my of Natural Sciences.
conform to the Utopian and impracticable uotions of some, it will be of almost incalculable nia. That it will receive the generous, foster ing care of the State, we do not doubt.
Edicorial Association Proposed. - The Butte county Register proposes the organization of an association of Califoruia editors and the holding of a meeting in Sacramento in June The idea is a good one. We often feel that better acquaintance with ourco-workerst antage to
out the State would be of great advantig us in our work, in addition to the social pleas ures to be derived from meeting those whom a fellow iecling should make woudrous kind. The editorial associations in the Eastern States are pleasurable, profitable and satisfactory to all conce

Mud at Thirty-two Dollars a Ton.
Connecticut leads the country by giving her agricultural population the benefit of practical and useful truth as gained from scientific investigation. Her experiment station, under an able board of trustees, of which Prof. W. H. Brewer is Secretary, has taken a sharp hold upon vital agricultural questions and bids fair to return to he citizens of Connecticut each year a value a housand times greater than the cost of maintain The annual report by the Director, Prof. . Johnson, is an able document and is full
aluable and suggestive points. We cannot instance them all at this time, but we may note the fact Connecticut farmers are buy ing each year great quantities of com-
mercial fertilizers. A commercial fertilizer is as uncertain a quantity as a patent medicine, to tell, until after he has paid for the material and noted its effects upon his field, whether he has been swindled or not. The experiment station has shown
its ability to protect farmers from fraud in a most emphatic manner. It gained samples of the fertulizers sold by one firm at $\$ 32$ a ton, and found by analysis that they were worth less than $\$ 1$ per ton. Follow-
ing up this analysis, it was found that the ing up this analysis, it was found that the
firm was merely engaged in barreling up harbor sand and mud and selling it
farmers at $\$ 32$ per ton. The firm wa farmers at $\$ 32$ per ton. The firm was
forced to olose up its swindling business and the last information from its chief member was that he was in jail in Mashad not been for the experiment station, the swindlers might have made a fortune from one year's sale of mud at $\$ 32$ per ton.
Our agricultural workers need the aid and protection of true science, and every State should provide for it as Connecticut has done. We wish the Conuecticut enterprise
many days and much wisdom, and we many days and much wisdom, look for the speedy establishment of a
hundred such institutions all over the country.
Another Phylloxera Eater. - It is reported in French papers that another phylIn our issue of March l6th, we spoke of a Syrphus doing this work with zest. The Syrphido are well known for their in-
sectiverous tastes. It is now announced sectiverous tastes. It is now announced
that a minute red mite (Trombidium) has that a minute red mite (Trombidium) has
also shown a vigorous appetite for the phylalso shown a vigorous appetite for the phyl-
loxera. This red mite makes its home on loxera. This red mite makes its home on
the under part of strawberry leaves, but the under part of strawberry leaves, but
when the phylloxera is working at the when the phylloxera is working at the devours them. hance, vines having strawberry plants France, vines having strawberry plants from the ravages of the phylloxera. Such is the report, and, though it may be true in France, it does not follow that the mere
planting of strawberries in vineyards on planting of strawberries in vineyards on successful, for it must be first determined that the plants are infested with the desirable mite If the French claim is found true, we shall probably hear more
of it in the future and then it will be time enough to set about finding out whether we
have the Trombidium, for without it strawberry plants in vineyards would be worthless as plants in vineyards would be worthless
weeds, so far as the phylloxera is concerned.

Byron Jackson's Harvesting Machinery, -One of the busiest manufacturing establish ments in the State is Byron Jackson's agricul-tural-implement factory, at Woodland, Yolo county Mr. Jackson is preparing for an active campaign in this ycar's harvest fields with his improved labor-saving inachinery for self-feeding and elevating and for combiniug the work of alrcady been tested by actual work and found of great value. We expect soon to give illustrations of Mr. Jackson's new apparatus, that all owners of threshing machines may be posted on the latest improvements.

Gorarsponenone

## Some Notes from Butte County

Edrions Press:-The county has a large arca of both mineral and agricultural land. Its name is believcd to tave been derived from a in the upper part of Sutter county; its peaks towering far heavenward from the very center of the Sacramento valley, while its east and west spurs run down within a few miles of the Feather river on one hand and the Sacramento on the other.
The county seat, is a flourishing mining town of 2,500 inhabitants, the center of its mineral wealth and the source of large supplies to Plumas and adjoining counties. It is situatcd on the east bank of the Feather river, and is the
terminus of the California Northern R. R. The terminus of the California Northern R. R. The around Wyandotte, Bangor, Magalia and other localities in the foothills, is devoted principally to stock raising or to horticulture. Orcharu and vineyarus are everywhere found. Their
orange groves will not rival in extent those of Los Angeles, but very choice, fully ripened oranges and lemons are frequently met with.
Mr. Hart, who has one of the finest mountain ranches in the neighborhooi, and extensively
engaged in arboriculture, finds ready sale at hoine for all his oranges at $\$ 1$ per dozen.

## Thoroughbred Cattle

Noticed in your advertising columus, has a large ranch on the Chico road six miles from
Oroville, where everything is fitted up in the Oroville, where everything is fitted up in the
best style for pastury, shieltering and feeding
-his stalls in particular being all constructed with an eye to the prevention of waste in hay with an eye to the prevention of waste in hay
or straw. By the way, the remark is too often
heard, that a poor man cannot afford to raise heard, that a poor man cannot afford to raise best of hay or grain to thrive well. A A fact to
the oontrary the contrary
Mr. W., usunlly keeps on hand for breeding abont 30 head ef thorouglibred cows, eonsisting
of several different families and tribes of the Red Durham, such as the "Duchess," "Louan and "Red Rose," and with the exception of
what little grass to be found at this season in in the pasture, they have subsisted the cutire win
ter on straw. They are all in good condition, ter on straw. They are all in good condition,
and one wonld have to travel far before sceing a finer looking lot of cattle. It is ilikely that his
favorite, "Golden Louan Duke," a very large, favorite, "Golden Louan Duke," a very large,
well-formed animal, has fared inore sunpt uously.: His pedigree is given in full on page
534 of the "Anerican Short-Horn Herd Book" 534, of the "Anerican Short-Horn Herd Book
Vol. 14, and was ealved September 10th, 1874 . A like record may be found of all his thine stock,
whieh has met with rcady sale throughout the which has met with ready sale the ear-load having been sent off last
coast; one
spring to Mr. W. W. Camron, of Oakland spring this connection I send you a short recipe furnished by Mrs. W., that is worthy of a p pase
in your columns nuder the head of "Doonestic in your columns under the head of "if the top or stand of your lanim
Economy."
gets loose from the globe, a little burut alum gets loose from the globe, a little burnt alnm,
will make the attachment as good as ever."
Is near the middle of the lest agricultural por-
tions of the county, and it is no disparagement tions of the county, and it is no disparagement
to other places to say that it it exceedingly flourishing. Inclusive of Chapman's and Bid.
well's additions, it is thought to have a popula Well's additions, it is thought to have a popula-
tion of near 6,000 . It has five hotels, (the
Chico Chico and Union being rated first-clase, $)$ not
less than five churches, two good pulic schools less than ive churches, two good puhlic schools
and as many privae ones-one under the
charge of Mrs. White, and the other conducted charge of Mrs. White, and the other conducted
by Mr. and Mrs. Wood, all of whicha are well
attended and sustaiued. It has also a very fine attended and sustaiued. It has also a very fine
ongine house, and a two story Town Hall 30x
40 feet. Among the manufactories, 40 feet. Among the mannfactories, may be
mentioned the extensive establishmeut of the mentioned the extensive establishmeut of the
Sierra Flume and Lumber Co.'s door and sash
factory, the large grist mill of (ien. Bid well, factory, the large grist mill of (ien. Bid well, shop of Messrs. Rusby \& Mery, whence all
kinds of mill, and lar, are turned out. Bessidest this, it boastst two
banks to keep the finaneial wheels a moving. banks to keep the finateial wheels a moving.
There are nany beatiful and well innproved ranches in the vicinity, to go into a descrip
tion of which would require a volunie. A brief tion of which would require a volum
notice of
Gen. Bidwell's Ranch must suffice. It it is known as the liaucho Chico,
and consists of about 20 , (utw aercs, including and consists of about 20 , (tW aercs, including a
consilerable quantity of foothill land of inferior
4uality. Alout $\overline{5}, 000$ acres were cultivated in grain last year. A larger anount has been put
in the present season. There are 100 acres in grapes, aggregating aloout 50,000 vines; 50 acres
in apples; 60 in peachcs; 90 in almonds; 100 in pears, apricots, cherries and plums, saying
nothing of oranges nothing of oranges, lemons, figs, pomegranates, olives, chestnuts, pecans, black walnuts, rasp-
berries, strawberries and other of the small va rieties of fruit and vegetables in abundance of every description.

Four acres of this speciann.
in last year as an experiment, giving very satis.
factory results.
It is cultivated in all respects as broom-corn. It yielded over 75 bushels to the acre and weighed 54 pounds to the bushel 1 ;
the laud heing by no means first.class. On soil of the best quality for raising good Indian corn, it is thonght that the Egyptian will turn out not less than 100 bushels pcr acre. Wheu
ground into meal, it makes an admirable substitute for buck wheat, besides being far more ciently for other nses to venture any positive opinion as to itt value, but there are reasons to wants in more ways than one. there is roo for further experiments. The California \& Oregon R. R., passes from south to north through
one of the finest bodies of land in the State, putting Chico in dircet communication not also with the outside world generally. At
and nearly evcry station on the road a lively local
business is trausacted with the well-to-do farmers of the respective loealities. North of Chieo are Cana and Nord, and on the south
come Durham, Nelson, Biggs aud Gridley, in the order named; liggs, was not visited, but is
represented as one of the largest and most represented as one of the largest
tlourishing places along the line.
Much damage has been done by the storm, Much damage has been done by the storm,
but it has been so much less than in other places, that tho county as a whole ought to
be thankful.
A. C. K .

## The Two-Headed Snake.

In our issue of Febrnary 16th, we gave a full and accurate description by Mr. Wright of the very remarkable young snake with two perfeet December last, and which we had photographed and engraved by our artists. The writer's inquiry after other instances of the kind has brought us the following letter. Editors Press:-I notice in the Press of the nake fouud in sonta Clara county. The writur asks, "can any one tell us of another instance
of such a double-headed reptile as California has now eertainly prodnced in this snake?"
a afirmatively, that Missouri has pro the one you speak of except that it was a diferent kind of snake. It belonged to the rattle snake family and was not so large as the Caliwas captured by Capt. Charles McNeal, 1882 (if 1 mistake not), when plowing. The
plow having unearthedl a nest of young rattc. plow having unearthed a nest of young rattlc.
nakes, the Captain was reminded of the scrip tural injunction that "the seed of the woman hould hruise the seryent's head," and he at blow, proeecded about to repeat it when he dis. covered that the reptile had two separate and istinct heads. He at once cappured it. The in two or three days afterward. It was then planed in alcohol, and is now, I think, the prop
crty of Arthur McNeal, of Greenwood, Mo. Los Angeles, Cal., Feb. 29th, 1878.
We also have a note from Mr. A. 7.cehand War, of this city, informing uss that he lias seen uel curiosities at Batavia, in Java,
riend of his substantiates the statement. We have lately learned, that our Californi pecimen, after being kept on exhibition at Woodward's gardens for two days, was taken ived abont six weeks after its capture, and is

## w preserved in alcohol

## Imitation Bird-Lime.

Eintors Press:- Your correspondent, M. I. Saviers, who, in the issue of your valuable aper of the 19 th of January, desires to know like to know how a tolerably good bird-lime cau be very chcaply made by almost anyone. In Furope, a bird-lime is made by using the ticum aloum or mistletoe, which y When a boy, I used to make a bird-lime t atch various kinds of birds, by simply taking rosin and linseed oil, in proper proportions, and boiling them together until of the right con
sistency. I do not at this moment recollect the proportion of eaeh article. Bat no matter Take, for instance, of rosin, or resin of Pinus fire. As soon as the resin is dissolverl in the oil, dip into it a stick or glass rod and judge of pound. If too oily (not sticky enongh), a little nore resin shonld be addled. If too brittle or The sa, until a requisite stickiness is obtained. The immersed stick or rod may be instantly conled by thrusting it into cool water. It
makes a perfect and cheap bird-lime. Try it.
Murray Hill,

Agricultaral College at Glasnevin. Editors Prrss:-On seeing a letter in one o your last issues, from the Professor of Agricul ture at the Royal Agricultural College, Ciren cester, England, it occurred to me, that per
haps a few facts coneerning the sister establish ment at Glasnevin, in Irelaud, would not be uninteresting to the many readers of your valu able paper.

This college is one of a number of agricultura schools established by the Government for the purpose of giving the Irish tenant farmers better education for their husiness. Nor is general education which may fit the business of any kind, neglected. A literary master, during certain hours of each day, give instruction in geometry, bookkeeping, grammer
land surveying, and the other rudiments of ound business education.
Attached to the institution is a piece of laud of some 200 acres in extent, which is divided into three farms, named, respectively, the Large farm of 180 acres; the Intermediate of 25 acres;
and the Small farm of five and a half acres. These are cultivated according to a certain plan to ilhustrate the most profitable way of farming large and small holdings. A small portion of land is reserved for experimental purposes; ou
which experiments with various artificial ma nure, new kinds of crops, ctc., are tried and the results thereof noted. For instance, during my residence there, an experiment was tried as manure have upon clover. Four patches of ghich a potash manure was applied; on second one an ammoniacal manure; a third fourth received no manure. The result showed that a potash manure produced the most luxariant crop and proved that potash is a substance The necessity for keeping the land in goo heart is thoroughly instilled into the minds o the pupils by the exanple set before them
the farm of a systematic rotation of crops and regular manuring of the land. The theory that eertain crops take sway a large proportion of certher mineral substances from the soil, while minerals in large quantities, points plainly to minerals in large quantities, points plainly to succeed in farming in the countries where land has been cropped for so long, a certain rotation must be followed and manure applied regularly. The rotation fol
lowed at Glasnevin is a four-course. The first year roots are grown, either bects, turnips or cabbage, and tho land prepared by a deep plow-
ing and heavy manuring. The second year grain is grown, gencrally barley, as wheat ing. In April grass. seed are sown among the grass is allowed to remain a third year and give crop or two crops of hay. The fourth year
the land is sown to grain again, generally wheat or oats. The grass seed generally sown are
Italiau rye-grass, or clover, alteruatcly, as it is found that land if cropped with clover oftener than once in eight years, exhausts the soil of potash, "and the land then becomes what is crop.
on the farm by a dairy of some 40 cows. whose milk is sold in Dublin. During the winter sealet out of the barn at all. By this plan enough and with the addition of artiticial manure its fertility is inereasing.
Various plans have been tried for preparing the food of the milch cows. During my stay
the steamed-food system was adoptcd. The roots were pulped by a machine aud mixe
with cut straw and brewers grains in a large with cut straw and brewers grains in a large
vat. This mixture was then cooked hy steam rom a boiler, which was used for other pur
poscs as well, such as cutting hay and straw threshing, etc. This food was served to the cows three times a day. Night an
The pupils receive instruction in the theoretical part of agriculture as well as in the various botany and veterinary science. A l rofessor or each of these is attached to the institution,
who delivers two courses of lectures every year Chemistry as applied to agriculture is tanght by 1'rof. Cameron, Analyst to the city of Dublin, and the other professors of sceence are equally lcarned and noted men in their respective departmeuts.
livery pupil is requirel to perform mannal served in everything they do, a time heing set ing has a good effect on the minds of the pupils, The institution is free to the sons of tenan in the rudiments of an English education. The The whole management is under the care of an efficient Superintendent, a practical agricul dignity of an institution of this to

New Points on Egyptian Corn
Editors Press.-Now that the time for sow ing wheat and barley may be said to be nearl or quite over in many parts of the State, in con may be mar the exceptionally good year, ther wet by rain, that they wonld like to see under some crop or other, and yet are undecide as to what to put in. Let those who have
never tried Egyptian corn, take this opportu nity and plant a small area; or, if they hav the seed, and lave sufticient confidenee in it, let them put it in on a large scale. None but hose who have grown it, ean be expected to believe in it as it deserves. Any ground tha wet enough to sprout the seed, will have heads, if not buth the crops, that it will ma ture if grown on ground that has had the
smallest amount of artificial irrigation. year we grew very heavy crops on land so
slightly wetted, that not above half the seed ever sprouted, and the second crop of ous, and amounted in weight to the same as the first. It is easily in wein the head by ing, beating, or tuamping out by horses. It is superior feed for fowls to any small grain equally good for hogs as wheat or barley and cows eat the stalks greedily. It does not vol unteer freely, and is easily cleaned off the land when the land is required for other crops in future years.
Those wh
Those who are planting it this year for th It likes decp cultivation, and will repay It likes decp cultivation, and will repay any
extra labor put in with the plow. It likes to have plenty of room-the space given to com mon corn is not any too much. A single see
is all that is neccessary in a hill; and those wh have but a limited amount of seed, would d
wcll to sow each seed single, and with plent woll to sow each seed single, and with plenty
of room between each. To those of your read ers who have found any difficulty in obtsining the sced, we shall be liappy to let tham has
enough to makc a beginning, if they will scnd enough to make a beginning, if they
enough to pay postage, etc., say 10 c .
Much has been written in your paper about he white varicty varieties have been long grown in this loeality, and the merits and demerits of each thoroughly understood. No one here be lieves in the white variety as a field crop, and
it is seldom grown. We, ourselves, have grown both, but we do not propose ever again to grow the white. It is inferior in growth and yield,
takes considerably longer to mature, and where the so-called "blackbirds " are nnmerous most impossible to harvest, as they eat it al to tantalize the grower. We shall grow it this we can defend it. However, let those who are undecided, or who have been induced to buy it, Wry have none of the white to dispose of, and none need apply for it. So uscful a crop as the browni variety, should not pass another year
withont a wider introduction, and it needs but to be introduced, to beome, ere long, one of grown hore each year, all came from the small package sent here, some years ago, to one of same amount do the samc for other localities.

## Hanford, Tulare county, Cal.

## Enormous Yield of the White Variety.

Editors Press:-1 send by mail a head of my best white Egyptian corn. This is one of 14 heads, of nearly equal size, grown from a singe kernel. Five of these heads (sumfient to plant one acre)
ripened early cnough to plant and raise a fall crop, of say 50 bushels per acre, during the same summer. This will givc you some idea of
its immense productivencss, one kernel produced its immense productivencss, one ker
over 50 bushels in a single summer.
By a eareful count, and wcighing of the grain
froni two of the heads, I estimated the yicld to have been (in producing the 14 heads) over 29,000 fold. If 1 could supply the demand for I have only a little, aud am letting it go, an ounce in a place, and am returuing money sent the bror it in quantities. We have tons of with this kiud. Another year I shall have a world's snpply of the white sech,
raise about 40 acres, of both kinds.
A portion of the secd has shelled out of this justify laanging it up in your sanctum for inW. A. Sanders.
[We reccived the sample heal with pleasure and have it hanging in our editorial rooms, where all who desire may see it hard to believe that Professor Sander's count was correct. The head wa
squeezed into a two-pound fruit can, which it squeezed intled completely; and it seems to be solid grain, most beantifu

## Rotting Straw Piles.

Editors Press:- I have been exceedingly pleased to see the straw question so ably dis-
cussed in your excellent paper, and would like to add my testimony in favor of saving straw for stock, as being decidedly the best way to convert it into a fertilizer. I have for some years followed
the practice of feeding out to cattle and horses all the straw npon my place, and can thy say that get rid of it. If cattle are shut in where they can get no feed hat straw, with free access to
water, they will do better than when running large on scant green pasture and hay. J. B. one winter, and the straw-fed cattle did the best of the two hands, Very few straw piles are now burned here, where a few years since of the remnants of last year's harvest.

## Artist's Anatomy

From the "Flood" illustration in the Press of the 2d, I see that Messrs. Keith and Nahl have originated a new breed of cattle, that are pos-
sessed of upper front teeth. I now believe the story of the Texas hogs that show none of the cloven hooi. The picture reminds one of those
scenes in Mitchell's old geoegraphy of "Lassoing cattle on the pampas," where the vaquero ily, artists need a grounding in stock and agri:
cultural surroundings.
a. Ukiah, Cal.

Another Mendocino Method.
Edirors Press:-My plan is to stack the as long as they will, say, to this time of year, ore heaps, as you find it convenient. In three days, you will see the steam rise from it; it wil Roint Arena, Mendocino Co., March 4th.

## Horticulture.

## Fruit on the Monterey Foothills.

Editors Press:-As I am very much in need information with regard to the cultivation of the orange, apple, peach, etc., in the foothills, and as they have not been tested here, the country
being new, I resort to you for the desired knowledge. I came here from Iowa in the driest of the drouth, and propose to stick if
I can raise fruit without irrigation. My soil is I can raise fruit without irrigation. My soil is of from three to six feet, and is partly covered with white oak, live oak, holly and sage brush. Now the question is: Can we raise the above
named fruits successfully without water? I have already transplanted some apples, peaches, pricots and almon for auother season, if those I have planted live. An also testing osage orange, alfalfa, beets, etc. In fact am trying everything I can get hold of, but am a good deat like thie boy going through the
woods-have to "whistle all the time to keep my courage up.
elieve there has not healthy location. the settlement since it was commenced, about three years ago, exceepting those who came here
ick, such as invalids who visit the springer sick, such as invalids who visit the springs,
and they are either soon cured or materially benefited by the water and pure atmosphere. Near the springs we have a settlement of
families, who are all improving their places to families, who are all improving their places to
the best of their ability. We all want to raise she best of their anit, and any information you may give
some frum
through the Press will be greatfully received through the Press will be greatfully received by all, Our rainfall
fields of wheat and barley are about a foot high, others are just coming up. Everybody is in
fine spirits and hopeful of soon having 'cplenty to spare and to eat." Monterey county Cal.
Paraiso Springs, Mo

Comments by Mr. Owen.
Evirors Press, - In answering Mr. Jolly's ent kinds of fruit on his ranch which he enu merates, and without irrigation, I will state, that there are several things to be considered in order to come to a correct conclusion; and I
will first consider the feasibility of growing apwill first consider the feasibility of growing ap-
ples, pears, and prunes, for these kinds of ruits require a similar kind of soil and cilimate. They wiln, or winter wheat, provided the bedrock or tight clay is far enough below the surface to
ive the roots sufficient delth of soil. Less
han five feet will not do, and sometines 10 feet will not, where the rock or clay forms a
kind of basin, which will fill with water in wet winter and soak the trees to death. But if there is moisture enough to grow good corn, aud sufficient under drainage and depth of soil, cultivated. Peaches and apricots will do well
with less moisture, and less depth of soil, pro-
vided the under draina vided the under drainage is good. With regard
to growing oranges, my observations lead me to o growing oranges, my observations lead mc to
believe they will do well ingood soil, if it is moie,
onough to to grow potatoes, and does not freeze much in the winter. They are doing wrell in
several different parts of Santa Crue and Santa

Clara counties, but in most cases they need
some irrigation. I have an orange and a pen some irrigation. I have an orange and a lemon
on my place, that are doing well so far, without Montere, but we have more rain here than in Monterey.
Soquel, March 14th.

## Some Varieties of Persimmon.

Editors Press:-Your esteemed correspond ont, Felix Gillet, of Nevada City, has furnished me some valuable notes on the Diospyros Kak and other varieties of interest. I venture therefore, to condense his practical remarks for the benefit of your circle of readers,
Mr. Gillet says: "The Diospyros Kaki has been or many years known in French nurseries, and is curious it was not introduced here a dozen
years ago. It thrives out of doors in the south of France; but, in the latitude of Paris, requires enerelly oo a greenhouse. The D. Kaki D. Lotus, which is called in Freuch, Plaque. mivier D'Orient. The cleft graft and inarching
are the methods commonly used. are the methods commonly used.
There are other valuable varieties of Diospyros which are much hardier. The best of
these are the Diospyros calycina, the $D$. hueida these are the Diospyror calycina, the D. hueida,
the augustifolia and the putescens. The Diospros ebenum, from Ceylon, is a large tree and is very valuable for its jet.black wood, known very problematical.
Mr. Gillet also states that the Mesphilus Japonica, or loquat, called in French, bibacier, is grown extensively in Algeria, for the Paris markets. It is a showy evergreen tree, with
whitish, sweet blossoms, producing yellowish ruit,

Chas. H. Shinn.
Onnithological- The qualities of the Enlish sparrow have bea widely constered o late years, since its large increase in this coun-
try. A monograph entitled, "The House Sparoost scientific treatise on the subject It written by Thomas G. Gentry, and published dilphia. Beginning with au excellent colored
plate of the bird, it follows with careful scienplate of the bird, it follows with careful scientific examination of its standing in Europe and
American, and adduces all the points which have been advanced in this country bearing pon the qualities of the bird for good or evil. The conclusion is decidedly against the bird, as
it is now protected and pampered in our cities. is now protected and pampered in our cities.
By bounteous feeding with grain, at the hands o by bounteous eend ing wivh grain, at the handso-
municipalities and individuals, it ceases its iusectiverous character, and instead of serving us in the reduction of injurious insects, it becomes n arrogant free luncher on grain and seeds,
nd insects multiply, because it disdains to ced upon them. As it spreads from city to country, it maintains its grainiverous habits,
nd becomes a pest of the grain fields, gardens and becomes a pest of the grain fields, gardens nsects itself, but by it is by its increase pushing our native insectiverous birds to the wall. prumises, and claims that the bird should be no
onger petted and protected, but should be onger petted and protected, but should be way forward, and forced by hunger to reassume its original insectiverous habit. The
subject is an important oue, and Mr. Gentry's treatise upon it should he widely read. The evil which he sets forth should be put to the
test of truth both by ornithologists, and the observation of practical men.

## THE $D_{\text {AIRY. }}$.

## Malva and Lavatera.

Editors Press:--In a recent issue Mr. W. A. aunders gives his experience and his opinion of the true value of malva. That it may he a valuable forage plant for winter, I will allow, but would caution anyone against feeding it free, I think they will leave malva when grass 1s plenty. My experience was in feeding it freely, a most exclusively, to a milch cow conmonth and more. She did not do well a moighbors said she had "lost her cud." I felt it a duty to buy hay, and throw a way the malva,
which was threatening to overrun vineyard and whichard.
orchan
Lavatera
Is a rapid growing bush, with similar bloom,
leaf and seed to the malva. Some years ago leaf and seed to the malva. Some years ago I
saw statements of the value of this plant for saw statements of the value of this plant for
cows, and such animals as love browse. It was two-acre lot would furnish food for two cows. I know it to be a rapid grower, tender and juicy, and would like to try it, but can hardly
afford to experiment largely at my own risk. Have any of the readers of the Press any
acts bearing on this point? Will lavatera at the same timez It is quite common in Santa Clara,
burn?
Aub
Auburn, Placer Co., March 9th.
esired?--Evs. Pr wose.]

## The Vineyard.

## Plowing Close to Vines and Trees.

Editors Press:-I saw an article in the Reral of March 2d headed "Plowing Orchards and Vineyards," referring to an arrangement for plowing close to trees or vines without in juring them. Now I have used the same arrangement for several years, but always
barked more or less trees with the end of the
Whiffletree, no matter how care-
ful I was.
I thought I would improve the shafts and buckled it into the the the end of an be made large or small, short or loug, Point Arena, Mendocino Cobe, Cal. Cadghey.

The functions of Vine Leaves.-A continued series of investigations, says the Journal Chemistry, have convinced M. Macagno that ruit is performed by this portion of the tree. A vast number of analyses show that the leaves
contain glucose (grape sugar) and cream of tartar, substances which enter largely into the composition of the grape. He found, in the month of June, and 7.41 grammes of the latter. As the season ad vanced, those quantities augmented, until at the
period of the vintage they had nearly doubled. and them in the branches, but in maller proportions, and he concludes that the terial of the fruit is formed, and that from them it is conducted by the hranches to the bunches. the substances mentioned ceased, almost imme diately, in the leaves. In consequence of those
facts he recommends vine growers to abandon the practice of nipping, which consists in suppressing, in the early part of July, the tops of
the fruit-bearing branches, at three or four leaves ahove the highest bunch. In July last he nipped 20 trees in a vineyard in full culture,
and left the neighboring stocks in their natural and left the neighboring stocks in their natural
condition. The analysis he made on the 27th of Septemher showed that the latter had prouced, per kilo, 620 grammes of pulp, whil the others had only 581 grammes, and the pro-
portions of saccharine matter was 175 grammes and 140 grammes.

Free Libraries and Reading Rooms
We are indebted to Seuator Geo. H. Rogers,
of the State Senate, for a copy of his jmportan iill, which has been approved by the Governor as follows:
An Act to Establish and Maintain Free Publi
The people of the State of California, repre sented in Senate and Assembly, do enact as folows: SEction 1. The Board of Supervisors of the city and county of San Francisco, and the
municipal authorities of the several incorpo municipat authorities of the several incorpo-
rated cities and towns of this State, are authorized to levy and collect, as in other cases, annually, a tax, not to exceed one mill on the cities and towns, respectively, free public libraries and reading rooms, and purchasing or leasing such real and personal property, books,
journals, and other publications, and erectin such buildings as may be necessary therefor. SEC. 2. The municipal authorities, respec tively (except as is hereinafter otherwise pro-
vided), in their respective cities and towns, may vided), in their respective cities and towns, may
appoint such trustees appoint such trustees (not exceeding seven,
aud such other officers and assistants as may b necessary to carry iuto effect the provisions this Act; they may declare and fix the terms
office (not exceeding four years) of all such office (not exceed ng four years) of all suc
trustees, officers, and assistants, and at thei pleasure, on the request of a majority of the trustees, may remove any from otfice, and fill vacancies; they may fix the salaries of all offricers and assistants, except the trustees, who
shall serve without salary or tion; and they may make, or may authorize the trustees to make such rules and regulations and by-laws as may be necessary for the govern-
nent and protection of such libraries and reading rooms, and all property belouging thereto, donated to the same. SEC. 3. All money and revenus collceted or received by authority of anything herein con "Library Fund," and shall be paid into the
proper city or town treasury, and there kcpt proper city or town treasury, and there kcpt
drawn theref rom as in other cases provided,
hut only to be used and applied for the purposes herein authorized
SEC, 4. All property, real and personal, ac-
quired by purchase, gift, devise,
bequest, or therwise, under the provisions of, or for the purpose authorized hy this Act, shall vest, and respectively, and may be properected, or defended, such cities and towns, respectively, as in other cases.
SEC. S. The following 11 persons, to wit:
John S. Hager, Geo. H. RRogers, Irving M.
Soct, Robert J. Tobin, E. D. Sawyer, John M.
Wise, Andrew J. Moulder, Louis S. Soss, Wise, Andrew J. Mioulder, Louis Sloss, A. S.
Hallidie, C. C. Terrell, Henry George, and their
successors. are successors, are hereby constituted and ap-
pointed, during good behavior, honorary trustees, without salary, of any library and reading unto helonging, that may be estahilished or acquired under the provisions of this Act, in and for the city and county of San Francisco. Such trustees shall meet for husiness purposes on the first Tuesday of each month, and at such other times
as they may appoint, in a place to be provided for the purpose, and six shall constitute a quo rum for husiness. They may appoint one of
their number President, and they may also elect their number President, and they may also elect
a Secretary, who shall keep a record and full minutes, in writing, of all their proceedings.
The Secretary may certify to such proceedings, The Secretary may certify to such proceedings,
or any part or portion thereof, under his hand or any part or portion thereof, under his hand,
veritied by a seal, to he adopted and provided
by the trater by the trustees for that purpose. Such trus
teee, by a majority vote of all their members, to be recorded in the minutes, with the ayes and noes, at length, shall have power tions, and b tration, government, and protection of such library, reading-room, and property.
Second-To fill all vacancies that
cecond-To fill all vacancies that may, from
cause, occur in the Board of Trustees. Third-To remove any trustee who may neg who may absent himself from such meetings, or, without the consent of the Board, from the Fourth-To appoint and define the powers
and duties of any and all authorized officers and assistants, and, at their pleasure, remove Fifth-To provide memorial tablets and
niches to perpetuate the memories of those persons who may make valuable donations to Sixth-By and with the consent and ap proval of the Board of Superyisors of said cipy
and county, expressed by resolution, duly passed by that body: To determine the num ber of officers and assistants to be appointed
for such library and reading-room, and to fix the salaries of such officers and assistants, an of the secretary; to purchase necessary real
and personal property; to lease and erect buildings; to order the drawing and payment of
money from out of the Library Fund for any money from out of the hibrary rund for any generally to do all that may be necessary to fully carry into effect the provisions of this act.
Sec. 6. The Board of Supervisors of the city and county of San Francisco, are author
ized and empowered, by a resolution duly passed for that purpose, to grant, donate, or authorize the use of, either in whole or in part,
any land, square, or other real estate belonging to said city and county, or dedicated to puhlic use therein, for the purpose of erecting and
maintaining thereon a huilding to he used only for a puhlic library and reading-room, in an ized and provided. SEC. 7. The proprietors, or other competer
authority, of any subscription or other library
may, upon such terms and conditions as shal may, upon such terms and conditions as shal
be agreed upon by them and tlie municipal
anthorities of any incorporated city or town, ex authorities of any incorporated city or town, ex
cept in the city and county and San Franciso, donate and transfer its property, real and per sonal, to any such city or town, for the purpose
of establishing and maintaining a public library and reading-room within the meaning of.this of any such donation, such proprietors may, rary trustees, without salary, a number equal to those appointed, or authorized to be apvely, as in this Act provided. Such honorary rustees, by a majority vote, may fill all vacan. cies that may occur in their number, and
they, respectively, shall have an equal voice they, respectively, shall have an equal voice
with the other trustces in the direction, mangement, and control of such lihrarics after accepted. This Act shall take effectimmediately.

An Insect in a Citauel.-Dr. Dewitz, a Gerinan naturalist, has recently described a very remarkable case of insect instinct peciliar to a butterliy of the genus Aidos, indigenous to
Venezuela. The chrysalis ou casual examination seems to be perfectly empty, while its surace is punctured with numerous holes. closer nvelope the outer layer alone of which is ner orated, while on the inner covering are deen pits corresponding with the apertures. The caterpillar, after making the outer cocoon, perwhich it takes refuge, the object of the holes being obviously to cause the cocoon to appear being obviou

## Patrovs or Hogbasprit

Removal



Worthy Lecturer's Visits.
Editors Press: - Again wo take the field to sow the frange seed of a pure civil polity, and
to bring the Subordinate Granges into near relation with the State Grange, in order that our policy may be one, and not divided, for to our Order, as to all others, union alone is strength. In division arc weakness, instability and consequent decay
On Wednesday, the 20 th inst., we were on Grange hall in

## Santa Rosa,

There to first install the new officers of the Pomona or District Grange of Sonoma county. At this meeting a majority of the Granges of the county were represcnted, and in such numhe day, as discussed by the State Grange in October last, werc brought up, and an agreerl policy arrived at to give them efficiency. So far
as the Grange district comprising Sonouna county
was concerned, a genuine, earnest desire to was concerned, a genuine, earnest desire to agreed upon. Such an earnest spirit as this
meeting indicates, will put the Grange (if carmeeting indicates, will put the Grange (if car-
ried ont in all the connties of the State) upon a permanent and successful footing, and the policy being decided to be one of truth and cquity, After the Grange closed meeting, all sat down to a Grange feast, and at 2 o'clock P. M. we
adjourned to Workingmen's hall, where we
were announced to give a public lecture on the questions that are now agitating the peoplc.
We discussed these questions an hour and a half to a very good and attentive audience.
This audience was composed not only of Grangers and farmers, but largely of citizens of Santa loudly applanded the lecture. This, our first lecture in Santa Rosa to a mixed audience, was greatly encouraged to open up our Grange pol
icy to the public wherever we go, with the hope of bringing not only Grangers and farmers bit the industrial masses to our selected civil polity.
These are times not only of agitation, and we hope progression, in political economy, but
really of a revolutionary character, and, therefore, as an Order, we feel it our duty to do all peaceably arrive at what reforms we mast need. is or ought to be more concerned than the agricultural, in the fight now going on in the indus-
trial field on the subject of capital and labor. To a wisc, just and cquitable solution of this great problem in political economy are our
efforts being directed. We have a desire to be antagonistic to no class, but an ar vocate of an
honest policy for capital and labor, so that they honest policy for capital and labor, so that they
may not become antagonistic, but united on a policy that serves equally the whole people. Patrons of Husbandry is devoted. We, therefore, cordially invite the whole public every-
where we go to our open and pullic lectures, that not only onr cause but our principles may
be well known. We also as candidly invite the press, both local and State, to publish our work and, as it is their full privilege to do, to point
out for us our errors, that we, as well as the public, may be profited thereby.
We are now fully in the field again for the ensuing Grange year, and shall with pleasure wive to the organs of the frange notes of our Grange and farm element may at least be posted
in what the Granges are actively doing. Petaluma.
Pursuant to previous notice and appointment,
we met Petalnina Grange at their Grange hall we met Petalnna Grange at their Grange hall,
at 10 A. M., March 23d, in closed meeting. For two hours or more was discussed and settled, so far as Petaluma Grauge is concerned, a policy
in accordance with the State Grange on all questions that so vitally affect the farin and agearnest resolve was made on the part of the
Petaluma Grangers to carry out the same. But let every Grange in California take similar
action and he as unanimons as was Petaluma action and he as unanimons as was Petaluma
Grange, aud all will be well for the Cirange for
the year 1878 . At 2 o'clock P. M., the time for public lecture,
the meeting was called to order by Worthy the meeting was called to order by Worthy Rosa, we addressed them our usual time on the grave questions that are now agitating the
whole publie, and dealt as we do, and only intend to do, with principles and their practical application to legislation, both State and na-
tional. We therefore strive to be impartial and
a political party. We present principles and their application to the general good, whether
in industrial science or in a social and civil polin industrial science or in a social and civil pol
icy for our State and national good. We have
not, nor can we ever have, any object in view that leads to personal aggrandizement or politi-
cal aim. Our basic idea is truth; and as truth is immutable, so we desire to make our civi policy subordinate to no pcrsoual, corporate or
monopolized interest, but, as demanded by our monopolized interest, but, as demanded by our
State and National Constitutions, for the great est equal good to the greatest numbers. With
such principles before us, and so noble a cause such principles before us, and so noble a cause
to serve, we cordially invite the whole indus. trial field of labor, in all its diversities, as well as the corporate and individual interests of cap-
ital, to representation at our discussions, so that if we are wrong we may be set right; and if we are right they may join with us in giving it to
the State and nation, and thns escape the ruin impending over us, should the present political revolution take a turn of enacting a policy by
force, instead of by all legitimate and constitutional measures.
Petaluma, March 23d. B. Prikisgor,
State Lecturer.

## Exorbitant Interest.-No. 4

Eilitors Press:-Altogether aside from the fact that government has a right to pass usury
laws, arising from the fact of its vast patronage of money, there is another consideration more fundamental still. It is this: In becoming a citizen, a corporate member of the State, wc
concede to the body politic, the right to pass over us a usury law if the public, that is the
general good, requires it. A millionaire comes into Califoruia from a foreign land and in process of time becomes a citizen. His property and rights are now guaranteed to him by the statc. The whole State with all its resources is pledged to guard his person and property. But he gains his guarantce by certain concessions, one of which is the right of the State to interfere with his business, and suppress or regnlate it, as the public weal demands. If his
business should be adjudged a nuisance, theu the State may pass laws suppressing it altogether; if not quite that, but liable to do great injury to the people, then the State may regulate
it. Now if combined capital and money-loaners extort rates of interest, crippling enterprise and discouraging industry, and thus retarding the growth or the Statc, then the State in self.
protecture, must limit them and protect itself. protecture, must limit them and protect itself.
Woe to the State when the capitalist can lift his head above all others and say with Napoleon
But many person
are everywhere practically a dead letter, no body observes them or regards them.". If this be so, how does in happen that civilized na-
tions have not found it out long before this tions have not found it out long before this,
and ceased to enact them? Why have they not long ago erased the useless statutes from their codes. The answer is, they are not a dead
letter where the people have public virtue and the State the back bone. I know of States
the Stave pita where the usury law is not a dead letter, but rigidy enforced; and we can do it here as
easily as we can suppress gambling smug.
ring and buying yotes. Once let Californing wak rates of futterest we are obliged to pay, and when such a law is passed they will see to it
that it is enforced. Where there is a will there is a way. I know of no civilized state on earth, unless it be Nevada, where an enterprisous exactions of interest as the people of California. Gentlemen of the banking and moncy
loaning profession, do you know why we form ers, mechanics, manufacturers and producers generally, do not employ to a greater cxtent you call "trampss?" The rasaon is, you extort
such interest that we can't invest in lands, on borrowed capital, and pay your rates; we can't
build a house or barn, and pay your rates, by build a house or barn, and pay your rates, by
nsing or renting them. We cant do anything,
net be, and pay $1 \frac{1}{2} \%$ or $2 \%$ per month, without rull
ning behind.
Hence it is, every compelled to reef every sail and discharge every hand which can be spared, hence this cry for
work. Let us have moncy at $6 \%$ on good sccurity, and new enterprises will start no as by magic, and idle and roving labor will be employ-
ed, and the city drained of its most dangerous elennents. 1 am persuaded that your own in. much as ours. cnd demand the usury law as But it is said, "the usnry law once passed,
the borrower and lender will, in various connive and combine to evade the law, and
great demoralization will ensne." I reply, that objection is equally giod as urged against the
of to zambling or sale of drunkard-making beverages. But further, let me ask, what of the demoralization caused by these hard rates exacted in the absence of a usury law? High rates harden
the loaner's heart and make him a Shylock in the loaner's heart and make hin a shylock in
the end. High rates given, demoralizes the
conscicnce of the lorrower ton, willing to evade payment if he can. Is there
no demoralization therc? There are two sides to this argument about demoralization.
It is further objected that "we wh.
the country and outside the great cities must
leave the city and come out to 'the towns and If money is limited to $6 \%$ in the city, favorite and the $6 \%$ obtainable ou farm property may be relatively a high rate; besides, most of the money loanted out in the country is loaned by
sinall capitalists who live there and can see to their securities and interests. At any rate w will risk it, and in doing so shall only do what
has in all States been done with no such results as has in all States been done with no such results as are feared ontside of the city. The famine and
utter poverty of the masses in British India frst now calls for the charity and pity of pristendom. At the bottom of this abject India has no usury law; but the loaner, as here can exact of the poor, in their extremities, an nterest he pleases. This often amounts to have been growing richer and the poor poore fill now that once rich land has become th Lazar-house of poverty, degredation and de
S. Bristol.

Tue Constitutional Convention.-Advice Constitutional Convention is a fixed fact. Th correspondent of the Bullefin gives the following facts: The Senate and the Assembly both the Senate the report was agrecd to without lebate. In the Assembly there was considera le discussion. The changes made in the bil on the recommendation of the Joint Eommitte esth of September, instead of the third Monday in September, and of the delegates at large from the four Congressional districts, the eigh having a plurality in each Congressional district are to be declared elected. This was done to insure that of the 32 delegates at large, eight ricts. Otherwise, if the plurality was confined to the whole State, it might happen that more
than eight residing in one Congressional disrict might receive the largest number of votes, because the people vote the whole 32 of the
delegates at large. This proposition gave rise considerable debate in the Assembly, Hugg what molitied by the fact that the Convention was to be the judge of the qualifications of its would right any wrong that might occur from his provision. The bill, as it now stands, pro-
ides for the election of 142 delegates, 110 by he respective districts and 32 at large, the dele gates to receive a per diem of $\$ 10$ for 100 days, egislatnre the election for delegates will take place in June; the Convention meets September 28th, and the Constitution will be submitted May of next year

## In Memoriam.

At a meeting of Hollister Grange No. 11, P. preamble
adopted:
WHERE
hereas, It has pleased our Supreine Mas ter to remove from our Grange, our worthy
Overseer, J. A. Reed, in the A prime and useful ness of life, and
Whereas, While we bow in humble sub cannot but mourn his loss, and tender w heartfelt sympathy to his wife and children, in their bereavement. Therefore,
Resolved, That in the death of Bro. Reed, we have lost a true Patron, an efficient officer and a good citizcn.
Resolved, That That the charter of this Grange be draped in mourning 30 days.
pon the minutes, and a copy be be spread upon the minutes, and a copy be furnished th
wifc of the deceased brother, and the same be published in the several papers of Hollister also in the California Patron, Pacific Reral Malsbary, R. Iucklidge, M. Pomeroy, Com mittee.

## Election of 0fflcers.

Kiwelatta Grange, No. 88, Humbolit Co.
Election Jan. 12th: G. B. Kneeland, M.; D.
D. Averell, O.; James Sinclair, S; M. J. Falor
A. S.; C. H. Daniels, L.; H. S. Daniels, C.;
Joseph Ncllist, T. F. McPhee, Sec'y; E. Pape,
f. K.; Sister Nellist, Ceres; Sister Kneeland,

Omona; Sister Arbogast, Flora; Sister Falor,
Kivelatta Ghange. - The Secretary writes as follows: "I have the honor of reporting to
you that Kiwelatta Grange is in good working order with a full set of officers, who were in stalled January 26th by the W. D. H. I Arbogast."

Malls. - Our milling industry
next that of iron. The number of mills is over 000 , affording employment for more than 60 , 000 men, whose anmmal wages are about $\$ 20$, rels of flour of which $4,000,000$ larrels are ex ported to foreign countries. Pennsylvania has the most mills (nearly 3,000), New York stands with from 700 to less than 100 . Minnesota's mills are the largest, and employ the great
average uumber of men, namely, five in each.

## Agriculturat Notes.

## California.

## L D

Editors Press:-Like every portion of our
State, abundant showers have visited ns, but
unlike other portion, no damage has been done
by high water. Ouraltitude insnres our safety. The wind, however, has not been so merciful.
Ther But even the damage from this source has been very inconsiderable, and our outlook for all
kinds of crops was never better. Fruit, at this time of the year, never looked more promising,
and fruit growers are quite jubilant. Orchardists are somewhat behindhand with their work,
owing to the too frequent "showers." The last owing to the too frequent "showers." The last
few days have been beautiful. All hands have made the most of it, and with reasonable fair
weather from this forward our brightest hopes will no doubt be realized. Some little attention is now beiug paid to the cultivation of the orange, that have not been grown here to any considerable extent. But what experience in this direction we have had, all gocs to show that our agation, and a few years, at furthest, in my opinion, will see every orchardist with a small
number of these trees growing in and around his number of these trees growing in and around his
home. We will never, probably, be able to compete with Los Angeles and other favored own wants, which will bring pleasure if not profit. The eucalyptus tree is also being extenus, but not nearly so well as in the lower and richer lands. Our soil, generally speaking, is not just what it deligh
O'Brien, Granite Hill.

## KERN

Machinges for Diggingi Irrigation Ditcies. or. Colorado Farmer: During my visit to the
anches of Haggin \& Carr I saw in the tool house several machincs for excavating ditch for irrigating purposes. In the deep sandy question of pushing or lifting on one side a cer chines differ chiefly for ditches of different sizes. The best machine for small ditches and rapid work is a board set on edge to which two
or four horses are attached. This simply crapes the sand over the side of the excavation. A very efficient machine is a simple wooden
wedge or triangle called a "home," 6 to 10 feet wedge or triangle called a "home," 6 to 10 feet
wide at the base, which is dragged by 4 to 12 horses through the sand in the direction of the course of the ditch. The surface is so even that this is often the only apparatus used in making the way for the water, a little dressing of the duit. Work may be done with this for two
cents per yard. Two much more pretentiou machines are used, however, with excellent results, for larger ditches. The Slusser exca-
vator, made at Sidney, Ohio, is a wagon with a coop beneath it. One man with four horses drives along the ditch, and the scoop carries the
sand into a large box with a drop bottom. When the box is full the scoop is lifted and th One man with four horses will thus do the work of seven men. The Wonchope machine sand and carries it 12 to 16 feet sideways.
will move 1,200 yards per day. It works we in grassy land, and will make a ditch 28 feet
wide and two feet dcep, with banks two feet
wide on each side. This machine requires wide on each side. This machine requires 12
horses and three men, and will do as mnch work MARIN.
Tue Dairy Season.-Journal, Mar. 16: The ne heavy storms that have prevailed for the last the first of January, but since the 8th of that month there have been but few days when it
did not rain. The ground has been thoroughl did not rain. The ground has been thoroughly
saturated with water and grass has been considerably injured by the cattle tramping upon
it; while both grass and cows have felt the necd of warm sunshine, of which there has
but little. Bnt all the storms have been warm,
and the been if the rain had been accompanied by heavy, cold winds.
NAPA.

few days comfortable for animals to seek a liv
ing out of doors during January and February ing out of doors during January a

## SAN LUIS OBISPO

Truth and Teaskls.-Eiditors Press:flowers and enjoying one of the many tine views might be said, as it was of that ancient city we read of, "beautiful far situation art thou" San
Luis. I was reminded of several pieces I saw Luis. I was reminded of several pieces I saw
in your paper a short time ago, by seeing teas-
els growing wild in several places around here. That you might see for yourself what San Luis ing, I send you one. My little son, four years old, thought they made very fine combs fo other people's heads, although preferring, as for his own. We are newcomers here, but seems to us that the natural advantages of the town and the surrounding country and its de. lightful scenery, need only to be fully known
to cause many to seek homes here, that are dis satisfied in less favored places.-Mrs. E. A Fisher.
[The teasel received is a fine specimen-as good as the best we have seen of California growth. -Eds. Press.]
SHASTA.

## SHASTA.

Cattle.-Record, March 23: On Monday evening Mr. J. B. Stanton, or Fall river, arrived Clark, and bound for the Sacramento market. On Tuesday evening Supervisor William Davidof cartle which ohe has raised, and is taking to San Francisco, intending to ship by rail from Cottonwood. They were pronounced by compe driven through Millville.

## SONOMA.

The Season.-Editors Press:-Toward the tured loafers, who go around telling what kind of weather we are to have, were prophesying rather blue over the prospect, when suddenly the water-god took it into his head to "wet things a little;" so the vortices were opened scending ever since. In many instances the bridges, fences, and loose tackle of all kinds were torn from their moorings, swept away to derly manner. I often went to bed at night ing but the morning would find, me floating in his ark, and I think it would not be Noah stating the matter, to say, that it has rained 40 Thus far we have had about 43 inches of rain more than double the usual amount, and consequently the grain in the low lands is looking injured, except in places where it was badly washed or covered with sediment. The farmers
are very busy setting out trees, pruning their vinyards, repairing fence and doing other necessary spring work. The market gardeners have and grass, on account of the continuous wet weather, and so their little patches are looking
rather weedy and forlorn. The ground is still too wet to allow any plowing to be done, except in a few favored spots, and so the actual work menced as yet. The hills are looking beautiful in their coats of green, and everything bids Bair for a favorable season and bountiful crops. as is usually the case with us mortals when season we grumble because it don't rain, and when it is a wet season we grumble because it
does rain. So it seems somewhat difficult to please us always, and I rather suspect, that if thing else to worry oursel ves about. We have and we may now hope to have bright sunny
weather, and with that we surely ought to have weather, and with that we surely ought to have
cheerful and happy spirits. -Uncle Josh, Santa Rosa, March 20th, 1878.
have had a few days of late that we could plow. Corn, wheat and barley never looked more crops this year that we have had for many years. There is but a small amount that is drowned out; pasturage in the mountains is No. 1, and
stock is thriving. The sheep men have had bad
luck with their half, some more than that. There was a heavy began to lamb, and for the want of proper
shelter, they lost hundreds in a few days. C.
M. Boswarth has had the best success of any
he only lost about 15 or 20 out of 400 . He has
proper sheds, and was with them through all
the storm. He is getting to be a thorough sheep
man as well as a good farmer. Mr. Gryff has
just completed fencing his stock range which he
intends to stock with I don't know what, sheep
or cattle, but one thing is certain, he is not
going to pasture his neighbor's stock any more.
STANISLAUS.
Alfalfa on the Plains. - News, March 14:
It is generally believed that alfalfa will not
grow on our plain lands unless irrigated. A
few tests, however, lave proven that it will
itand the geverest drouths, and yet
some extent prove useful on our driest lands.
Some two years since $\mathrm{Mr}, ~ \mathrm{~V}$ Some two years since Mr. V. E. Bangs seeded
a couple of acres to alfalfa on his place, situated a couple of acres to alfalfa on his place, situated
about three miles from Modesto. It was late in the season when sown and did not come up very thick, yet it struggled through the dry about three inches of rainfall, and Mr. B , was certain it would dry out during the past summer. To his surprise, however, it has lived, and is now making a rapid growth. Of course moist heavy lands. May in comparison with more protitable to him as a pasture than the same amount of land would in wheat, is a ques-
tion worthy of consideration. If it will live through the driest season ever known, and that through the driest season ever known, and that, does look as if the yield should be sufficien to justify our farmers in cultivating a limited for milch cow
VENTURA.
ENTURA
Saticoy Farmers' Club.-Press, March 16 At a meeting of the farmers and laborers of
Saticoy, held Wednesday evening March 6th, 1878, measures were taken toward the organiza tion of a farmers' club. James Day, Esq., was
lected temporary Chairman, and C. J. Hubbard, Secretary. Two committees of six mem bers each, were elected: First-Committee on Permanent Organization, consisting of Wm.
Slinger, Wm. Baker, O. J. Goodenough, J. L. Crane, G. F. Rostler and C. J. Hubbard. Second-Committee on Constitution and By
Laws, Chas. G. Finney, Henry Baker, E. B. Liggins, Chas. Kimball, M. Faggan and C. J. Hubbard. The committees shall report at the the free discussion of all subjects of interest to the farmer and laborer, to induce congeniality, o concentrate power and to promote the gen
ral welfare of our farmers and laborers. Fine Stock.-Signal, March 16: Messrs. interests of the county, have just imported a horoughbred Short Horn Durham bull and also a fine Berkshire sow. They are of the best breeds and will prove a valuable
the stock of the Santa Clara valley.
Seed Corn from Iowa. Signal, March 23 W. S. Chaffee, a close observer of all agricultual matters, has for some time been of the opinion that our corn growers should change
their seed. He has ordered from Iowa, the great corn-growing State of the Union where great pains are taken to seeure the best seed, a
lot of shelled corn. It will be of the best quality and invariably taken from the center of the ear. Our farmers will do well to make note of this fact.
at the center of Valley. - In every direction, out before us, are thanta Clara valley, spread anything, too luxuriant. Our cattle, sheep and horses are fat. The late rains of the pres ent week promise to give us an unprecedented
corn crop, for which it may confidently ke exorn crop, for which it may contice
Home Made Pork. - When our pork-pack dull sale at four cents per pound. The propri etors of the two pork houses here became competing buyers with those buying for the San vanced to five and one-half cents per pound.
This was not the only advantage derived. Castern bacon, inferior to our home-made bacon was then selling at 10 to 20 cents per pound, retail; now it is selling at 15 cents per pound,
retail. Eastern impure lard in cans was selling at $\$ 1.75$ to $\$ 2$ per can-lard that may have been made from still-fed or diseased hogs. Now the from grass and grain-fed hogs, sells at $\$ 1.50$ per can, retail. The above figures demonstrate the mportance of sustaining home pork-packers pork or lard, notwithstanding San Erancisco packers sell the Eastern bacon and lard cheaper in Ventura than in any other place. Our mer chants are to be commended for thus standing
by our home institutions. Our farmers should by our home
do likewise.

## Colorado

The Hereford for the Plains.- Editors Pess:-In Colorado the demand for Hereford's visited Illinois and Ohio and bought three carloads of Hereford bulls to take to their herds oar Trinidad, Colorado. The Messrs. Gudgels Mr. Holmes, middle Colorado, has taken a carload. Another party near Denver, another carparties have sold a large number to different be used upone were all first class bulls, and to breeding purposes. The Herefords are rapidly gaining the favor of the public throughout the
entire country, and every step forward they entire country, and every step forward they
will hold. As a hardy race, good grazers and eeders they has
Beecher, Illinois.

Eucalypsinthe.-A new preparation from eucalyptus, under the name of cucalypsinthe,
is announced from France. A Dr. Mierdue, is announced from France. A Dr. Mierdue, a
colonial surgeon, has succeeded, after many ex. periments and much research, in distilling from the palate, exhilarating, and not only quite harmless but also possessing many useful medi-
cal properties. This new beverage is, we learn,
being largely made and consumed in Marseilles.

## News in Brief.

State ownership of the canals is proposed in Ohio.
J.
toria. toria.
VIRG.
gress. The iron production of Russia is 320,000 tons y year DIPHTHERI.
A SHIP canal, costing $\$ 2,000,000$, is talked cross Cape Cod.
SEvERAL towns in this State have temperence THE total subse
nds are $\$ 3,612,600$. ering; once she stood first House. It appropriates $\$ 14,048,684$
Aman named John Hushions dropped dead while at work in this city last week.
A man named A. Foley, died in the
A MAN named A. Foley, died in this city last week from the effects of opium smoking.
CAPT. Boynton has accomplished the imming across the Straits of Gibralter Timming across the Straits of Gibralter
Twenty-five Chinamen have been arrested The city of Staunton, Va., population about 10,000 , consumes 100 pounds of opium a week. Stringent regulations for the preservation passed.
Mr. Wallace of Rawdon, N. S., has lost
nine children within 16 days; disease, diphtheria.
R. H.

TAPP, horse trainer, claims to have nearly subdued the man-eating stallion,
The Lutherans, who have 75,000 members in Minnesota, exceed any other denomination in
that State. The copper product of Michigan for 1877 foots
up to 16,000 tons, a little more than the preceding year.
Vincente Garcia, a noted criminal, who
boasted of 25 murders, has been killed at Za more, Mexico.
An auxiliary branch of the Honest Money League of the Northwest has been established There
There were 228 miners killed and 462 wounded in the anthracite coal region of Pennylvania last year
The Winnemu
acres of land will be cultivated on the Big SUGAR-cane grows well in all the valleys of southern Arizona, yielding a large percentage of saccharine matter.
ackers have killed $1,944,000$ logs, agains
IN New York, during the past year, nearly 1,000 cases of cruelty to horses were prosecuted by Mr. Bergh's society
Cornelius Canan, a boy seven years of age,
was run over by a truck and instantly killed on Brannan street last week.
Five persons were killed and seven seriously wounded by the explosion of a boiler in a steam
saw mill, in Richmoud, Va. A defaulting water
Mass., has been sentenced to three years in the penitentiary for official rascality.
There were 89 deaths in San Francisco last there were 98, seven violent ones.
When a wealthy Jap breaks up housekeeping, he ships his kitchen furniture to America to be
sold as "Rare curios from Japan" Dusseldorf, Germany, furnishes its citizens with filtered water at a low price, and the waTherks are said to be profitable.
The almond orchards in Santa
The almond orchards in Santa Barbara are now worth seeing. They present a dense mass flowers from center to circumerence
The authorities of Eureka are st
The authorities of Eureka are striving to
suppress the opium dens of that town, arresting suppress the opium dens of that town, ar
In about a month the wood business in the Sierra will give employment to some 4,000 men getting out wood for the Washoe mines.
THE new pension bill will abolish the present 18 Pension Agencies, effecting a saving to
Government of about $\$ 200,000$ annually. California is now producing 200 barrels petroleum, worth $\$ 800$, daily. Well No. 4, in
the Pico district, yields 66 barrels a day. A movemenx is started by some colored men in W ashington, who are opposed to the Liberia scheme, to colonize their race in the West.
There is a strong probability of Emery resent Governor of Utah, being removed an It was the belief of the distinguished French statesman, M. Guizot, that Constantinople would become the capital of a Greek empire. The House Committee on Coinage, Weights
and Measures, have agreed to report Maish's and Measures, have agreed to report Maish's
bill punishing defacers of gold and sil ver coin. TWENTY western railroads, during the month
of January, 1878 , earned $\$ 6,085,162$, an increase over the corresponding month of 1877 of $\$ 863$ der
the
Ac
by
de
wi
THE gradual decline in the price of gold renders possible the indefinite postponement by

THE ports of Nicaragua are to be blockaled demands made by Bismarck have been complied

There are now steam engines of $1,500,000$ horse-power, representing the actual labor of
$4,500,000$ horses, or $31,500,000$ men, in use in France.
Official statistics gives the cost of the late
war with the Sioux at $\$ 2,312,531$, and the war with the Sioux at $\$ 2,312,531$, and the
whole number of persons killed, 16 officers and whole number of
267 enlisted men.
A passenger train on the Central road, New Roselle, and killed all of them instantly, while walking on the track.
A PLAN of heating a multitude of houses by
steam from a common boiler has months in Lockport, New York, and the result is a complete success.
Look out for counterfeit trade dollars. They
are sinaller than the genuine coins, and the are sinaller than the genuine coins, and the
metal has a yellowish tinge, but they are well calculate
All boilers required by the government will
hereafter be constructed at the navy yard; a rolling mill is to be provided for making the boiler iron.
Mrs. Abraham Livco
Mrs. Abraham Lincoln is reported to be to the United States lest she should to return placed in a lunatic asylum.
There was'employed, last Monday, 123 dolla There was employed, last Monday, 123 dollar
a day men at the park. They are constructing a day men at the park. They are constructing a
new drive on the southern side to connect with the main road to the beach. On the 24th inst., over 300 persons were
drowned by the capsizing of the English training ship, Eurydice, off the Isle of Wight. Only one boy and a seaman escaped.
Director Linderman favors making trade dollars because a definite demand has been created for them in the East, and an outlet is thus Leading New York bankers are of the opinion that resumption would be practicable at the the agitation about the currency
Tre death of Judge Leonard, in Cuba, wil be investigated, rumors being afloat that he love affair that took him to that country. The House Committee on Commerce hav agreed to insert in the River and Harbor Ap
propriation bill an item of $\$ 80,000$ for continupropriation bill all item of $\$ 80,000$ for co
ing the improvement of Oakland harbor. At the Iuternational walking natch just ter
minated in London, O'Leary walked 520 mile minated in London, O'Leary walked 520 miles
in five days 20 hours and 10 minutes, beating his competitor, Vaughn, who made 500 miles.
The Supreme Court of Nebraska has decided that dealing in grain options in Chicago is gamfounded thereon are against public policy and
The boiler of the steamer Magnita, which was racing on the Hudson the other day, ex-
ploded, killing two of the passengers, scalding two others severely and blowing a boy over
All real estate men agree that a return to
the six and a quarter cents fare on the street the six and a quarter cents fare on the street
railroads would tend greatly to depreciate the price of property in the suburban districts of The five republics of Central America are likely to be involved in another general squabble which measure Costa Rico advocates and Guat enala opposes.
The Chinese
The Chinese Embassador to England attri-
butes the famine in India to so devoted to the in India to so much land being 000 acres of the best land in India being devoted to that business.
At the Paris Exhibition there will be distrib uted 1,000 gold, 4,000 silver, and 8,000 bronze orable mentions, besides 100 grand prizes and exceptional silver prizes. 1869, $\$ 2,525,463,000$. March 1st, 1877 , the debt amounted to $\$ 2,088,781,000$. The decrease
had been $\$ 436,682,000$ in eight years, and the erage Joun Runk, who was sentenced to be hung for the murder of officer Coots, has been re-
prieved until April 19th, by Governor Irwin, prieved until April 19th, by Governor Irwin,
that he may have time to more carefully ex that he may have time to more carefully ex-
amine into his case after the Legislature adjourns
THE
THE wife of A. Lognoze, boarding-hous at Ophir canyon a teaspoonful of strychnine 21 st, and died three hours afterwards. Deceased had been subject to aberration of mind for several years past.

Signal Service Meteorological Report.
Week Ending March 26, 1878.




stant caressing, so natural and proper in a
mother, might be unseemly in a father, and, from the nature of the occupations necessary to
the bread-winner, as distinct from the breadCol. Ingersoll adds the
Col. Ingersoll adds the right of " protection" to the list of "woman's rights." To this righ children are doubly entitled from their superio
need. Children's wants should claim and obtain priority to parents' wants. Alas! that too often some bestial biped besots himself with
brain-burning liquor, while the youug oues cry brain-burning liquor, while the young ones cry
for bread.
Spring Time.
The boghood of the year-Tennyom.
The ile enants Suring, the joyous Spring
Ifis course is onward nowi;



*pring hnuigs her infant blossoms out the trees - Corper.


 When well-appareled Aprit on the heols of linping
Winter troals. - SSlakespeare. Welconne, sweet season of delight;
What beautios colarat he wand
ting sight In thy eneelanting reigh:
How frening dew,
Wbile openening flowers the ono varions hue
 When overy brake hath found its note, and sun
shine suiles in every hower. Fidtrard Erecelt. The love-thriling hedge-birds are wild with delight;
Like arrows loult whistling the swallows fitit by:




## Children's Rights.

Emitors Press:-Synpathizing, as I do most heartily, with the gentler sex in their enforced endurance of many wrongs to which their
weakness exposes them, I have not felt disposed at present to enroll myself among the advocates of so.called "wonan's rights."
1 have loug been accustomed to consider "duties" and "rights" as inseperable; to consider the diligent fultillment of the one to constitute the most valid base for a clain to the
other. Perhaps I have been wrong in my idea that many women, who have been the nost
enthusiastic in demanding their rights, lave been far less ardcut in the discharge of their dnties. Parental and domestic duties are considerations in life and sometimes get con-
temptuously sncered at, as things that must be cenpeared from the track of the coming woman.
Fighting against nature, against the laws nature (which are the laws of God) is always
the hardest work which anyone can take in the hardest work which anyone can take in
hand in this world. Obviously in a fight some one must back down and nature
Never Will Back Down.
Those who wisely and willingly accept
nature's yoke fiud it easy, and, to those who nature's yoke fiud it easy, and, to those who
will adapt the sloulder cheerfully, hcr burden
is light. Maternal and conjugal love are prime is sight. Mes aternal and conjugal love are prime
principles with nature, ennobliug and elevating those imbued with them, rendering then loving
and beloved. I dare affirm that auy woina and beloved. I dare atfirm that auy woman
who sneers at such qualities in her sistcrs has No Rights any Longer,
As a woman, that are worthy of public discus-
sion. Children's rights, it seems to me, are more in neel of champions now than "wonan's
rights."

Ever
who wil
nerry child las a rigltt to a loving mother to tend and train her child and find her highest earthly lappiness in seeing her offspring respon tues. It is a trite saying that every great man that a woman can fully influence the politics of
the future by training worthy offproping. The
ten-thousandth part of a voice in the State ten-thousandth part of a voice in the state
palaver is of far less weight in the affairs of the
nation than the tougue or pen of a well-educated nation than the tougue or pen of a well-educate
nan or wonnan, with a hcart brimful of love for womankind, as typified in the mother who
has commanded their love by deserving it, as a true mother can and does. I leave it to the
advocates oi womau's rights to point out what advocates or womau's rights to point out what
more noble and excellett occupation they pro-
pose for woonen in place of this God-send. The pose for wonen in place of this God-send. The
next right a child has is to a loving father. Of
course the influence of a father over a child course the influence of a father over a chil
differs considerahly from a mother's. The con

Has more A Respectable Old Hen
though her own craw be empe feeds h though her own craw be enpty. A good example from both parents is the next childrens right. Precept is nuwher
without practice. It is little use the mothe Without practice. It is little use the mothe while father is constantly seen loatiug round rum-mills and poker-tables.
A "home" is the sine qua non of having
children at all. Any one who wauts feeding on Boarding-House Hash
All their lives, had best retain their single
blessedness. The sparrow even finds her a house and the swallow a nest where she ma lay her young. Bipeds, too lazy to follow suit,
have no right to increase and multiply. There have no right to increase and multiply. There
are suthient people "born tired "iu the world are suth
already
To be
To be thoroughly under control is a further ence is the first lesson for childhhood, and to
have their offspring "well in hand" have their offspring "well in hand" (as M. M. .
expresses it in last week's adinirable "Farm House Chat") is a prime duty of parents. House Chat Do-as-youllike's children, provided with
MIs.
fine clothes, costly playthings and the daintiest fine clothes, costly play chingrs and the daintiest
fare are all peevish and discontented, while fare are all peevish and discontented, while
Mrs. Do-as-you-should's family are constantly happy and contented, though possessed only o toys. dresses, ordinary fare and make-believ
To be taucht in the best possible way that meaus admit, to be trained to shun deceit and idleness, to hare all their faculties awakened be shown how to earn an honest living, to have and enjoy continually a full share of the
amenities and enjoyments possible to their amenities and enjoyments possible to their
station, to have fully explained to them their parent's creed and their reasons for the hope that is in them are further samples of children's
rights, which I will not venture to weary your readers by nore than naming.
readers by more than naming.
One thing further, when children arrive at reated as men and women, even by their parents. As Lowell puts it:
ole Uncle s.," sez he, "I guess, f only guess," sez he
The surest plan to nake a man is, think him oue. J. B. Enwd. Berwick.
No Home.-Alas ! that a man who could
write so sweetly of home that all the world has write so sweetly of home that all the world has
echoed his music, was honeless ! A writer in
the the Cincinnati $E^{\prime}$, Howard Payne, the genial-hearted, kind little man, who wrote the immortal song of "Home,
weet Home," was walking with me in the reat city of London, and, pointing to one of the aristocratic streets in Nay Fair, where
wealth and luxury had the windows tightly losed and curtained lest the least ray of light cod warmth should go out, or the smallest air English confort was guarded by the patrician ragon of gold, he, this tiny man with big inspired with the idea of 'Home Sweet Home as 1 waudered about without food, without a semblance of shelter I could call my own
Many a night since I wrote those words thus ushered out of my heart by absolute want of home have I passed and repassed in this local-
ity, and heard $a$ sireu voice coming from these ity, and heard a sireu voice coming from these
gidded, fur-lined, comfortable walls, in the depth of a din, cold, Loudon winter, warbling 'Hone,
sweet Home,' and I knew no leed to call my own." There was a worker-an arrnest, honest man-w
his wage?
Teachivg Grography by Rallway Sigys.-
he Southeri and Eastern railway companie The Southerı and Eastern railway conpanie of the Lyons Geographical Society, and added cerning the geographical position, cleration
above the sea level, population, industries, etc., of the towns whicein they are located. To
further popnlarize geographical knowledge, some towns have also erecteli stone pillars, upo which are placed the towns and environs th nents, maps of the towns and environs, th
bearings and distances of the capitals Europe, and places of interest in the neighbor hood, and other information.
A Natcral Flower Garden.-There is one
tretch of about 60 miles, say from Medara stretch of about 60 miles, say from Medara
to Fowler in the San Joanuin valley that every man, woinan and child in the State should see which passes through it in the daytime, if they whinch passes through in the to do so. I allude to a
make up their minds to do
perfect mat of flowers, at least 60 miles in pength with all the colors and tints known, but in dominate. The whole atmosphere is laden with exhalations from this incomparable handi-
work of Flora-this matchless piece of mosaic work of Flora-this matchless piece of mo
which has no rival in art. -Cor. Bulletin.

## Ferlanthropy

"Does eny ob dese gem"len understand wha ferlantropy means asked Brother Cardner,
as he rose up and folded his arms across his no as he rose up and folded his arms across his no-
ble brcast. It was a long time before Fenix smead lifted his body and replicd: "I 'spect that a ferlantherpist am a pusson dat feels heap sorry for the poor, and is allers
to better the condition of his nayburs." "You
is nio' dan sixth-fifths kerect," continued the president. "Ile ferlantherpist sits down befo' a rousin' good fire on a cold day an' wishes dat
everybody else had such a fire. He doan' take noney out'n his pockect to buy wood an, coal
for the poor, but he figures up some scheme by which all de money an' all the po, folks is to divided up, somehow, so dat ebery dollar will dat any one starved to death, he figures up de amount ob de grain crop, devides de bushels by
de number $0^{\prime}$ poperlasbun, an'
ob wheat dis y'ar. De ferlantherpist wishes
dat de po' chil'ren had clothes, but he doan' buy 'em eny. He wishes dat all de bad folks
would reform, but lie doan' walk 'roun' among dem, for fcar gitten' the shine offrn his boots. He adverkatcs homes for crippled an' aiged au, unfortunate, an' nex day signs a petishun $\omega_{0}$ a dollar a day. Gemilen de cull'd race am prad.
and a collar a day. Gem len de culld race am grad-
ed down even below de Turk, lut 1 is ob de solum opinyun dat a good square niggar am Corty rods a head of a ferlantherpist, an gainin'
at ebery jump."-Detroit Free Preas.

The firestide. -The fireside is a seminary If infinite importance. It is important because tows, being woven in with the education it behood, sives form and color to the whole texure of your life There are few who can recive the houlors of a college, hut are graduates of the hearth. The learning of the university may ade from the recollection, its classic lore may molder in the halls of memory; but the simple lessous of home, enaineled upon the hearts of childhood, defy the rust of years, and outlive the more mature but less vivid pictures of after ays. so deep, so lasting, indeed, are the im-
pressions of early life, that you often sec a man in the imbecility of age holding fresh in his the wide sp hour is a blasted and forgotten waste. You have perchance seen an old and half-obliterated and restored you naty have seen it fade away while a brighter and a much more perfect pic-
ure, painted beneath, is revealed to view ture, painted beneath, is revealed to view.
This portrait first drawn upon the cautas, is no inapt illustration of youth; and thougb it mnay iginal traits will shine through the ontward picginal siving it a tone while fresh, and surviving tin decay. Such is the fireside--the great in. stitution iurnished by Providence for the eduof man.-Goodrich.

Marriage.-Marriage makes home happy. Without marriage there is no real home, no true home; a house, as the Frcuchman says, but nothing more. Marriage briugs with it all that levates and refines, an tbat satisties and de-
lights; the commonest details of our ordinary occnpation it clothes with a vesture of enchanting loveliuess"and imperishable heauty. Marriage enlarges the scene of our happiuess aud miseries. A marriage of love is pleasant; a marriage of interest, easy; a marriage where both meet, happy, a happy marriage has in it all
the pleasures of frendship, all the enjoyments of sense and reason, and all the sweets of life. Nothing is a greater mark of a vicious and de generate age that
this state of life.
The Polar Colony.-Capt. Howgate's plan the a new expeal of the Senate and House Commit-
the Sorth Pole ha met tees on Naval Affairs. It is proposed to appro; priate $\$ 50,000$ for this as obtaiued the port of many prominent geographers and ex-
plorers, who have, at their own expense, sent out an advance expedition to collect supplies
for the pernanent colony. The place selectel for the permanent colony. The place selectel
as the site for the colony's headquarters is on the shore of Iady Franklin bay. It is also approval to a new enterprise by James Gordon approval to a new enterprise by a polar expedition.

Old Mards.-Many of the satirical aspersions cast mpon old maids tell more to their crcdit than is generally imagined. Is a woman remarkably neat in her person, "she will certainly die
an old maid." Is she frugal in her expenses, and exact in her domestic concerns, "she is cut out nane to the animals about $n$, not save her from the appellation of "old maid" Iu short, we have always found that neatness, failing characteristics of "an old maid."
A bright littlc fellow, about four years his father questioned, who asked: "If Mary should tell anything that was not exactly so what would you say?" "I'd say she told a lie." so, would you think it right he told a lie.

## The Epoch of the Mammoth

Under this title a highly interesting volume, bearing upon the ralidity or otherwise of the evolution theory, has just been completed by Dr. Southall, an Finglishman. His stndies o the evidence concerning the occnrrence of man
on the earth, lead him to approve the Biblical record and to refute Darwinism. It is very certain, says. Dr. Southall, that at some undefill period in the past man was to be found line of $54^{\circ}$ latitude, in En the Baatic and th and elephants and rhinoceroses, lions and hye nas, reindeer and hippopopatimi abounded in all this region at that sime. It is equally certain, he continues, that some time after the race had
been tlius sprcad over Eirrope a great flood covered a large portion of the continent with wadistricts of the same deluge submerged large This was the flood of the Leess, which Asia, the Palæolithic age. It was probably subsequent to the Noachian deluge, which was prob. its effects within its range. It is extremely doubtful, he thinks, whether previous to this the Biblical dcluge, the human race had lef their original home. Thcy were probably up very limited area. There was an African Med by thean sea covering the space now occupied erranean sea, of which the Caspian and the Aral and the Black sea are the slirunken relics Far to the sonth the reign of ice prevailed in
Europe, and the Northern ocean rolled Europe, and the Northern ocean rofled far ove
Russia and Siberia. The Arabian and Nubia descrts, with the snow-capped monntains of Ahyssinia and the east coast of Africa, formed There were glaciers in the Lebanon, glacien the Atlas, and glaciers in Anatolia. The Him alaya mountains constituted a larricr toward shut, and the elevated plateau of Central Asia which w western I probably under a part of North America, being at the same time
the theater of terrible volcanic convulsione the theater of terrible volcanic convulsions.
Such was the geology and zoology of the earth Such was the geolog.
when man appeared.
The various researches which have been from time to time made in connection with the lak and gravel deposits are carefully recorded and
and discussed; and Dr. Southall shows almost unanswcrably that man must have been created in civilized condition in accordance with the Bib Cain was capable of building a city, and tha only a few generations afterwards Noah went down to Egypt and found it an organized state;
in short he shows that both evidence and inveg tigation demonstrate that man appeared upon the earth abruptly and in a civilized condition lution theories are distinctly negatived.
The Interview with Her father, -In this country when a girl is abont to get married,
though all her friends may be very much intel ested in the question of the incume of her in tended husband, they are not likely to talk to take ing to the lady aud her parents an exact account tleman'. Ahere is no indel icacy in the old gentleman's asking him plumply
whether he is able to support a wife and in jus what style he can do it. No matter how much in love the engaged pair may be and how loth parents of the girl ought to take pains to see that the young couple shall not start out in
their married life lacking any available advantage.
tleman aside and asks for his daughter, as he ought al ways to do after getting her consent, the father may with entire propriety, and, indecd, he
should, ask lise would be son-in-law if he has an inoome, and he may reguest him to say exactly what it is, what are his prospects in life, and whether hc intends to set up a home for him A deserving young nan will tell just what his circumstances are, and his frankness will go far
to conciliate the favor of his questioner. interview over, he should return to his sweet. heart and gladden her with the report that he has been allowed to assume towards her the de-
lightul relation of an acknowledged and accept-

Cranioloiv and Crime. - The Britiah Mediical Journal presents, at some length, the re-
sults arrived at ly Prof. Benedict, in his examination of the brains of criminals-some sixwith the healthy brain, proved to be abnormal. Not only, too, has he found that these brains
deviate from the normal type, and approach that of lower animals, but he has been able to classify them, and with them the skulls in First, absence of symmetry between the two halves of
interior
continuat what is usually termed af the posterioar cerebral lobes, so that, in the
of the
lower animals, they are not large enough to lower animals, th
hide the cerebellum. the criminal's brain and skull are distin
a lower type than thone of normal mes.
 to the elevation of our sons and daughters in their homes, is our work and our highest privilege to accomplish. It lies with us to make
evenings at home pleasant, so that there shall be no morbid craving for parties, or a constant amusement. It will cost a little planning through the day and some self-dcnial to accomplish, but
the value of the result can only be computed when we see our children virtuous, home-loving and justly honored citizens.
Enough cannot be said about making home attractive, and one hopeful sign of the times lies in the fact that so much is being written about ren house, destitute of ornament or even com fort, fowls and pigs domesticated at the ver sights, even among the poorest of our farmers. people so much as shiftless ones who thus con-
sent to live like the very swine who eat and seep, and are content that this shonld be all o ife to them.
It is not forgotten that the task of winning the master of the household to improvemen may border upon the inpossible, but a pot of
geraniums in a sunny window, over which some simple drapery has been hung, a vine trailing from a langing basket, however rustic, an ivy trained around some rob any liviug-room of a barre or homeless air.
One thing more, and I am done for to-night. It is so delicate a matter, that I feel like putting on some sort of gloves, and even then handling it in the most gingerly manner. For do I not sister wrote in the Rural Press, that if putting on a collar in the morning, to add some slight finish to her toilet, required 'tut half a minute'
she could not afford even that, while children san about undressed, and a dozen men impatiently waited breakfast. But we don't mean
you, oh! burdened sister. The tears start and the heart aches, to know that the story is not a fiction in hundreds of cases over all our broad boudage, in this world if may be, but if not for you, may your daughters be disenthralled and bear your hard lot.
My message is for all who have the "half hour" to spend in making a becoming home
toilet-plain enough; it may be, but neat and tasteful as lies within your power.
Perhaps my first and most

Perhaps my first and most poteut argument should not be such, but I have a vivid picture of the children in after life recalling mother's looks as they are imprinted by her daily apat the very least, tidy, and perhaps even charmiug in its simplicity. Some one will reply to my second argument: "Ten chances to one iny it must have an cffect upon him to see you fluence upon yourself, is worth something, and much. Who that sits down to her sewing in
dirty morning wrapper feels the same selfrespect as when attired in a neat, afternoon
dress (with combed hair), a dainty ruffle at the neck and wrists, and a flower, with a And then if a visitor calls, you must run appear to still greater disadvantage in making appear to still greater disadvantage in making result of indolence after all.
ings" are something that our "outward adornpermanent influence npon all with whom we mingle, and not the least upon ourselves. It so shed sunshine rather than frowns and gloom over the households that are given us to cheer
and nurture and bless.-Mrs. Carrie A. Colby.

East Lessons in Chemistry. - The following names from a recent German journal of chemising for juvenile students of the searbominthien Me enylamin; oxaldiphenylguanidin; parabrommetasulphophenylpropionic acid; parapicrylmetanitralin; ethoxilphenilpropyformiate of paratoluilendiamin; methylethylpropylamylammon. ium oxide hydrate.
Hyusiry . We muat not look chiefy to
 and most enduring happiness. The higher the mountain, the colder the air by which it is visit-od-the nearer the home of the clouds and the
storm. There is many a quiet home whose re-
tirement is as sweet as that of a little rivulet in irement is as sweet as that of a little rivulet in
ome quiet nook on the slope of a hillside, whose
ight comes so warm and gentle to its bosom

## Young Folks' Column.

## April's Sunbeam






## I'll Pay You for That.

A hen trod on a duck's foot. She did not mean to do it, and it did not hurt much. But the duck said, "I'll pay you for that!" So the duck flew at the hen; but as she did so, her wing struck an old goose, who stood close by. "T'll pay you for that !" cried the goose, and
he flew at the duck; but as she did so her foot tore the fur of a cat who was just then in the "IT "I'll pay you for that !" cried the cat, and he flew at the goose; , but as sne did so her tai "I'll pay you for that?" cried the sheep, he ran at the cat; but as she did so, her foot hit the foot of a dog, who lay in the sun.

T'll pay you for that!" cried he, and he ran old cow, who stood by the soate. " "I'll pay you for that!" cried she, and she grazed the skin of a horse, who stood by a tree "'ll pay you for that !" cried he, and he ran
the cow. What a run there was! The horse flew at the cow, and the cow at the dog, and the dog at the sheep, and the sheep at the
cat, and the cat at the goose, and the goose at cat, and the cat at the goose, and the goose a
the duck, and the duck at the hen. What a noise they made to be sure who lad the care of them; "I cannot have this noise. You nay stay here," he said to the hen.
But he drove the duck to the pond and the goose to the field, and the cat to the barn, and the sheep to her fold, and the dog to the house,
and the cow to her yard, and the horse to his stall.
"I'll pay you for that!" said the man.-
Josh Billinges tells abott the goshin.
The goslin is the old goose's young child. They are yellow all over and az soft az a ball of worst $d$. Their foot iz wove whole, and they kan wim az easy az a drop of kastor oil on the wa
cr. They are born annually about the 15th o May, and never was known to die natrally. man should tell me he saw a goose die a natafter that, not even if he swore he had lied about seeing a goose die. The goose are differ are said to grow weaker and wizer, whereas roslin always grows tuffer and inore phoolish. have seen a goose that they sed was 93 year one that was only 17. The goslin waddles whe he walks and paddles when he swins, but neve dives like a duck out of sight in the water, but
only changes ends, The food uv the goslin it rye, corn, oats and barley, sweet apples, hasty
pudding, succotash and biled cabbage, cooked potatoze, raw meat, wine, jelly and turnips, stale left over. They ain't so particular az sum left over. They ain't so particular az sum
pholks what they eat, won't get mad and quit
if they kant have wet toast and lam chop every morning for breakfast.
"Flick."-A correspondent of the Journal of Elucation thus relates her experience in at upon her dog "Flick:" "After a few seconds she wrote as follows: 'Flick is a pretty little dog, with a face like a monkey; bright eylls them bright eyes-roguish eyes, my sister calls them,
he has a little tail.' Here Mary's ideas became somewhat confused; she wanted to say something more and yet she could not think of any-
thing. Finally she continued: 'Tlick often runs to amuse himself at the minister's house.
He has gone there to-day'-and at this place He has gone there to-day'-and as this place
the child, having read her composition aloud, deliberately laid down her pencil, closed her
copy-book, and folded her arms. 'Well. Mary,' copy-book, and folded her arms. ' Well. Mary,
said I, have you finished?' 'All, shc replied, in the most inuocent manner, 'I can't finislh my
composition; Flick has not cone back; we must wait until he returns.' The reason appeared to me so comical that I could say no more.


Good HEqLTH.
Antidotes to Strychnine.
Editors Press:-I have just read an item copied into your paper that coffee is an antidote for strychnine poisoning. Like a great many other items of the kind that go the rounds o the press, the remedy seems very nice until you come to test it. Only a few days ago a miser-
able woman, wishing to rid herself of an incurable disease and a drunken husband at the same time, took a large portion of strychnine in a cup of strong coffee. She died within 20
minutes, and before a physician could reach her. Perhaps the best immediate remedy would be so empty the stomach with a strong solution of
salt and mustard, or sulphate of zinc, after the poison is absorbed, which takes place very pasms, also a few drops internally, with chloral hydrate. Bromide and iodide of potash are
used as antidotes. Sweet oil and other oils used as antidotes. Sweet oil and other oils taken freely are popular remedies, and possibly
do good by preventing the absorption of the do good by
strychina.
Santa
Santa Cruz Cal.
Hints on Finger Nails.
Hall's Journal of Heatth gives the following hints on the care of the finger nails: The coly any of aood nor should the nails be scraped with peuknife or other metallic substance, as it de$t$ length give them an unnatural thickness. Most persons are framiliar with those troublesome bits of skin which loosen at the finger
nails; it is caused by the skin adhering to the nail, which, growing outward, drags the skin long with it, stretching it until one end gives way. Io prevent this, the skin shou with a knife or scissors, but with something blunt, such as the end of an ivory paper cutter; this is
best done after soaking the fingers in warm water, then pushing the skin gently and slowly; craping the nail with a knife at a point where it emerges from the skin.
Biting off the nails is an uncleanly practice.
Children may be broken of such a filthy habit by Children nay be broken of such a filthy habit by causing them to dip the ends of their fingers
several times a day in wormwood bitters, withont letting them know the object; if this is not
sufficient, causc them to wear caps on each finsufficient, cause them to wear caps on

Paralysis Caused by Cosmetics.
One cause of acquired deformity is the slow poisoning of the system by certain metallic poisons. Chief among these are the salts of ead, and one of the most characteristic cleform-
ties produced is what is commonly known as "wrist-drop," caused by the use of "Bloom of use of cosmetics has within a few years become
very common, even among the better class of very common, even among the better class
society, and as most, if not all of them, are in this report, I have deemed it my duty to place these cases before the profession, that nowing their injurious effects, they may guar themselves through ignorance.
This defornity, incompletely developed, can
be seen every day upon the streets of this city, be seen every day upon there is many a fashionable lady who suffer from it in consequence of her own folly. Her position, a sort of kangaroo style, and many fancy that they are imitating the fashion admir ably, while they are simply obliged to carry
their hands in this position because the extensor meir hands in ths position because the extenso Thesces are not strong enough to hold them itself in producing partial paralysis of the ex has been introduced to accommodate the deform-ity.-Dr. Carbally.

Hair Tonic.-A Tribune lady says of the to clog the pores of the scalp; but if some smoothener or glossifier must be applied, lak cologne The following often proves beneficia when the hair falls out or is of weak growth
Hair tonic) Quinine, ten grains; tincture of (Hair tonic) Quinine, ten grains; tincture of cantharides, one drachm; bay rum, two ounccs; glycerine, one ounce; rose water, four ounces. brushing the same. Ladies would have les trouble with their hair, and conplain not so
ten of headache, if they would allow the same to grown aturally, aud uot be always drawing it over their heals as if to pull it out by the roots.

Gunpowner Marks.-Says the London Lancet: Smear the scorched place with glyceriue,
by means of a feather, then apply cotton wail by means of a cather, the discoloration was very great, the patient looking more like a mummy tian a living being
It entirely subsided in month by the abov It entirely
treatmont.

## Domestic Economy

## Cooking Fish.

Clara Francis gives the Prairie Farmer, some timely hints on preparing fish for the table. In choosing fish one may judge of the freshness
by the full clear eyes, red gills, firm fins, and by the full clear eyes, red gill, firm fins, and is stale and unfit for food. For boiling, bak ing, or roasting, a large fish is to be preferred,
while the smaller ones are better calculated for frying or boiling. The fish should be thorquickily in cold as soon as possible; rinsed on the inside, and laid in a cool place until time to cook.

To Boil Fish.
If it is large, and you do not number a fish-
kettle among your lour a napkin and place the fish in it, fold the edges, and baste them together, being careful that only one thackness of cloth passes around the fish. Place it in a long pan in which put a to each to each pound; add salt, parsley, and celery,
and cover all with cold water pan over the top and bring the water to a boil then push the pan to the back of the stove where it will simmer very gently until the fish is done, which will require, after it begins to
boil, about six or eight minutes fo of fish, according as it is thick or thin. I salmon is to be boiled, follow the above directions, using hot instead of cold salt water; otherwise the color would not be preserved.
When the fish is done, let it drain for a few moments, then place on the fish-platter, and
over it pour a sauce made as follows:

Mix half a Bechemel sauce tablespoonful of flour; aucepan on the fire, and heat until it bubbles, stirring constantly; then add by degrees a pint
of rich milk, or better still, part cream and rich milk, or better still, part cream and
maile. Stir until it boils; remove it from the fire and beat in briskly the yolks of one or eggs and another half tablespoonful of but Return to the fire for one or two minutes ver the fish, and put the remainder sauce sauce boat in put four aner into sauce boat. Have ready four eggs boiled hard,
the whites and yolks chopped separately, and arrange the chopped eggs over the top of it in
diagonal rows-alternatiug the colors-of about an inch in width. Put a little bunch of parsley or a slice of lemon in the mouth. The head
and tail should be left on any fish that is to b served whole

## To Bake Fish.

Rinse the fish in cold water, wipe the inside dry and fill it with stuffing, then sew up the very little hot water. Melt a teaspoonful of butter and auoint the top, then sprinkle lightly with salt and pepper and lay over it a few
strips of salt pork. Bake in a hot oven, and baste very often; when done, serve with the gravy from the pan, poured over it, and have
Worcestershire, or some pungent sauce, so that $\mathrm{e}^{\text {acll }}$ one may season to taste.

Stuffing for Fish.
Chop a small onion and fry it in a tablespoonounces of bread crumbs, a tablespoonful of vater, pepper, salt, and a little chopped parswater, pepper, salt, and a little chopped parsfire and add the yolk of a beaten egg. If the bread is very dry it can be soaked for a few mo-
meuts in cold water, then squeezed dry and thie water omitted from the recipe.

## To Broil Fish.

Split the fish down the back, and rub it over e clear that can be turued without disturbing the fish. When done, slip it into a hot platter, and sea on to taste with pepper, salt, and melted butter; sprinkle some chopped parsley
top, and garnish with sliced lemon.
To Fry Fish.

Split the fish down the back, season with pepper and salt, and dust it with flour, then fry it in a little salt pork drippings and butter, in a ripping pau or a cake gill and dip each the into into squares, season well, anumps and inmerse he pieces in boiling dripuings, which should be very hot to prevent the fish from absorbing the

## srase.

Cabbage Salad.-Procure a head of nice, risp, white cabbage; cut it up very fine, as smal use the outside of the celery for this purpose, as it is nearly as good, the chipping taking the place of the crispncss, while the iuside is so
ice by itself. Mix all well together and place in a salid dish. To the yolk of onc boiled egg (soft boiled is the best in my opinion, but it is cooks), blended with a tablespoon of butter, ne-half teaspoon of unmixed mustard, a teaa cup of good vinegar. Blend smouthly and a cup of good vinegar. Blend smouthly and course you will require double this quantity of been prepared. I use butter in place of salid or olive oil, as I prefer it

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## SAN FRANCISCO: Saturday, March 30, 1878.

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## NEW ADVERTISEMENTS.

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Washington Irrigated
,

D. N. Mawley, Agent, S. F.; Important to Farniers, J,
Clark, N. Y.; MeCormick's Reapers and Mowers, Farruu-
er's Union, San Jose. Cal.

The Week.
As we write, the rain is rattling dowu upon the had learned some uew amusenent and was not playing the same old game, whtich began in
January last. All Califoruia has had a new illustration which bcar thousand-seeded capsules and insects which can count their offspring by the
million, if such there be, are but faint extravagancies of nature compared with the surplus
drops of water which are falling. No clearing
of the sky has been permanent. and the scrip. of the sky has been permanent, and the scrip.
tural will bring forth, seems to be eased of its appli.
cation, for no one has predicted rain without cation, for no one has predicted rain without
getting drenched soon afterwards. Even the disreputable old "Equinoctial" has taken two
shots at us this year, both of which may be disshots at us this year, both of which may be dis-
cribed as equally noxious. The time has come
when the more is cot the merrier, and sume When the more is not the merrier, and some
despairing farmers are beginning to think thcy
will be forced to find some plant as will be forced to find some plant as quick in crop this year on lands not yet seeded. But
such thoughts are far worse than the facts
warrant. Water is, of course, the warrant of our agricultural prosperity and no one loses
sight of this fact sight of this fact, no natter how ill natured his
innocent grumbling may be. No one quarrels innocent grumbling may be. No one quarrels
with the aggregate but with its lack of distribu.
tion. After all, the fiercest complaints are but the gentle longing of the nursery rhynnc-

Rain, rain go sway
Come again some other day.

## Uncle Sam's Savings Banks.

We are glad to learn from reports from Washington that the proposition for postal savings banks, which we described some weeks ago, into speedy operation. It will be a boon to the frugal citizen, who is now squandering what he desires to "lay away for a rainy dav," because
he is afraid that saving's swindlers will rob him of if he intrusts it to him. It will be a
ofessing to that other class of our inen of small blessing to that other class of our inen of small
means, who are carrying a few surplus dollars around in their pockets or locking it up in a
strong box, desiring to save, and yet braving htrong box, desirig to save, and yet braving
highwaymen aud house.lleakers rather than
take the chance of bank-breakers. The epi take the chance of bank-breakers. The epi-
demic of broken and plundered savings banks has passed over our country from one end to the
other and distrust is general. If now there be anytling safe, and anyone that is responsible for depositors' losses, our people must have it.
This desirable quality of safety and responsibil. ity does exis. Uncle sam should be presiden of our savings institutions. He is paying
interest on large sums. He is endorsed by about $50,000,000$ people. He should let us loan
our small savings to him, and give us all the our smal savings to him, and give us all the ing his favors for capitalists, native and foreign. deserved favor, henence we rejoice. It is true
that the cannot afford to pay us as large interest that he cannot afford to pay us as large interest
as men who have speculated with aud stolen our money heretofore, but he will give us some in-
terest and the sure return of the principal, and terest and the sure return of the
that is a good deal iu these days.
of postal savings bauks that it does not come to of postal savings bauks that it does not come to
us as an untried experiment. It has been fully and practically approved by the experience of deduction and that is overwhelmingly in its favor. It is important now to collect the results
of experience abroad. Take, for example, Great Britain. The postal savings systen in in Great Britain was put in operation in 1861, and was
called to life by an experience with rascality in corporate savings banks, quite like that we are now experiencing. Great Britain began in 1861
by receiving deposits at 300 post-offices, and on by receiving deposits at the first day opened account-ofices, wand on
itors. By the end of the first year the numberer of receiving post-offices was 2.535 and nore than
$88,491,105$, including interest accrucl, was held safe for the people. At the end of 15 years,
that is in 1566 , there were 5,458 post-offices that is in 1576 , there wcre 5,458 post-offices
receiving deposits, more than $3,000,000$ people had open accounts, and the amount of money
held for them was $\$ 41,911,750$. This enterprise was plainly for the benelit of frugal folk of each depositor was a little over sil.
There are other points which we may draw
rom English official reports on the which are very pertinent. A comparison is
nade between the losses by the old style savings nade between the losses by the old style savings
banks and by the postal system. During 13
years the loss through savings iucorporations was years the loss through savings iucorporations was
896,400 . Duriug 14 years the loss by postal savings system was $\$ 21,935$. The contrast is hightened by the fact that in the former case
the depositors lost the full amount named, but in the latter they did not lose a farthing, for the of its agents. The proportion of loss by the
postal system has been but one and oue. laalf cents on
o each $\$ 500$ deposited, and this loss, which the governmeut had to make good, was but as
nothing, for the profits from the postal savings ystem during the same length oi time, 16 years, was more than $5,000,000$.
Nor is the Britisl experience with postal
banks alone to be cited. The system has been banks alone to be cited. The systemn has been
successfully iutroduced in Italy, Austria,
Canada and New Zealand, and in France, Ger Canada and New Zealand, and in France, Ge
many, Belgium and the Netherlands, some
the English the EEglish ideas have been put in successful
practice and the full system will be ere long practice and the full system will be ere long
adopted. The principles upon which it rests
are sound, are sound, and the plau of putting then into operation gives the people many advantages
over the old system of depositing savings. In
ond the first place it is as safe as, the Government is enduring. It is convenient. Offices scat-
tered all over the country do away witle the extered all over the couutry do away with the ex
pense and trouble to which rural depositors are
subject in sending their saving to the cities deposit. Money dcposited in one oflice nay be drawn out at another, so that the depositor,
when he wishes to when he wishes to go away from home, need
not carry coin or drafts, but can put his bank book in his pocket and draw out his money here
nd there as he necds it and there as he needs it. The system of postal savings banks, as pro-
posed in this country, has all the advantages which have been demonstrated in the British system and some others. It provides for allow.
ing depositors to turn thcir funds into national
securities when they desire wishes to become a bondholder he can do so as soon as he has saved 810 , as the denominations
of the new $3.65 \%$ bonds will be made small for this purpose. He can accumulate these small
bonds until he reacles $\$ 500$ and can theu exchange them for a $\$ 50004 \%$ bond, thus gaining much higher than have been given to British depositors, for they have been paid ouly $2 \frac{1}{3} \%$.
We believe the making of thousands of our frugal and small-moneyed citizens creditors o
the Goverument will have a salutary effec
upon the upon the quality of their citizenship. It will
lead them to study more closely the financial
condition of the country because they will hare
a more direct interest in it. It will make them a more direct interest in it. It will make then ment and to understand all influences which
affect it for good or evil. It will do away with part of the depressing effect of a debt mainly
held abroad and will do more to make a national debt a national blessing than it hase ever before bcen shown to be by the most zealons theorists voter, with a deposit in the lands of tho Gov ernment, be it never so small, will feel a direct
interest in guarding the integrity of the Govinterest in guarding the integrity of the Gov men to frame laws and regulate expendiatures.
The whole theory and practices of the pootal savings systen are such as we earnestly apsmall, may woon have che enjoyment of the safety and profit which its introduction prom-
ises.

Fine Thorocghbred Sheep. - Wo had the pleasure the other day, of looking over the fine fock of pure-blood Spanish Merino sheep owned by E. W. Woolsey, and kept on his ranch adBerkelcy. We never snw a cleaner, bettcr formed and finer fleeced lot of sheep. There good part are young ewes and rams of gratify ing sizc and vigor, and showing all the points
iu forn and flecce which their imported ancestors possess. Indeed, in point of growth the age which have come from the famous Fister age which have cone from the famous Easter
Hocks. Mr. Woolsey has a great advantage in
the lation of his stock from other sheep. This i connection with his intelligent care and watch
fulness, gives him an absolute freedom from scab aud other diseases inparted by contact The sheep are in clarge of Win. E. Woolsey,
sou of the proprictor, a young man of education and with practical experience as a flock master Shearing was going on at the time of our
and we had the opportunity of looking
num
high class, of silky texture, fine as defect staple is even, and shows weakness, for the stock has been kept evenly
growing, in spite of the dry season which the year's growth of tleece had passed through. The shearing had only included a 8 mall portion of
the flock at the tine of our visit, but we took the weights of the fleeces of a number of young They are as follows 22 Itse; ; $20 \frac{1}{2}$ ths ; 21 ths.
 average lleece will not be far from 18 ths. We were pleased to see such a ${ }^{\text {a }}$ promising lot o
young thoronghbreds as Mr. Woolsey has, be cause the needs of our State, in this year of
abundant feed and of reduced flocks, will be great. There will be demand for improvement
on all sides, and we expect all our breeders of on all sides, and we expect all our breeders of
tine sheep will find their surplus readily taken.
The Debris Question.-This question came up in the Assembly on Monday and Mr. Ostrom's bill to regulato the practice of mining, so as not to iuterfere with farning lauds was indefinitcly postponed by a to adjustinent of difliculties by this Legislature. When the subject was up, Speaker Berry, of Sutter county, made the faid it was a principle recognized among eren laalf civilized nations, that one man should not use his property to the danage of that of
another. This bill was not to prevent the working of a single mine. It inerely said to those the farming district : (ientlenen, you must preent this damage. it is from them that the
damage comes, and it is for them to find a solution for it. The miner asscrts that this bill is a is so, as both the miner and the agriculturist drew their title from the general Government, it might perhaps be equitable to appeal to the
ceneral (jovernment for a remedy. If miners were to claim that the Sierra Nevadas were a vein of solid gold, still they would have no gronnd. They were desolating and making a lands in the State. He would leave the matter of dollars and cents out of consideration and a right to destroy him to aggrandize himself? He pointed to a calamitous future if some remedy was not applied.
Century Plakt Wanted. - We have a letter from a friend in Philadelphia, expatiating upon the advantages it would be to have a "Califor
nia century plant" in full bloom at the permanent exhibition at Fairmount park, and asking us to request some reader to donate one. uncertain busiuess to send one and let the ex. position wait for it to bloom. If one which
showed signs of blossoming should be dug up and sent 3,000 miles by rail, we are quite sure Philadelphia. Besides, who is going to pay the hig freight bil on such1 a package, and eesides
that there are already plenty of agaves in the
Eastern green-houses and their blossoming is

## Quepies and Replies.

Bisulphid and the Squirrels.
EDitors PrEs8:- I thlnk Prof. Ifilgard well worthy the
gratitude of all cultivators on this coast for hls sumestlo of sulphuret of carbon as a squirrel externinator. Now,
let some wide-awake man nanufacture it cheap and pui it some wide-awake man nanufacture it cheap and put
in market at a fair price and his fortune is absured.
After trial I believe there is nothing more effectlve. is easily a
well done.
Cruz counis.

We are glad to receive this approving experience with Prof. Hilgard's remedy, and we think the manufacture of the material at a low esults accumulate. It would be s safe business venture and many people are on the lookout for such chances. By way of strengthening the which the Enterprise gives as Benito
Canfield procured a pound of this liquid for th purpose of experimenting on squirrels, and th result so far exceeded his expectations, that he out destruction in small doses to all vermin on his farm. The article can be sold here at about for from 35 to 40 squirrel holes." His method of application is like that described by Prof and February 16 th

## Legal Fences.

EDTrors Press:- Lis a barbewire feence a legal fence, and
if not, what is a legal fence? If fuild one-hall of me ine fence, can I compel my neigh
lalf?-QUERKT, Paso Robles, Cal.
Some of these questions are now before the Legislature. A bill was introduced som ion fences. It proposed to makeject of diri legal fence, and provides that in lawful fences the top board or wire shall be five feet from the ground. This bill is still pending, unless some action on it has escaped our notice. The build ing of division fences is, under certain cond tions, made obligatory upon both parties by the more persons own land adjo closed by one fence (in certain sphich is in ties) and it bemes necessary for the coun tion of the rights and interest of one party tha a partition fence should be made between them
the other or others, when notified, shall proceed to erect or cause to be erected one-half of such partition fence.
given in writing, or after determination of the party shall fail to proceod to erect, * with in six months time thereafter, one-half of such fence, the party giving the notice may procee by law one-half of the cost of such fence from the other party, and shall be a lien upon the land thus partitioned.

隹 172 of the statutes of California, 1875-6.

## Aristolochia Callfornica

EDitons PrRss:-1 sent you on tho 20 h from Penrya a box contaiuinks.-1 stent leavera nd ha flowers of a a woony wine
new to me. It was found near a granite ledge, sheltered y trees. The school chlldren at Penryn called my atten-
tion to it. Tbey would like a name for it. The only vine tion to le. Tbes would like a name for it. The only vine
I saw was about as thick as my little finger, and six or
seven feet high, elinging to the branehes of a tree.- J .
Roarks, Auburn,
G. W. G. Harford, Dircetor of the museum of the California Acalemy of salifornica, "Dutch man's Pipe." He recognized it easily because imen was in bad condition. It is not well to crowd a fresh plant into a box when scnding for identitication, because it dies en route and be-
comes a shapeless bundle of brittle rubbish. Specimens should be pressed as soon as gath ered under a weight, changing papers until they
are dry. If they be shrubs, take a smail bras and with leaves and blossoms. If herbace roots and all. $\qquad$
Spent Hops as Stock Feed. - We read in the London Farmer that at a meeting of the Sandershausen Society for the Encouragement of Agriculture, held at the close of last year, Herr Kleemann stated that he had long been in the habit of feeding the spent hops from his brewery to his live stock, with excellent results. An analysis of such spent hops Prof. Maercker,
undertaken at his instance by Pred
showed their average composition to be as fol-lows:-

4.90
Q 18
16.27
27.20
45.17
4
$\overline{110.000}$
This does not differ greatly from the analysis of goo hay, and farther, in a practical way, to determine the best way to feed the material,
and with what other substances it is best to combine it in feeding.

Os File.-"Transplanting Evergreens," J.
I.; "Save Yor Rain,"M. P. O ;"Rose Cul-
ure,"G. E. C.; "Floriculture,"W. C. L. D.;
Improvements on Roberts Island,"O.; "Clear-
ing Land," L. J. D.; "Inexhaustible Sorts," E.

## The Rural Press.

Our edition this week is 3,000 copies larger than usual, and our paper will doubtless come into the hands of those who are not acquainted with our work. To such we would say that the Rural Press is the recognized exponent of the agricultural interest of California. Aided
by an able and wide awake corps of contributors residing in all parts of the State, we are enabled to present in our columns each week a compen dium of all the latest improvement in the agri cultural practices and policies in California, and to keep all our readers well abreast of the rapid progress which our agriculture is making. Ou journal is, so far as it is within our power to make it so, high in its aims, pure and ennobling $n$ its tone, fresh and inviting in its manner, terse in its style, comprehensive in its grasp, and true, as we conceive the truth. But w need not press our own lips to our bugle. Our friends, who have known us for years, can best encouraging words which we are weekly receiv ng, we select a few which touch apon differen eatures of our work

I am pleased to notice that the Press is con inually increasing in interest and useful infor mation. It is now the recognized medium for th out the State."-James R. Hebbron, Monterey County.
"I always want to thank you for the good
work you are doing, and I would like to tell you how we enjoy the crisp editorials."-Mrs M. J. Locke, Santa Cruz Count
"The Rural Press should be read by every farmer and gardencr on the Pac
H. Dunlar, Stanislaus County.
H. Dunlap, Stanislaus County. as that of an old and tried friend. We find it ndispensable in the garden, orchard, stockyard on! May the greatest success attend you."-R D. Nunnally, Siskiyou County.
"We would like to be considered life members of your great family. We should feel as though we had lost a dear, dear friend, should the Roral cease its weekly visits to our hou
Mrs. Lizzie Bowman, Alaineda County. "The 'Home Circle' of the Rural brings each week to our own, the cheer of grateful companionship and the knowledge of interests
and aspirations in common to bind us loyally to and aspirations in common to bind us loyally to
ench other. Who of us would not feel bereft each other. Who of us would not feel bereft ruptcy that seems epidemic all over the country The very thought calls each of us to the fore
in its support against such a possibility, and the assurance of its prosperity steals over us with a weet sense of security."-Mrs. C. I. H. Nichweet sense of security.
Irrigation and Crops.-The following remarks on the effect of irrigation on the growth of crops and the increase of the fertility, are made in the governmental report on irrigation irrigation projects are being carried forward. Where water has been available from rainfal or irrigation, and the cultivation intelligently conducted, remarkable crops have been gathred, reaching from 50 to 80 bushels of wheat per acre, and as many as five crops acre per year. It is on record that in the San Joaquin valley two crops of barley, each averaging over 40 bushels per acre, were grown and harvested it 245 consecutive days. alone which will be filled with people; the valley of every stream with part of the water which will subsequently reach the lower lands. This great basin should in 20 years become the granary of the world.
The effects of irrigation will be permanently of irrigation will be cause, when the soil once becomes quire the application of less water quire the application of less water thorough and comprehensive sysreadily adopted the waters could before the first rains to soften the ground and make it fit for the plow. In fact, the whole method doubtless be modified, and it is look forward to of probabinity look forward to an average of two crops a

Dairy Apparatus.-We have received a copy of the illustrated price list of Jones, Faulkner \& Co., of Utica, New York. This is one of the leading firms engaged in the manufacture and sale of dairy apparatus at the East, and their
list shows all the latest devices which Eastern dairymen employ. We are personally acquainted with the members of the firm, and can freely recommend them to dairymen needing improved ments of their goods to this coast from time to
ment time.

## A New Portable Cider Mill.

The accompanying illustration represents a portable horse-power cider mill, mounted on wheels for convenience in moving from farm to farm, lately invented by Sikes Bros., of East
Otto, New York. This mill can readily be Otto, New York. This mill can readily be driven to any point where the fruit may be, or
where it is to be operated, and by the simple application of the brake is fixed in position, and is made ready for use by merely unfolding the leading pole, which is attached by a brace t the draft-sweep and fastened by a lock pin
supplied with fruit with the greatest facility. The step-ladder is thrown
when the mill is in transit
The entire weight being 2,200 pounds the The entire weight being 2,200 pounds, the mill can be easi y moved from place to place by essary that it should stand level, as it will operate as perfectly on uneven ground.
We are assured by Sikes Brothers that the capacity of the mill is 100 or more gallons per hour, by actual test. The first, or experimental mill, made nearly 1,000 barrels of cider last
fall, although not completed in season to do fall, although not completed in season to do
what it might have done, and gave perfect sat-

the cinchona tree.
ime. One small horse affords sufficient power The overhung shaft, by which the grater is does not in any way interfere with the operator either in supplying fruit to the hopper, or conveying the cider from the press. The pomace,
as fast as grated, drops from the hopper to the as fast as grated, drops from the hopper to the
curb placed beneath, which has a false bottom
isfaction everywhere. We have seen numerous
testimonials from New York farmers who used the mill last fall, and it seems worthy of at ention in all neighborhoods where it will pay
man to make cider by going from orchard to a man to make cider by going from orchard to orchard, or where the growe
to keep it going for himself.
The Rescllt of Contention.-How prone


SIKES BROTHERS' IMPROVED PORTABLEE CIDER MILL supported on a track below both grater and press, on which track, the curb when
instantly and easily moved under the press Intantly and easisiy moved under the press the entater, grating and pressing proceeding at
the same time and without delay. The exhausted pomace is removed from the curbs by loosening the hoops, to which the staves are bolted, which fastens with a clasp. The bed, or bottom, of the nill, inside the outer frame, is inclined toward a central channel or gutter, with exit spout at one side, through which th A step-ladder, hinged to a platform
A step-lade opposite the exit to a platform on .th side opposite the exit spout, affords easy ac
cess to the platform from which the hopper i
we are to profit by other's misfortunes. How analysis analysis analysis
differen 21 lots of beets grown in 10 highest is five of the lots is over $10 \%$ the average over $5 \%$ and the remaining 16 lots begin with and we hope farther experiments will be made this year. It is worthy of note that North Carolina has one of the only two regularly equipped agricultural experiment stations in the United States. This is a rebuke to other rich and progressive States-California among the number
The workingmen, at a late meeting in Vir ginia City, tended James G. Fair the no
tion for U. S. Senator, which he declined.
nnany times have we lined lawyers' pockets with
substance over which we have contended with deadly hate. Here is a story with a moral, which we gain from a Sonoma county exchange 'J. B. Jacobs, Jr., went over to Little Sulphur creek, last week, for the purpose of fishing. Near ing the stream he saw a peculiar commotion in tho water, and on closer exainination discovered two large salmon in mortal combat. Taking part in the fight with his spear, he landed both, and as proof of the earnestness of the combat bore ugly wounds received from each other. They weighed ten pounds each."

## A New Colony in Fresno County.

An interesting announcement is made on the following page, of the Washington Irrigated Colony, just opened for settlers. Some time ago we described a visit which we made to the Central Colony of California, near Fresno, and expressed our agreeable surprise at the evident marks of prosperity everywhere displayed and the general feeling of satisfaction expressed by the colonists. Here was a colony of 4,000 acres, divided into 20 -acre lots, and sold, with water for irrigation, at $\$ 1,000$ per lot instead of $\$ 700$ per lot, as in the Washington colony, and yet the lots were all sold in a surprisingly short period, and what a few brief months before was
only tenanted by wandering bands of sheep, had only tenanted by wandering bands of sheep, had
been converted into a populous community of farmers, with happy homes, apparently surrounded by every element of success. The desert had It de been made it olossom like wonderful ve getable growth produced in this warm climate by the abundant and judicious use of water, where the soil is adapted to irrigation, as is peculiarly the case in this region. farms well tilled," and we believe the of "small will realize the truth of our oft-repeated conviction that a small farm well cultivated will yield a greater profit, with far less trouble and effort, than large unwieldy ranches, where so much lahor and money is necessarily wasted for nought. We cannot too strongly urge the wisdom and
economy of this policy of small farms upon all new comers who gain homes where water for soon builds up a populous community method soon builds up a populous community, giving
the farmer and his family the refining influence of society, with its schools and churches, so generally wanting in sparsely settled districts. We risk little in predicting a prosperous
future to colonists who have sufficient intelligence and practical common sense to avail them. selves of the advantages offered in fertile, wellirrigated lands. If prudent and industrious, they will succeed, and none other will succeed
anywhere. Some people are constitutionally so indolent or "shiftless," that they would starve if given a choice lot in the garden of Eden, with the world for a market. ©o succeed in farming,
as in everything else, requires pluck and energy, To all such a farm of 20 or 40 acres in this, a similar colony, ought to yield a handsome income after the land is fairly in production.
We are glad to welcome the Washington
Colony as a new enterprise and one in the Colony as a new enterprise, and one in the right
direction. It is located immediately adjoining the Central Colony, and is laid out and sold in similar lots of 20 acres each, though at a much less price and on more favorable terms to the
purchaser. The soil and location is purchaser. The soil and location is equally good, and the title to the land and water
unquestioned. The character of the gentlemen unquestioned. The character of the gentlemen having it in charge is a sufficient guarantee that,
everything will be conducted "on the square." everything will be conducted "on the square." From a personal acquaintance, especially with
Mr. J. Stratton, the president and generel manager of the colony, we feel sure he would never lend his name and influence to anything that he
did not believe to be fair and honorable, and we the more readily give the Washington Colony an approving word, because we have every rea-
son to expect that all pledges made to purch will be carried out in pledges faith. A noticeable will be carried out in good faith. A noticeable
feature in this colony will, doubtless, be the extensive cultivation of all the finer varieties of semi.tropical fruits, alfalfa and
kindred plants, to which the local. kindred plants, to which the local-
ity is admirably adapted, both by ity is armirably adapted, both by ises to be very lucrative. Joaguin valley parts of the San Joaquin valley, as in other parts
of the State along the river bottoms, malarious diseases prevail to
greater or less extent, we are assured greater or less extent, we are assured the vicinity of the colony, that nothing of the kind is ever known
there. On the contrary, the climate there. On the contrary, the climate and people esuffering from pulmondence there highly beneficial.
Sugar Beets in North Caro-
LiNa. - An ofticial report, which we have just received from Hon. L. L. Poik, Commissioner of Agriculture for North Carolina, gives the re-
sults obtained in growing sugar beets in an experimental way in that State during the last year. The chemist of the department, Dr. A.

## THE WASHINGTON IRRIGATED COLONY,

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unfallug supply of water at his conmmd, with which he can cover every aore of land at will, he ts sure of





 can be given, to how that a 20 -acre tot in the Washington Colouly
$\$ 500$ to the acre per annum.
The Washington Irrigated Colony contains orer 3,000 acres of land, of a deep, sandy soll of great for

ic plazas and squares. Every purchaser of a 20 -acre lot will be entitled to a town lot $80 \times 150$ feet, on making hls hast
 Terms of Sale.-A 20 -aere lot with a Perpetual Waler-Right for Irrigation, will cost 00 or $\$ 35$ ler acre

PAYABLE AS FOLLOWS ase, 30 montiny instalments of si2.50 each, and a final payment of a

No Canal 'Tax will be charged until September 1st, 1850, after which only $\$ 12.50$ will be charged to each 20 acres per annum, to keep the canais in repair.

The entire land of the Colony is nearly a perfect plain, slightly inclined to the south and west, so that every acre can be easily irrigated from the main eanal, entering near the northeast corner. For particulars, send for Maps and Cireulars.

## Breeders' Directory.

 OUR RatBe - Six lines or less inserted in this Directory al
bo cents a line per month, payable quarterly.

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BARRETTO \& CO, Downey City, Cal, breeders of
thoroughbred Jerseys. Bulls and Bull calves for sale. A. MAILLIARD, San Rafael, Marin Co., Cal., PAGEF BROTHERS, 302 Davis street, San Francisco, (or Cotate Ranch, near Petaluma, Sonoma Co.), Breedors of short Horns and their Grades.
R. G. SNEATH, San Bruno, Cal, breeder of Jersey
cattie. Has Jersey bulls for sale-various ages-at $\$ 40$

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L. U. SHIPPEE, Stockton, Cal. Importer and breeder or spanish Merino Sheep, Durham Cattle, Es-
sex and Berkshire Swine. M. EYRE, Jr., Napa, CaL Thoroughbred Southdown Lambs, $\$ 15$ eaeh
LANDRUM \& RODGERS, Watsonville, Cal. ImLANDRUM \& RODGERS, Watsonville, Cal. Im
porters and breeders of Pure Breed Angora Goats.

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BURBANK \& MYERS, 43 and 44 California Market, M. FALLOM, Rabbits, eotner Seventh and Oak streets, Oak land. Bronze Turkeys. Choice Eggs for Hatching
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hatching. MRS. L. J. WATEINS, San Jose, Cal. Prennium Pekin Dncks, et
A. O. RIX, Washington, Alanieda County, Cal.,
Breeder of Thoroughbred Poultry. Send for circular

## SWINE

ALFRED PARKER, Bellota, San Joaquin Co., Cal, Importer, Breeder and shipper of Pure Berkshire Swine,
Agent for Dana's Catte, Ilog and Sheep Labcls. $\frac{\text { Agent for Dana's Cattle, Ilog and Sheep Labcls. }}{\text { A. J. TWOGOOD, RIverside, Cal, IImporter and }}$ J. M. KERLINGER, Eilis, San Joaquin Co. Impor-

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sheep. Prices always reasonable. All animals sold are guaranteed as represented and pedigreed.
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Ten head of Red Durhams from 12 to 15 months old, Also, 12 head of large work horses and mares wil from Oroville, Butte Counte
Balls Sired by Golden Louan Duke.
M. WICK.

## W. \& J. ROBINSON,

Hanford, Tulare County, California THOROUGHBRED BERKSHIRE SWINE Pure Brown Leghorn Fowls. birds and eges for sale

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Large numbers of them are now in use on this Coast for Irrigating, Printing, Feed Mills, Large numbers or them are now in use on this Coast for Irrigating, Printing, Feed Mills,
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As a horse medicine it is superior to any liniment ever
 from thiree to five days iu succession, ald in four or five
days, if not cured, repat as at frst. SPRANs, STIFr
JoinTs, BRulezs, WINDosts, and als Joints, Bruises, Windoalle, and all slight ailments, apply a mall quantity so as not to blister. Saddle Sores, Cuts,
and all other sores where the skln is broken, mix the lin and all other sores where the skin is broken, mix the lin
ment half and half with any kind of oil, and apply

WILLIAMS \& MOORE, Proprietors, stookton, oal
 Calvert's Carbolic SHEEP WASH, $\$ 2$ Per Gallon. After dipplng the shecp, is use-
ful for prescrving wet hides, detul for prescrving wet hides, de-
stroying the rine pest, and for
whenet whatat dressings and disinfecting
purposes, ete T. W. JACKSOy s. F., Sole a jent for Pacific Coast.

BUCHAN'S
CRESYLIC SHEEP DIP CURES SCAB,
and all diskasme of the skin,
Buchan's Carbollo Sonps; Holman's Fever and
Ague Pad; Corks, Bottles and Soda Stock.
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struction is given in all the branches of an English education, and Modern Languages are practically taught. The
discipline is excellent, and its system of Actual Busines discipline is excellent, and its system of Actual Business
Practice is unsurpassed. Ladies
struction in all the Departments of the College for instruction in all the Departments of the College.
Tklegraphic Departurnt. - In this Department young men and young ladies are practically and thoroughly fitted for operators, both by sound and paper. For further particulars call at the College, 24 Post For further particulars call at the P. . HEge, HLD,
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tlon; Everybody wants it; best thing out for wzents State and county rights at low f fures. For fortioulare address W. W. FLETCAER,

## S. F. MaRKET Report

 not intended to represent the estat of
urday, the date which the paper bears.

Weekly Market Review.
DOMESTIC PRODUCE. ETO.
The face of trade is brightening a little The face of trade is brightening a little, and
nothiug but settled weather seems needed to
 for the coming great harvest must be laid in as
soon as possible, and this will make many our merchants busy.
The Wheat market holds a promising appear
ance well, and the European complications seem anco well, and the European complicationsseem
likely to usher in another year of high prices. Even if this should not cone, there are needs
enough now apparent to close ont old stocks and give a clear market to the new crop.

Range of Cable Prices of Wheat.
The course of the Liverpool quotation for Wheat to the Produce Exchange during the
days of last week has been as recorded in the days of last
following table:


Exchange cable quotations to the Produc Exchange compa
yeara as follows:

The Foreign Review.
London, March 26 th. - The Mark Lane Ex press' review of the British Corn trade for the
past week says: Some reaction in favor of past week says: Some reaction in favor o London were very moderate, is met with im proved demand at an advance of 1 s per quarter, ness is passing than of late in all varicties and the tendency of prices is is sellers' fav has been some Contiuental demand, which has tended to advance values for cargoes off coast.
It is probable France will
require 700,000 quarters of fine Wheat, for mixing purposes, between this aud harvest. Judging from the
dulness of trade at the close of the doubtful whether last week Monday's advance will be maintained, as arrivals of Wheat froin be on too large a scale to admit of much en-
hancement of values. France will probably relieve us of sone portion of the accumulate stocks in southern Russia; but, allowing for its
scarcity, it is likely the ordinary consumptive scarcity, it is likely the ordinary consumptive
demand will be sufficient to support present currencies. Some attention is direeted $t$ are worked down to a comparatively narnow compass, and a slight improvement in walue o Calcutta Produce appears probable.

The situation is unchanged and little basiness has been done

Eastern Graln Marketa.
New York, March 23d. -The difficulties nous reports from European capitals have had rather an uusettled effect upon the Breadstuffs market. Early in the week there was a firmer
feeling, but subsequeutly the price of Wheat feeling, but subsequeutly the price of Wheat
gave way 4 c to 6 c pr bushel- Spring closing at
$\$ 1.15 @ 1.30$ for inferior to choice, realizing to day $\$ 1.22 @ 1.25$. It is intimated that the sup
ply of Wheat to be released by the raising of ply of Wheat to be released by the raising of
the blockade of the Russian Black sea ports is smaller than at first represeuted, owing to the the great deticiencies of Western Europe will compel an uninterrupted drain upon Ainerican
cereal resources, whether the resnlt of the pres ent politicial complications shall be peace or warar.
Corn has also declined and the export demand Corn has also declined and the export demand
for Flour shows a marked decrease. Barley is worth 62c to 90 c , with continued exports to England.
have been var March 23d.-The Grain markots have been very irregular, unsettled and alter
nately higher and lower, active and dull. The nately higher and lower, active and dull, The down ward from an active and strong opening,
until there was a continual lower range, but the warlike runiors from England and Russia caused an excited feeling and higher rates, which were
not, however, fully maintained. Sales for

 45ı ct; Pork, $\$ 9.25$ © 9.30 , Lara,
Eastern Wool Markets.
New York, March 23d.-The general fea-
t ires of the Wool market are the same. The cautious policy pursued by buyers in the imme diate past is still followed closely, and though holders are not iuclined to place stock with who ever will take it, they are still anxious sellers to parties prepared to pay cash or to olfer gilt-
edged paper. This state of affairs will, without doubt, exist until manufacturers find a more
active market for their products as it is not active market for their products, as it is not to
be expected that they can afford at present to
stock their mills with raw material, thereby
locking up their capital. Many seem to think locking up their capital. Many seem to think
that farmers will again this year realize high figures for their clips, and they no doubt will, as ealers and manufacturers are keen to "bull" During the week offers have been made on a large portion of the Dary Crockett's cargo, and also on a large line of Oregon, but in both cases
the sales fell through. Transactions for the week embrace 61,000 tbs Fall California, at $13 \frac{1}{2}$ tos X Ohio Flee en ws XOhio Fleece, 422 c; 14,000 tbs medium un $36 \mathrm{c} ; 1,000$ lts scoured Texas, 32 c , and 84,000 ths Fall California, $13,000 \mathrm{tbs}$ Spring do, 2,000
Its Michigan Fleece, 3,000 Ibs Georgia, 15.000 Ibs Oregon delaine, 30,000 ths city super Yulled, and 3,000 ttos country do, on private terms.
Bostov
Bostov, March 23d--In Wool there is no
material change in prices, but there is still a material change in prices, but there is still a
gradual settling down on all grades, and last week's prices were more difficult to realize. There was ittle inquiry for fine Wools, as both
buyers and sellers are indifferent about opera ting. Trade generally has not been sout oull and msatisfactory for a long time. Pullcd Wools
met with a fair demand. Sales of the week comprise Ohio fleeccs, mediun, No. 1, X, XX
and above, at $42 @ 43$; No. 1 and X Michigan, $41 @ 42 \mathrm{c}$; fine Maiue, 40 c ; low No. 1 Fleece, 38 c ;
coarse Fleece, $32 @ 37 \frac{1}{2}$; Combing and Delaines, coarse Fleece, 32@3712c; Combing and Delaines, Combing, 21 e; Colorado and Territory, 19@33c;
Eastern and Valley Oregon, 20@33c; Texas, 20 Eastern and ralley Oregon, 20@33c; Texas, 20 @2cis Scoured, 3jot@ 80 c; Super and X Pulled,
30@45. Sales of California. Wool were the smallest for a long time, comprising for the week
only 144,000 Hts, at $15 @ 25 \mathrm{c}$ for Fall, and $18 @$ 29 c for Spring. Sales of Domestic for the week aggregated 921,900 ths.

Domestic Produce.
The following table shows the S. F. receipts non to-day, as compared with the receipts of previous weeks:

| Artichse. | $\begin{array}{\|c} \text { Weer. } \\ \text { Mar. } 6 . \end{array}$ |  | Wese. Mar. 20. | $\begin{aligned} & \text { Wexk. } \\ & \text { Mar. } 27 . \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Flour, qua | 26,084 | 21,275 | 82,866 | 30,257 |
| Wheat, centals | 45,804 | 73,671 | 150,825 | 111,493 |
| Barley, cental | 6,797 | 7,873 | 5,578 | 9.763 |
| Beans, zacks. | 2,853 | ${ }_{993}$ | 2,780 | 941 |
| Corn, centals | 2,293 | 4.558 | 4,438 | 7,203 |
| Oats, centals | 830 | 1,452 | 1,834 | 545 |
| Potatoes, | 21,743 | 14.189 | 13,350 | 19,173 |
| Onions, sa | 2,551 | 1,329 | 1,272 | 1,052 |
| Wool, bales |  | 136 | 125 | 29 |
| Hops, bal |  | 47 |  | 7 |
| Hay, bales | 1.191 | 1.511 | 1,8 | 1,5 |

BAGS-There is no change in prices, but the market for Grain Bags is reported strong and Ve hear of more than half a million Grain Bags sold to day for interior dealers in the San Joaquin and Sacramento valleys.
BEANS-Bnsiness in Beans is not large, sim-
ply for present requirements and about at last Week's rates. (weevilly) at $\$ 1.25$ and 200 Feed at Coast Feed ks Coast Feed at $\$ 1.25 ; 300$ and 900 kks Bay sks Coast Feed at $\$ 1.25 ; 300$ and 900 sks Bay
Feed at $\$ 1.30$, and 360 sks Chevalier at $\$ 1.80$ old at $\$ 1.20 ; 700$ sks Bay Brewing at $\$ 1.40$; 1,200 sks Coast Feed at $\$ 1.25$; 80 do Weevilly at $81.25 ; 885$ dark Chevalier at $\$ 1.50$ per ctl. Corn is far in advance. We note sales: 200 ctls White sold at $\$ 1.95$; 280 choice large Yellow at $1.60 ; 80$ large Yellow at $\$ 1.55 ; 60$ small Round 1.60;194 sks small Yellow sold at \$1.75; 500 ctls at $\$ 1.75 ; 430$ large at $\$ 1.55$, and 46 do at $1.52 \frac{1}{2}$ per ctl.

ODUCE-Butter is at the bottom everything. The finest can be bought for 22 c ,
ut there are some fancies for which 25 c is obtained, because the sellers know that customers will have it. The rank, wet feed is injuring the avor, and therefore Butter, generally, will not do to pickle, but must be worked off. Cheese
of different qualities is now arriving, and some different qualities is now
is sold as low as 13 c per th is sold as low as 13 c per th .
EGGS-Eggs are down bes

FEED-Corn Meal and Middlings are reduced年ftered by the millers. Hay and Straw. have ations are only during the week, and our quotering sales. We note sales: 30 tons Volunteer, 11; one cargo good Wheat, $\$ 17$; another do at FRUYT-The weight of the Los Angeles
Oranges is now believed to be in and the supply is short. Prices are now ascending. Other ruits are stationary
HOPS-Sales are only in small lots and the rade is wholly inactive. Eminet Wells reports the New York market for the week ending March 15th, as follows: "We have to re-
port a very quiet market this week. The receipts and shipments to Europe have been comparatively small and but little trade has vell stocked. We predict a quiet a quiet maromething should down to the crop, unles Angust, giving rise to speculation and higher prices." 0 "S-Oats are rather neglected. Prices re a trifle lower and sales are small. Sales for Oregon sold at $\$ 1.50$ per ctl Oregon sold at $\$ 1.50$ per ctl.
ONIONS-All kinds are dull, and have.
dropped to $50 @ 62 \frac{1}{c} \mathrm{c}$ per ctl. Oregons are still
at $90 @ 100$ per ctt. at $90 @ 100$ per ctl.
pOTATOES-Humboldts have advanccd
little. We note sales: 1,000 sks Oregon at $\$ 2.1$

better.
PROVISIONS-Beef is unchanged and the supply is adequate. The best quality Mutto is scarcer and higher. Pork is in light supply
and higher. The trade in Cured Meats is active, and higher. The trade in Cured Meats is active,
and large supplies are being laid in by consumers and retailers, because of the low prices which now prevail.
EGETABLES-The rule is a general cheap ening on green vegetables, as may be seen by
our list of prices.
VHEAT-The city market is firm. Receipt WHEAT - The city market is firm. Receipts
are light, and holders seem to have confidence iu the future. We note sales: $1,500,800$ and
$650 \mathrm{ctls} \mathrm{No}$.1 Milling at $\$ 1.95 ; 650$ at $\$ 1.921$ 1,300 ctls Smutty at $\$ 1.80 ; 1,300$ do do at $\$ 1.70$ Choice at $\$ 1.97$ Ship 360 ctls at $\$ 1.87$, aud $1,000 \mathrm{sk}$ $\$ 1.97^{\frac{1}{2}} ; 1,200$ ctls choice Stockton at $\$ 2$. $; 1,000$ ctls do at $\$ 1.95 ; 600$ sks Milling at $\$ 1.97 \frac{1}{2} ; 2$ 680 ctls choice Milling at $\$ 1.97 \frac{1}{2} ; 1,500$ ctl
Shipping at $\$ 1.92 \frac{1}{2}$ (alongside) ; $1,600 \mathrm{ctl}$ a $\$ 1.90$, and 1,000 ctls do at $\$ 1.87 \frac{1}{2} ; 1,000$ sks Shipping, \$1.921
WOOL-Sinall lot ing, but no sales har opring Wool are arriv prices quotable

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Ten, Twelve and Fifteen Foot.

## POINTS OF SUPERIORITY.

We have a new and improved self-adjustable reel, which we know to be superior to any Reel made. Those who have seen them pronounce them the best ever put in a Header. We warrant them fully.
All our Headers have the Patent Finger Bar; all have the New Style, Extra High patent wheels, 52 inches, all iron. They have the Center Pitman, which has proved far superior to the End Pitman for large machines; have the Loose Gear Spur Wheel, a very great improvement; have short, strong and well braced frames; patent tongue irons; well braced reels; improved belt tighteners; Reels driven by Belt; Balance Springs on Levers, the greatest improvement for balancing ever put on a Header.

We are the only firm in California who sell the Hodges' Header, and when compared with other Headers, will at once show their superiority. We have also, Hodges' 16 -foot Double Single Gear Header, Eastern manufactured, the best Headers of the kind ever offered for sale.

## Hodges' Case's Improved Header,

Made by A. J. Hodges' \& Co. There being some demand for tho Case Header, as formerly sold by Treadwell \& Co., we, last year, had A. J. Hodges \& Co. build a large nurnber of them, on which we had put in place of the objectionable features as built by J. S. Case, the many im provements of Mcssrs. Hodges \& Co. Farmers when comparing our Improved Case's Headers, nvariably givo it the preferencc in comparison with Case's own make.

The "California" Case IIcader, sold by us, has Lever Balance Springs, instead of weights, themselves worth fifty dollars on any Header, from the one fact of their securing a perfect bal ance, relieving the driver of any heavy strain, and greatly prescrving the machine. Also, the Loose Gear Spur Wheel.

We use the Patent Beveled Finger Bar, a great grain-saving featare. Wide belts, heavier and better braced frame, and many important improvements which we can readily explain by an examination of the Header.

## MARCUS C. HAWLEY \& CO..

## THE AVERILL MIXED PAINT,

Prepared Ready for Use, is the Best, Most Durable, Beautiful and Economical Paint Known.

As is proven by the numerons Medals received over all other Paints, as well as by thousands cf estimonials from those who have used and thoroughly tested it.

It is of Pure White and any Shade or Color Desired.

## AS A EIOUSE PAINT



It is the most perfect substance known, possessing unsurpassed beauty, great brilliancy of color, adhering firmly to the wood, and giving the richost, most agreeahle and uniform tints. It is equally as good for inside as outside work; over old work as well as new; in fact where any Paint can be used the AVERILL PAINT will be found superior to any other.
Houses painted with it are distinguishable for years by their superior brilliancy of finish, over those painted with any other paint.

## Our Wagon and Machinery Paints

From the fincst Vermilion, to the more common and cheaper colors, are specially fine, and being ready mixed, meet the wants of the public completely. Every person owning a wagon, or any kind of ma chinery, should occasionly give them a fresh coat of paint. It would add to the durability and appear ance of the articles a hundred times its cost.

## Our Metallic Paint



Comes the nearest to being actually Firc Proof of any Paint cver made. For T'in Roofs it has no cqual it being cntirely impervious to air or moisturc-rust or corrosion is impossible, while its use on shingle roofs not only fills up the cracks and prevents the shingles from warping, so as to prescrve the roof and prevent its leaking, but its fire proof qualities are such, that a roof thoroughly coated with it is nearly as safe from fire as if made of iron. This feature, together with its checupness, makes it most desirable for warehonses, bridges, mining buildings, and for all purposes where durability and fire proof qualities re desired.
por dealcrs for it and take no other. Sample Cards of Colors and Price List mailed free on pplication to
California Paint Company,
No. 329 Market Street, San Francisco, Cal.


Volume XV.]
SAN FRANCISCO, SATURDAY, APRIL 6, 1878.
Number 14

Jackson's Improvements in Threshing Machinery
One of our most progressive inventors and manufacturers of labor-saving appliances for threshing is Byron Jackson, of Wuodland, Yolo work, adding improvement after improvement, until he now has perfected a system of handling headed grain for the separator, which is fast superseding the old style of machinery and method. The feeding, which is the hardest and dirtiest work about the thresher, and very
damaging to health, is now eutirely done away with, and the balance of the work about the machine is light and clean when compared with the old way of feeding and pitching by hand.
Besides the gain in health and comfort, twicc as much threshing is done to the man employed. Tgreration lat ex aggeration, but the rant the truth of the make a crew for the new way and 18 for the old; 2,000 bnsh-
els, or 154 bushels day's work with the fceder and eleve the 1,200 bushcls,
bishels per man, is an
average day's work average day's work
when feeding and pitching by hand. And it is also claimed threshed cleaner from the straw and cracked very much less when
Jackson's Feeder is isel.
table and derrick shown in our cngraving have many arlvantages over the "high derrick table and selffeeder," among which
arc, lightness, strength and durability, consaved iu moving; absotablemen from being hurt by the forks, avoiding the delay caused by dodging the forks and giving inore room to spread. th by hand, as it is dropped by the forks so close to the end of the elevator that it slides on to it,
with but a slight pull of the "hoe downs" feeders). There is room for a man to staud by the "hoe downs." The labor is much that pass on the forkman, as the table is muly up to his waist, and it requires but a slight effort to kecp the fork from swinging under it. For this rea
son, with the low table, it is easy to keep th separator supplied with a full feed until entircly clcaned up, which it is impossible to do with the high derrick table.
It makes one's flesh crawl to think of clean ing, or the high derrick. The writer well re shovel the rakings from the stack bottoms and from under the separator, on to the table or ing back all over himer, and the dirty more fall for half an hour. In the new way this is all feet away from the separator, and the winl which favorable. These are all advantages ars, and will doubtless lead many of them to discard other costly machinery that was to A little study of the following figures, which are furnished us by Mr. Jackson, will show the

claimed for the improvements:

 | AY. | cost PER D |
| :---: | :---: |
| $\$ 4.00$ |  |
| 4.00 |  |
| 2 Engineer |  |
| 6.00 | 1 Fecders (w | Sorkerse Itabarers $\Theta$ es.

there rexpenses.
 16.00 All other expenses, \$63.00, 18 Men.
Taking the average out-turn of the new style as claimed above at 2,000 bushels per day, for 63 expenses, it makes the threshing cost about
hree and one-sixth cents per bushel. By contrast take the old style, turning out 1,200 bush els, at a cost of $\$ 73$ for labor, and the average
cost per bushel is six aud one-twelfth cents To show the amount saved each day by using the new rig we have only to compare the follow ing: 2,000 bushels at six and one-twelfth cents
per bnshel, amounts to $\$ 121.66 ; 2,000$ bushels, at threc and one-sixt cents per bushel, amount to $\$ 63$. This gives a balance in favor of th
new way of $\$ 58.66$ per day. new way of $\$ 58.66$ per day.

Tasmanian Grasses. - We believe that we have as yet hardly made a beginning toward the securing of the valuable trees and plants which the islands of the South seas can furnish us from its stores of indigenous growths. There is a sort of private international seed exchange now being carried on between our readers here and in New Zealand, which will, we believe, result greatly to the benefit of the two countries, and we hope that those who find the New Zealand plants desirable will give us notes of their experience with them, so that all may share the
benefit. We find in our Auckland the Weekly News, an article on pasture grasses, which deals chiefly with grasses imported from this country and Great Britain, but it gives a following in ligenous grasses proved well ad apted for cultivation: Great quagga grass,
kangaroo grass, blne grass, ratstail grass, blue

BYRON JACKSON'S FEEDER AND ELEVATOR, HORSE-FORK AND PORTABLE DERRICK.

California Canned Fruit Abroad.
The fame of California canned fruit is rapidly extending and in this specialty of our produo tion we have the world for a market. We read that in New Zealand the preference for fruit exported hence is so great that the manufac turers of the home-grown article somewhat ill uaturedly declare that if they were bit to plagiarize our labels and mark their good "Californian," they would find a much better demand for them. We would not force them into such counterfeiting, but we are quite glad that our productions are thus popular. We shall have large quantities to sell this year and the better the market the better for all con cerned in the production. There seems abundan
the countries and west of south Asia and the islands of the Pacific. Nor is
the trade elsewhere less promising. We lind the following note of progress credited to ent: "One is constantly hearing criti'Have you tasted the California peaches?' 'Yes, they are perthink the apicots are but bave you tried the apples?' 'Yes; but I think the pears are still more deliciols; and so on. every grocer's window, and pyramids of tacks bearing famuliar Caliornia names, and embellished with pictures on their paper covers,
of juicy, luscious fruits of juicy, luscious fruits that make your mouth
water only to look at them; stacks and pyrquickly disappear, to be repl"
This is the state of Snch claims based upon the practical working kangaroo grass, polly grass, dog tooth star trade which we would like to see indefinitely of the machinery are certainly worthy of at- grass, early spring star grass, oat grass, blue extended. We can furnish stock to weigh
tention. The results are vouched for by a number of threshers whose letters we have seen. Our engraving gives a good idea of the gen cral arrangement of the different parts of the
new apparatus, and the right number of new apparatus, and the right number of men
standiug in the usual positions for work standiug in the usual positions for work. Fur
ther iuformation can be had of Byron Jackson, ther iuformation can be had of Byron Jackson, of Baker \& Hamilton, who are the agents in this city and Sacramento.
Short-Horn Beeeders' Association.-The annual meeting of the California Short-Horn Breeders' Association will be held iu room 24 , Young Men's Christian Association, on Sutter street, in this city, at 1 P. Mr., April 17th. It
will be a meeting which will interest all breed will be a mceting which will interest all breed they may act together for mutual benefit. The Short-Horn iuterest on this coast is continually growing, both in the improving and extension of existing herds and in the yearly establishment of new ones. At the meetings of the association, valuable facts and ideas are always brought forward, and we expect this year's assemblage will surpass all which has preceded it. Let all interested attend.
Colonel Tom Scott testifies that the loss of property of the Pennsylvania Railroad Company, entire loss, including merchandise timated at $\$ 5,000,000$.
polly grass. Weeping polly grass. Several of these grasses were found well suited for hay, yielding four tons of hay per acre."
The writer gives no further information con cerning these grasses, doubtless becanse they would be of much interest to know more about them. Perhaps our frien Dr. Curl may find it convenient to send us specimens of these grasses, with notes conccruing their habits of growth, the soils on which they Hourish, the degree of moistnre required, ctc This would be a contribution to our knowledge which many would appreciate, and it would
doubtless lead to the introduction of some of doubtless lead to t
them for trial here.

Bermuda Grass.-Mr. George Rich, of Sacramento, who recently wroto us a short communication on Bermuda grass, says that he has received a dozen letters from readers of the Rural, from the hills above and the valleys beneath, and has just received a call from Texas. He has sent parcels of roots to all who have applied for it on their own risk and his stock is the durability of the grass such he expects to find plenty more soon. He has not succecded in rooting it out, and does not think even the draft of the voluminous correspondence which he has received will kill it.
down the tables of the world, if the demand but warrant the development of our fruit resources.
Wer and Dry.-If anyone thinks of complaining of excess of water and a defcrred spring time, let him also think of the feeling which an opposite condition of affairs would engender in the mind. And to refresh the memory on woes which are happily past in this State, let him ponder on the situation which existed in South Australia at the date of our latest advices. The Adclaide Oliserver, under drouth coutinues, In spite of tluctuations in drouth coutinues. In spite of fluctuations in
the thermometer, which have time aud again the thermometer, which have time aud again
inspired hopes of a downfall of rain, the weather is still hot and dry. Here and there the clouds gather and a sultriuess in the atinosphere, which is often the harbinger of change, is experienced, but nothing has so far come of them or it. The feed is now dried up, and although the mortal ity in sheep and cattle has so far bcen small the subsistence which is cked out of the parched pasturcs is at the best rather precarious. To make things worse, bush fires in the hills to the east and southeast of Adelaide, have swept over scores of square miles of country, destroy upon which stock has maintained its life." Surely no incouvenience or loss which we are experiencing this spring can be mentioned with that which would have bcen experienced lad a kind Providence denied us the bounteous rain.

## Cormespondence

## Improvements on Roberts Island.

Edrtors Press:-Koherts island, in the San Joaquin riwer, contains about 65,000 acres of land. Mr. M. C. Fisher completed the reclana21,000 acres, in January, last year, and immediately commenced destroying the dense growth of tules and plowing aud preparing the land for cultivation. Four thousand acres have been
sown with wheat, whicl has a fine stand and bids fair to make a large crop. The balance o the plowed land, some 2,000 acres, will be put in harley, other grain and root crops. The levee on this portion is made of sedimentary soil altogether, there being no peat on this por tion of the island. It has a uniforin width of five feet on the top, with a three to one slope on the water side and a two to one slope on the land side. Its length is 35 miles and is built up to a grade of three and a half feet above the
autumn Hlood of 1876 , which was an unusually high flood. All the material used in its construction has been excavated from the water side, that is between the levee and river. A
cross levee from Middle river to the San Joaquin divides the island into two districts, known as the upper and lower divisions. Mr. Fisher commenced work on the lower division in
August last, and since that time has nearly completed the reclamation work, having built 32 miles of levee, leaving only about a mile to
complete, aud having dammed no less than nine complete, aud having damned no less than nine
sloughs, some of which are very large. Whisky
sith slough, the one now nearly tinishel, is 204 feet wide and ta feet deep to hard bottom. In its The dam is 100 feet wide ou top, and, without
question, will lee the largest dam heretoforc question, will le the largest dam heretoforc
attempted in any tule reclamation on this coast. The evee on the lower division varies from five
feet to 25 fect on top, according to the character feet to 25 fect on tol, according to the character
of the soil of which it is composed and the soil of the soil of which it is composed and the soil
upon which it rests, the average width being a little ever 15 fect on top. When the work was
at its hight, $4,000 \mathrm{mcn}$ were employed, of whom at its hight, 4,000 mcn were employed, of whom
about 3,500 were Chinamen and 500 white nen, and 192 horse-scraper teams. As the work is now close upon completion, th
has fallen to about 1,500 men.

## Steam Cultivation.

In connection with this work, Mr. Fisher has each sct consisting of two traction engines, of 14-horse power each, with a plow-frame con taining I6 small plows or cultivators, capahle of plowing to a depth of nine inches and estimated
to plow 40 acres per set per day. Plow-frannes to plow 40 acres per set per day. Plow-franes
for deeper plowing can be used as circumstances for deeper plowing can be used as circumstance
require.

## San Franeisco, March 20th, IS

## Save Your Rain.

Edirors Press:--Five years ago this March I came into Santa Cruz county, and was told that they had had a wet winter; and many farmers had done but little seeding yet or but little plowing, although it was the last of March and the weather was dry and warm then. I asked why they were not pushing their plowing a little more, as it was getting late. The gen-
eral answer was, that there need not be any eral answer was, that there need not be any
rush, as the ground had been thoroughly soaked and they would wait until it dried out well, so it would plow nicely. The result of the matter was, that but very little land got just in that particular condition that they ealled nice for
plowing, for the continned hard rains in winter
had settled the clay soils pretty close had settled the clay soils pretty close, and by
the time it was dry enough to suit them the soil the time it was dry enough to suit them the soil
broke up in clods. They would plow ou for days, without harrowing or otherwise pulveriz-
ing those clods, that lay exposed to the sun and ing those clods, that lay exposed to the sun and
drying winds till they got so hard that the harwould only tumble them about without as they called it, ly dragging a log over the
ground sideways. This only served to sink the clods down with the surface, without pulverizing them but little, and only breaking some
into smaller clods, which covered the surface of the plowed fields, to be ready to cateh and absorb what little rain fell after the plowing and
seeding. The consequence was that those who seeding. The consequence was that those who
waited till spring to do their seeding, and did it
in that manner, had short crops, aud they were not a few.
and, instead season promises to be like that one, and, instead of waiting for the land to dry out,
plow it a little wet, and as soon as it is ury
enough to erumble well, harrow and dras it till it is pulverized. Then plow again, and follow up as before with harrow and drag, and don't
let the clods lie for days to dry out like lricks before you harrow,
Thave tried this plan and found it to work
well. If you have sun and dry winds, the har-
rowing and dragging hal better the done the rowing and dragging hal better he done the next day after plowing. In this way you caul
get the land quite mellow and save the mois-
ture, that would otherwise evaporate throngh
the clods. And now I will tell you how to make a "drag," that suits me better than a " " $\log$ " or a
roller, for ordinary farm uso: Take two pieces roller, for ordinary farm uso: Take two pieces
of scantling, four hy four, five feet long, and with a two-inch auger at equal distances. Then take four pieces of
the same sized scantling, frons six to eight feet long (according to the strength of your teain
and the evenuess of your land and tenou then to fit the holes in the other pieces and lay
eveuly on the ground. Cut the corncrs off so that they will be beanly round. Now, take two boards and nail them on to thic cross-poles, so as to strengthen them. Ou these boards you
can construct a seat for the driver, if you wish; or, if the conditions of the land is such that the driver's weight is too much, he can walk, or put
a less weight on. Having your drag ready for going, take a light chain, four feet long, with a ring on one end; put it around the outside
cross-pole, a little to one side of the center, to draw the drag by. This will make it run a
little "corner ways," which gives it a motion little "corner ways," which gives it a motion
that will grind the clods iuto loose earth in stead of pressing them into the ground, as the
roller does. It will even the surface, hy drag. ging off the lumps and filling the depressions. orchards, as it lcaves the surface smooth and soft, so that an apple may fall to the ground puts theing smashed to pieces on cloris. the growth of the trecs aud friit, which you ar not likely to obtain if your orchard is full of
hard clods. Let me say here, that if you will plow your orchard well in the winter and early spring, and finish with harrow and drag, you
will sce an improvement in them.
Soquel, Santa Cruz Co., Cal.
Application of Manure-Culture of Coast Hillsides.
Editors Press:-As the columns of the Re-
all Press are promising more information on the utilizing of straw piles, with the various
opinions already published, its readers are sure to be placed in possession of ideas that will lead them to try many profitable experiments; and when they have hit upon an economical plan of coverting into mamire the thousands of tons of
straw which are now annually consumed by fire straw which are now annually consumed by fire,
the next question will arise how can it be the best applied? The opinions will he as varied upon this, as on the former question.
Observation and experience have established with me ideas that will require much argu-
ment to change. I propose to view this subject from a nataural standpoint; nature mayy in
very many ways be assisted and promoted in very many ways be assisted and promoted in
her effort, but is in all cascs strictly true to herself. Hence she is a sure and safe gnide to go by. There is hardly a farmer of much ex-
perience in the State, but that is ready to ad mit that the less light, combustible matter that may be turned under ly the plow, upon upland in particular, the better will the crop stand the drouth,
I am not yet convinced, but that by burning the stubble atter stock have taken up all the feed,
the soil will receive as much fertility from the the soil will receive as much fertility from the
ashes as from the stubhle plowed under. This material requires about two years for thorough
decomposition and for early dry sowing, without plowing, I will take the nshes in preference every tinn.

Culture of Coast Hillsides
On the coast sections, where I only have experience, farners will soon learn they plow too
much, in partieular such winters as the present. This fact is observable with very many of my neighbors who dry plowed and plowed again
after the land was wet down and sowed just in in time to have the heavy rains fall upon the loose earth and young grain, carrying down
acres of the best soil and seed to the ocean, leaving the lillsides so badly furrowed as to
render the use of the reaperalinost unavailable render the use of the reaper alinnst unavailable
Summer fallowing in the interior is found nec essary to give the land a rest. In this, on the
coast, we have a very great advantage. We summer fallow by a rotation of crops, having weeds, that make so luxiriant growth on our deep, rich soil, etc., another to reclaim our land quality. Large and paying crops of potatoes, corn, heets, turnips and pumpkins may be
taken from our summer-fallowed lands, and by eareful hoeing and cultivating, the land so tharoughly eleaned from noxious weeds, is pre-
pared to receive the seed for the future erop pared to receive the seed for the future erop
long before the rains arriving. By thus sowing
early apon the vegetable land (plowing in most early upon the vegetable land (plowing in most
cases leing wholly unneecssary), the grain starts cases being whony umecessary, the grin sars
at the first rains, aud ere the floods are upon
youn your hillsides are so thoroughly swarled you, your hilstes are so thoroughly swarder
with deep-ronted grain, as to defy the waters of two such winters in one. This is evidenced
upon my hillsides under this system of cultivaupon my hillsides under this system of cultiva.
tion, where large shects of water swept down the stef deelivities over a luvuriant growt th of grain, pressing surage the carn, casing the surface wholy unbroken, the grailr rising again
when the water had found its level upon the bosom of the ocean.
Least you will charge me with digression,
will return to my subject, and finish in as few
words as possible. On all rolling land, sow
early whether you plow or not. Land sown
dry receives but littlo dry receives but little or no injury by the haul.
ing of heavy loads of mauure over it. Hall out the accumulations around your building verted straw under the various from the conmended iu the Press (first taking your choice of them), and if you save not cnough to cove si in wo judgurface, apply to such part reat for over the surface leaving no piles to nd if ever you plow under any inore manurc will he under very pecu
and such as are unavoidable
One as are unavoidable.
ice yexpernment uader this system will con hess of this theory, I will ask, what has don nore to fertilize the surface of this earth that nature, and does she apply her fertility any other way than upon the surface?
Half Moon Pay, San Mateo Co.

## A Ditching Machine.

Editors I'ress:-I witnessed, a few days ago, the practical operation of Austin's patent ditcher, which I think is a valuable machine, and ought to be used by many of our farmers, especially those who have heavy land. The litcher is a machine alout the weight of an ordinary four-horse farm wagon. It is very
simple of construction. It consists of a carriage rame which is supported a little back of the ceuter of gravity by two wheels, and in front by two castor wheels which freely turn in any direction, and being thns supported allows the use of a limber tongue to which the team is hitched, and by which the machine is easily turned and adjusted in any position. The
frame to which the ditching wheel is attached works inside the carriage frame. It is fastened on the inside at each end lyy grooved guides, in
which corresponding tongued guides, fastened Which corresponding tongued guides, fastened
on the outside of the inner fraine, exactly fit. This allows a free but steady elecration or low ring of the inner frame by means of a shaft and crank passing through the guides. On
this shaft two pinion wheels are fastened, which work into two cog plates. By turning the he inner frame, is lowered and raised into and out of the ditch.
The ditching wheel is a simple, plain whee made of wood, to which is attnched two sharp cutting, cast-steel Hanges, riveted to the sices the wheel four inches. The weight of the frame resting on the wheel, siuks the flanges into th ground, and, as the wheel revolves, it litts hy
friction and cohesiou the mass of earth thus pressed betweeu the flanges to the top of the
wheel, where it is thrown out from between the langes by a sharp scraper set on the frame nea the top of the wheel. The earth thus thrown out is thrown to either side of the ditch by lianting slicd. The wheel cuts to the depths of the flanges, each passing over the fround, and
by passing over the ground three times it will cut a ditch one foot deep and so on to one-half litch three feet deep and six inches wide, which is suitable for under-draining tile ditches, whic many of our farners have found to their ad-
vantage to inaugurate; the enhanced yield of grain fully paying the cost of tiling in one or two season. The machine works well and could
no doubt be inade applicable for leveeing and similar purposes. The agent informed me that he can cut a mile of ditch per day with for patentee is M. I. Anstin, of Teras
Anstin and H. M. Ioncs, the agents for this arranged as to cut a ditch two fect wide.
Santa Llosa, Cal., Mar. 27th.

## Floriculture.

## Hardy Shrubs.

Eminors Press:-The season for transplant hardy sliruhs in California being at hand faction.
Deutzia,-Very few plants give more satis action than the various inembers of this genus. D. Crenata fore pleno is the choicest. It was The flowers, whish are very donble, are of pearly white on the inner surface of the petals, The bush makes a strong and rampant growth attaining a hight of six to eight feet, when laden with its wealth of bloom there is no finer shrul in cultivation. D. Grazitis is a later introduc tion from the sane country, but of a dwarfer and more reine throwth, never attaning The flowers are snowy white. $D$. Scabra, which
also produces white flowers, is of an interuediate growth betweeu the other varietics namell.
Ilydrangea, paniculath grundifora, at the
present time, is the most popular shrub in culti-
vation, and not without reason; its long season
of bloom aud the great beauty of its flowers
make it au deservedly popular plant. The
flowers are borne in immense panicles, on open. ing changes to a rosy pink, finally turning to a rich
brown brown color. The plant is in bloom from July requiring plenty of room. Like many others of
our most valuable plants it is a native ofer Hydranyea पuercifolia is a plant of Japan. lated to the former. It forms one of the most decoration. The flawers, which ore garden white, are produced in large panicles. It
blooms in June and July. The foliage is also worthy of comment, the surface of the leaf is glaucous green, the under part nearly white. the Japan quince, is one of the handsomest of the spring blooming shrubs. The flowers are of profusion. It is one of the few shruhs worthy of place in the most select collection.
in with some of our choicest shruls, we would particularly recommend for a choice collection, White blooms; , callosa alla also producing white Reversii forepleno with white flowers, and $S$. most beautiful variety in cultivation and the sorts with eolored tlowers will also he valuable for variety.
Forsythia virulissma. For early flowers there of the brightest yow, are produced with the foliage. For a vellow, flowering shrub there is none finer. Azaleas, magnolias and syringas are all choice subjects.
Answers to Inquiries.

Chmarabia. - What is the best method of grosing cia-
eraria frum seed?- J. S.
Cineraria seed, to germinate readily, must be
quite fresh. Now in pots filled quite fresh. Sow in pots filled with light loam or leaf mold, sowing the seed on the surface settle; lay a moist cloth over the surface, and, if convenient, set the pot in a hotbed, or it may sunny window. The seed will germinate in less than ten days; when the seedlings have made a
fair start, transplant into three-inch pots, filled fair start, transplant
with rich, loamy soil.
Buoovise.--How soon will the begnia bloom from seed?
I have a number of sod seding pants; will ary of them
ar from seed; if they have been well attended to, they frequently Hower the following winter after the
seed were sown. You will, in all probability, seed were sown. You will, in all probability,
have several specimens worth cultivation and propagating from your seedlings.

El Dorado, Cal.
Wm. C.

## Budding Roses.

Editors Press:--Allow me a little space to give a word of consolation to any one that may have followed any of my suggestions on rose culture. As I said before, all I know on the
suhject I have learned in three years' experienee, and if I had not resorted to budding some without many of iny finest rose buds. For in. Neil"" the "Cloth of Gold" and "Marechal cuttings, when, if budded on a rapid growing and blooming freely; I paid a lrofessional 100 huds, and I don't think six of them grew. After watching him it seemed easy enough, then I have budled a great many and find it latter need careful watering and shading and I never pay any attention to budz until, about the wrappers from them and cut back the stalk budded into; and I never wait for ccrtain seasons or times to bud, hut do it any time I ean find a new varicty, for I can find a good thrifty
stalk with bark that peels easy almost every stalk with bark
I put five buds in one stalk last November, growing. But I say every one to their notion. Climate makes more than half the difference. It is easy eusugh to rub off a new sprout from the root helow a budded rose when you go to every day. I used to cut 10 large bruquets at once three times each week, and only have a
garden so feet square. A little spot well cared
or is better than a large one half stareel hoth ways budding and cuttings, and if you your experince. I like to help, others and be helped to anything in shape of ilowers. I wish
correspondents would give full name. I like to know who I an talking with.

Mrs, G. E. Culus
Botanical Ifowors, - Two persevering work-
rs of the Santa Barbara society of Natural ers of the santa Barhara society of Natural having marine plants named for them. Prof.
larlow, of Harvard College writes that of two ang named for Mrs. C. P. Bingham, and has been namied for Mlrs. C. P. Bingh
the other for Miss Helen Lennebecker.

## The Stock Yaro.

Poisonous Grasses and Preventives.
Prof. James Law, of Cornell University, gives the New York Tribune some notes on the ill effects from pasturing stock on grasses at a cerhe mentioned are now growing in this State, and the general principle which he enunciates much difference of opinion exists as to the this variance arising largely from the apparently
irreconcilable results ohtained with the same grass at different times and places.
grasses are universally held in bad repute,
while others habitually considered as harmless, at times appear to be seriously inimical to
health and life. To the former class belongs the Lolium temulentum, intoxicating rye grass or darnel, which is referred to in Matthew's gos-
pel as a most undesirable addition to good seed, and in the present day gives a corrnption of its cattle in north Britain. Numerous observations on this plant by Baillet and Filhol show
that it is poisonous to all domestic animals, an that its toxic qualities reside in a yellowish fat, which can be extracted from the seeds. A sim. from feeding on the other varieties of rye grass, and notably the perennial (L. perenne) Italian
(L. Italicum), and the L. Linicola. These last, however, are not habitually injurious, and their
poisonous qualities are usually shown only at a particular stage of development, namely, when they are partially ripened but not yet fully
matured. Thus the evil effects are to be seen in animals feeding on pastures that have hee
allowed to run to seed, and at the perio when such seed is in process of ripening. eaten down so that the grass never com poisoning are in all cases analogous, consisting as they do in general paralysis and drowsiness,
Horses fall asleep eating or drinking and drop the heads into the manger or trough. If sud denly startled they may drop down. The eye
are dull, the pupils dilated, and the lids sem closed. Standing in the stall the animal may rest he drags his limbs tardily, and sways un. certainly upon them. Signs thaigestion flatus and colic pains are occasional accompaniments. Though the rye-grasses are rathe
famous for their poisonous properties, it must famous for their poisonoch pualities are peculiar not rye-grass. Millet, Hungarian grass, and even
vetches, witb seeds fully formed but not yet completely ripened, produce very similar symptoms. Even new oats are always dangerous,
though more likely to produce irritation of the digestive organs than primary brain disorder Some grasses, like the stipa siterica, a while others, hee pratense) and bearded onts, produce serious or cal irrital the en as mechanical irritauts, the dangers of the whole class of graminex, and of such other forlder seeds, and at an advanced though not quite per.
fected, stage of ripening. Whether used for pasture or for soiling, safety lies in utilizing them at an earlier stage of growth, and before
the seeds are developed. This system of feediug close and cutting moderately early, is a further safeguard against the ever-present danger of
ergot, which develops mainly in the ripeniug

A Sale of Valuable Short-Horn Cattle. Our advertising columns contain an announce ment of a sale of dairy cattle, thoronghbred
and graded, from the herds of our contributor Mr. Robert Ashburner, and Mr. S. B. Emerson Their herds have outgrown their limits and the excess is thus offered to the public. As Mr. Ashburner practices what he has preached in
our columns, and neither breeds nor keeps anything but good "attle, no one need think it is a sale of "culls," but the stock offered is
descended from the best blood in the herds. Nor is it in show condition, but in the usual pay
order in which the cattle are uniforuly kep order in which the cattle are uniformly kept.
In Mr. Ashhurner's offerings are three of the
nuch sought after Bates-bred Frantic family "4th Duke of York." Since the time of the iinported cow, the family has been well and care-
fully bred, two of the three females offercl locing by importcd "Kirke evington Duke 2de", a fincly-
bred Bates bull, inported from England by Mr. Ashburner for the special purpose of keeping up
his Frantic family to their lighl standard of Bates breeding, as well as with the view of im orating their constitutional powers by an infusion of new blood.
The Pansy family (of which there are three
females in the catalogue), are known wherever
they have been bred for their hardy constitu-
tions, superior dairy qualities and the great
growth of flesh they make when not in use in

## The same remarks will equally apply to Mr. extensively in cold climates with great success

 and its adoptiobe appreciated.
Having named the frames that will give the best satisfaction in the varions sections of our
large State, and also having stated some of my reasons for using them, I helieve that some of your readers would he pleased to know more
about these frames and the hives in which said frames are used. I hope ere the swarming sea-
son sets in to give the required information and erhaps a few illustrations. U. K. Lyprus. North Temescal, Cal.

## Arboriculture.

## Transplanting Evergreens.

Editors Press:-Greater care is required in transplanting evergreens than deciduous trees, An important feature as connected with the accessful removal of evergreens, pines, cedars, cypresses, etc., is the fact that iu nearly all
such trees the sap is a species of balsam, that such trees the sap is a species of balsam, that as with rosin, insoluble in water. When the roots are much exposed to sun or air, the juices
become hardened, after which no amount of become hardcned, after which no amount of
moisture will dissolve the once inspissated sap hence, the reason of so many failures, especially
from those taken from forests and carried long listances and where the conditions of soil and generally prepared for them.
It is quite different with the sap of most It is quite different with the sap of most
deciduons trees, they being of a more watery character. Some, like the cherry, peach and prom, mat are all soluble in water, and, though hy removal, their roots may become in a measwith the evergreen; hence, the necessity keeping their roots always moist during whole operation of displanting and replanting.
Nearly all conifers, in their natural position in he woods, have a strong tap root, which makes stroying too many of the more important ibrons roots, and, owing to the natural sym-
metry of most conifers, but few limbs can be metry of most conifers, but few limbs can be
spared to maintain a balance hetween top and
the maimed roots; hence, great care should be taken or resort be had to very small trees. Old gunny or grain sacks may be hrought into of earth and working the sack under it and in close contact with the roots. They can then carried some distance if handled with ca
Best Time to Transplant Evergreens.
The writer has an successful at all ti
from November to April, especially with trees frown in the nurseries, which, owing to skillful handling hy the nurseryman, may he sent for trees from the forest, the best time is new growth, at whatever season that may be.
At.this time they are filled and flowing with a thin fluid sap and are less likely to suffer from drying. But at whatever season the transplant save the roots as nearly entire as possible and never allow them to become dried in the slighthle trees, both evergreen and deciduous, in our orests, worthy a place in every man's collec-

Make Home Attractive
We must plant trees if we would make our homes attractive and pleasant. We owe it to
our children if not to ourselves to make home the place of all others, around which loving ay to do this, than to plant trees ahout our premises. It does not require a great deal of abor, and generally can be done at odd hours. growing in our forests to be had for the digging. In a few years they will grow to a respectahle
size, and will be a constant pleasure to us. We cone to feel an iuterest in them, that will grow with their growth, and attachments form, that
will bind us closer to our homes in after years, and do much toward curing us of our migrating habits, the bane of peaceful and happy homes Gillet's Walnut
I received a fruit catalogue from Felix Gillet, I English walnut, with the exception that it come ing bearing at, whe your it come later, and reproduces itself faithfully from the seed. If Mr. Gillet is right about its good qualities (and I have no doubt but he is), these mon English walnut has the fault of not comin into bearing until the trees are several years old, and blooms so early that they are liable to cut with frost much north of this, but in Napa valley they are seldom injured.
Gillet has none for sale this year.

Seeds from New Zealand
Thanks to Dr. S. M. Curl for a fine assortment of seeds of tree, slirub and vine from New Zealand. This is an acquisition to California fully apprcciated by the water,
propagated with the utmost care
St. Helena, Napa Co., March 27 th

## Sheep and Wool.

## Selling Mohair.


 Pearonn's springs, cal

 In answer to the above queries we can but say that we have made inquiry concerning Mr.
Tetly, but did not find the gentlemen.
We Thety, but did not ind the gentlemen. We Grand Hotel, san Francisco, stating that he is prepared to pay cash or mohair, either receiv ing. here and making a bid upon it after examination, or, if the quantity is large enough, to go into the country to see it. We senta
reporter to the Grand Hotel to see Mr. Tetly, but he was told that he had left there some time
before. We helieve he is still in the city and is before. We helieve he is still in the city and is
making bids on mohair, because of the allusion making bias on mohair, because of the allusion
made to him in the letter which we print below. If so, we shall be pleased to receive from him
made to any facts concerning his operations, which may We also wrote to
Watsonville leading breeders of A Rogers, of Watsonvilie, leading breeders of Angoras, to
ascertain what they knew concerning the selling of mohair this year, and received the following

## reply: Enrors Press:-We submitted three differ-

 cents tor a choice 1 ot ot fiece which has never
sold at the East for less than 60 cents, and deducting the freight and commissions, which amount in the aggregate to not more than eight cents, this leaves us a net price of 52 ents per
Ib. It often goes up to 65 and 70 cents average. The last lot sold for us by Bond $£$ Co., of Bos.
penses, 52 cents per 1til. As this is so, we do
not think. Mr. Tetly will get much mohair nnless he bids higher. We will ship ours East and also all the fleeece consigned to us, unless some one
offers a better price. Our choice fleece in the
 cents per lib. between 40,000 and 60,000 Ibs
There was shipped from this coast last year. Farr \& Co.,
of Holyoke, Mass., had 30, ooo ths of that amount. Georg WW, Bond \& © Co., of Boston, sold 10, opo
 find ont the exact amount of these scattering sales, hut they may have reached 10,000 itss.
she
 at 7 fecents averaye. Many other lots of as good fleece sold as low as 60 cents average.
Last year we handled the clip of about 40 breeders, free of charge, paid our own expenses
and gave our time. This season we will charge and gave our time. This season we will charge
one-half one per cent., merely to cover personal expenses in attending to the same. You may say made to Landrum \& Rogers, care E. Grisar \& Co. San Fraucisco. Our charge will not more than
 erally on this coast, as we have done so much promote anville, Cal., March 21 st, 1878.
[This comprises the information on this subject which we have at present. We should like to have the selling experience of all our read ers who have the goats whether it be good or
ill, in order that the standing of goat industry ill, in order that the standing of goat industry
on this coast may be clearly defined. All feat ures of the business whether for profit or losi
hould he made known for the public benefit should he madc known for tbe public benefit
and we hope to hear from all who are interand we hope to hear fro
ested. - Emproes Press.]
Curb for Wool Eatriv.-A correspondent of the Landwirth writes to that journal on the subject on the great tosses hee has experienced
among his shep tor years past, owing to their habit of eating wool. He tried all the remedies usually recommended, such as bicarhonate of soda, tartar emetic, fir tops, and so on, withot conclusion tbat their evil habits must be due to adeficiency of chalk in his land. Thereupon, in
the course of last autumn, he took to strewing the course of last autumn, he took to strewing
a small
quantity of chalk mixed with salt upon a small quantity of chalk mixed with salt upon
the fodder laid before the sheep, and in less the ooder a tarnight they had completely ceased to
thater eat any. wool, and have never since resumed
the habit, so long as he continued the treatment mentioned.
men
Marking Shrep-This is best done with Venetian red, a cheap paint, only a few cents a pound, and one pound will mark a thousand.
Take Take a pinch of the dry powder and draw the
enclosing thumb and fingers through the wool at the spot you wish to mark, loosening the
powder as you do so, and it will combine with the oil in the woil, and make a hright red mark that the rains will tever wash out, and
which, without injuring the wool, will $n$ dure from one shearing to another, while it can be readily cleansed our Nork
Rural New

Partors oz Hogbaviry.
Correspondence cordially invited from all Patrons for thi
Remova
 the Grangers' 'susinese
tont inne
hin strect, as as heretefofor

## Worthy Lecturer's Visits.

Eurtors Press:-Monday evening, March 25 th, we set out to mect our next appointment met by Bro. Lewelling, and conveyed in a comfortable carriage up the pleasant avenue, lined on each side by walnut and almond trees, to his palatial residence, some three-fourths of a mile during our stay in Napa valley. Bro. Lewelling during our stay in Napa valley. Bro. Lewellifg by nature as found anywhere in the world, and so improved and beautified by art that not only
every comfort but every luxury desirable is made to foster to his intelligence and industry. He has about 120 acres of slope valley land, plauted and improved to the highest degree, a variety of orchard fruit, and the best varieties
of wine, table and raisin grapes. In the background he has some 300 or more acres of mouu
His location for scenery $\begin{array}{cl}\text { tain laud for pasture. } & \text { His location for scenery } \\ \text { is most magnificent. } & \text { He has a uever-failing }\end{array}$ is most magnificent. We has a acer-ated in
supply of spring water, which is concentrant
a reservoir or tank of immense dimensions and carried by pipes to every room in his most beautiful of residences. For purposes of irrigation
through his spacious grounds he has a pressure through his spacious grounds he has a pressure water company but his own insurer against fire.
In a word, Bro. Lewelling's home needs only to
be visited to be deciled a nonesuch in any county, State or nation. Another feature of
Bro. Lewelliug's industry is his own invention of a fruit-drier, in which he prepares for market his grapes into raisins, in less time and in a
more simple manner than any drier, patented more simple manner than any drier, patenta ine. It is equally well
all other kinds of fruits.
On the morning of the 26th, Wednesday, in accorcance with previous notice, we met St.
Helena Grange in private session, for the good of the Order, and at 12 o'clock partook of a
most sumptuous Grange feast with them, after which the doors were thrown open and a public installation of officers proclaimed. After the usual manner to that work which was made
doubly interesting by most appropriate music doubly interesting by most appropriate music
being continually interspersed at interludes, being continually interspersed at interludes,
thus giving great effect to the occasion. After
installation, we delivered our usual public lec. ture of one and a half hours in length, our
subject being norc especially the Granger' duty with reference to the coming Constitutiona Convention, which was so often interruptel
with rounds of applause that we concluded not only the Grange tut the whole audience were in sympathy with the leeturcr. The lecture being
over, we were met by brother and sister Grang ers, and various citizens, with compliments and and action, which was not a little gratifying to At 7:30 next morning we took the train again
for our next appointment, which was at The morning was like thejo of the past winter anything comfortable for a large Grange meeting, but
true to our work and appointment we arrive on time, and at Vallejo were met by Bro. Dem
ing, Worthy Master of Vallejo Grange, and coning, Worthy Master of Vallejo Grange, and con-
ducted to the frange hall. By 11 oclock there was a goodly number of the brothers and sisters
assembled for a closed meeting, where was disassembled for a closed meeting, where was dis
cussed in a most earncst manner the questions
brought before them by the State Lecturer After this a recess was taken for rcfreshments, and a most sumptuous lunch was had, with
genuine, social good cheer. We then adjourned to the hall, aud the doors. being thrown open,
delivered to a not large (on account of the delivered to a not large (on account of the
weather) but most appreciative audience our public lecture. After this, private discussion
was indulged in for au hour longer, which proved was indulged in for au hour longer, which proved
most interesting to all present. The time com. ing for parting, the usual uumber of invitation
from brothers to partake of their hospitality given me, aud accepting the kindness of Brother
and Sister most comfortable home and by them and Brother and Sister Mlosely were most counfortably taken
care of and entertaiued uutil the afternoon o care of and entertaiued uutil the afternoon of
the 2 Sth, when we took train again to Elnira, there to meet Bro. Hooper and be conveyed to
Bird's Landing, to meet the Grange there ou the 30 th

Montezuma Gra At Bird's Landing, met at 11 A . mi., in closed
meeting for the good of the Order, and at 12 m meeting for the good of the Order, and at 12 m . Grange feast, and at ar. M. pubic lecture
when for an hour and a half we held forth to
very

St. Helena and Vallejo. Aftcr lecture, we spen their views on the great questions described in our lecture, conceruing the best ways to adop
to earry out the work suggested in our lecture After taking leave of all, we were conveyed t Collingsville, and taking the steamer Centennial
were conveyed to San Francisco, to be ready for our regular trip on Monday, April list.
B. Pilkingon, State Lectu
San Francisc
o, March 30th, 187
Grange and Farmers' Meeting at Hay wards.
The Patrous had a lively and harmoniou neeting in the hall of Eden Grange, at Hay wards, Alameda county, last Saturday. Patrou and matrons from various Granges in Alameda Adans, Secretary; B. P'ilkiugton, Lecturer; and J. V. Webster, Past Master, members of the tate Grange, were present. Tho interests and good of the Order throughout the Stato and
uation was ably discussed by the above named and other members, and all present seemed greatly pleased and interested. Master Wood, esting facts about taxation in this State, show ing a thorongh knowledge of the subject. An
open discussiun ou this question among farmers and other anti-
to thicse times.
The social feature of this meeting was a gran to excess with wholesome substantials, and rich and rare delicacies, brought from the homes of siastic devotion to the Order, lends it a charm ing and living iuflueuce. The Grange meeting
aud festival closed about 1:30 o'clock, and an open meeting of farmers and others was
called to order by J., Kussell, in Odd
and Fellows' building, at $2 o^{\circ}$ 'clock. J. J. Web-
ster was elected President and Secretary. Mr. Pilkington gave an able address eliciting much applause, urging the farmers to in the approaching Constitutional Convention. that a non-partisan club should be organized Messrs. A. T. Dewey, Wm. H. Jessup, Jas.
Shinn, Alex. Allen and Wm. Whidden, comShinn, Alex. Allen and Wm. Whidden, com-
mittee, reported the following article, which was adopted as the basis of a temporary organi"The undersigned hereby join in organizing a purpose of uniting our carnest and active efforts county aud the State of Califoruia in the apA goodly number of those present signed the The following officers were elected: J. V Welster, President; James shinn and Danie The officers of the association and A. T Dub. The Directors were instructed to report perm oclock A. M., Saturday, April 133 th; also to per-
Sat orm any other duties requisi
of the elub in the meantime
There seented to be a feeling prevailing tha n orgauization slall be effected upon a basi pure and broad enough to carry out the princiare so urgcntly pressing upon the hands and ties and industral organizntions will be sent out for further signatures, and those present expressed the helief that the ncxt meet
Mr. I. G. Gardner, manager of the Califoruia Farners' Mutual Fire Insurance Company pre
sented the sworn statement of the officers of the company, showing the association to be in goo nancial condition

## Exorbitant Interest.

Editors Press:-I was extremely pleased with the article "Usury Laws, No. 3," by Mr.
Bristol. His reasoning is close, and it canuot be disputed that it is the bounden duty and right of the Government to strictly limit the exctions of capital. It is a subject of the first and greatest importance, vital indeed to our further
progress. It seems strange that a matter so obvions should have been allowed to go by de fault so long, or that it should now require to be proved. Capitalists of the Eastern States and of Europe no longer attempt to dispute ought to limit the rate of interest. It is onl y in such places as California, where are combined the influences of the most gigantic monopolies
of sudden and enormous wealth, of the temporary and insecure investments of a mining country, of the extravagant hahits of '49, and of the fact that so large a proportion of the inhab
itants of the State, are not fixed to the soil, but floating, that capital dare ask such enormous rates of interest. This does not attract capital, but rather the reverse, ly giving a false
idea of the insecurity, and hinders the develop-
ment of the State,
checking the efforts at improvement by those tions in few hands. Were interest limited to $10 \%$, the effect wonld be immediate and great,
and it is a matter that well deserves the stron nd united efforts of all.
Auburn, March 28 th, 1878.
Convention of Grangras-A convention ill We held at the Grauge hall in San Francisco M., to consider such amentments to the Constitutiou of the State, as may be of interest farmers. A general attendance of Granges
expected. By authority of the Executive Cominittee.
April $3 \mathrm{~d}, 1878$.
Farmers in Alameda county are invited to attend an adjourned publie meeting of Gran 10 óclock A. M. ou Saturday, April 13th. Able speakcrs will be present to discinss (in a rational, common sense way), questions of implortanco
to all citizens, and of special interest to the pro ducing classes.
Deep Chefk Grange,-Election Dec. 22d,
S7: F. G. Jefferds, i, 1S77: F. G. Jefferds, M.; L. League, O.; A.
W. Mathewsou, L.; C. Van Loan, S. ; E. M.
Jefferds, A. S.; Mrs. S. Buckman, ©. T.J. League, T.; W. (A. Pennebaker, Sec'y; M. Jas-
per, (i. K.: Mrs N. Jefferds, Ceres; Mrs. A. Calhoune, Pomona; E.lla
Miss M. A. Harlow, L. A.

## Aqpicultural Notes.

## California

colusa
Resownive, - Sun, March 30: The work of resowing grain on drowued out land will extend late into April, and even then, we are afraid,
here will be much that is not swannpland, even, that will not be gotten in. Some farmers are securing Sonora wheat to sow, while others for late sowing. Both kinds will be sown, and for late sowing. Both kimds whit tre keep the of it, and see which turns out best
lank Graln.-Many persons are now afraid that grain will grow so rauk as to fall down and very farmer, at least try some of it. We be lieve that rank grain mowed down now, will
make a third more than that left to run too much to straw.
CONTRA COSTA.
CONTRA COSTA.
Glorious Weatier.-Antioch Lelger, March GLorious Weatier.-Antioch Lediger, March
o: We do not remember to have seen so prom-
ising a spring duriug tifteen years residence in the ising a spring duriug of land on plain and hill-top, even to the verysummits, is luxurious with vege. tation; the grain, both that sown carly and late, is growing rapidly, is healthy, of good color and the late sowu cspecially is free from weeds. Sixty thousand acres, mostly fallowed, has been seed--
ed between Point of Tiniber and Bay Point; pasturage is excellent aud every "prospect pleases." The growth of grain is so
it is fared some fields will lodge badly.
years like this on the San Joaquin and our EL DORADO.
A. 2S: A meeting of the Fl Dorado County Agricul tural society was held on Saturiay afternoon, matters were discussel, among others, the fair ground and raee-track question. It was the sense of the meeting that the society should
own its grounds and estallish a track, and a committee was appointed to selcet a site, survey a track and report at an adjourned meeting to
be held at Grange Hall, on Saturday afternoon be held at Grange Hall, on Saturday afternoon
of this weck, at oue $\sigma^{\prime}$ clock. At this meeting, of this weck, at oue o'clock. At this meeting,
it is also expected that definite arrangements in regard to the holding of a fair next fall, will be relorted and acted upon. The Conmittee on by-caws
the society.
FReSNO. INCREASE.-Erpositor, March 27 , We learn
from Clark Joplin that about 5,000 acres of grain have been sown in his ueighborhood-thc
Duke settlement-this season, and it is all looking splendidly. Among the heaviest planters are willialn Ingram, Jdick. Tumphrey, B, M. season, that any considerable quantity of grain has been planted in the neighhorhood, though
considerable corn was raised there last season. In addition to the grain fields, a cousiderable I. \& T. Wagner have in about 200 acres of falfa. The गnke settlement is new but thrifty. The farmers have united aud constructed a sub). stantial irrigatiug ditch which, in ordinary sea-
sons, will furnish an abundance of water for irrigatiug purposes,
STEAM DITCMER, -Republican, March 30: Mr. Beall received his steam ditcher duriug the past weck, and hal it transferred from the depot at Centerville, where he will shortly commence work cnlarig the King River Canal Company's ditch, having contracted with that compauy for enlarging the ditch for the distance of one mile
WidD MAY.-We hear some of our farmer sason-something new for this county surely.

LAKE
Williampa-Bee, March 21: We learn that alfalfa this season and that sout five acres of ers of Scott's valley have sown from one to five acres. We are glai to know this for we believe no crop pays better, and the soil of Scott's valley is inaly alapted to its growth
LOS ANGELES
Irrus.-Gazette: Mr. Telford Cheney, of
Downey, is again suffering the loss of his cattle Downey, is again suffering the loss of his cattle
from dry murrain, caused, he supposcs, by the water they drink from a lako near by. He has his herd to valuable animals, and will remove lost quite a number of animals last year from the same disease. Judge Venable has 28 acres planted to millet and canary secd, on his farm near town, both of which are growing finely,
and bid fair to realize good crops. Nillet comand bid fair to realize good crops. Millet com-
mands 10 and 12 cents per pound in San Franmands 10 and 12 cents per pound in San Fran-
cisco, and canary seed seven and eight cents. More experiments ought to be made. A Los Angeles paper states that the genuine Smyrna adena, where it is almost perpetually in fruit. Last year it fruited from June to January, and this year has already started fruiting, and will probably ripen from May-day to Christmas. Edrors l'ress:-At this hour, $11 \mathrm{~A} . \mathrm{M}$, rain is pouring down. Everything is lovely. Tho
weeds are trying to outgrow the garden and trees. Malva, that has not been cut, nor other wise attendoilho, reaches ${ }^{\text {inches through.-F. WEBEr, Orange, Mar. } 26 \text { th. }}$

## SACRAMENTO.

Work and Weather.-Editors Press: The work Sinall fruit srowers great drawback plish much. As soon as the ground becomes in order, rain falls and retards work; weeds ac cumulate. Vines in full bloom, but we are un able to touch them. Grapes are fast making
new wood. Fruit trees are blossoming in full. Pasture is gool. Graiu and hay crops look
cheering. All high land will be cultivated Vegetabie men ore using all accessible land l'he season will be late touched and there has been scarcely any plow ing iu the orchard. Stoch in general is fattcning up. Overflowed lands with crops and im
provements are suffering. Cannot stay the flood. We are in hopes that the new canal bill will pass and become a law. Business generally Gro. Ricir.
AN BERNARDINO
Riverside.-Semi-Tropic, March 30: Ripe now and the price will soon drop to a point that will allow poor inen to indulge in the luxury.
SAN JOAQUIN.
Tue Vallex.- Independent, March 26: It is pardonable under the circumstances to recu again and again, with renewed congratulation wheat crop thro the glorious prospects for the we meet farmers from different sections of the valley, all of whom, with few exceptions, unite in saying that tho grain has not presented so
fine an appcarance in any previous season for the past 10 years. And what is more gratifying the prospect continucs to improve, with oc
casional showers that kcep the surface monost, and intervening days of warn sunshiue. Nothiug can now prevent the San Joaquin valley
from raising the largest crop ever known, unles we should have a severe frost while the grain is in the milk, or unless scorching north winds
should come at the wroug season. The prospect for all crops is gool, but the cereals are particularly promising. A sample of a field of
640 acres of wheat from the ranch of Willian Nitchell, Merced county, was brought to thi is four feet long, not including the roots. Mr White reports that he saw an unbroken whent heavy them three to four feet high.
Wool at StockTon.- Independent, April 1:
The first consignment of wool of the spring clip arrived on Saturday from Turlock, consigned to J. .. Peters. he wool trade of this city is perchance a concession in the matter of freight could be obtained from the railroad company sheat shipments. Miller's warchouse is to b principally used for the storage of wool coll-
signed to this market, it being more advanta goous to all dealers to have the wool stored in one place, facilitating its examination and sale, couring and packing wool purpose of assorting, scouring and
for shipment to Eastern markets.
STATEN IsLand.- It may be considered as a
fact timits of this county are enlarged fact that the limits of this county are enlarged
to take in Staten islaud. The Legislative As. sembly adopted the Senate substitute for a bil introduced by Assemblyman Sargent, and the
bill is now in the hands of the Governor, a mo tion to reconsider in the Assembly having been lost Saturday afternoon by an indefinite post-
ponement. The measure met with little oppo ponement. The measure met with little oppo-
sition, as the change was unanimously peti-
tioned for by the owners and residents of the iond. Staten islaud, which lies embraced
istween the two forks of the Mokelnnune river that part to receive it, and come together again below it, covers nearly 16,000 acres of excellen
land, mostly under cultivation. The levees
crops were mostly destroyed, but late crops
may yet be raised. This addition will increase
taxable property of the county quite materially
the coming year.

## SANTA BARBARA.

As an evidence of what our soil will bring forth, the experience of J. E. Hawkes with alfalfa, in his part of a block up town, may be cited. Be-
fore the rain began the ground was as hard and bare, nearly, as a floor, but soon after the rain came the grass sprouted up luxuriantly, and a he cut the second crop, which then averaged
two and a half feet in hight. The growth since then has been at an average of ahout an inch a day. The seed was sown some three years ago. rich, low soil, but dry, thin, high and rather rocky soil. The feed is not coarse and gross, as might be expected, but so tender and sweet did example of what can be done with this valuable forage plant on the lands of Santa Barthey may reap abundantly
Goleta.-Cor. Press: These beautiful showers are helping out the late sown barley in a
splendid way. We hear of more cattle dying of "'bloat." More have died from this cause than from last year's drouth-in this immediate vi-
cinity. We see large fields of barley that are cinity. We see large fields of barley that are
already showing their tasselled heads, and will soon be ready for the reaper. The outlook was never more encouraging. Our people are hard
at work; many are setting out fruit and ornaat work; many are setting out fruit and ornamental continued rain was too much for the early crop of potatoes, many of which look good, but when cut are badly rotten. Others are rotten throughout.
SONOMA.
Losses of Hogs. - Russian River Flag, March 28: Ed. Martin was in town last Satur day. As his ranch is situated in the mountains
more than 20 miles northwest of this city the bad roads and high water have prevented a
previous visit for four and a half months. He reports the mortality amongst hogs very great. Out of a band of 120 he has lost during the the disease, only that they dicd suddenly, and often in a few minutes after eating and drinking voraciously. His neighbors, the Carinichael
brothers, have certainly lost 200, and do not brothers, have certainly lost 200, and do not
know how many more. Truett \& Rickman's know how many more. Truett \& Rickman's
loss is about 150 . All the droves in fact suffered more or less thinning out, and were stil dying off when he left. It is the first loss of
hogs lyy epidemic ever known in northern Sonoma. Mr. David Hopper has made investigations, finding that worms are the cause of
death and that indigo is a cure-as in the case of botts.
Hungarian Pancakes.-A farmer near town forms us that griddlecakes made from the Hungarian grass seed, are very palateable. rat, March 30: We visited I. De Turks wine cellar Wednesday morning, and found that he was busily engaged in loading cars from his
cellar. He expects to ship 30,000 gallons within a few weeks, several carloads having
gone already. Mr. De Turks proposes to place ,600 gallons of proof brandy in the bonded warehouse here as soon as the roads are in The Vinexards. - Most of the vineyards the vicinity of Sonoma have been pruned, bu owing to the great amount of rain the ground is quently many of them are very weedy.
Brandy Warehouse. - The bonded ware house, which is situated at the western side o Sonoma, on the Santa Rosa road, was opened
on the 19th for receiving brandy. The building is a substantial one, made of concrete, and wa is 60 feet long, 40 wide and 15 high , and cos some $\$ 2,000$. It has a capacity of $30,000 \mathrm{gal}$ lons, and 15,000 gallons are now ready to be
stored. John Tivnen is the proprietor and Otto Stored. John Tivnen
The Grain and Fruit Crop. - A wellamount of grain is seeded in this county, and amount of grain is seeded in this county, and now half a leg high, and has a firm, healthy
color, indicating an ahundant harvest. The
ground is so thoroughly shaded that even if the rains were now to cease entirely and be followed wet winter, there would be no serious damage to the crop. Taken ally in all the outlook for in getting their grain in the ground early, and ulated the weather and rains have greatly stim commonly late, at least two weeks later than
usual. Peach trees are just in bloom usual. Peach trees are just in bloom and will be large, and in this connection we must
again refer to the great misfortune which befell
the farmers of the county in the burning of the
wine factory in this city. Though the grape
crop will be uncommonly large, we fear that
there will be no market for it in this neighbor-
hood, and very few grape-growers are able to
work up their own crop. Wine making and
grape growing, as a business, are as distinct as
raising wheat and making flour, hence they
suggest necessity for a wine nanufactory, such
caused by the recont heavy breaks in the Sac-
as was so unfortunately destroyed after years of labor for its construction and equipment.
There seems to be little hope that it will be rebuilt.
STANISLAUS.
Growth AND Wet. - News, March 29: Some apprehensions are felt on account of the
continual wet weather, lest rank wheat fields should be affected with rust. Grain never looked better at this seasou, and fiuer feed never grew in the valley. Last month was the sheep that have managed to weather the storm can revel in abundance of clover. Some
early fields of rye are growing rapidly, and will ripen early in May.

## TULARE.

NG Wool.-Delta, March 29: From Mr. L. Guggenhime we learn that three small lots of wool, spring clip, have already been received at the warehouse. The prices range from 12 to 16 cents per pound, according to quality and
condition. Owing to the poor condition of the sheep the past season, the spring clip will not
be of the best quality, and the continued wet weather will prevent shearing to any great ex tent for the present

## VENTURA.

Editors Press:-It commenced raining last night about 4 A. M., and this forenoon it fairly poured for about three hours. Most of the fed off is laid flat to the ground. Some are of opinion that it will rise again, but quien sabe never saw the almond trees so heavily lade set can drop off, and still leave an abundance to ripen on the tree. Apricot, peach and nectarine trees are going out of blom, and the trees are
well set with fruit. Strawberries are getting plenty. The ripe guavas are lying under my noon. We have had ripe guavas for the last two months. The loquats are just getting good
and ripe, and for those who like a tart fruit they are splcudid. The storm is over if bright sunshine and blue sky are to be taken as indi-
cations.-R. L., Ventura, March 27th. YOLO.
Fruit.-Mail, March 28: The present indications are that we will have an abundant crop
of fruit this year. The trees have been in full loom, and no frosts have visited us so far to do any injury. It is getting rather late in the sea-
son for heavy frosts, and wc may feel comparaon for heavy frosts, and wc may feel compararoots have received will certainly insure a heavy roots hav
jield.

## Arizona.

Rain.-.Citizen, March 22: Florence has been favored with another rain-a beautiful rain,
steady and gentle as was the last. It began arly Monday morning and continued till the fresh and full of new vigor. The farmers and anchmen are happy, and we have every prosin agricultural pursuits.
Wine Commissioner to Paris.-The California State Vinicultural Association has determined to send a special Commissiouer of their own to the Paris Exposition to represent their sible and to report upon the vine, its culture, its production and their manufacture into wine
and brandy; its diseases, the ravages of the and brandy; its diseases, the ravages of the selected Charles A. Wetmore, the Washington Commission has just been received by Mr. at San Francisco, has affixed his certificate in the French language, with his seal attached, very warmly bespeaking for Mr. Wetmore a and all French societies.
Meteorological Summary for March. The report of the U. S. Signal Service officer,
of San Francisco, for the month of March is summarized as follows: The mean hight of perature, $55^{\circ} .6$; mean humidity, 75.61. prevailin perature, 55.6 ; inean humidity, 7.61 ; prevailing
winds, southwest; highest barometer, 30.3 ; lowest, 29.4 ; highest temperature, $66^{\circ}$; lowest, wind, 24 miles per hour ; total number of miles traveled by wind, 5,456 ; total rainfall, 4.56 years: 1872, 1.59 inches; 1873,.78 inches 1874, 3.36 inches; $1875,1.30$ inches; $1876,5.49$
inches ; 1877, 1.08 inches. Of Interest to Lumber Users.-Farmers and others living on the bay of San Francisco,
the San Joaquin and Sacramento rivers, and other uavigable waters connecting with them, Berkeley Lumber Yard, which appears in our columns. Mr. J. F. Byxbee, the proprietor and Mr. Thos. Richardson, the energetic man for sending lumber hy boat to such as need it to
repair damages done by the recent floods or fo any other use.
Removal-Gray \& Haven, lawyers, whose card appears in the Press, have removed to
their new offices, San Francisco Savings Union their new offices, San Francisco Savings Union
building, No. 530 California street, San Fran cisco, wh
friends.

## News in Brief.

It is claimed that the Montana mines have The publuced $\$ 100,000,000$.
The public debt was decreased during A arch, $\$ 2,313,614$
A dog show opened in Boston on Tuesday Ir is reported in Ro
pposiug the Pope's general policy

## Gieneral Anderson, of the Louisiana Return Board, has been rcleased.

 The "patriots" in New York declare that the uban war shall not end.Trie Quaker meeting-h
tirely free from debt.
ntirely free from debt.
London specials say that the Czar has ordered 500 additional Krupp guns.
Legal Tenders are firm iu San Francisco at 98 and 99 buying and $99 \frac{1}{4}$ selling.
The famine iu the northern
China continues with increasing severity China continues with increasing severity.
Operatives at Fall River are urging the stead of wages.
A CAPE Town dispatch says: "There is every
prospect of an early close of the war. The Kaf prospect of an early close of
Captain Bogardus, the famous string shot,
aails for Europe! June 1st. He has challeuged all Europe for pigeon shooting.
ONE hundred and fify-eight license marriage were issued last month hy the County Clerk of A winnsto.
A windstorm visitcd the vicinity of Chicago shipping. One mau was killed.
indians at Chemanus, forty miles north
Tie ship $P$. $R$. Hasoltine, from New York
or San Francisco, was wrecked off Cape Horn. A part of the crew were saved.
One hundred California ministers who have been interviewed, express doubts about a state of future punishment.
During the past week 95 deaths occurred in San Francisco, of which 17 were from consump
tion.
The total rainfall in this city for the year ending March 31st was 34 inches. At the same
time in 1877 it was 10.59 , and in $1876,29.62$. large number of plans under way for the comin building season. , are running mowers over their fields of grain to check the rank growth.
Fron three to 10 car-loads of beef cat Fron three to 10 car-loads of beef cattle are Winnemucca, Nevada.
Tire Coroner's inquest has found that the loss of the Eurydice was accidental, no blame atTue notorious
The notorious Major Bonner has given up
his eldership at Salt Lake and left for parts un-
At Tiflis the Sanitary Commission found 20, 000 corpse buried two feet under the ground,
frozen hut not decomposed. The Murphy movement is flourishing in Los Angeles, over 500 signatures to the pledge havGreat dissatisfaction exist in Texas over the report of the Commissioner appointed to iuves-
tigate the El Paso and San Elizario difficulties. The Cowlitz pass of the Cascades is to be Trveyed, to see if a practical route for the Cap'r. Lees last Thursday obtained $\$ 3,940$, which had been "planted" by George W. Ab-
bott. Thus far all hut $\$ 6,000$ of the $\$ 40,000$ THE irou Abade of South Yorkshire England, THE irou trade of South Yorkshire, England, bers of men have been thrown ont of employment during the past few days.
licy of the new Italian goverament will be policy of the new Italian government will be
that of strict neutrality on the Eastern ques tion.
Already counterfeits of the new silver dollar are in circulation. They so closely resemhle the genuine coin in appearance and ring that
none but experts can well detect the difference. The bill establishing the office of State Engineer, and appropriating $\$ 100,000$ for irrigation and
TiIE train bearing the remains of Mark Hopkins made the continuous run from Yuma to
he end of Long Wharf, a distance of 720 miles, in about twenty-six hours.
A Mrs Howard, of Boston, has reared nearly to full growth, an African lion and lioness, which run abont the house and are as playful and harmless as young dogs.
In two artesian wells being bored at Battle Mountain, Nevada, flowing water of excellent quality has been obtaine
The embargo on the Costa Rican man-of-war Yrazu, formerly the steamer Pelican, having
been raised, she left on Wednesday last for the been ra
South.
A Pr
A proclamation, signed by Gen. Martinez Campos, declaring peace re-established in Cuba,
and pardoning all persons for treason, rebellion and pardoning all persons for tre
and sedition, has been published.
Tie House Committce on Education have greed to report favorably upon the bill to pro
vide a fund of $\$ 250,000$ iu United States bonds the interest on which is to be expended for thic benefit of ins
of the blind.

Thirrv- ONE persons were committed to the HARY Huylum last month from this city. willing to back for any amouut from $\$ 500$ to $\$ 1$, viling to back for any amouut from

## The feeling of anxiety in London <br> reat and warlike sentiments are becoming

 general.The severest hail storm ever known in that ies a week ago last Sunday; most of the hailones*were as large a ordin The insurance companies in Panama refuse to insure unless an improvement in the matter fater is effected. The Panama railroad is egotiating to supply the town.
THE bill introduced into the
ture fil introdiced into the California Legisu lature for regulating transactions in the Stock
Exchange Boards and the management of mines has been defeated. Dennis Donnelly, a Molly Maguire, will be t which time and place Jack Kehoe will also suffer death.
No more goods will be received at the Brook sition. Twelve hundred tons await transportaThe Pound Keeper reports 414 dogs lassoed ast month, and thirty more on hand He killed 216, 44 were redeemed, and 12 were
sold. The total receipts for March were $\$ 146$. Twenty-seven States now receive fithe Uuited State Fish commissioners fish eggs for hatching in their respective waters. About our himion eggs of California salmon were dis. Mrs. Sarall Bernis, aged 30 ars, mitted suicide by hanging, last Tuesday, at her residence, near Petaluma. She had been de-
spondent for some time by reason of the death of a sister
A bour
thirty States have received their standards setting forth the metric system of weights and measures, which is now being intro-
duced. These standards are to bc placed on exhibition in some public place accessible for re-
The followers of modern Spiritualism in
The thirty-first anniversary at Charter Oak Hall on Sunday last.
The last labor demonstration in Canada took the novel form of an applicatiou to the Government for the loan of money enough to estabManitoba.
A week ago a girl, aged 17 years, tried to drown herself in the stagnant, filthy pool at the southern part of this city. She was rescned, southern part of this city. She was rescned,
and, on examination, being found to be insane, was sent to the lunatic asylum.
On the 28th ult., E. J. Pitts and Alfred P. Thorne, havi matters, met on the street in Eastville, Va.,
and, renewing the difficulty, commenced firing on each other with pistols at six feet. Pitts
was shot through the lieart and dicd instantly and Thorne fell fatally wounded with a ball in
The estate of the late Mark Hopkins is valued at $\$ 15,000,000$, which, as he died iutestate, will be divided equally between his
widow and adopted son, if it shall appear that will the and adopted son, if it shall appear that the act of adoption regular have been eomplied with.
Some three months since, a Chinaman, em ployed hy a Mr. Maynard, in this city, stol from that gentleman $\$ 350$ and some mining in the honesty of his domestic that he refuse to prosecute him. Soon afterwards John stole $\$ 80$ more from the same party and immediately disappeared. A day or two since the fellow
was found and taken in hy the police and Mr was found and taken in hy the police and Mr Maynard will now go for him.

## Egyptian Corn.

Edrrors Press:-The types in your issue of March 30th make my statement to appear that I planted a kernel of white Egyptian corn last spring, and actually raised 50 bushels from that strictly the facts in the case. They are as follows: One kernel of white Egyptian corn, planted sent you, during the season. Five of these heads ripened iu July. At the time of gathering those five heads, I plantcd a small portion
of the seed gathered on that day ; the seed so of the seed gathered on that day; the seed so
planted yielded at the rate of over 50 bushels of beautiful ripc grain per acre; this I gathered of beautiful ripc grain per acre; this I gathere dance of seed for one acre of land. Had I have had an acre of land in perfect condition for planting, and had I have plantcd the sced from those five heads on the day I gathered them, positive of yield of what I actually had over 50 hushels of grain in onc season as the product from a single kernel of seed.
W. A. Sanders.

Kingsburg, Fresno Co., March 30th.
Premiums at the State Fair.-A dispatch from Sacramento says: The State Board of Agriculture met Tuesday, and reviscd and arranged a premium list for the next State fair. Many advantage of cxhibitors of cattle, hogs, fruit,
wine and brandy. The Board hcld another scssion on Wednesday.

about the middle of the forenoon, and contin ued inereasing till it beeane so terrible that several houses had been blown
and the beacon light had been eat
and dropped hissing into the sea
The wind howled and whistled monrnfully enough to Jamie's ears, and he conld restrai himself no longer. He rose and opened the
door, and gazed out into the gloom and darkness of the night

## The storm had somewh rain still fell in in torrents.

Clearing Land.
[Writen for the Rcral Press by Lafra J. Dakis] The wind blows horth with yentie breath,

 For what will elines the shandes atar
Like the grand bonfrece glare: Thesleens quanil with whir of wings


 1 see dark finires march about
To urge the exeiting game.

Litiete the grand have thenifre ress salit tare?


Lost in the Deep.
[Writen for the Prase by Case. ResD.]
Near a smant village on the eoast of Maine, but a short distanee from the shore, stood a little white eottage. The deep hue waters of
the oeean, stretehing far away to the horizon, formed a eharming eontrast to the bright foliage of the trees surrounding the cottage home;
and the green grassy lawn slopiug down to the gravelly beaeb, where the lapping waves could almost kiss the tips of their bending Jlades.
Within this pleasant home lived a young fisherman and his ofd mother, who thought there
was no one in all tho wide world like her son was no
Jamie.
Now Jamie was a fine fellow, everyboly said so, and everybody ought to know.
Ho was boru and bred a fishernan, and Ho was boru and breel a dishernan, and well. tried skill as a seaman. Many's the life
he had saved from the wreeks of death, and he had saved from the wreeks of death, and
many a heart had been made glad by lis bra-
very. the village hard by, lived a maiden whom he thought a great deal of, in faet they were
betrothed, and it was oommon talk throughout betrothed, and it was eonmon talk throughout
the tillage that Jamie and Uella were to be
married married.
Sne was a good girl, was Uella, and all loved
who knew her-even to Jamie's mother-she was so kind and gentle.
She had now gone home with her eousin to
Bangor, to prepare for the weddiug, and was to return in two weeks.
Sunday e ening was the time set for the wed.
ding, and she would be home on Saturdey ding, and she would be home on Saturday, 0 !
how Jaunie longed for the hour to eome, when
 The rillage folk ound talk they notthing nut the wedding, and all the fine things Wella was
to bring home with her, for her unele was weal thy, and was to furnish the outfit
U. Jayime", said his mother one evening, as he
entered the contage shakiug the water from his

"Then this is the day Uella was to return," "surely they will not leave port in sueh a storm?"
 sengers,
morninn,
"And Uella was on board!" asked she anxiousl. "Y. Yes," he replied, vaeantly gazzing into the
"e, "llut Captain forden is a eareful seaman, fre, "Mut Captain Gorden is a eareful seaman,
and would not attempt to try to make port at
and and would no,
such $a$ time."
Supper was now ready, and he sat down, but
could not eat, for he was troublect; he eonld not
tell. why, but he felt that all was not right.
said his mother, as she busied herself about her work. But Jamie made no answer-his thoughts
were not there. They were out with the fair were not there. They "
Uella tossing on the deep.
He as at thas for hours gazing into the fire, and elose beside him the little ehair where she, hand had
so of ten sat. But it
But it was vaeant now. Would
"Hark! what was that:" said he in wild despair, as there came the boom of a eannon aeross
the water. It was the signal of distress; the the water. It was the signal of distress; the too near the shore and had struek upon one of the stray roeks that st.
His mother had long sinee retired, and he would not wake her.
said, as he thought of her weak and fragile form; "she will know all too soon. But then
the worst will be over." But now another
but now another peal from the eannon, anbeneath the waters.
Great heavens! the ship was sinking, and
she, of all the living, wonld be lost, lost to hin forever, and he-who might save her-there by the warm fireside waiting her destruetion.
"No! by heavens, it shall not be so. I will
save her, or perish by her side!" he exelaimed, as he darted into the gloom and rushed down upon the foaming beach. He gazed about in
the darkness for some monnents, when at last he found his trusty boat, and leaping into it, pushed off alone upon the murderous waves.
On he toiled till his strength was alinost ex On he toiled thil his strength was alnost ex shining through the dense fog. With renewed
energy he plied the oars, and soon reaehed the wreek.
The ship was under water, but the mast-head with the signal light upon it was still above. It eareened toward him, and striking the boat
shivered it into fragments, and plunged him shivered it into fragments, and plunged him
beneath the surging waves.
When he rose to the surface all was vacant blackness. Suddenly there was a flash of light ning that lit up the murky sky and the foam form battling with the waves.
He gathered all his remaining strength and energy, and, leaping forward, eaught her in his "Uella !

And they sank together to rise no more
An Explanation With a Promise.
Edirors Press:-Illness prevented an early response to the eall of Brother Berwiek, made solong ago, and a thank ye to Prother Miller.
Several generations have already diseussed and tinkered the edueational question, and, viewin it from my standpoint, the educational ideal is like the ideal of the true artist-every improveproved methods and more desirable results, eonsequently the suceess the true edueator
seeks, is, and will always be, ahead of his less appreniative eontentporaries; alead of himself growth of his or her inherent powers, is satisresponse to Brother B., only a prelude if health and time serve for more.
Pomo, Cal.
I. II. Nichols.

KNowledge.-Knowledge, next to religion,
the brightest ornament of human nature. It is the brightest ornament of human nature. It strengthens, enlarges, and polishes the hets its beauty and dignity in the fair est light. Learning hath made astonishing dis earth. Those nations who have lived under the appeared like a smperior order of beinys in eom parison with those who have dragged out thei lives under the eold and dark shades of ig. noranee. The Chaldeans and Egyptians, as well
as the Greeks and Romans, while they eultivated the arts and seienees, iar surpassed, in dignity and glory, all their ignorant and barbarous neighbors. A'few learned men in each nation
have done more to spread their national fame have done more to spread their national fame
than all theirkings and heroes. The boasted glory of Britain is more to be aseribed to he
Newtons, her Lockes, her Addisons, her How ards, her Jenners, and her Parkes than to all her

A litrle boy who wore striped stoekings wa asked by a nan on the street why he made bar'Well, ain't I a little shaver? does, if you saw a ghost?" said Jemmy BosWel to Sammel Johnson. "l hope not," replied A SIGN of indigestion: "Gone to dinuer. Be Wack in tive minutes."
mooth? Beeause he always carries his comb with him.
Somerody thinks Dr. Holland's last poem ie alnost intoxieating in its
Holland gin we suppose.
The Cineiuati Commer

## The Remonetization of Cheese

George W. Peek, of the La Crosse Sun, delirered an address before the Wiseonsin dairy
convention, in the course of which he made the convention, in the course of which he made the
following humorous suggestions: But to come dowu to the present day, we find that cheese has become one of the most important branches of manufactnre.
you are you are loing yourself great injustice that you etize eheese. There is more pass a bill to remoncountry than there is silver, and it's more valuable. Suppose you had not eaten a monthful
in 30 days, and you should have plaeed on the in 30 days, and you should have placed on the bullion on one plate and nine dollars stamped out of ehecse bullion on another plate, whieh would you take first? Though the face value of the aine cheese dollars would be $10 \%$ below the take the chances of the eheese. You could use it to better advantage in your business. Hence I say cheese is more valuable than silver, and it
should be made legal tender for all debts, publie should be inade legal tender for all debts, publie advanee of other stuctied the curreney question, but I want to distant, when $41.2 \frac{1}{2}$ grains of eheese shall be equal to a dollar in eodtish, and when the merry jingle of sliees of eheese shall be heard in every its own coin, money will be plenty, everybody will be happy, and there never will be war any more. It may be asked how this curreney ean bond, made of limborger eheese, which is sond, made of limbarger ehecse, which
stronger and more durable. Wheu this is done you can tell the rieh man from the poor man by do not even get the smell of money, but in the good days which are coming the gentle zephyr will waft to us the delicate violet and the able
bodied limburger, and we shall know that bodied limburg
money is plenty.

An Elephant and an Engine. - The story Times: It appears that a train was drives: it apyears that a train was going out, ent, assisted by Mr. Steward, locomotive foreman, when, about the 35 th mile from Rangoon, ence and get on to the line. Steam was shut off, and Mr. Stone tried to open the waste eocks, which being in front of the engine, woutd, by
ejeeting hot water some distanee ahead, induce tuskif to leave the liae. The coek was slightly stiff, and conld not be readily opened, and
the engine was soon apon the unfortunate the engine was soon upon the brute had turned tail and fled on seeing the engine, but was speedily eaught.
The buffer beams of the engine being very low, the beast's hind legs were taken from under him, and he was forced to sit down, as it were,
with his hind guarters against the smoke-box with his hind quarters against the smoke box
door, which was of eourse nearly red hot. The poor beast managed to keep his fore-feet
going, though hustled along faster than ever he going, though hustled along faster than everges the train eame to a standstill and he got away fe moved of the line at the double, uproote geanee on a tree, and was last seen rushing through the jungle, tearing and smashing everything in his path. He was sadly eut and never be caped with his life, while those on the engine
may safely congratulate themselves on their esmay
eape.
Teasill Stemas for Parasols, - We have had whieh grow all over our state to some practical aceount instead of spending money, as our
woolen mills do, for the imported artiele. We read in the British Trade Journal that an entirely new eommereial artiele has quite recently arrived in that country from liranee, in the shape of a enriously twisted stem. This stem,
which is flattered and spirally twisted, and marked with deep eorrugations or channels, proves to be that of the Fuller's teasel (Dipsacus Fullorum), a plant very mueh eultivated in southern France and Anstria for the sake of its prickly flower heads, which are so extensively inported into Fingland for earding or raising the nap on eloth. litherto, the only applieation to
which the stems have been put has been for fuel whieh the stems have been put has been for fuel,
or for manuring the ground after they have been or for manuring the ground after they have been
allowed to rot. Their present use is for the handles of ladies' sun shades and parasols, and When manipulated they have a very grotesque
and striking appearanee. Several thousand these faseinted teasel stems are now in Fugland aud they will issue as a novelty during the coming season. At a recent meeting of the Linnean soeiety, some of these fasciations were shown as imported, as well as a fimshed parasol
with a teasel handle, sent by the firm who in with a teasel handle, sent by the firm who in-
tend bringing them out. At one time these faseiated stems were supposed to be very rare but, from the faet of so many being now introdueed, they would seem to be of eommon oeeur so abundant as ever to form a regular article of mort, as is the ease with o
other stieks of foreign produce.
"llave yon a Chaucer?" asied a young
lady, looking in at a hook-store. The polite lady, looking in at a book-store. The polite

## The Law of Rest.

W゙illiam Walter Phelps recently made an address on the Ameriean liabit of hard work be fore a meeting of physicians and surgeons.
Among other things, he said: We are a nation happiness happiness. In a feverish race, we pass from whom life is a failure. Our boys leave the uni versity, when linglish boys leave their sehool Our merehants leave their trade, retiring to
some more dignified or honorable work, as they some more dignified or honorable work, as they
believe it, at an age when the German merchant first feels the master of his trade. We are al ways antieipating the fnture, foreing the task of tent with doing a year's work in a month in our own ealling, but we must do enough in all othe eallings to win distinction there. In othe elergyman, merehant. Here we are nobodie unless we fill the sphere of all human oceupa tions. He must be a statesman, and know po
litieal seience as if already iu office. He mus be an orator, and ready to persnade and instrue teur, a eritie There is too much human maturo in man for this to mean contented life and a premature death. And the remedy
Correet publie opinion. We must honor the man who faitlıfully does his task, whatever it he Not the task, but the faithfulness with which it is done, must be the measure of the honor Then men wilt be content with their father' house or their father's trade. This will give u of good eonduet and patriotie love. This will give us too that traditional a titude This wil gives great meehanical excellence. It will no be a bad time for Ameriean manufacturers when we find stamped on them, what Mr. Griffis find on Japanese bronzes- "Done by the ninth brouz er in this family." Then men will keep the oeeu pation of their youth for their age, and having
leisure, will build the foundations broad enough leisure, will build the foundations broad enough to withstand bankruptey. Then men will seek excellence in other callings, and not compet with the exeellent in other eallings. Then men
will alternate labor with rest, and ohey the will alternate labor with rest, and oley the
law which God has written on ereation-God who Himself rested after toil-God, who shroud the earth with the night, that it may take its daily sleep-God, who speaks to the torrent to stop at onee amid its maddest plange.
Girls is tue farney. - If there is any one thing more heautiful than another in a gardeu sunbonnet on her heal so wide and eapaciou that you have to get right square before her, and pretty near her, to see the glowing cheeks tomed to sure to be there if she is at all there can be notling better for daughters, and indeed for many wives, than to take sole eharge of a small flower garden. The benefits derived from early rising, stirring the soil, snuffing the pure morning air, are freshness and glow of
eheek and brightness of eye, cheerfulness of temple, vigor of mind and purity of heart. Cou as a doughter more dignified and womanly as sister, and more attractive and confiding as wife. If you have not the dooryard ground then get a dozen pots and plant the seeds o required to rear and train the growing plant oceupies the mind, to the exclusion, of tentimes time. You listless, pale-faced fragile thing of girl throw of your moek delicaey, put on you gloves, if you will, but work in the flower gar-
den, till your eheeks vie in color with the hlush The Lios in Love.-The lion enjoys the honorable distinetion of being, unlike most earreport says that she is by no means so virtuous, and hansomer one turns up. Let us hope this is a ealumny. At the breeding season each who try all means in their power to gain her with one, andther fint of great use, for its length and thickness prevents the combatants taking a firm grip of one another's neck. Thins, the lion with the finest in two ways. The lioness is more likely to take most of the lower animals as well as ourselves, appreeiate personal adornment very strongly the tournament in whieh he is obliged to take Whart, fighting a loutrance, against all comers. and beanty" has bestowed the prize-herselfon the vietor, the happy pair live together m-
til the young are able to take eare of themselves. The male often hunts for his mate, and allows her to take as mueh as she wants of her prey
before satisfying his own hunger. He eares for and for the litter from the time when they are weaned till they are able to hunt for themselves. -"Cassell's Natural History."
A marriage lieense was lately returned to an Alabama otfietal, having indorsed upon it the
following: "dis here eupple Fale to marry and
de-lisens is returned Blank. -J. MeMillan, M.
Chaff.
Wiren Adam ate the apple, did ho or did he
not Eve-aid the responsibility?
OsMaN PasHa has seven wives. His establish-
ment was the original of Hawthorne's story, the
"House with Seven Gabbles."
"Bovs, don't leave the farm." No, boys,
just take the farm right along with you wwen
you go anywhere. You will find it handy if
you fail to get a situation in the city, as you
probably will.
A Western man, recently visiting Vermont,
was shown some beechnuts, of which he pro-
cured a quantity for a friend in his native State.
On receiving the same, his friend returned
thanks, and declared that "Vermont must be a
tall one on buck wheat."
"Avo now, Mrs. Sullivan," said the counsel,
"will you be kind enough to tell the jury
whether your husband was in the habit of strik-
ing you with impunity?" "Wid what?"
"With impunity." "He wuz, sir, now and
thin; but he sthruck me ofthener wid his fist."
A few days ago a very handsome woman en-
tered a dry goods house in New York, and
inquired for a bow. The polite clerk threw
himself back, and declared he was at her ser-
vice. "Yes, but I want a buff, not a green one,"
was the reply. The young man went on meas-
uring goods immediately.
"Do you know," remarked a rather fast
Newark youth, the other day, to a stuttering
friend, to whom he was slightly indebted- "do
you know that I intend to marry and settle
down?" "I do-don't know anything about it,"
was the reply; "but-but I think you had b-b-
better stay single and set-settle up."

There is a precocious six-year-old boy who is wonderful on spelling and definition. 'The
other day his teacher asked him to spell "matother day his teacher asked him to spell matster, promptly. "Now define it," said the
teacher. "Well," replied the boy, "I don't teacher. "Vactly what it mans; but I know mother's got enough of it.

Little Mary P.'s father had gone to Europe. During his absence she prayed continually or him. On his return she ceased praying for asked her mother. "We have got him at home asked her mother. "and we can take care of him ourselves!'
very little boy had one day done wrong, and he was sent, after maternal correction, to
ask in secret the forgiveness of his Heavenly Father. His offence was passion. Anxious to hear what he would say, his mother followed to
the door of the room. In lisping accents she heard him ask to be made better; and then, with childlike simplicity, he added: "Lord, make ma's temper better, to
A LaDY living near Baltimore, who is very
dcaf, stopped a milkman, as he was passing the dcaf, stopped a milkman, as he was passing the
house the other day, and asked him how much house charged for a quart of milk, and then had quart of milk and emptied it into the trumpet, and the result has been that he lias to go three miles out of his way to keep out of sight of the
lady's son, who sits on the porch with a shotlady's son, who sits on the
gun waiting for him to pass.

Men and Mice.-The newspapers, says the Rural New Yorker, are fond of telling stories
about the cowardice which women will show in about the cowardice which women will show in
the presence of a mouse. A severe masculine censor once declared that the most grave and
wise gathering of women, for the most importwise gathering of women, for the most importoff its balance by the letting loose of a mouse
in the room. That was men's theory. Here is in the room. That was men's theory. Here is
a fact: While a judge was holding court at
Van Wert, O., a few days ago, a mouse took advantage of his preoccupation, and climbed up tendants became aware of the situation when the judge suddenly gave a jump, clapped his
hand to his legs and stamped on the floor. The Sheriff rushed to the rescue, and the spectators rose in their seats, not kuowing what was about
to happen. The Judge whispered to the Sheriff, a lawyer shook the intruder out, and in the general confusion that ensued the mouse es
caped. Fancy the howl of derision that would have gone up from "the superior sex" if this
had happened in a court presided over by a

 | papers regularly and diligently, and sucked out | it away from him; and then he'll squall, and |
| :--- | :--- |
| of them the nutriment his mind needed for its | then mother will give him some more, and you |
| austenance and the matcrial it requirel for use. | can take that, and we 11 both have sone." |

## Young Folks' Column.

## Doodle Bugs."

It is a known fact that nearly everything in nature likes music; snakes have danced to it, with rapt attention, and even bugs are not in ensible.
"We call the Doodle Bugs up any time we have a mind," said some little girls to me one day when I was teaching school in Western
Virginia.
"Doodle Bugs?" said I. "I never heard of ch things.
"Would yon like to see them?"
Then the an old log school-house, roofless and floorless and, joining hands, they squatted upon the ground, forming a ring, and began chatting in "Uncle Doodle, Uncle Doodle, Uncle Do-o-dle Bugs ?"
I looked on in astonishment, for I could see nothing but hard-baked earth. There seemed not a living thing visible; but the children kept when I noticed the ground began to heave in little spots and tiny heads peeped out, soon colored beetle.
When the children stopped singing the little things scampered back into their holes.
This struck me as very singular. But the we are constantly meeting with strange things
in Bugdom. It is like fairy land if we only become intcrested.
There are many, many kinds of beetles called coleopterous insects, because they have wing
cases; that is, they have shells or cases on their cases; that is, they have shells or cases ond backs, under which they foll their wings, some kinds using them so very seldom that we would never know that they had wings. A great
many live under the ground, and others on the trees, flowers and grain. Indced, there is scarce a place where you may not find them
Antry has noticed, and perhans been the nuch amused with the Bill Chafer, or Tumble bug, as we call it here in New Jersey. How they seem to be playing with marbles right in
the middle of the road on hot, dusty days! How they push and tumble, and get their
jackets all dusty in their efforts! Sometimes iackets all dusty in their efforts ! Sometimes up an elevation or over some inperdiment in the way, you never wonder what all such work meant, or did you suppose it was just the way
those bugs have of amusing themselves? I can remember when I thought so myself. But after I became older I began to wonder where the bugs got tho balls, what they were made of,
and what they were going to do with them. I have since found it out, and it is all very inter

## They

They make the balls out of the excretions of animals, in which they deposit an egg, lewving
it in the sun until it is baked almost as hard as a marble; then begins their work. They toil and struggle until they get the balls three fee
under ground. Theu the little one is left in it under ground. from early September until the spherical home from earling, as warm and cosy as you please, growing larger and larger until it hursts from its to the surface of the ground; or, as some say, they remain in the balls until they become ready to begin tumbling and pushing like their mothers before them.
April Wide Awake.
The Influence of "Young Folks' Column.
Editors Press:-I find that our "Young Folks' Column" serves a double purpose. Attracting the little folks to itself, it makes them hungry for more, and they soon find it in the columns devotod to subjects of general interest, till even the advertisements attract their at tention, and books and farm animals and ma-
chinery are discussed; the latter reproduccd often, some by the pockct knife, some by the pencil, developing the genius of the mechanic and the artisan. Perhaps I am singular, but in the light of my experience and observation the journals and papers enjoyed by intelligent sustain in children a healthy and invigorating interest in current literature, and in moral, to be enrolled on the pages of future histories of the present. Interest in these matters as they transpire, lends relish to their readings of
past history and its study is relicved of the dry past history and its study is relicved of the dry-
ncss which appalls the youth zonversant only ness which appalls the youth sonversant there are so many good and beautiful, but like cake and candy, I would deal them in restricterd quantities. C. I. H. Nichols. quantities.
otirer, mother, here's Freddy teasing the
aby. Make him cry again, Freddy, and then mother will give him some sugar, and in thall, and an take that, and we.ll both have some

Good Health.
The History of Diphtheria.
tions eonety quoted some pertinent suggesdelivered by Dr. Maxon, of Syracuse, New York, and published in the Journal of Chem-
istry. There are also matters connected with istry. There are also matters connected with The annual flooding of the Nile in Egypt, afford. ing, with the moisture thus produced, a generation and mingling of marsh and animal miasnis, with the various imprudences of the EEyptian
people, may readily have originated this discase. Asia Minor, probably the next most prediposed country and peoplc, was next invaded, as might
have been expected. Then, in its turn, the south of Europe, burdencd with the imprudences of the third and fourth centuries, with its influx
of the northern hordes upon the Roman empire. of the northern hordes upon the Roman empire.
Later still, central and northern Europe, disracted with the turmoils and degraded by the pollutions of the dark ages, became ripe for it. America, had become sufficiently predisposed it or received it from the Old World, has hence suffered a due share of its ravages down to the present time.
Lvery step of the progress of this disease ha demic has had its cause; no case ever having
ccurred anywhere, unless contracted by the contagion from another patient, without some general or local cause-usually local and discov-
crable-from which may have emanated aninual crable-from which may have emanated ane fact may very likely be due, in part at least, to the more artificial mode of treating children, it
more common victins. For it is a shameful fact that, as a result of modern fashion, few children now, among all classes, have proper smaller number take their food with strict regularity, abstaining from it between meals, as well
as from candies and other injurious and indigestible trash, as they should. A radical reform in these respects, together with cleanliness and an
avoidance of the pollutions in and about $d$ well. ings, barns and out-houses, with proper sewer
age, would greatly diminish the number of cases as well as the malignancy of this and all othe putrid diseases. Such a rational and proper
course, persevered in for a reasonable time, If all interestcd in this matter would, instea
of them lest of regarding it as a visitation of God, set about much might and would thus be speedily done to
eradicate this diseasc.

## Hints for the Wakeful.

If you connot get sleep when you first go to bed, says Hall's Journal of Health, give orders
to be waked up at daylight, get up promptly, do
not sleep a wink during the day, go to bed not sleep a wink during the day, go to bed
at your regular time, with directions to be wak ed as before; in a week you will find that you can go to sleep promptly, but then be careful to
get up as soon as you wake in the mornings, get up as soon as you wake in the mornings,
thus you will soon find out how much sleep
your system requires, and act accordingly. your systen requles,
Always avoiding sleping in the daytime; for if
you require seven hours sleep, and spend that you require seven hours sleep, and spend tha
much in slcep at night, what ever time you
spend in sleep during the day must be deducte spend in sleep during the day must be deducted
from that seven hours, or you will soon becon from that seven hours, or you will in the night,
wakeful again. If you wake up either go to bed two or three hours later or
when you wake, get up, even if it be but one when you wake, get up, even if it be but ou
o'clock in the morning, and do not sleep a mo ment until your regular hour for going to bed;
and if you go to bed regularly, get ap as soon as and if you go to bed regularly, get ap as soon as will find out in less then a week how much sleep you require, then act accordingly. Na
ture loves regularity, and the four hours slee from ten to two, is worth six hours after twelve
o'clock. The great rule is, retire at a regular early hour and get up always as soon as you
wake, if it is daylight. If persons have force of will enough to keep from going to slcep a
second time, it is greatly better to remain in second time, iften or fifteen minutes after waking up, to think about it, and enjoy the resting of that comes over us on waking, especially if we have taken more exercise than usual
day, or have been kept up later.
Treatment for Corns.-The Druggistg' ad Vertiser handles this painful subject as follows: Kecp the fect clean by frequent ablutions with warm water, and wear easy, soft boots or shoes.
Without the latter precaution, corns will generally return, even after they appear to have ally return, even after they appear to have
been perfectly removed. After soaking the feet in warrn water for a few minutes, pare the corns as close as possible with a sharp knite, taking care not to make them beec.,
part affected $a, ~ s m a l l, ~ c i r c u l a r ~ p i e c e ~ o f ~ l e a t h e r ~ o r ~$ buckskin, spread with some emollient plaster and having a hole in the center corresponding
to the size of the corns. They may now be touched with nitric aeid by means of a small glass rod or wood tooth-pick, due care being taken not to allow the liquid to come in contact with the neighboring parts. Ivepeat this process
daily, until the offender be sufficiently sottened to admit of removal.

## Domestic Economy.

## Johnny-Cake Without Eggs.

I found out for myself long ago, that delimeal without cakes could be made of sweet new wody else knew the same. I used to scald the meal mixed with a little salt with just as little boiling water as would wet all of the meal. This mixture I thinned a little with milk or more of wheat flour, then I baked it in gem pans in $a$ hot oven. These corn gems are good, too!in a hot oven. These corn gems are
Lately I have boen trying to use up some fine white corn-meal that seemed a trifle bitter. There was little sweetness in it to bring out by scalding, and I wanted to disguise the slight They all dictated eggs and butter or lard. It was impossible for me to get fresh eggs (I threw
away four of the last half dozen, and have lived way four of the last half dozen, and have lived from a neighbor), and "shortening" is one thing steer as clear of as possible. So this is the
Scald about a pined above. at night with boiling water. In the morning thin it with milk, add a teaspoon of salt (only level full) a big tul of sifted of sugar, and, lastly, a teacuppoonful of baking-powder. The batter should be rather thicker than for griddle cakes as the meal has swelled some during the night, and no allowance need be made for that. I cannot see where the necessity for shortening comes in, as hese johnny cakes are certainly tender. A litThe above recipe makes two thin cakes if baked in common "spuare tins." When the milk is ful of soda to a large pint of milk) is used in-

Asparaqus.-Select green asparagus. If you have the privilege of cutting it from the tender. If yon must buy from the marketa, try several stalks and see that they are not woody and tough. The white ends are usually so, After breaking off the hardest part, the asparagus may be improved by taking a thin sharp
knife and stripping off the outside skin, begin knife and stripping off the outside skin, begin
ning at the cut end and drawing the skin upwards as far as it will go. The bitter lies next to the outside. Now cut the stalks into pieces little salt, and just cover with boiling water. weet cream; rub togetlier a teaspoonful of but ter and a teaspoonful of flour and stir in; boil up a minute or two; toast a thin slice of bread light brown; cutinto several pieces; lay into
the bottom of a dish, aud pour the asparagus ver. Or leave the asparagus without cutting
up, lay it all one way in the saucepan, and
otherwise prepare the same.

## Green Peas.-The most important part is to

 get the peas fresh from the vines. They lose picking. Wash before shelling, not after. Shell the peas, then select the tenderest pods, and put into joiling them 10 or 15 minutes, skim out the pods and put in the peas. Boil them slowly 20 minutes, trim with a little rich crcam, water that there will not be more than a half teacupful around them when they are cooked, and this should be seasoned and dished with the peas. Those who must depend upon the ets or peas often find them very insipid lecting and cooking. Sometimes a spoonful o sugar will add to the flavor. l3oiling the podsadds much to the richness and sweetness of the peas.
Stove Blacking.-The following recipe for will mell, will prove acceptable to some of our read. mell, wamp-black is mixed with water-glass (a solution of silicatc of soda) to the consistency of syrup and applied with a brush as a thin and wards graphite, or black-lead, mixed with gumwater, is applied, and a polish obtained by rub-
bing in the usual manncr.

Making Tea. - A cup of tea is considered by many to be one of life's indispensabilities. To get the best cup out of the smallest teapot with boiling water, put in the tea, and let the pot stand five minutcs; tho leaves gradually sink, are not scalded, and the true aroma is retain-"tca-drawing.

Mucilage or Cement. - The Journal de Phar macie states that if to a solution or gum-arabic solution of 30 grains of sulphate of alumina, dis solved in two-thirds of an ounce of water, be of fastening wood together or of mending porce | lain or glass.

# PAC IC RURAL <br> expriss will 

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## The Week

The sun shincs again; the Legislature has adjourned; blessings thicken and prosperity shakes the brakes from its wheels. Every
is full of life and zeal and spirited work.
The growing crops still hold the promise of an outcome mprecedented in our agricultural
history. Pasturage aud hay will be beyond the ability of the animals to consume it, and for another two ycars no lean kine shall vex our
sight nor tornent our dreans. (irain of all
kinds will to ine rels of European rivals hold the prices firm quar promise well for the coming tous which we shall have to spare. Fruit and grapes will be gathhere morc than, its needs. Thus again the the
huestion of au ontlet for our fruit will rise, and it behoves all growers to lay whatever plans they can to reach new marts. The drying and
canning will be stimulatel, and we hear of sevcanning will be stimulated, and we hear of sev-
eral novenents to ercct capacious drying facto ries. It will indeed be a year for pushing for-
ward all worthy cuterprises, and no one
should sleep when the lield is should sleep when the field is ripe for action.

Notes on Plowing and Manuring.
Our Half Moon Bay oorrespondent gives an acconnt in this issue of his practice in cultivating hillside land, whick will be read with tcrest by all: cspccially, doubtless, by those who, in expectation of a dry season, mellowed and sowed their sloping fields early in the winter, and then found their soil carried down by
the drenchiug rains of January. Of the soundness of his doctrine with reference to the lands of which he writes there seems little doubt. The points iu his special treatise suggest comments of a more general nature.
The spoke not long since of some considera tions which bore upon the subject of dcep and
shallow plowing, and urged the fact that deep plowing should not be carelessly undertaken merely upou the grounds of general and plausi-
ble theory. We also citcd indications that a ble theory. We also citcd indications that a part of the geueral abuse of the practice of "scratching in with the cultivator" was uncalled in which work with the cultivator, or at least shallow plowing, was just the treatment needed to give a crop with strong upright stens and
heavy heads. Take for example the following: One of the leading farmers in the Alameda val. ley put to us the other day this proposition
"If I should lease my farm to a tellant and he shoull plow it deep, he would get a growth of straw breast high while the rains lasted, and it
would either fall aud cost more than it wa worth to get it of the fields, or, if it stoon un-
tir the drouth comes on there would not be til the drouth comes on there would not be
moisture enough, which could be drawn up in the soil, to mature the heads, nor would the in jury be contined to one season? I betieve if I
should sue the mau I should sme the mai could get danages against
him from a jury of my ncighbors who could see
the iujury done to the farm." This statement we give is one of many which we hear from practical men. All do not agree as to the per
manence of the injury done by deep plowing manence of the injury done by deep plowing,
because some clain that the result, on a second year, has shown a gain. We do not propose to
pursue this branch of the sulject at this time We would note especially the fact there is set ting a general reversion of opiuion- concerning
the advantages of over-working the soil, espethe advantages of over-working the soin, espe
cially where it is of a light nature. We have
al ready noted in a former issue, the expericuce alrealy noted, in a former issue, the expericuce
which proves that wheat, to acquire stout stems and mature heals, requires a moderately firm
seed bed aud not one which is mellowed over nuch. Some other agricultural plants manifest a similar taste where they are grown on soils
natnrally light. This sulject las lately been naturally light. This sulject las lately been
discussed before an English farmers' club, and the opinions adranced scem the deductions from a generalized experience. They very ofteu heard
striving farmers complain that although they striving farmers complain that although they
had cultivatcd their laud to the very utmost, and perhaps plowed it three or fonr times, they
were, were worse off than their neighbors, who had done just nothing at all. One speaker be than nccessary had been done in the way plowing, in fact that they lad bccn farming too
fast, and that four plowings on light land were fast, and that four plowings on light land were
too many by three. He believed that for every purpose required after the first plowing the cultivator would be far the most useful aud cco-
nomical implement. He continned his statcnomical implement. The contimued his state
ment of observation in thesc words: "We of
ten see the best crops on ten see the best crops on or near the headiand,
particularly in dry seasons, and on exannination particularly in dry seasos,
we find it is whe plow has not had so
nuch chance, and when the soil has beeu more consolidated. Have youn never hicard a fariner say; 'I have no clover except a bit on the head-
land!' [The "headlands' are the strips of land along which the steam plowing eugines move when drawing the plow from side to side across
the ficlds.-Lus. Press.] Well, I think this hclps to prove that we plow too much, or too
hoep, deep, or do not consolidate enough. I kuow of
but very little land in the neighborhood that requircs more than one plowing in one scason,
as I said before, all other stirrings being much better performed by the cultivator.
This experience is of much interest in connection with the general subject of tillage. How
far it is of practical application to our conditions, we are not prepared to say, but the fact that excessive working of light, soils is found
most injurious in Fngland in dry scasons, and the other fact, that it is observed to be similarly
injurious in some parts of this State, where the diry condition is of regular occurrence, may
doubtless point to somc relatiou bctween the doubtless point to some relatiou bctween the
two experiences. We give the facts at this time without attempting on elaboratiou of their relations.
We are al ways gratified to present experience which indicates a successful use of manures iu this state, lecause tradition is so strong ayainst it, and yet there seems no other way to restort
o the soil the streugth which we take from it We have no doubt that our strange conditions demand a method of applying manures, somewhat different from that which prevails else-
where. This must bediscovered by experiment and comparison of experiences. Our Half Moon Bay letter is a contribution in the right direction, and will, we trust, be followed by records
of expericnec in other parts of the State, for it is hardly likely that one linc of practice will be successful in our widely diversc regions. I
this search for the key to the profitable usc
mannre, we have associates among the farmers
in New Zealand in New Zealand, whose conditions are, in some
respects, not unlike our own. In the Auckland respects, not unlike orr own. In the Aucklanh
Weekly, Nexes, we read as follows: "At the
Wionter Waiuku agricnltural diuncr, Mr. Wallace is tried an experimeut in regard to plowing. One portion was plowed decp and weeds sprung up
in great alundance; the other portion lie scariin great abundance; the other portion lie scarl
fieed and gave a fair supply of nanure. The wheat caine up, choked the weeds, and on this portion of the farm he had a splendid crop, and he fthought that shallow plowing and good manuring would pay well in this province. experience and should understand the much but his statcment is a startling one, and 1 should like to know on what princiyle such things can be. If such be the case, then it is
useless and worse to go to the great useless and worse to go to the great cost of
extra power for deep plowing and we have all These are theme
These are themes which it would be well for our agriculturists to consider in the light of
our experiences, and wc trust that they our experiences, and wc trist that they will
give us the conclusions at which they arive to the end that the true practice may be shown

## The Rainfall.

The rainfall everywhere throughont the State has now reached sufficient proportions. The following table shows the measurement np to
the date stated in the different parts of the Statc:
Sann Franciseo, Mar.
petulu una, sur.
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Iteald
Napa
St
Ink
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an Jose, Jlar. 30,
lission San Jose, Aprii
Rabbit 1hseuster,
-How g
me remedies for evils are and yet how im-
ractical their application. For example, w read in an Fuglish exchange that soot is a dis their inroads upou young wheat. The prescrip. tion is in these words: "I have always found lrilling; the plant has more chance to tiller ont and it prevents hares from rumining betwecn the rows and biting through the straw, as they will do to a fearful extent ind drilled crops. As soou
as the young plants begin to make their appearas the young plants begin to make their appear-
ance, engage a trustworthy man to sow over ance, engage a trustworthy man to sow over
the wheat, barley or oats oncc a week, very early in the morning, a small quantity of soot nixed with a very little guano; such attentio will rally the young plant into strcngth, aud the most trying mouths-March and April., Now the idea of getting a man to sow soot over our wheat fields early in the morning once a week seems impractical, when it is known that there are many ranches with fields of wheat so
large that a man conld not soot them if he large that a man conld not soot them if he
should work from now uutil larvest, aud the price of the required soot would amount to more than the grain was worth. Nevertheles have a dislike for soot, and sometimes our gardens or trees could be saved from their inroads by its application in a small way.

Another Remedy for Pifilloxera.-The war against this ruinons insect continucs. Wc read in the London Farmer that M. Denis Monnier, Professor of Chemistry at the Univer sity of Geneva, has attempted another chem-
ical cure. He believes that he has found in liquid sulphurous acid an agent which is at once final to the insects aud harinless to the plants. form, can be readily liquelied under the press ure of three or four atmospheres, and being thus introduced into the ground in closed vessels, is liffused throughout the soil with great energy, when it is again set free, killing the phylloxera in its subterranean hannts. A report, presented
to the Federal Council by M1. Desor, states that M. Monnier's process has proved completcly successful at l'regny, but whethcr it will act in differcut kinds of soil remaius to be shown by further experiments. At present it is surnised that in claalky soils the action of the sulphurons acid will be so far neutralized as to
render it inert as against the insects. In a note on this same phylloxera question, ad
lressed by M. Truchot to the Academy of S Iressed by M. Truchot to the Academy of Sciof potass is statcd to be doubly beneficial, this at the same time furuishing or the enrichmeuy on
which it is cmployed.
t

## Queqies ano Replies.

## Rye Grass.-Egyptian Corn,

Editons Press:-Will you, or some of your kind corre
glondents, inform meand other patrons of your valuable Journal the name of the rye rrasp wlinich is so depirable in
the foothils? Car. you telf me if an analy sis has been the foothills? Cart
made of Eyyptian e
Santa Cruz county.
The rye grass of which most has been said in our columms of late, has been grown from seed was prod from New Zealand. The original stock acclimatizaty than there fromgland, but by to our own, is helieved to have cined a partic ular adaptation for sur tained a partic doubt that the grass which is sold under the names "English," "perennial," aud "Italian," the Ncw Zealand. odating plant, and has been found to adapt We do not know of ans very rapidly. We do not kuow of an analysis of Egyptian would be whether it is or is not on record, it Prof. Hilgard upon. An analysis would in terest many, for there will be a very general planting of the sced, in an experimental way this year, and large acreage where it has becn found to thrive. We should have analyscs both of the grain and of the dried and green

## Growing Cranberries.

Editors Press:-I sec in the Press an inquad some littlc cxperience in the matter, and will give you the results. Three years ago I
procured 1,000 plants, and sct them on a piece of ground about $20 \times 30$ feet. The first ycar they date not grow much, as 1 received them very
late the season. They made good stroug plants, however, and the next year they grew
tinely and were full of very fine fuuit. The last senson was bad for them. I had so much to do
that I neglecterl them, but water was scarce for irrigation. They were plantcd on a piece of
moist land, near a spring, about 600 feet above the sea, and close up the mountain. I irrigated attention otherwise. I am well satisfied that with good cultnre they will pay well, even on sold the old place.-R., Carpinteria, Santa Bar. bara county. Alden Drled Squash.
Enirors Press:-I send you by to.day's mail a package
of Alden dried squash. It is prepared at the Alden Fruit ractory, San Jose, and we desire to make the public ac-
quainted with its merits. Please test it. We convider it
The cleapest and best artiele of the kind In market. Ther are tell pounds of yreell synaeh in one of dried.
The water only being extraeted it chaves the nutritious
part of the vegetable unimpaired.-C. T. Settle, San Jose. This article is unquestionably a gratifying pies and made an encore pie the first time. One piece was not enough of it, it was so richly
Havored. As a dinner vegetable it is likwi lavored. As a dinner vegetable it is likewise
delicious. It comes in a fine powder and thus cuickly takes up water and assumes a good onsistency. Being thus n̂nely diviaed, it lumpy as careless cookery frequently makes the fresh vegetable. We have not seen a more
perfcet success in the line of dried vegetables. Red Clover Again.
EDtrors Prfss:-1 have not seen an answe to my guery: Who has tried red clover on irriRosa, mentions in his letter from Lake connty, in your issue of January 12th, that Mr. Linsa heither irrig 0 acresed red clover that ot the acre aumnally. This, I thiuk, is as gool as cau be done with alfalfa withont water; but I repeat my query: Who has tried red clover on
irrigated land ?- Jso. Mavity, St. Helena, Vapa Co.
Eidtors Press Solda County Cow uary 23d a statement from Jamcs Smith, of Ferndale, in regard to the yield of milk from
his mixed grasses, I would simply say I have a cow that has been giving milk five months athe preseut time she is giving 44 pounds o week, after using all the milk and cream needed in a family of six, we made 12 ponnds of but my cow, and had 20 pounds.-Horace Drake hohnerville, Humboldt Co., March $22 d$.
Spanish Pea
 land drills, hik
feles eounty.

> Fertilizers for Sugar Beets.-The agricul tural Society of Nelun publishes an interesting of cultating leet root, plots of gronnd. The general results arrived at are that early sowing shase together aro rows widely separated; and that the superphosphates, or better still, a

Incongruities in Dairy-Produce Market
EDrrors Press:-I presume in the nature of things we
must have a change soon. Butter at 16 celts and cheese must have a change soon. Butter at 16 celts and chees
at 17 cents per pound. And the mik that produces one
pound of butter will make thrce pounds of cheese. It i pound of butter will make thrce pounds of cheese. It i
to be hoped that our bis dairymen have scoured ou
thcir vats and gone to cheese making by this time, so a oo rclieve the butter market and give the man who run
a small dairy a chance to get even on his produce. As a smal dairy a chance to get even on his produce. As a
rule, anything under 25 cents per pound for butter in
San Francisco, does not repay the naker the cost of pro duction. Should prices remain long as they are, some
-EDWD. BERWICK.
Our correspondent presents the situation pointedly, as is his wont. The outlook and the dairy producers. A few years ago, when the price of butter fell below 30 cents, there were considerable shipments to New York, but since
then Eastern people have learned to worship then Eastern people have learned to worship the false god, of the legitimate article is so depressed, that their markets can give us no no better off than are we, and their firkins, which they used to store up for high spring rates, are falling at bakers' prices.
It is quite probable that some relief will be had yet the contrast dairies into cheese dairies, and yet the contrast in price is hardly as great on indicate. He has taken the top of the ladder cheese now arriving which sells for 13 cents with an average for all receipts of about 15 ents. The average on butter would not fall far is ground enough for with this revision there yet the rush toward the cheese vat must not be a precipitate one or else the milk will be used worse than it is for butter at 20 cents per tb.
Even good cheese will fall by the stimulated production and poor cheese will be sold, as we half what it cost to make it. No one can make good cheese without experience, nor can a butter house be converted without some considerable attempt cheese making uuless he has the skill cheese be taken from the press in good condition there may be many a slip in the handling and curing, and as the quantity accumulates, the curing, and calls for not a little labor and for proper curing calls for not a be shipped to the city too held at home until the market favors, it will droop on forced sales. There is a sort of Scylla-
Charybdis feature about the business, unless the Charybdis feature about the business, unless the
dairyman can hold his owu bark under control dairyman can hold his owu bark under con
There is little doubt in our mind but that the surest way to derive all the money there is in the
nilk is to be prepared for either cheese or butter, as the marke prepared this remark would not asply to a number of dairies, which have the apply to a number of dairies, which have the as the case may be. Probably they could gain nothing by any change. But for the mass of the situation, therewould be profit for themselves and rescue for their humbler neighbors if they a balance in the production and a true relation between the two commodities. Not only would
this be true among dairies shipping to this this be true among dairies shipping to this market, hut there are oftentimes in remote parts of the State where money could be made by intelligent watching and minis
But we do not expect to see the present depression loug continue. A little more sunshine result will be a wealth of true flavored butter which will he a safe article to pack or pickle, which now results from the great weight of butter from rank feed which must be sold when fresh. Although it is not probable that high prices will be reached during the year, there milk, which will be made as cheap as milk was ever produced, because of the amount of pasturage which is in excess of the mouths to crop

A Blessivg.-James Morse, Jr., of Guadalupe,
Santa Barbara county, writing to the New E'ngland Farmer, says: "A friend has just sent me thrilled me with joyous recollections of the past. It was like meeting an old friend, for I was a to California, from Yermont, in 1869. Our mode of farming here is so widely different from What it is iu New England, that the same agriaur farmers are blessed with a most exaper, the Pacific Rural Press, and some others of less note.

> Horses for War. - The putting of the English armies on a war footing is stimulating the patch from Montreal says the demand for horses for England is increasing, several carloads daily, destined for Europe, They are intended
for military service and branded with the letter "S." Large shipments of cattle are also being
forwarded from the lower provinees, and the country east and west is being searched for suitable lorses for war purposes.

## An Ornamental Cottage.

We expect to give our readers a number of tasteful designs for house-building, which we trust may prove useful and suggestive to them in their rural and suburban home-making. It
will be a good year for improving our California homes. The influx of money for bounteous crops will give many the means to gratify their desires in this direction, and we hope that many wives and children may spend many pleasant summer hours in talking and planning for the and brighten their lives. We can but plead for them that such surplus as can be well spared from efforts to diversify and increase the pro ductions from the fields, shall be expended upon the home, and not wasted upon vain pursuit o often been found ruinous to both soul and

## Grain Lifter for Headers.

There is a chance that this year's heavy growth in the grain fields will make all devices for reaching it, when lodged or trinkled down, valuable to grain growers. We give on this page an in-
genious device for perfecting the work of the header when dealing with grain of this charcter. It is claimed to be very successful in aving grain without waste in heading. The lifters are light and strong and can be easily djusted to the header by any one who can use cans. As shown in the engraving, the lifters can be removed by the drawing of a bolt if the grain should not need their aid. They are worth examination, and, as we said above, this year bids fair to make some such coutrivance very desirable. The lifters are manu
by . Bonney, at 221 Mission street, S

Sheer Dip.-We have given in former is

design for ornamental cottage.
pocket. The farm is itself the surest field for anterprise, and
The cottage shown on this page is one de H. Hobbs \& Son, of Philadellliaa. They are
doing a good work for the homes of the country, doing a good work for the homes of the country,
and infornation concerning the terms on whicl they work may be found in our advertising col umns. The design is a combination of the Frencl
and cottage style of treatment. It is conven and cota, ge sitye ommotions for a small fanily, econd story gives rooms of nearly uniform
have found effective for dipping. As shearing other prescription, which we find in the Auck. land Weeklyy Nens, and which is approved hy
the New Zealand shepherds: ${ }^{\text {s. }}$ The most cer tain, simple and least expensive is totacco and
sulphur, used as follows: Make, say five gal suphur, used as follows: Make, say five gal
lons, as follows: Twenty-five ounces of well cured, sound tobacco, 20 ounces of flour sul. phur; boil the water and put in the leaf (the
sulphr
may be put in the dip afterwards) pulled to pieces if the tobacco has been mann
factured. Cover the boiler with a lid to pre factured. Cover the boiler with a lid to pre-


FIRST FLOOR.
hight, save a small angular slope near the ceiling, causcal y the root, hand this is rather an
ornamental feature. The roof can be made of slate or shingles, the flat top being of tin. The
cottage, surrounded by grounds well laid cotaage, surrounded by grounds well laid out be found a beauty and a comfort.
In the simaller engravings will


BONNEY'S ADJUSTABLE GRAIN LIFTER plans for dividing the two floors. The lettering has the following signiti
First Story. $-H$, hall, 7 feet 6 inches wide $P$, parlor, 15 hy 17 feet' 6 inches; $S R$, sitting 10 by 13 feet; $L$, library, 9 by 13 feet. 6 inches by 15 feet 6 inches; $C$, chamber, 11 fcet 6 inches by 15 feet; $C$, chamber, 10 by 15 feet,


SECOND FLOOR.
makes tea, only do not boil it afterwards, a weaken the effect of the essential oil. Make bath of these proportions in accordauce with the size of the flock. The tank or bath should not be made to hold more than 20 sheep at a kept at a temperature of $110^{\circ}$ to $112^{\circ}$ Fahr. This mixture is perfectly harmless, either to animal or fleece. The best season to dip is a soon after shearing as possible. Repeat the process every 10 or 11 days, stirring the up well before commencing to dip, to keep the sulphur in suspension in the solution. The re
sult will be a perfect cure. Should auy sheep sult will be a perfect cure. they slould be kept separate, the ulcers opened, and a stronger so lution of the same mixture "poured on the bad spots out of a bottle or cup.'

The Timber Land Bill.-Page's Timber Lhe Timber Land bill.-Pages Simber Committee, on motion of Wigginton, in onc particular not heretofore noted, namely, by pro ties heretofore indicted, etc., shall not apply to timber cut or removed for thic purposes of exportation to foreign countries. This will allow to
continued detection and prosecution of guilty partins engaged iu wholesale depredations in Washington Territory, and among fores
larly convenient for slipments abroad.

## Jumping Seeds or Devil Beans.

These curious little things which we have here fore described and illustrated in the Press, have excited no little interest among entomologists, and their studies have brought to light many interesting facts concerning the written history of and that of the plant it infests, and other point of local interest on this coast. We tal pher fore from the transactions of the St. Louis Academy of Science, which are kindly furnished
us by Mr. Harry Edwards, the following esting paragraphs:
Mr. Riley exhibited certain seeds which pos sessed a hidden power of jumping and moving recently the table. He stated that he ha of San Diego, Cal,, and that they were generall known by the name of "Mexican jumping seeds." They are probably derived from a tricoccous euphorbiaceous plant. Each of the
seeds measures about oue-third of an inch, and seeds measures about oue-third of an inch, and
have two flat sides, meeting at an obtuse angle have two flat sides, meeting at an obtuse angle,
and a third broader, convex side, with a medial and a third broader, convex side, with a medial
carina. If cut open, each is found to contain a carina. If cut open, each is found to contain a
single fat, whitish worm, which has eaten al single fat, whitish worm, which has eaten all with a delicate carpet of silk. The worm very
closely (Carpocapsa pos the common apple worm (Cospocapsa pomonella , and, indeed, is very
closed red, the insect being known to science as Carpocapsa saltitans. It was first
recorded by Westwood in the proceedings of the Ashmolean Society of Oxford, in 1857 (t. 3,
pp. $137-8$ ), aud repeatedly referred to under the name of Carpocapsa Dehuisiana in the Annale The egg of the moth is doubtless laid on the young pod which contains the three angula
seeds, and the worm gnaws into the seed, which, iu after growth, closes up th seed, which, iu a ter growth, closes up the
minute hole of entrance, just as in the case of the month of February the larva eats a circula hole through the hard shell of its habitation, and then closes it again with a little plug of
silk, so admirably adjusted that the future moth, which will have no jaws to cut with, may escape from its prison. A slight eocoon is
then spuu within the seed, with a leading to the circular door; and the hitherto restless larva assumes the quiescent pupa state. Shortly afterwards the pupa works to the door,
pushes it open, and the little moth escapes pushes it open, and the little moth escapes. space, the slightest motion will cause the seed space, the slightest motion will cause the seed
to rock from one of the flat sides to the other But the seed is often made to jerk and jump and, though this has been denied by many
authors, Mr. Riley has had abundant proof the fact, and had seen the seed jerked several lines forward at a bound, and raised a line or
more from the surface on which it rested. If more from the surface on which it rested. If the seed be cut, the worm will soon cover up the whole with a transparent membrane of silk;
and if two of the opposite angles be cut, the movements of the worm can then he seen, if the
seed be held against the light. It then becomes seed be held against the light. It thicn becomes the worn holding fast to the silken lining by its anal and four hiud abdominal prolegs, which the head and forebody aud tapping the wall of its cell with the head, sometimes thrown from side to side, but more often brought directly
down as in the motion of a woodpecker's head when tapping for insects. Iu drawing back the forebody, the thoracic part swells, and the horny
thoracic legs are withdrawn, so as to assist the thoracic legs are withdrawn, so as to assist the
jaws in receiving the shock of the tap, which is very vigorous and of ten given at the rate of two per second and for 20 or more times without in-
terruption. It is remarkable that this, of all the numerous seed-inhabiting Lepidopterous
larvæ, should possess so curious a habit. The larvx, should possess so curious a habit. The
seed will move for several months, because, as with most, Tortricilous larvæ, this one remains a long time in the larva state after coming to its Mr. Barnes gives the following aceount of the plant, received through Capt. Polhamus, of
Yuma, A. T. It seems to be called both Yerba de flecha and Colliguaja by the Mexicans: name the shrub bears that produces the tris the r seeds that during six or eight mone triangucontinual jumping movement. The shruh is small, from four to six feet in hight, branchy,
and in the months of June and July vields the seeds, a pod containing from three to five seeds. These seeds have each a little worm inside. The caf of the plant is very similar to that of the Garambullo,' the only difference being in the size, this being a little larger. It is half an inch in length and a quarter of an inch in width, asl-colored, and the leaf is perfectly grecn during all the seasons. By merely stirring coffee, or any drink, with a small branch of it, it acts is an active poison, speedily causing death unis an active poison, speedanteracted by an autidote.

On File. - "Views in Shasta," C. H. S. ; "The Malva," R. L.; "Notes from Los Angeles," "B. "Squirrel Killing," I. C. W.; "English AgriAmerican Cheese," J. P. S.; "Inexhaustihle ,' E. W. H.
The letter carriers eollected in this city in
March 551,913 letters and distrihuted 448,692 .

Information Concerning Patents

## AUSTRALIAN COLONIES,

EAST INDIA, Etc.
The geograpbical position of San Francisco, and the fact of baving a regular communication by means of a line of steamer's renders our loca.
tiou here particularly favorable for takiug out tiou here particulariy favorable for taking out
patents in these colonies for United $S$ States inrentions. Fre the esanc reasons we include with
these instructions those for the Fast India these instructions those for the East India
patents. American inrentors, as a general pateng. Aot aware that Australia presents a
thing, are net
better field for them to patent their inventions better field for them to patent their in ventions
in than alinost any other country, the United in than alnost any other coul
States and England excepted.
States and England excepted.
Comparatively little is known in the United States of this rast continent sitwated at the antipodes, and the almost fabulous richne-s and
depth of the soil, the vast strides witb which she has advanced iu population and wealth are littte known.
A correspondent who has lived 19 years in Australia, sayss "I hare been a little surprised abont one thing in connection with sour invent-
ors, and that is that they don't malie nore use ors, and that is thas of these colonies. It is trine that it is somewhat expensive to patent in all
the colonics, still it would pay in some cases the colonics, still it would pay in some cases,
and in otbers it would answer to patent an in vention in two or three of the colonies. An efficient reapcr and binder would pay to patent in all the colonics; so would an invention tor
preserving raw meat, or for benefiting those enpreserving raw meat, or for benefiting those en-
gaged in wool growing. whitc any really good gaged in wool growing. while any rengyed in
invention for the bencit of those engagen gold mining inight be' advantageonsly patented ventions have alrealy bcen patented here, and Ventions have alrealy cemunerative, and, as a rale,
have been very rep
when properly pushed, almost any good invention might be made valuable if patented here Ten times as many British inventions are patented here as American ones, yet it is notorious that the inventive faculty is not near so
developed in them as in the Auericans."
The continent of Australia has an area $3,000,000$ square miles, or nearly as much as tha onterior is waste and unsetted, but wherever the colonies bave made a start, they have made the cotonies bave made a spogress, in population and civilization. which are upon the continent, and the other two upon the adjacent islands. Or those on the con
tinent four only arc of considerable importance, tinent four only arc of
namely, Victoria, New Sonth Wales, (Queens namely, Victoria, New Sonth
land and South Anstralia. The fifth-Western Austratia-is separated from the rest by nearly
2,000 miles, ard is used as a penal station by Great Britain. The island colonies are New Zealand nud Tasnania, the first consisting of
three istands of considerable size, wbile the last three istands of considerable size, while the lasi
comprises one island. In importance these colo nies stanld at present in the order named (leav area of $2,136,180$ square iniles, with an aggregate popnlation of upwards of $2.110,368$ iuhabi-
tants. Each of these colonies has a welt ar ranged patent law, and many of the inven.
tions patented in the United Stites, could be adrantageously patented and introluced bere.

## Victoria.

The frst colony in population and imporfance, though not in sizc, is Victoria. This colony has an area of 88,198 square miles, anol a population
of aboutt 800,000 inhabitants.
The cupital of Victoria is Melbourne, a city of upwards of 240 , 000 inhabitants.
A patent may be obtained in this colony for any new and useful manufacture. An invention already patented elsewhere may be patented a
any time during the continnance of the any time during the continuance of the prior
patent, provided it has not been used or iflustrated in the colony. An examination is usually made to deter
ity of the invention.
A patent may be obtained by the inventor
whether resident or non-rcsident Whe ther resident or non-resident, but a mere importer cannot become a patentee, The docluments required to obtain a patent are petition
specifcation and drawings in duplicate and of specification and drawings in duplicate and of a
given size, one copy being on parchment. The inventor. No model is required.
The term ot a patent is fixed at 14 years but expires with any prior patent. The patent is not required to be worked in the colony. It is
subject to a tax of $£ 15$ at the end of the third year, and one of $£ 20$ at the end of the seventh

## New South Wales.

Tiles cond a population of about 6000,000 . It eapital is Syluey, silluated at the bead of a nag. about 600 miles. The pastoral an't mining interests predominate at present, and the cotony is in a highly flourishing condition. A patent or jetters of registration, as the document is called, may be obtained in this colony for any invention or improrentent. The termi is 14 years and a preliminarty examination is bal to
determine the novetty and utility of the invel determine the novefty and utility of the inven-
tion. I he patent maty be obtained tion. The patent anity be obtained by the invenThe dochments reggilired are a petition, dupli-
cate specifcations and draw ings. The law does not require the invention to be worked. The
esst of a patent for the entire term, inelading

## Queensland.

Queensland.
This colony was set of a few years since from ew er ma population square miles and a popnlation of upw
150,000 . Its capital city is Brisbane. A patent is garanted in this colony to the in
entor, his ageut or assignee for the term of ventor, his ageut or assignee, for the term of 14
years, be same as in New South Wales. The years, the same as in New South Wales. The
locuments requircd are also similar, a petition documents requircd are also similar, a petition,
duplicate specifications and drawings. The cost duplicate specilications and drawings. The cos
of a patent for the entire term, including all or patent for t

## South Australia

This is the largest of the colonics, baring an rea or 914,730 square niles and
198,257 . Its cap pital is Alclaidc.
Patents Patents arc granted in this colony for 1 yearz, an cxamination being mado as to norelyy.
The docluments required are a petitlon, dupliate specifications and drawings. The entir

## New Zealand.

This
miles,
is $W$ Well
ellinalation of 310,437 . Its capital Letter patents in this colony are granted onty when application is made there before anywher else. Letlers of repistration, however, ar
issured to bona fide bolders of letters patented elsewhhere, and have the same force as, and ex
pire with, the original patent. To obtainletter pire with, the original patent. To ob tain letters
of registration, a certiffed eopy of the specifica lion, drawings and prior letters patent, and dcclaration of the applicant that he is the bona fide holder of such letters patent, must be filed.
if made by the assignee, a certificd copy of the assignnent and a declaration of the appllicant must be flied. The entire cost of letters of regis

## Tasmania.

Patents are granted in thls colony in essentially the same manner as in Victoria, and for the same

## Trade-Marks.

Trade-marks may be registered in the colonies Reactoria, New South Tales, Queensland, New Zealand and Tasmania. The cost of a Victorian mentioned, $\$ 50$ each.

## EAST INDLA.

An East Indian patent is granted for a term of 14 years, and must be for a new inventiou
f public nility. The applicant must be the inventor, his executor, administrator, or assign,
and may be a resident, non resident, British abject or alien
The documents necessary are a petition dill five coplies, one for each of the fresiden with five copies, one for each of the Presiden-
cies. 1 be cost of an Fast Indian patent is $\$ 300$. Inventors will please write for any further Information desired concerning the above colo mess, the Canadas, and other foreign countries
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be eent free on receipt of postage stanp. Samples of our first-class ittustrated newspa pers will be sent postpaid on receipt of 10 cents. DEWEY \& CO.,


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seceral years part, and in in introducing hime, we trust that


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of eharges to employers and employ ees.

The Pactific Retal Press elosed its four teenth volume with last year. The Press is a
favorite in this offiee, as well as in the house hold of the agrieulturist. We trust it will con tinue to enjoy nanayy years of prosperity, and to
its enterprising publishers be a satisfactory its enterprising publishers be a sati
source of revenue."

Good Land in a Favorable Location.
The Redding Ranch, in the Upper Sacramento ralley, originally embracing over 26,000 acres of ehoiee grain, orehard and pasture land, is now offered for sale at low priees aud on favorable terms of payment, in sub-divisions to uit purehasers.
The ranch was selected at an early day by Iajor P. B. Redding, one of the largest pioneer and owners in California. It is situated on the west side of the Sacramento River and exteuds over 20 miles aloug its bank.
The average rainfall is about 30 inches per nnum, aud erops have never been known to fail from drouth.
The climate is generally healthy and eompartively desirable. The near proximity of high mountain peaks give cool nights during the "heated term" which oceur in our California ummers.
Figs, Grapes, Peaches, Prunes, Almonds, Enlish Walnuts, Oranges and other tempcrate and semi-tropical fruits ean be raised with suceess on most of the tract. Also, Vegetables, Corn and all other cereals ordinarily grown in he State.
A considerable amount of the rich bottom and has already been cultivated.
The soil throughout the tilled portions of the ranch proves to be of great depth and enduring ${ }^{n}$ its good qualities. It is quite free from foul growths. The rirgin soil anong the large oak rees on the bottom land is easily broken up and cultivated.
The California and Oregon railroad traverses nearly the entire length of the tract. There are several sections, stations and switeles, besides depots at the towns of Anderson and Reading-all of which are located within the limits of the ranch.
Land suitable for settlers in colonics ean be btained on good terms.
Town Lots are offered for sale in Reading, situated on the Sacramento river, at the present terminus of the railroad. It is the converg. ing and distributing point for large, prosperous mining and agricultural distriets in Nortbern California and Southern Oregon. Also, lots in the town of Anderson, situated more centrally on the ranch. Lots in both these towns are of fered at a bargain, for the purpose of building up the towns and faeilitating settlement of the raneh.
l'urehasers are invited to come and see the lands before buying here or elsewhere. Apply on the raneh, to the proprietor,
Ander8on, Shasta Co., Cal.

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Two Thoroughbred Stalliens One 8.5ear-old Filly, one 2 -year-old do, and two Brood
Mares by Belinont. The above stock can be seen at Baden Farm, close to
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Pure Brown Leghorn Fowls,
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25 EXTRA MIXED CARDS, Snowflake, Orlental, Etc.


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struction is givern in ant the brancher of an English oduca.
tion, and Modern Languages are practically tughlt. The
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Of which 640 are secured by Government title and the possessory title. It consists of
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Which is adapted to the raising of Wheat, Barley, Oats, Potatoes, Corn, egetables, etc., and will raise as large
crops as any land in the county. There is 1,210 acres of Fine Rolling Land which is A No. 1 pasture land, and of Fine Roling Land which is A No. I pasture land, and
capable of keping 1,000 hear of Shce, or 100 Dairy
Cows. The whole ranch is well fenced with picket and Cows. The whole ranch is well fenced with picket and
post and rail fence, and las eight good buildings on it,
consistiny of a good substantial and comfortable

Dwelling House of Six Rooms, Two Barns, one of them $100 \times 40$ fect, and the other $40 \times 40$
feet, a Granary, Woodshed Chicken Housc feet, a Granary, Woodshed, Chicken Housc, and a No. 1
Dairy House, new last year. There is a bounteous and
never failing supply of good soft water at both the Dwelling and Dairy Houses.
On the ranch is a large quantity of Redwood timber,
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Fine Orohard of Some 300 Trees, Of the choiccst varieties of Peach, Apple, Pear and Plum,
as well as a large quantity of Grapevines, Currant and Gooseberry bushcs, and other small fruit. There is 100 acres sown to Wheat and Barley, which is now up four or
five inches, and promiscs an ahundant harvest in the
fall. The owncr has also about 40 head of Cattle, a few
Sheep, five horses, 150 head of hogs, 100 Hens, and a larce Shcep, five horses, 150 head of hogs, 100 Hens, and a large
supply of all neecssary Farming Utensils, which he will
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one mile from to a btore and one-half mile to a good
she Sche owner's rensong for his dislike of the businers. At the price at whith it it
offered is the theapst ranch in Mcndocino County, as
ote the tids fair the crop bids fair to be worth when harvested, 84,000 .
A Therms are $\$, 000$, one-hall cash and the balaneceso-
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DEWEY \& C0., 202 Sansome Street, san francisco, cal.

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 Hece, and 42 mmanl water per second helongs with
blaes and two to threc hundr
blacklerry and strawherry plants; 30 acres of alfalfa: acres of barley, all lonking ticely, and a nico vegetable
garden. Sixty acres inclosed, three plows, one two gang
sulk sumy,
number one cows, two calves, one work team, harness,
old buggy and two dozen hens. The ranch is one mile
west of the Riverdale postoffice. We have a good school, West store and preaching every two weeks of the South
onethodist. The ranch is 10 miles north and west of
Lemore, a flourishing railroad town; $\theta$ miles due west of Kingston; 20 miles fron Fresno, the county seat of
Frenno, and 15 miles from the Central California Colony,
All the crops stock and tools mentioncd go with the Alt crops stock and tools mentioncd wo with the
ranch if sold soon. Price, $\$ 2,500$. $\$ 1,500$ gold coin down,
and one year's time on balance. For further particulars and one year's time on balance. For further particulars
address or call on raneh.
DAVID S. ORR, Riverdale, Fresno Co., Cal

FARM FOR SALE.

Farm of 50 acres in Vaca Valley, four miles from Vacaville, good house of four rooms, barn and outhouses. Well watered, fine orchard. School one mile. Forty-flve acres in grain, to be sold with the ranch or without. For further iniormation inquiro of HENRY AMMONS, Vacnille, or on ranch
O. GARLICHS.

FARM FOR SALE.

The subscriber, long a resident of Lini's Valloy, Kern County, now offers his farm for sile cheap. Said farn is well improved, convenlently situated to school, church, te. Well supplied with water, Posa Crcek running hrough it full thrce-quarters of a mile, and two good prings of oxcellent water on tho premlses. Titlo, U.S. Patent; 160 acres. For further particulars apply to
S. E. REED, Glenville,

Kern County, Cal.


#  

List of U. S. Patents Issued to Pacific Coast Inventors.

By Special Dispatch from Washington, D.

## Week Exding, March otit.

Tobacco Prpe-Thomas A. Van Noiden, Waincy, Cal. Oil Cerp.-E. R. Weber, S. F Steam Eygive-J. J. Carter, Sacrameuto.
Oin Cook Stove Lamp.-H. L. Howse, Sacra mento.

How.-H. C. Shaw, Plowarks.
were Fwo, Plow Company, Stock ton.
Week Eyding, Marcil 19tif.
Fleme.-R. H. Campbell, Rel Bluff, Cal.
Mode of Benching Lumber for throdeh V-shaped Fle mes.- N. P. Chipman, Red Bluff, Cal. Block.-W. H. Abrams, Vageue City, Oregon
Apparatus for the -E. Moreau, S. F. Salve.-IW. S. Halpruner, S. F
Ontice unt patents ame are not ready for dellivery by to



## Notices of Recent Patents.

Among the patents recently obtained through Dewey \& Co.'s Sclentific Press American and
Foreign Patent Agency, the following are worthy of mention:
Car Trueks.-James D. Divoll, S. F. The improved construction of car trucks relates more particularly to an arrangement of divided axles and a novel method of mounting the axles, so that the car wheels can adapt themselves to
the enrves of the tracks. The invention contemplates the employment of a separate short
axle for each wheel. The outer end of eacl short axle is mounted on a bearing, wlich is capable of a slight horizontal rotation, while the inner end is mouuted ou a swinging-box or
bearing which is constructell with a swingiug frame midway between the wheels. This swinging-box is attached to the frame by a
movable fastening below the axle and an arrangement is applied which connects the upper ends of all four boxes of each truck, so
that they can swing in opposite directions when it is desired to alapt the wheels to the curve o the tracks.
Purifying Coal. - P. F. Morey, Oakland The invention relates to a novel process, by which coals may be purified at small expense, and all impurities separated, so as to procuee a high
grade of coal from an impure and nearly worthless article. It consists in the employment of a bath of liquid, having sucl a density aud connwill be separated from its impurities, partly by
Improved Aschor.-E. and R. R. Spedden, Astoria, Oregou. This novel method of constructing ships' anchors consists iu pivoting or
hinging a single fluke in a peeuliarly-constructed frame or shank. This shank, ou account of its
peculiar shape, serves both as a shank and stock and is devoid of any projecting arms or points, to come in contact with the ship's sides
or bottom when it is being taken nup, or to or bottom when it is being taken np, or to
entangle the cable or claain os as to fonl the
"Cash Padd Promptly."- MaylBros, Gales.
burg, ill., want to hire ayents for their late imburged Wiudmills, the cheapest, strongest and best in use. Retail price, $\$ 50$. Write for
 improvements in the zoological deepartiment, besides the
other fenures which have enuil it popular.

Serturns and others wishing good farming lands for sure crops, are refcrred to Mr. Edward Frisbic, of Anderson, the Upper Sacramento Valley. His advertisement ap ,

3r. W. J. Woonler, who took out a Canadian Patent
some four years aigo, is requested to call at the M1sino some four year
AND Sciustyyc
of importance.
 or two green stampls. Tellls stornu and clanges correctly,
efore hand and reliable. E. S. 11 kath, Clintonville, P\%

[^12]S. F. Market Report.
 wan

## Weekly Market Review.

DOMESTIC PRODUCE. ETC
The wager of battle which seems imminen etween Russia and England has a noticeable tendency to alvance rates for Grain, and Wheat coming immensc harvest. The ready supplies this also exerts a strengthening effect upon spot prices. The trade is alert and expectant,

Range of Cable Prices of Wheat. The course of the Liverpool quotation for
Wheat to the Produce Exchange during the days of last week has been as recorded in the
following table:

## 

## The Foreign Review

Losuon, April 2d.-The Mark Lane Erpres says: Reports concerning the Wheat plant from
all parts of the Kingdom coutinue satisfactory. The country trade is steady, but uot active.
The provincial markets are scantily supplied Tith provincial markets are scantily supplied Wheat iuto London have been liberal. A pres-
sure to sell Ameriean Wheat, ex-ship, brought sure to sell American Wheat, ex-ship, brought
about a slight reduction in the value of this class of grain. Russia is anxious to dispose of her produce, and with her and America competing, it is dithcult to see wheucc tradc is to India may be disregarded for the time, as she cannot slip nuluch Wheat until the new crop is porting to this country. Politics lave once more monopolized the entire attention of the
trade. With fair arrivals at ports of call, the oating cargo trade fivals at ports of call, the to a more unsettled state of political matters, rices advanced 2@.2s per quarter. The Conti nental demand continues. Maize improved 9 d

## Frelgnts and Charters.

Whent freights, says the Commercial Nenes,
have been fairly active during the past week have been fairly active during the past week for ained until the close, when the charter of th British bark Cormorant-made in Englandbroke the market. Iron ships cannot now be
quoted alove $£ 2 \mathrm{Ts} 6 \mathrm{l}$ to Liverpool direct, a decline of 2s 6d on last week's quotations. is, however, only fair to say that it is exships in port could be obtaned at anything less we have $12,3.5^{\circ}$ : tons in port loading Wheat 7,404 tons miscellaneons and $22,2, S 8$ tons dis-
engaged. The latest charters reported are: Br bark P'arknook, 790 tons, Wheat to Cork, U
$\mathrm{K} ., \dot{f} 210 \mathrm{~s} ; \mathrm{Br}$ ship Cormorunt, 1,116 tons, Klour to Liverpool, $\mathrm{f}^{2} 2 \mathrm{is}$ Cid, chartered in Jing and; Ship Enos Soule, 1,519 tons, Wheat an
Mdsc to liverpool £2 7 s GIl; ship Lucile 1,30 tons, Wheat to Liverpool, $£ 2$ Gs 3 d ; Cork, U K.; $£ 28 \mathrm{~s} 9 \mathrm{l}$; Contineut, C 211 s 3 d .

NEW York, March 31st.- The possibility or ussia has served to enliven the markets, an a wider thuctuation of priees than nsual has pre
vaited. A war between these Powers uow is re ailed. A war between these Powers uow is re lave heretofore been most hopeful of a peaceful solution of the difficulty; and this change of sencommercial records of the last few days. Whea cereals, Flour and Provisions, and large pur-
chases for export has led to an adyauce in freights to Enrope of 31@6d per quarter on
grain. It is worthy of note that underwriters grain. It is worthy of note that underwriter
are begiuning to discriminate against British ships, and charterers give preferenee to America and other ueutral flags.
Cincago, March 30th
have attracted the atteution of an grain markets have attractca the atteution of an musually large
activity, bustle and business there, to which the
speculators have been strangers for some mouths past. The Wheat market opened active and
firmer, and there was a fluctuating, uuscttled markct, which ended in an alternately panicky and cxcited closo. Wheat on Thursday sold
from $7 \frac{1}{2}$ to 11 for May, and on Friday at $\$ 1.11 \frac{1}{2}$ © $\$ 1.14 \frac{1}{8}$. Coru was also excited at times an with less fluctuations followed the lead of Wheat. strong and closed at nearly outside hgures; May 45@46. Altogether the prices for grain this
week have averaged higher than for several months. Provisions were more active, in sympathy with the London market, wherc prices
have advanced smartly. Closing cash prices were: Wheat, $\$ 1.10 \frac{1}{2}$; Corn, $42 \frac{1}{2} ;$ Oats, 23.3
Rye, i81: Barley, 46 ; Pork, $\$^{9.45}(a \leqslant 9.50$ Lard, Eastern Wool Markets.
NEW York, March 31st.-No encouraging Wool market. Buyers firmly adhere to their old policy of actual wants, and nothing, seemiugly, can induce then to depart from the
beaten track. Telegraphic advices from San Francisco are looked forward to with interest and news of sales of Southern clips there at 2
a 23 c brought forth many not very compliment ary remarks. Iu fact fhis narket cannot afford to stock up at such figures, and an impression meet holders in California at such exorbitant rates, which will result in the placing of greater portion warehousc to await season. But there is no telling what might happen, seeing that dealers and inanu
facturers are again brought face to face, so that it is possible that the tug that follows when
Greek meets Greek will be shown in the case. Greek meets Greek will be shown in the case. -the former in storing for high prices, or the buyer in paying the first price demanded. Sales
for the week are: 30 bales East India, at 16 c ;
75 do Donskoi, $23(a 25.1 \mathrm{c} ; 2,000$ lts Mexican, $15 \mathrm{c} ; 5,000 \mathrm{lts}$ Spring California, $20 \mathrm{c} ; 13,200 \mathrm{lts}$
Colorado 17 (a $18 \mathrm{c} ; 2,000 \mathrm{lbs}$ low valley Oregon,
$20 \mathrm{tc} ; 41,000 \mathrm{lbs}$ Eastern do, $23(a 2 \mathrm{cc} ; 1,000 \mathrm{lts}$
 (12 $20 \mathrm{c} ; 1,200$ lbs domestic Noils, $27 \mathrm{c} ; 30,000 \mathrm{tts}$
Ohio X and above fleece, $42 \mathrm{c} ; 3,000 \mathrm{lbs} \mathrm{mn}-$ washed Nichigan do, $2 S \mathrm{c}$; $10,000 \mathrm{lhs}$ coarse
Western do, $3 \mathrm{cc} ; 10 \mathrm{bags}$ super pulled, 35 c ; and Western do, 3 3c; 10 bags super pulled, 3J̌c; and
So bales Port Phillip, 34,000 tbs Fall Califoruia, 50 bales Port Phillip, 34,000 tbs Fall Califoruia
50 $2,5,000$ lts
washed Wichigan do, $10,30,000 \mathrm{tbs}$ uncliicfly
BAGS BAliS-Prices arc advanced $\frac{1}{2} c$ on Grain Bags, and some other descriptions rise in sym
pathy. There are still large transfers from day to day, and 11c cash is said to be the lowest
rate at which hand-sewed Grain Bags can be bonght, even in 100 -bale lots.
BARLEY-Barley prices are unchanged and Feell, weevily, at $\$ 1.20 \circledast 1.25$; 600 sks Feed sold at $\$ 1.25 ; 550$ do at $\$ 1.22 \frac{1}{2}$ and $\$ 1.35 @ 1.50$ per ctl; 2,000 ctls for Australia at $\$ 1.47 \frac{1}{2 ;} 300$ sks Coast Feed sold at $81.25 ; 140$ Pearl at BliANs-Prices are unchauged and the sales are small.
CORN.
CORN-We note sales: 1,000 sks large Yellow, at 81.521101 .55 per ctl. Prices are gencr DAIRY PRODUCE-Butter prices do not improve as yet, althongh there are some Point
Reyes dairies which iusist on $2.5 \mathrm{c} \mathrm{p}^{\mathrm{P}} \mathrm{tb}$, and will Reyes dairies which iusist on ose is ib, and win EGGS - Fresh California are about lc lower educed.
FELED-May is dull and salcs sinall. Sales: Witd Oat at 811 ; and 32 tons fair Wheat at at $\$ 14.50$ Boat-loal of Wheat and Oat mixed sol at one at $\$ 14$ and one damaged oat luced $81.50(a \geq$ per ton.
FRUIT-Oranges are in small stock and firm. Large supplies are nearly due from Tahiti. Six The bulk of the laie receppts wore in very poor order. Nome strawberries are selling at 35 c 110 P S-There is nothing new in the local raule and we hear of no sales of any signin inarket, for the week ending March $22 d$, as follows: "Although the shipments ex the rercipts dhis week and prices are off on choice
ket is depressed
Hops at least $3 \mathrm{c} * \mathrm{t}^{10}, 10 \mathrm{c}$ now being the highest figures, we feel warranted in quoting for the quality of goods remaining on ofler. There enough to bring 12@13c from a shipper, but we and to quote prices that cannot be realized, who, ou consigning to this market, are always governed more or less by the quotations pul)secms to be the ruling figures in the country ""
OATS-Oats are uuchangel, and sales are in
mall parcels. We uote sales: 250 sks feed \$1.50; 100 sks Humboldt at $\$ 1.37 \frac{1}{5} ; 356$ White
Oregon at $\$ 1.45 ; 95$ Black Oregon at $\$ 1.50$ per ONIONS-All good Onions from all quarters rriviug well sprouted which are worth nothing and sell at $2 \overline{5} \mathrm{c}$ per sk.

POTATOES-There is no change except a
slight gain by Petalumas over last week's quotations. Sweet Iotatoes rose at one time to PROVISIONS. -The trade is good no chango prices,
POULTRI AND GAME,-Hens and roosters have advanced $81 @ \$ 2$ per doz. Turkeys
decline 2 24 c per tb .

back the usual novelties late spring is holding peas have tcheapened a little Asparagus and green vanced 25 c per ctl for the best.
WHEAT - The
about 15 c per ctl all around. We note sales: 1,700 sks good Milling, $82 . ; 212 \mathrm{sks}$ fair Ship ping, $\$ 1.90 ; 1,600$ and 500 ctls choice Milling $\$ 1.90 ; 100$ do at $\$ 1.85$ jer ctl, and $14,000 \mathrm{ctls}$
Milling delivered at Vallejo at $\$ 1.97 \frac{1}{2}$ per etl. On Saturday last, 3,500 ctls sold in Stockton at $\$ .15$ per ctl ; 330 and 600 choice Milling at
$\$ 20 ; 7,000$ do (at Vallejo), at $\$ 2.05 ; 1,400$ and 600 ctls choice Milling at s. $12 t$. S00 000 do at $82.10 ; 520$ Shipping at $\$ 2$, and $2,800 \mathrm{ctls}$ Milling, at Vallejo, at $\$ 2$ per ctl.
ut no sales are yet reported. It is thought that uext week will see the market open

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 $\frac{\text { Mar. } 27}{29.64}\left|\frac{\text { Mar. }}{29.23}\right| \frac{28 \text { Mar. } 29}{30.04}\left|\frac{\text { Mar. } 30}{30.15}\right| \frac{\text { Mar. } 31}{30.22}\left|\frac{\text { Apr. } 1}{30.21}\right| \frac{\text { Apr. } 2}{30.06}$


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IT IS THE ONLY MACHINE That кnlts fat or tubular work of all sizes;
Narrows and widens on hosiery or tubular work; vuiis a regular right-angled heel, as by hand;
Knits a
Knits mittens or gioves of any size without soam;
Forms genuine Ribbed or Seamed work;
Knitt the Double, Flat, or Fancy webs; Knits an elaatic seamed. -stiteh sysupender with button. holes;
Knits the Afghan stitch, Cardigan Jacket stitch, Fancs

 J. J. PFISTER \& CO., General Agents, Manufacturers of knitted goods and dealer in woolen yarns.
120 SUTTER STREET, Room 46,
San Francisoo.


Experimental and Fine Special Machinery, Planing and Gear Cutting, Printing Press, Band Instrument and General Machine Repairing; Dies, Taps, Punches, Reamers and other Tools made to order. Models and Patterbs for Commercial Street, between Sansome and Leidesdorff, Third Floor), San Francisco, Cal.
I. A. HEALD, Proprietor.

NURSERYMAN WANTED.
A practical and experienced nurseryman is wanted to The owner of the land has tho best of soil and plenty of watcr, one mile from the railroad station. He wants a good man to put out a fow acres of cranbcrries, and raise
all kindy of ornamental and forest trecs. The owner of the land wishes to take and interest in the proposed nursery and belicves good sales of trees can be made. Good
men, experienced and trustworthy may address us on
$\qquad$

## 1878．WEAT TO BUY AlVD WHER刃 TO BUY． 1878.

## The Ames＇Engine，Pitts＇Thresher and Power，Case＇s Headers， CHAMPION REAPERS AND MOWERS

Are the best Implements in the World Unequalled for Durability，Economy in use and Adaptability to the Requirements of the Farmers of the Pacific Coast．The Pitts＇Buffalo Thresher has earned a reputation and increased it fcr 20 years－In this State within the past Five years．The Russell，Sweepstake，Dayton，Pitts＇，Chicago Pitts＇and Vibrator have sprung up and disappeared．Some of them had good points，but their defects were too numerous．The same might be said of the many kinds of Engines，Headers and Mowers．We get the Best and Improva them from year to year at our own expense，and when given to the farmer it is ready for work，and is the BEST there is in the State．


## Price of Ames＇18－Horse Straw－Burning Threshing Engine，$\$ \mathbf{1 , 6 5 0}$ ． <br> CEIAMIPION EREAPHER \＆MMOTVER， <br> Price of Ames＇18－Horse Straw－Burning Threshing Engine，\＄1，650．

The best in the World，wrought iron frame，Steel Guards，Patent Pitnan Conneetion，Malleable Iron Shoe，Patent Tilting Arrangement for Piekiug up Down Grain or Grass



TESTIMONIALS．

T昍 CA （S

## 解

Messrs．Baker \＆Hahloton，S．F．－We notiee several implement dealers in California are advertising g themselves as the angents of a＂Catee several Header．＂Whilement it dealers in California，
that our popular，single Gear to know
Header（to whieh was awarded the gold inedal at the Cali． that our popular，single Gear Header（to whieh was awarded the gold medal at the Cali．－
fornia State fair），is sueh a favorite with ranehers and farmers as to conpel other manufaetur－ ers to attach our name before they can sell their maehines，yet we are equally eertain
that the method thus resorted to is a very questionable one．leet us say that our Header em－ that the method thus resorted to is a very questionable one．Let us say that our Header em－
bodies a number of valuable innprovements not found on any oher made，and that no one
in Con in Calionornia has the right from us to sell our maelines but yourselves，all others are imita－
tions and frauds on the farmers． tions and frauds on the farmers．

玒巴AD巴无
and this is ahead of them all．I ran the It－foot cut as easy as I could tho 10 －foot of the Hodges
and with less expense for repairs than the others． and with less expense for repairs than the others． The naine sold the machine but failed to make it work．

The Pitt＇s Iower we bought of you last year is the hest we ever used，and we have used all kinds for the last 20 years．It runs light aud

Look out for bogus Pitts＇Powers，none genuine unless made by Janes Brayley．All others
are imitation，and have not been within 400 miles of the I＇itts＇Agrieultural Works．
Farmers，buy only tho best，do not bo deeeived or led to buy poor initations of the Pitts
Threshers or Case Headers．The saye may help to sell a poor artiele，but the work in tho field Threshers or Case Headers．

# . - ACMCYC NURAM 

## Volume XV.]

## SAN FRANCISCO, SATURDAY, APRIL 13, 1878.

An Improved Self-Binding Harvester
Last spring we presented an engraving of Walter A. Wood's self-binding harvester, as in
troduced by Frank Bros. \& Co., of this city At that time it was new to this coast, and the most we conld do was to commend it for trial. Its success dnring last harvest was greater than was anticipated even by those who expected most from it. Owing to the great demand at the East and abroad, the Eastern manufactory was run day and night, and 3,698 machines were turned out. Of this number only 55 conld be secnred for the Pacific coast, and as the crop in Oregon, from Frank Bros. \& Co.'s branch house in Portland. We have seen letters from enor, and that in decided approval of the practical working power of the self-binders and their great labor-saviug quality. Onr English xchanges for the present week are fut achievements at the last harvest, and they freely comment upon tho appara-
tus as illustrative of the nniversally conceded preeminence of American Thentive genius.
The unnsnal success gained last the fullest pertection on the machines, and we have now opportunity to the most importaut character. So marked are these improvements that the sphere of novelty which we insist upon in the choice of subjects for our illustrations. The most essential alterations in this new machine are
these:-The driver's seat is in an entirely new position, not to the extreme rear, as before, but placed over the main carrying axle. This
axle has a broad wheel upon it, 40 inches in diameter, which carries nearly all the load weight of the of the driver's sent is now conuterbalanced by the greater breadth of the binding table, which is carried that there is no perceptible load apon the draft-pole. There is also exoeptionally little pressure upon the
outside carrying wheel. It is one of the best balanced machines, when its ize is considered. This is made more evident by the ease with which the
driver can alter the pitch of the knives driver can alter the pitch of the knives binder some six or platform and binder some six or eight inches.
Another very important inprovement is the adjustment of the $r \in$ volving reel, which lays now carried at the extremity of two adjustable arms, which can be moved by a handle from the forward or downward and backward to suit any variation of crop. The biuder can also be regulated and tripped by a foot lever under the crops. The binder is timed to revolve abont once for every 10 feet the main driving-whee travels, but in some crops a larger charge on to it may be desired to ay times be necessary, or The tripping gear operates by lifting a little drives the revolving binder.
All the handles are brought most conveniently easily within his control. 'There is a lever in and pitch of the knives, a lever behind enables him to traverse the binder and table, so that a sheaf of any length. This is effected middle of ing the driving pinion to the inclined binder shaft. There is also a trip gear within reach the drivcr's hand behind him, by means of which be put out of gear, and thns the whole binding and cutting operation be stopped.

There have also been notable improvements made in the constrnction as well as the plan-
ning of the eselftbiders. The binder arms have been case hardended. The mandine has has heen jenerally strengthened. An improved wronght.
irou wheel has been introdnced in place of the Irou wheel has been introdnced in place of the
wooden wheels, which are unsuited to our wet and dry conditions.
The experience of last year has gone far to
allay the fear which arose that the wire used in binding wonld be injurious to the separator, or to stock eating the straw. The most carefnl examinations have natnrally been made by those most interested, and no wire has been fonnd in
the straw. The extraction of the wire is effectually done by cotting the band with a pair of and pincers combined, and enable the band cuter to cnt and pull out the wire with a single movement of the arm. Indeed, it is asserted fnlly extracted, it is much easier for the separaThe great grain harvest of this favored year on this coast will call for nnnsnal supplies of

A Fodder Tree for Dry Climates.
In onr experiments with fodder plants for our dry summérs it may be well to inclnde the Candle Tree," which we find described in Hooker's Journal of Botany. If we can feed onr steers on candles and then nse their fat for making oleomargarine what will become of onr dairy cows and their owners? We refer the matter to the next meeting of the Dairymen's Society. But serionsly there seem qualities in this candle tree as nsed in its native conntry which make it worthy of attention. Its growth is confined to the valley of Chagres, where it forms entire forests. In entering them, a person
might almost fancy himself transported into chandler's shop. From all the stems and lower branches hang long cylindrical frnits, of a yellow
as to hav as to have given rise to the popular appellation.
The fruit is generally from two to three, but


## WALTER A. WOOD'S SELF-BINDING HARVESTER

harvesting machinery. In fact, we have noticed $\mid$ diameter. The tree itself is abont 24 feet high, hat the overland freight trains are now wel This will give wide opportunity for the test of self-binding reapers in comparison with headers, which is a qnestion of interest and importance. We are assnred that Frank Bros. \& Co., at their and Portlants in this city, and in Sacramento hinery in good supply, so that its merits may be fully examined.
High Priced Cows. - We observe, by one o onr English exchanges, that Henry Allsopp, a member of the British Parliament, and the has recently purchased a six-year old Short Horn cow and a yonng oue, for which he paid
$\$ 37,500$, and for four other youngsters, $\$ 17,500$. The grcatly priced and prized one of the lot and er progeny are American bred. This is one valne full blood stock.

Our Illustrations.-This week we give prominence in onr illnstrations to hay and harvesting machinery. The subjects are just in est all our grain-growing readers not, inter all especial ain-ntion to new. Wa wonld call especial attention to a new California in-
vention for stacking or storing hay, grain or straw, which is illustrated on page 233 of this
with opposite trifoliated leaves and large white blossoms, which appear throughont the year, but are in great abnndance dnring the rainy season. Crescentracce, and is a Parmentiera, of which genns, hitherto, only one species, the $P$. edulis, De Cand., was known to exist. The frnit of the latter, called Quanhscilote, is eaten by the Mexicans; while that of the former serves for food to nnmerous herds of cattle. Bnllocks, especial-
ly, if fed with the frnit of this tree, ly, if fed with the frnit of this tree, guineaBrass, and Batatilla, (Ipomera brachypoda, Benth.), soon get fat. It is gener in some degree of the pecnliar, apple-like smell of the fruit of the pecnliar, apple-like smell of the fruit ;
but this is by no means disagreeable, and easily prevented, if, for a few days previons to the preventcd, if, for a few days previons to the tree prodnces its principal harvest dnring the dry season, when all the herbaceous vegetation is bnrned up; and on that acconnt its cultivation in tropical countries is especially to be recommended; a few acres of it would effectnally prevent that want of fodder which is always most severely felt after the periodical ains have ceased

Fine trout in large numbers are now running np all the streams putting into Goose lake, Mo-
doc county, and salmon are plentiful in Rus-

## Chufas and Artichokes.

Eniors Prass:- Tast spring, while in Texas, Ireceived
 I call tham gras. for nute ni they grow on the root of








The nnts are chnfas, and our remarks npon their nsefinness, as given on page the query. We call them, chtas becy to this query. We call them chntas becanse they apree exactly in form and taste with chufae
which we have known to be such. It is proper o state, however, that there are other spall genus or corms belonging to others of the "grass-nnts" which do not possess the valne of the true chnfa (Cyperus
esculentus). These are not desirablese other grass-nnts the Sonthern States to are fonnd in sconrge which can be inflicted land. There seems no way known to eradicate them. In Louisiana whole nut-grass. After several years' crops of weeds, briars, etc., these aband a year or two be again cnltivated for a year or two, only to be again aban-
doned. In Georgia they have only small patches of this pest, and yet it defies all efforts to kill it. The nntgrass is wholly different in habit from the gennine chnfa. The nnt-grasu forms a perfect net-work of roots and nnts, ramifying in every direction. At each joint is formed a nut, from
this nnt another root springs, and so this nut another root springs, and so on. You may break any one of these,
even the parcnt nut, still its life is perpetnated. Not so with the chnfa. The nuts of these are all formed immediately aronnd the main stem, on short roots. Break the roots, and
the nuts send ont no more life, nnless taken np and planted again; or they will lie in the ground until the next spring, and then germinate. mom. Brien's are not as good as some we have seen grown elsewhere.
They have a litte thicker skin and are not filled out as well. The best specimens we have seen were lately sent us by Prof. Sanders, of Kings-
burg, Fresno county. His seed burg, Fresno county. His seed
was of Spanish parentage, and the tubers are of a cream color. Prof. San. ders takes exception to onr commending gennino chufas as hog feed. He writes: "Don't talk fattening hogs on gingerbread and mince pies the greatest luxnries of my boyish taste. Besides, it wonldn't be wisdom to engage in fattening hogs on them till we who are raising them can reduce the price below 50 cents per ponnd by prodncing quantities beyond reqnirements for seed and confectionery. I have no seed for sale this spring."
We are informed that many of the chufas raised in our State are a spurions article, native
of the islands of Tnlare lake. These, instead of being of a cream or lemon yellow like the gennine, are brown; they are inferior in size and productiveness, bnt equal in flavor to the genuine Spanish chufa. They possess considerable valne, but to sell seed of them for Spanish chnfas is a gross swindle. There are two varieties of Spanish chnfas-one being somewhat reddish in color.
Another correspondent asks where Japan and peas, artichokes can be bonght. Whover has artichokes for sale, shonld also adverin favor of them. Japan pcas are also proposed as a subject for an advertising epic.

An anti-smoking crusade has been inaugura. ted ainong
Brooklyn.

## Gُorrespondence.

## Notes in Los Angeles County

Edrrors Press:-Los Angeles las received 22 inches rain and the rainy season has not yet
closed. The 27th and 2 Sth of March gave us another thorough wetting, almost equal to the heaviest. Barley and alfalfa were already lodg ing; this must greatly increase that difficulty It could be mown for hay but could not be cured easily at this time.
The corn planting and preparation for plant ing, is now going on where it is dry cnough, and the demand thus created for horses has greatly elevated them in price. Almost every day inquiries are nade for horses.
When the barley is cut they can plow and raise a full crop of corn, and many persons do
not hoe, or even plow the corn, aud yet harvest a good yield of corn from a forest of weeds. Those who plow their corn, drop pumpkid seeds which yield them several tons per acre,
for which they make no special labor beyoud planting. In some places in addition to the pumpkin crop they have a winter growth of
Which is variously estimated in value as a ho and cow feed. A thriving Los Nietos farmer, falfa in his, and pointing to the rank imalva pronounced a lengthy eulogy, giving it the quantity, quality and color. In this particular
the general verdict is with him, but as a ho the general verdict is with him, but as a ho
feed, sone consider alfalfa superior to malva His strong point was that this malva seeds it self, fights its own battles, and generally is th
master of the situation, without regard to fo or circumstances, a kiud of omuipotent and Mexicans as a medicine, especially as a poul tice, by bruising up the juicy stems and leaves
and also as a remedy for colds and pectoral ail ments, making from it a cooling mucilaginou drink.
The "malva or marsh mellows," as sold from the drug stores in small pressed packages, one traid as high as $37 \frac{1}{t}$ cents per pound as a trade price. In Solano county, I have seen this same ten der weed reared into a tree one foot in diame ter and 14 feet high, yet holding all the characplants from the tree seed that were ideutical with the wild weed and therefore infer they are identical

The Alder.
We saw in the uppcr part of the State, especially along the Sacramentoriver, that the same
old alder of pop-gnn notoriety, and purple ink berries, grows as it did in the cold East; but it diameter as there, but here it often adorns the mansions as a shade tree. Along the banks
the Sacranento river, on Dr. Glenn's ranch, saw one that measured over 12 inches in diamete for six feet, and where the limbs started out was fully 18 inches in diameter.
And now, while speaking of California pecu
liarities, I am reminded of seeing liarities, I am reminded of seeing applcs in Los Angeles (in the spring of 1861) on the tree and
the spring blos soms, all at the same time; th the spring blos soms, all at the same time; th
same can now be sen here at the nursery o Mr. J. W. Potts, who has eight to ten three year-old trees of the Pearmain and Newtow
Pippin varieties that have held their leaves, an
now have each about half a dozen apples th now have each abo
size of hen's egg.
Mr. Potts las bauanas now nearly ripe. a few years this fruit will be abundant an
anply supply the upper markets. Mr. Potts i
a Los Angeles pioneer a Los ancence here and contributing , making hi experience advanced Americanization of the county, and especially of the city of Los Ange-
les. He believes in the unlimited capabilities of the combined soil and climate, and, by the exact figures, can show a better remuneration
for labor here than in any Eastern or Souther State. I might reprodnce some of the same a compared by him with his old State of Ken-
tucky, but trust he will favor you with some fruthful and sive stren earth day, that wo truthul and give strength and courage to the who complain of the climate, of the market,
soil and productions, and will sell at a sacrific to go to some distant land of promise.
26 years, has passed, and yet thousands of sack of corn and baled hay are being shipped as the
surpus of last year's crop. There will be small portion of old hay kept over that might
have sold well, but waited for the highest figures, and now is not worth more than hald what it would have brought.
The Nurseries.

The great nursery sales are now Placking off
much on the common fruits, perhaps not so much owing to the advancement of the season,
as to pressure for time with the farner to do as to pressure for time with the farmer to do
his seeding and planting, each trying to double
his energies to make up the deficiency of las
Orange culture is now just beginning to wak
the hundreds on the outsidc, who are plant ip the hundreds on the outsidc, who are plant
ing out small or large orchards. I saw a fine rauge tree, almost in bloom, sold aud sackc with dirt to the roots. It was to ride alsout
niles in a wagon and yet the seller offered t insure its living aud not to shed a leaf, for
It is clition to the $\$ 2.50$ paid for the tree. that April is a favorable month for transplant
ng the orange tree. In Sacraniento city I saw nany trees that were sold last A pril by Stron $\&$ Co. that made a very satisfactory growt
after their shipment from Los Angeles and $r$ planting, as some supposed
PREs of excellent success with told in Rural Peighbors transplanting in July, and yet he
neconended season for orange planting with him. During arge last three months there have bcen From this I infer that the orangc and lemon will admit of being transplanted at almost any season when the ground for their reception is in
its best condition. The experienced nurserynen prcfer to disturl a trce only when it dormant, but they are not agrced as
act time best in different fruit trees.
This seems to be naturally a nursery country,
Cor proof of which the immense growth of the ne and two year old trces will attest.

Tillable Land.
It is claimed by old settlers that there is not acre of tillable hill soil in Los Angcles county ut would bring good barley or corn this year worn crop after harvesting the barlcy. I find some who disbelieve in the theory that the con tinued cultivation of the same crop can impov
crish the soil in this county, and in proof crish the soil in this county, and in proof ron which the surface for 10 or 20 feet dept has been graded of during the last year, ath
left hard and bare, but now it is covered with a luxurious growth of filarce, clover or malvavolunteer.
Admitting many very strange and marvelous acts of climate and soil that are in favor of this empire county-the "American Italy"-the
great fact holds here, as elsewhere, that it costs nuch labor and good management to huild $u_{p}$ and maintain a farm home by its own proctuct
and income. Here, as elsewhere, can be found sober, earnest workers and rigid ecouomists Who ane not worth 80 much as they were year heir en they have prospits them, their capital the country suits them, and the
even think better of their neighbors when all sunshine financially, Many are yet discour
aged from last year's dronth, and now find iscouragement from the fact that there will b such abundance that the money value will bo mall.
Probably no county in the State could show a greater advancement in the last five years
than Los Angeles. Entirc communities have Lhan Los Angeles. Entirc communities have
sprung ivto existence in the shape of cities with streets and avenues, regularly laid off and adorned with trees and flowers of rare beauty.
They have erected neat dwellings and houses of worship, schools and colleges, and yet the inhabitants enjoy the luxuries
the small farm and colony plan.

The Indiana Colon
Is a beautiful example of thrift, high cultured taste and refinement. It is very young yct as a settlement, but interests and delights all who
visit it. It represents a true Yankee type lightly inproved by passing over the great prairies. It, like Compton, Fiorence, West saloon or liquor traffic, and the conmon voice

The City of Los Angeles
Though times are spoken of as very hard, going ou in Los Angeles all this rainy season. One extcnsive brick block is just being com.
pleted and occupied, on Spring strect. A very massive block, three stories, iron front, first floor and second story, iroll casings, on Main street,
has now third story walls nearly coupletcd. The fonndations for a brick storehouse, 200 feet quare, arc being excavated convenient to the
rairoad track, on Alameda street. Also a large louring mill is to be erected. These with the
maller enterprises of the place indicate some yood coutidence in in the future of the county.
A mass meeting is called for to-morrow evening o talk of local interests, commercial policies and the relations and dependencies of all classes. The object being to encourage in all practical
ways, their own mechanics, merchants, and armers, cspecially in all points where they cal save paying ont treights and commissions, an
better build up all of their own industrics. They propose to inquire, why Chicago bacon
ells in Los Angeles, and the Los Nietos fed pork, equal to the best, is sent away for a
market, and some assert that the same meat, neatly cured aud sacked, finds its way back to the Los Angeles markets, where the consumer
pays for all its journeyings and connissions. Surely this inquiry is a move in the right diFrancisco may take a valuable hint therefrom, sands of acres, and the hog gleaners by thouands, and often are seen buying bacon cure

Stock Improvement. terest taken in the improvement of all kinds of stock from the chicken to the massive draithorse and flcet racer. Mr. W'm. Niles leads off
in his importations of choicest fowls, and is in his importations of choicest fowls, and is
filling a place of importance to that industry, as the Barretto Brothcrs, of Downey, are in of the county. Their importations of Jerseys are mostly young and of the pure and decided type, that to see it is to know it for genuine.
The many small farmers coutemplating starting small dairy operations appreciate this oppor tunity to improve on the choice stock they now carrying on their specialties in swine, sheep cattle and horses, but the length of my communication this soteme that man or graled by being obliged to associate with mean vicious and worthless stock. True civilization appreciates the higher types of domestic animals
L.os Angeles, March 30th.

## Views in Shasta County.

Editors Press:-I was one of a party from
Alameda county, who recently made a trip to Shasta county to view the land and its various resources. Aftcr a pleasant journcy we reached the town of Anderson at midnight, and were housed at Mr. Snow's hotel for the night.
The next morning we found Mr. Edw. Frisbie, the present owner of the licading grant, in waitiug, with a fine team and a roomy express of Vallejo ; he recently bought the entire grant, originally comprising 26,000 acres, from J. B Haggin, and proposes to divide the land into sinall tracts, graded in price according to qual ity, and scll them to actual settlers mainly.
There is sufficieut of the first quality bottoin land to make room for a large number of fanilies and, in additio or grape land, nuch timbered pasture land, mining has been carried on.
starting from the town of Anderson, we drove 3onth along the railroad track, over.the lied still pretty wet, and the little gullies were full of watcr. After several miles journeying over
these table lands, whose clief value, I appre. hend, will be for orchards and graperies, although ant cxperimcnts me left the upland aud drove into the level botton lands aloug the river, turning northward, and following various roads, so as to get a fair view of the tract. It is studded with
white oaks of large size, and there is but little undcrgrowth. Some portious are virgin soil,
and some have been put iuto grain for a fow years, but never in any thorough manner.
The Martha Vashington farm and also the placcs of span, Ludwig, Johnson, and others, are held under titles from Major Redding him self, but they appear quite lost in the nnoccu-
picd lands around. The policy of holding for higher prices, which is so great an obstacle to followed here for many years, and a body of land, which would support a thriving commu nity, has lain idle. But the present owner pursues a different policy, and we saw enough of
Mr. Frisbie during the day's drive to convince
Mr. Frishie iuring the day's drive to convince a practical, energetic farmer, whose intluence on With stcady driving be ay good one.
rith stcady driving, by one oclock we found that worthy pioneer on his back recover ing from the effiects of a severe fall, but he Was, as ever, full of cheer and good nature; nor shall we gcon' forget his hospitality. for erioiu
the Hughes' ferry road and after driving through a small forest, came again on the bottoms. Leaving the maill road, we crossed what
has been known as the George place, as yet a has been known as the George place, as yet a
part of the Frisbie tract,. a curving hollow of nearly to the s, and adjoining belt nearly to the river, and adjoining a belt of
timber. Crossing this and driving past a series of smaller farms-Densmore's, Oliver's, Dersh's etc.-we rose from the lowlands to the bluff which is the

## Site of the Town of Reading

It was the unanimous opinion of our party o every requirement of co to every requirement of commerce, cannot exis
in this whole northern region. Imagine a timbered plateau, swept on two siles by the mighty currents of the sacranento, sloping iug ridges which mark its connection with the great valley, and rising to the west in ridge and
mountain hight. East, leyond the river, were mountain hight. East, beyond the river, were
masses of timler and rolling slopes, whilst above, and over them all, rose

## The White Sierras

In a grand, silent, unapproachable battlement. Northward, too, ruling the llue and lesscr
ranges, tlic perfect done of Mt . Shasta marked the union of the sierras and Coast Range.
There were fragrant flowers and bright, new

## grass at ou

of ged with pine and cedar. The very hear
of the Alps, when the tourist looks on Mt. IBlanc from the vale of Chamomuix, is not more
inspiring. These are the mountains whereo
poets shall sing in the coming ages; this is the nne, swift, exuberant river, which artists shal
hercafter paint and lovers linger along it banks,
It began to rain, the promised equinoctial laving caught us, and our plans of seeing the
rest of the county wcre delayed. We spent few days in Reading, and took numerous nont a on the country, the business openings, the Reading is the terminus of the county road line from Sacramento, and is likely to be so for many years to comc. The town is grow seve last risit, in October. It lias a fine school, of two departments, well conducted, and the trus.
tees propose to add another department shortly. tees propo
Reading is

## The Natural Distributing Point

For the county of Trinity, and for the mines horth, so that muen buiness is carried on here To use as an illustration, the single article of points further south Taking the relre and pany's figures, which represent the busines done, as there is no flour mill in the busines we learned that the total trade in flour and shorts for the mines north and for Trinity
county, has ranged from 1,000 to 1,400 tons annum, and is steadily increasing. A goo flour mill, to grind this amount, and so sar freights, is vary much needed and womld mee With the hearty support of the community mill would pay, for wood is abundant and cheap. The tillable lands coming into market the Reading grant and elsewhere, woul present the greatest need of this section. Ther is only one other mill in the county, and that is at Millville, some is iniles away from the rail
road line, so that it is no sense a rival, but doe There is abiness.
There is also a
Herc, to supply the small mining villages and camps, and possibly combine with this busines The purchase of wool, hides and beef cattle this business to but distance tella in the long run and it is drift ing back to Reading, the liveliest town of its size I know of. The

## Mining Resources

Shasta county are as yet undeveloped. With vast amount of mineral wealth lying locked up in her ledges, we may fairly say that until th past five years nothing was done. The las ries, all of which promise well. The famou edges of Copper City are finally on the hig oad to success, and the ores, so long rebellious, iron, coal of fine quality, copper, silver, gold marbles, both white and colored, quicksilver is taking hold of thes hings and the mining prospects are bright There is also much valuable gravel for hydraulic mining left. It is reported that Alvinza Hay ward's large gravel mine, near Igo, is paying
largely this winter. Breslaur, Vandeven and largely this winter. Breslaur, andeven and tract, bought from Mr. Frisbie. On Clear creek and Spring gulch men are mining in gravel, whilst near Buckeye and the vicinity, new diggings are rcported.

The Lumber Interest
Of the county are hardly measured as yet, for Flume company is steadily pushing northward and the natural outlet of this belt of sugar and yellow pine, of cedar and of fir, will prohabl tract in northern California is on the McCloud but fine bodics are on Hat creek and along the much longer, at our present rate of consump tion, so that shortly these unused resources wil he made available
Shasta county, in times past, has made a ace diggings began to fail, and thus the count me hor most energetic men. But

## The New Era

Which is opening for all this old and famou region is bascd upon mnltifarious pursuits, and intcrinking numerous industries. it has becnfound that much good land lay idle and ncg
lceted. Within the last year several hundred pioneer families have taken up government land and have come to stay. Seven months ago there are three. Property of cevery description is in. creasing in
directions.
respect to farming land, it may be said and ready for the plow, for $\$ 6$; uncleared lands still lower. Some of the low-priced land ranks
high as fruit land. The local market for vegetables is as if the

Clumate
Of Shasta county must be cold and nnpleasant. ouly inhabited ouly inhabited in winter, but the main valley
and the lower hills are blessed with a healthy
ture for the coldest month is $46^{\circ} 72^{\prime}$, or $12^{\prime}$
warmer than San Jose. These figures are taken
from B Beding from B. B. Redding
of the olive. The

## Two Palm Trees

Now growing in an orchard near Wiser's vine
yard, two and a half miles east of Shata City,
were planted by Mr. Swazey, of Shasta, some yard, two and a half miles east of Shasta City,
were planted by Mr. Swazey, of Shasta, some
20 years ago. The largest is now 37 inches in diameter at four feet from the ground. The variety is that known as Pritchardia flamen
toracy Young orange trees may be found in
various parts of the various parts of the county, and several
have borne fruit. At the Tower house are some of the finest walnut trees in the State, and
choice orchard of all the standard varieties. Figs and peaches are of unusually good quality, and months longer than the same varieties in the San Jose valley. Almonds have hardly been
tested. The hard-shell is found everywhere but only a few trees of the soft-shell can be found The olive will undouhtedly succeed. Much of the fruit has been seedling, and little care has
been taken of the orchards; hut a better spirit prevails, and mauy trees are being planted.
There is a fine field open for the first man who will grow small fruits, strawberries, etc., for the mines. A few are brought from Sacramento, but they arrive in poor condition.
In the matter of hay, the
ranges from $\$ 18$ to $\$ 24$, and has been up to $\$ 30$ the local supply not being large enough, and Experiments with Alfalfa,
On both upland and lowland, have resulted favorably, and it appears that it will grow withprepared. Mr. Gilbert, of Gilbert's ferry, gave us a graphic account of his nethod. He plows
twice, as for corn, pulverizes well, sows in April, and covers lightly. It gets up about three feet
the first year, and makes oue cutting. The next year it will make two, or, with irrigation,
three or four cuttiugs. The wild white ats often soow for hay, and millet and timothy are
used. Some experiments will be made with the Egyptian corn this year, of which we shall

## Is of so grea Question of Health

ticular queries on this point. Healthier people
than Sliasta county than Shasta county furnisbes are not to be found anywhere, nor is there any malaria along the
Sacramento within the county limits. A few Sacramento within the county limits. A few
narrow valleys are very hot in summer, unbear. ably so, and where water stands, in such cases,
there is danger. North Cow creek is undouhtedy unhealthy, but Millville and its tributary ravines, Reading and the grant below it, Shast region, as a whole, and all the uplands have al unsurpassed climate.
The advantage above all others which is just now turning the attention of stockmen, sinal
farmers and orchardists to Shasta couuty is in its

Abundant and Unfalling Rainfall.
Last year over 20 inches fell, and every acre
vielded a full crop. This year Shasta city has had nearly 90 inches of rain, and Reading
nearly 60 . Facts of this kind speak volumes. The sheep, goat, hog and cattle interests o the county are only in their infancy, and there
is a good deal of unoccupied range. The local market has hitherto taken all the hogs raised, at good figures, about five and one-half to seven
aud one-half cents live weight. This all goc into the mines and some pork is even br
from Tehana and other points south.
n the whole the advantages of this.
n the whole the advantages of this county,
first, diversified interests; second, local
inceasing marke and increasing markets; third, hecalthd, lolness, is only a question of time.
Our notes were cut short by the last rain-
storm, so we shall report further after another visit a little later in the season.
. H. Shinn.

## The Malva in Southern California,

Editors Press:-The Press of March 9th
contains a communication from Prof. Sanders, of Fresno county, recommending the cultivation
of malva as a forage plant, and regretting that the malva seed could not be obtained at the seed stores in California. For fear some poor
innocent should be misled by recommendation to commit the folly of putting malva seed on their land, I will endeavor to
give them some information in regard to the growth and habits of the malva weed, re
ommended by Mr. Sanders as a forage plant.
First, there is is not a worse land-destroying, noxious, pernicious weed in the State of California than the malva. Let the seed once fall
on land suitable to its growth, and it will take on land suitable to its growth, and it will take
a dozen years' careful cultivation to eradicate it
from the soil. friend in comparison to it.
Second, as a forage plant it is worse than worthless, for if stock is starved to eat it and
noo ther feed for one
did no otber feed for one week, it would injure if it
did not kill them. Messrs. Barron \& Cliilson
of the lace, lost a uumber of fiue, blooded
yetch. tch.
he would wetcor recommend farmed with
hers to
the seed. It is the first weed to start after the ground has been thoroughly soaked by rain or
irrigation. It matters not whether it he spring,
ing irrigation. It matters not whether it he spring,
summer or winter, it will, by the rapidity of its
growth, growth, soon smother out all the small grain or farmer permits the malva to get five or six weeks start he will have to mow it before he
can plow. As I window men mowing down the malva in the
L. D. Chilson orchard kept in excellent ord. This orchard has been spring the proprietor was not ready to plow his land at the proper time, and to day, March 26 th, the malva stands from five to six feet bigb all
over the field, completely hiding the vines and ver the field, completely hiding the vines and
small trees, and the owner assured me it would cost him at least $\$ 75$ to get rid of the malva on his 30 -acre lot hefore he could plow it
There is an evergreen, flowering shrub, whic called the malva tree. It hlooms nearly all the year round, grows to the hight of 12 or 1
feet, and requires about four or five years obtain its growth. Stock is fond of browsing
on the leaves and boughs. It is planted only as on the leaves and boughs. It is planted only as
an ornainental tree. and is nothing like the malva described by Mr. Sanders.
There is an old tradition current in southern Caliornia concerning the origin of our two
worst pests, malva and mustard. It is said that 30 years ago, after the discovery of gold in Cal ican form of government, the Mission fathers icani form of government, the Mission fathers
who had so long ruled the land according to
thein of all poll, found themselves not only strippe portion of their revenue, and the majority o tbem determined to leave the land in a body, Missions in southern California an after arranging their affairs in regard to the
Missions as best they might, they started to journey on foot to Mexico, hut ere they de
parted they left a curse on the land, which they leclared had been seized by the despoilers o
their holy church; and as a lasting curse to the rich soil they sowed malva and mustard seed in the rich valleys, all the way from San Luis
Obispo to San Diego. Such is the legend now told (and believed by sone to be true) of the should be avoided when possible. R. Lixox. Ventura, March 26th, 1878.
[It will be noticed in the letter of our Lo other side of the malva question is maintained.

## Poisoning Squirrels.

Ebitrors Press:-Our pest, the ground squir rel, has now began its annual breeding, and the young will be ready at harvest time to assist in
tisposing of the crop. I opened three to-day and found the embryo of six in each female, and,
haviug opened them regularly each month since
last June, I may safely say they here breed aunually, for to-day is the first time we have found any in embryo.
Now is a time of comparative leisure witb most farmers, and, in the hope that I may help
to assist in rousing a comhincd prosecution of the common enemy, at least from this time use of strychnine: Take dry wheat, stir in a little molasses, but only enough to slightly cover mixing. Pulverize your strichnine in the bottle bout a hushel of use an ounce of strychnine to about a hushel of wheat, and again mix thorenough o form a slight coating, and again stir
thoroughly. Some persons then add a few dhops of essential oil, to tempt the squirrels ly
the sense of smell. We are experimenting the sense
with anise.
By actual count, we killed 50 squirrels to the acre when we commenced in 1877 . Now they
are becoming scarce on the estate. These rodents will not stand persecution. I. Woons.
Mission San Jose, April 2d, 1878 .

## The Stable. $^{\text {the }}$

## Breeding Horses in California.

A great deal has been written upon breeding horses, and yet the subject has not become trite, or the consideration of it without interest. It has many new features, aud there are varying phases which continually present new
suljects for thought. It will always be so, and from the time over two centuries ago when the Duke of Newcastle in quaint though forcible style portrayed the various breeds, their merits and faults, nntil the last essay of the Rev. Mr. Murray, though volumes have written, the mine is still yielding "pay There is little question but that those
advanta
pursuit.
By scientific breeding is meant the carefu into the production of the desired anill come or fisb, the purposes for which it is intended, and make effective the experience of others. quisite, and though it is not essential to be fa miliar with Darwin or Huxley, the breede on the subject which can be obtained. It is a fascinating subject to one who engages in it in the right spirit, and wbo follows well forme ally on the alert to solve, and though tbe breed ng of borses entails a longer waiting for the
solution, the greater intricacy gives it greater cbarms.
The Pacific slope has peculiar advantages for hreeeing all classes of horses; for the finer
families of the equine race it has a natural uperiority above any other country in the hut we think it can he demonstrated bys a care ul comparison with the regions which have bandry, and by the results which have followed what has already been done.
oremost place as the producer of the best ani mals, and her horses occupied the highest position. Not merely the race horses, but the
range has extended from the boy's saddle horses o tbe mammoth draft animal, with varietie the best adapted to nearly every purpose in
which the horse could be employed. That couutry owes the greater part of its celehrity to
he skillful manner with which the breeder bviated the disadvantages of climate, and the proper appreciation of selection and intermix-
ure. The climate is too humid for the comcure. The climate is too humid for the con-
plete welfare of the horse, and the breelers
were early impessed vere early impressed with the force of that
rouhle and took the necessary steps to remedy trounle and took the necessary steps to remedy
the defect. The excessive moisture was favor-
able, however, to the pasturage and the gres able, however, to the pasturage, and the grasses
and grains were of good quality. Maryland ad Virginia were the horse regions of America
colonial and revolutionary days, and these in colonial and revolutionary days, and these
States held the pre-eminence until the country in the business, and then the newer districts in the business, and then the newer districts
bore the palm. Kentucky once in the lead than ever entitled to claim the supremacy. who are the best informed in these matters concede the legality in the frankest manner. There is a slight difference in the topography, soil or
climate of the lest portions of Kentucky, Tenncssee, and southern Ohio, though as regards
climate, Tennessee is the best fitted for the ants of the horse.
To compare with California the "blue grass
"race horse region" of Keutucky will answer very purpose, and the three counties of Bourof the section, and where at least $75 \%$ of the originally a heavily timbered country, and the good taste of the inhabitants bas preserved a great many of tue native forest trees, and the affections of the residents as the highly bred animals which add so much to the beauty of
the scene. It is undulating in surface, the elevations hardly rising to the dignity of hills,
the soil mostly a chocolate-colored loam resting on lime rock. There are many springs and
small water courses which frequently sink and appear again.
generally generally handsome structures, a majority
the "well-to-do" farmers having built larg mansions of brick, the grounds carefully laid
out and well kept. The houndary fences out and well kept. The houndary fences a
made of quarried limestone, and these walls ar put up in the best manner, high enough to
the most unruly animal, and neatly capped. The interior fences on the large breeding tablishments are mortised posts and rails, the posts cedar, the rails ash, and the work nearly
as well done as the framing of house. At Woodburn, the largest stud farm in the State containing over 3,000 acres, there are a great
many paddocks of from two to five acres, and fields of various sizes all enclosed in this admir able manner, and in those allowed to the thor oughbred brood mares, are shelters under which are ranges of "loose boxes," and the whol place has been fitted up with an eye
Cattle and sheep are also bred, but the divi sions are such as to completely separate the different races, and the horses are also arranged in the classes to which they belong.
This short account will be sufficient to sbow he readers of the Rural Press that amount of money has been expended, and to
hreed on a large scale, in even the favored clinate of Kentucky, the outlay is imperative. But the Kentuckians are prone to ascribe their
great success mainly to the advantages of soil great success many, it truth, it hastag been to the ystem followed, and though this system would harsher isotherms, it is the keystone which sup ports the grand arch there. Already this yea
dermometer, at Lexing ton, has marked
degrees below zero, and storms during
winter and spriug, when snow, sleet and
winter and spriug, when snow, sleet and
and sere ${ }^{\text {a }}$
California.
The blue grass (Poa pratensis), is held by nany to be the greatest concomitant, and the many famous animals which bave sprung from ent herby erdant pastures owe to that succutubborn endurance. While this grass is, witbout doubt, very valuahle for pasturage, it is not absolutely certain that it is superior to all oth. ers, and the combination of the California
plants, which make up the range here, many lants, which make up the range here, many
hold to be better, and advance strong arguents to sustain this view.
It would be a waste of words and space to those who are ages of the California climate many of our readers bave not that knowledge, it may be well to state wherein it is superior to
any other section of the United States for stockany other section of the United States for stock-
growing. growing. First, is the uniformity of tempera-
ture; and in the districts bordering on the bays nd ; and in the districts bordering on the bays
and of heat or cold. January is likely to be as favorble as April in Kentucky, and tbough there protection required is a roof aud walls which will keep the wet away. When it is not raining nares. is abundant feed in the fields for the there can be no better tine for the mares to foal. The spring rains in March and April are
not usually severe, and at no season the "cold rains" of the East, which are so severe on stock which are without shelter. The "dry
season" is the perfection of the finishing climatic touches for the young, enabling them to
be as comfortable in the field as in the best be as comfortable in the field as in the best
stable, with every advantage of pure air, and in a great many localities without the annoyance lose of the year, and November and December are similar to January, save that there is not so much green food; though further south, in the neighborhood of Los Angeles, we have seen as
fine pasturage the first of December as could be conceived. This consisted of alfilerilla, wild oats and burr-clover, the two former predomin-
ating; and though, of course, it had all spruns from the seed, the mass was so dense that it
felt under the foot like the sod of an old blue. grass pasture. These grasses appear to have all be merit which is claimed by those who bav given attention to the comparison between them
and the Eastern plants, and certainly they cor entails. The alfilerilla and wild oats, when young, are the most relished, and until the seed horses are prone to confine themselves to feeding on them. But after this transformation,
the burr-clover comes into play. The stalks an leaves are eaten with avidity, and the stalks and is literally covered with the capsules containing
the small oleaginous seeds. There is no danger of rain to spoil them with premature germina tion, and nature has provided a granary to pre
serve all tbeir nutritious qualities pose a foal is dropped the first of February, ther
por pose a oal is dropped the first of February, there
is then plenty of green herbage to induce a full acteal secretions the dam, and continue the whicb is the main thing at this age. The grass is green until the young animal is of an age
when it would be considered old enough to wean; but on the recer food there is no neces-
sity for this. The mother acquires all the strength necessary to carry along the embryo
and foal both, and the latter has learned to lick ap the seeds, which give him a further impetu in life, and supply bone and muscle of the best kind. Eastern and English breeders of race-
horses have learned that it was essential that lam and foal should be liberally fed with oats, the dam all of the time and the foal as soon as those who were thus treated; and while in California the racing colt, or the trotter which is intended to ter for this artificial supply, there is nothing
like the necessity for it. been jaded and worn down with over-exertion, and is turned out as
soon as the feed is sufficiently advanced, may get thinner in flesh, and, notwithstanding he herbage, remain without an accumulation of adipose or muscular tissue. So soon as the wild oats "get in the dough," there is seen to be a change for the hetter, and when to the eyes of there is nothing for him to live on, bloom of perfect health, and his spirits will be as high as though he were eating fine hig feeds
of the best oats every 24 hours. The excrements appear like those of the highly-fed animal, and there can be little question but that the nourishment contained in those dried plants and perfected seeds is about equivalent to that in
hay and oats. It does not require argument to how the adlaptability of this feed to the wants of the growing animal, and so far we will consider that much of the breeding problem as
Resin in Shellac.-The Polytechnic transates from foreign authority as follows: For the detection of resin in shellac take five grains portion is evaporated and weighed. If the residue be greater than I0\% of the shellac, such excess is due to the presence of resin. Another

THE PACIFIC RURAL PRESS.

# a <br> cmin 

The Well.
When the gunimer noon is glowing,
Whieu the unen are out a mawivy,

 Stand the wenturb brow trigh and pearly,


 And as fram its restive, priace,



 And one eres
On the trees


 Seems to sororod the worid in wrath-

 Or, witb neither shoen nor to sobe










 Man nind beast reij joe topether


 tit numnery sr




 | These e waill |
| :---: |
| Sin and thanh |




##  <br> Where the ancient tayctis found them

Law Agarist Flurtisg - Burke, in the his tory of irpyina says Th find that thie Goveruo forbidding women to contract themsel vest to two several men at one time. For wounen beeng yet yet
scarce, and much in request this oftense we becoming very common; whereby great disouie arose betwen parties and no smalt trouble to
the government. It was therefore ordered that the government. It was therefore ordered that
the minister should give notice in his church the minister should give notice in his church
that what woman soever should use any word or speech, tending to a contract of marriage, to several persons at one time, although not pre-
cise and legal, yet so sas might entanyle or breei
scruple
 be punished by fiene, or orthereaise, correction, or
the quality of the person so offend ing."

## Nineteen-Twentieths.

A.brrasos, M. D. $J$

In a reckless moment some three mouths ago intimated at the close of an article under the paper "Marigolds or Onions," that another best kind of cultnre .o our boys and girls. I say recklens, because had not counted the cost necessary to speak au thoritatively on a subject that puzzles the wis est philosophers of the day. Since then I have thought much on the subject, and would gladly lave canceled that intimation, or laid it on the
table, or indefinitely postponed it.
Day after day and week after week have passed, and still that promised paper haunts me. It will not down. I fancy Mrs. Jeanne U. Carr, who first proposed the question, still asking, "what is the best kiud of culture for nineteen-twentieths of our boys and girls?" And only a week or two ago your excellent corChat," reminds me of the promise. Even some of my private correspondents evince a wish to of ny private correspondents evince a $w$.
know what I would do with the $19-20$ ths. Just as thongh iny straw of promise inight prove a support and a rescue to the thousands
now buffeting the waves of financial distress! fear it may be indleed but a straw for the drowning unan; and yet it may point to a haven,
and possibly a continent, as did the sticks Coumbus saw when nearing the shores of Amerca, where there is safety from the ills that now beset us; and where every son and daugher may find-not exactly repose, for that has been killing ns-but a sate resort insill weather.
Now, if I were obliged to reduce my answer to two words-and I might do so very easily
and correctly-it would be honest labor. This is not only the best kind of culture for 19-20the of our boys and girls, but for 20-20ths. This is the law and the prophets, and is a command
and necessity as old as Adam, and older than and necessity as old as Adam, and older than Eden "to dress it and to keep it," we know not is only in honest work in tield or shop, by land tentment in youth, in maturity, or in the infirmities of old age,
idleness, a plant of rapid and sure behold uow when we look forth the fields are ripe for the liarvest. There are more than a
million tramps in the United States, who are willing to eat but will not work. They ignore the sacred maxim, "if a man will not work he shall not eat." Scribner for March says: "We are just now having a great epidemic of dis-
honesty." Yes, from the tramp who eats without earning, to the bank president, who steals Scribner suggests as a remedy preaching and
prayer. But I fear this kind of disease will not come forth except by a combination of
prayer aud fasting, and earncst, honest work. prayer aud fasting, and earncst, honest work. and unfortunate, and prisons for the criminals. Shall I say there should be no place for the man
who can but will not work? What is he good for, and what can we do with him? Perhaps
we need another institution for this classplace where the State may give them work and
make them do it. It is said that some of these idlers in the larger cities desert their families at the approach of winter, knowing this to be an irresistible excuse when these families appeal
to charitable societies for aid. Thus there is organized beggary, by which certain persons may do as little as possible and get all they can
for it-"'to live without work, and without virtue obtain sympathy." " The "out of work," and "can't get work" plea may be good one time in a hundred. But actual want. Their houses may burn down. The Hood or storm may carry away their prop-
erty. But the earth is a good inother after all even in the most inhospitable climates. After the storm comes the sunshine-after the drouth the rain-after the long winter the genial
spring; and the willing worker scorns to receive alms. The "can't get work" exeuse only comes from those bred to prodigality or vieious idle-
ness-who are unskilled in any honest ness-who are unskilled in any honest use of
their hands or minds-who would depend on the exertions of their wives or mothers at the
wash-tub-who are besotted and debased with obacco and whisky-who if offered a job would sublet it in order to play "boss." Why, the face of the earth cries out from every square
yard of land for some hand to till it! The plains yard of land for some hand to till it. The pains and air, and the dwellers in all these, and even and haves of the earth, bem. Instead of this we see him in some rum shop as proprietor or patron, or leadiug in some fiery campaign agaiust capital, or moving on with the great army of "tramps in search of that undiscovered country where there is no work to be done
one is so unfortunate as to find a job!
make the mind and meh value that does not force and vigor to both that will make that give pendence practical. And here is the chief fault of our system of education. The verson whose early life up to 21 years is only spent in the
school room, "getting an education," as we call
it, without physical training to strengthen the body, seldom in after years acquires that essen-
tial. Then add to this four ycars longer in college, and we have a specimen of humanity 80 entirely spoiled for all practical uses that he
seldom amonnts to anything in after life, nuless he should chance to have an unusual endowbodily training
For the reason, then, that the routine of on usual school roon course deprives the pupil o an early training in the avenues of industry "half-time" schools would be an improvement Half a day with books and sedentary studies is plenty for the active and rcstless child. Th labor or healthful play. This system whereve fairly tried has given excellent satisfaction. The effect of culture should le to bring inan kind to a knowledge of his relations with the world about him; not to environ him too much with the artificial, or to make him think and act as a being removed and alove the common
brotherhood of his kind. But he should be ed ucated to look upon and value a noble, generou and honest mind as of more worth than mate industry with the full assurance that no hones or individual has been, is now, or ever will be poor, in the full sense of the word, that adheres to this faith (and practice. Thus endowed no one can be poor. Hard times may pinch, thieves may steal his earnings, misfortunes may overtake him, but he is rich in a resource that under every change 18 cash . Contraction or ex pansion in values of
seriously affect him.

Prudence, frugality and generosity are among and school. And it may reading, writing and arithmetic as "the mint anise and cummin, and have oinitted the weightier matters of 1 w, judgment mercy and faith.
"Ill fares the land to hastening ills a prey,
Teach erring man to spurn the rage of gain.
Teach him that states of native strength poss Though very poor, may still be very blest; As ocean sweeps the labored mole away:
While self-dependent power can time yefy,
As rocks reist the billows and the sky ",
And now in claiming that the best education lies in an early training, by which mind and body may be so employed-not so mnch in get-
ting a store of knowledge, or making a living, ting a store of knowledge, or making a living, the best kind of culture? Or is there some bet ter kind-one that will bring more contentmen or measure a greater amount of happiness?

## French Hand Doctors.

We gave a few hints latcly on the care of the hands and finger nails, and they seem elabo rate enough for anyone. The French go as much farther in this line as they do in other extrome niceties of f the toilet. Harper's Bazar gives an account of a visit of a lady to a "manicure" or ing, my turn at length came, and I scated mying, my turn at length came, and I scated my were scattered the tools of her trade. Thes were scissors and knives of a shape special.
devised for the trimning of the nails; files, nail-cleaners, a small basin of rose-water with a bit of soap near it, a tiny towel of linen cam-
bric, a bit of lemon, and various polishing pow ders and sweet-smelling unguents in the form of ruby-colored pomadcs. The first step in her proceedings was to wash off the finger-tips carethat there were no ink spots or other stain upon
them. Then she slipped and trimmed the nails into the approved filbert shape, neither too short nor too long, nor too pointed nor too broad; the 'half-moons' at the base of the nails were, gently brought into clear light; all 'hang. a coral-colored pomade of adelicious odor upon the nails and the upper part of all the fingers. After allowing this to remain a little while she
wiped it off again, and scattered upon the nails a golden brownish powder, which she vig. powerful forefinger, occasionally aided by the palm. More pomade, more powder, more rubbing, and then the nails were shown with that beantiful gleam upon then, that pearly pink-
ness, seen in the interior of some delicate seashells. As the pedicure had said, the mani ure's manipulations greatly 'adrantaged' a pretty hand, but even
vantaged an ugly one.
"The manicure charged 40 sous for a sitting, that is, at her own rooms. When she did the visiting, her price was a dollar. That she found
her business lucrative was sufficiently indicated by her halldsome rooms and her prosperous appearance.
A gentleman, whose proboscis had suffered
amputation, was invited out to tea. "My dear," amputation, was invited out to tea. "My dear," said the good woman of the house to her little daughter, "I want you to be very particnlar nose." Gathered about the table, everything was going well; the child peeped about, looked "Ma, why did you tell me to say nothing about Mr. 'Jenkin's nose ?" He hasn't got any !'

## Black Silk.

A Yaris Exposition correspondent writes Now, I can talk very learncdly of black silk, aving seeu a quantity of samples cut from the looms which scud forth their fabrics to the ex hilnition. I wish every lady who means to biy black silk knew what I do about that invest ment, and how in a fecling of Christian sister-
hood I wish they could be preserved from the 3oocalled gemninc black cord, warranted not to reasc or to absorb dust! I have seen dealers but they now fail to convince me aith in weak fiber, bad dycs and weighte no these defects incident to a silk that will not wear being hidden under immersions in treacle spermaceti and iron. I have visited some of the inanufactorics which, even at Lyons, make
for the cheap I'aris trade, and there I have or the cheap I'aris trade, and there I have
known a sidk merchant to have handed over raw silk for a each pound of which he had three in re turn. The two over were got ont of the mix. ures for dressing and dyeing, not out of the clid can comprehend that whatever substance is put in a tissue must likewise at some time or other come ont of it again. If spermaceti and ron be boiled in the dye of a thick glossy,tex. ure, and that texture be made up in a tight will will assuredly rub out over the two fronts of put in the the grease, treacle, etc., primitively lains how some gros sailact, and ex plusty looking in a short time. They are reat disappointment, because they were so handsome in the piece, such gloss, such feel, yar They were expen the dressmaker bill was a long, dreary affair. After a little com passionate sympathy, a few words of comfort equally to blame, and not male purchasers are quall to blam, and not the dealers. A dealthat should be take into consideration, he sclls black silk. People will have gros grain and will not pay the price for it

What Mas can Do.-We can not always, hardly ever root out an evil tendency; but we growth, more sun and rain, more truth and love these powers of growth will conquer the evil ions, as I have sid, le and hopeful. We are humble in thin hat our best success and our highest pifts have their danger. Wee are hopeful when we see that even the worst thing in us can be turned to good. So rod, in lis great geological workshops makes diamonds out of carbon and rubies out of clay. Man's brain is a self-compensating machine, an automatic, self-correcting appar tus. God has set in it two against two; every in man a tendency to hope, and another to cau ion as its counterweight. He has given sel the wish and also sympathy; He has inspire added the tendency to reverence and submit to good. He has given us powers which take us outward into the world of things and men others which draw us inward to the world of
imagination and reflection.-James Freeman

Prident, Nut Mean.-Mr. Elijah Hitchcock was under scruting constable, whose characte was inquired of about him. "Deacon Solomon Rising," said the questioner, "do you think Mr. "Oh, no, sir; not by any means." "Well, do you think he is a mean man !" "Well, with egard to that," said the Deacon a litlle more hink he is a may say that I don't really think he is a mean man; I ve sometimes thought prudent man so to speak. "What do you mean ist the old Widder Witter back here, and he went up to her house and levied on a flock of ducks, and he chased them ducks one at a time round the house pooty much all day, and every time he
catched a duck he'd set right down and wring its neck, and charge mileage; an his mileage about it, as I know of, but I always thought, after that, Mr. Hitchcock was a very prudent

A colored preacher in Florida thus held forth: "My brudring, the Israelites went over
the Red sea on the ice. They got over all safe; and dat's de reason way Moses sung de song ob praise, In de morning when de sunl was up, great lumbering chariots of iron. Dey brok through de ice, and all went to de bottoin ob de and Egypt's a hot country. It's under the
Tropics, it's near de Quator, and dere an't Tropics, it's near de Quator, and dere an't no
ice dere. How could dere no ice dere?" To which the preacher responded: "I'am gla
Now I can 'splain.

## g'ography, instead when de children

dat was a great, great yrael go over de Red sea, was any gography, before dere was any Tropics,
before dere was any Quator. Dat's de reason dere was ice, my brudring.

## Chaff.

Every dove has a cote, and every dog pants. A younasher, perusing a chapter in Genesis,
turned to his mother and inquired if people in those days used to do sums on the ground. He
had been reading the passage: "And the sons of men multiplied upon the face of the earth. A gossipriva woman intent on slander went in
to a neighbor's, and exclaimed, as she threw her self into a chair: "One-half' the world doesn' know how the other half lives." "That isn'
your fault," quietly responded the neighbor A boy stood curiously watching the peanut man as he methodically turned the crank of his
roaster. After expectantly waiting until patience ceased to be a virtue, the unsophisticated why don't you play suthin?
A correspondent asks: "What is the best method of feeding cattle in winter?" We don't the ox in his lap and feed him with a spoon, Others would bring him into the dining roon Tastes differ in matters of this kind.
Abour the time barometers became so cheap as to induce agriculturists to purchase them, a become the possessor of the instrument, on one occasion, in spite of a rising barometer, it continued raining; the farmer, losing all patience, towards the sky, and exclaimed, "In the name of guidness, will ye no believe your ain een?" Of a certain Enstern ex-governor a pleasant Worcester, and called upon an acquaintance, who owned many fine pictures. The ex-governor went about the room examining these, until he
came to a painting of the "Madonna" hanging above the mantel. He peered up through his "eyeglass, "And who-er-is-this?" he asked na.'" "Ah!" said the ex-governor, blandly

How a Day is Gained and Lost.
Questions are frequently asked as to how a day is lost or gained in going round the world Prolessor Davidson last evening gave a popular
explanatiou of the phenomenon to the Academy of Sciences. He started a traveler westward
from London, or rather from the meridian from London, or rather from the meridian of Greenwich, precisely at noon, and he made him speed that the earth carries us eastward in its
daily whirl of 24 hours. The traveler 1s always daily whirl of 24 hours. The traveler 1s always
in local time at meridian; he goes round the globe in 24 hours, and it is always noon with
him. At New York his application of time agrees with the clocks of the city, but his watch, which was at 12, noon, when he left London, longitude 120 , He boes bor meridiau of Nevada his watch M. In longitude 180 , the sun is at meridian and his watch shows that the time occnpied by his journey is 12 hours; and in the longitude of
the Ganges, 18 hours have elapsed; and contin uing his transit to Greeuwich he has still the sun in meridian, and finds that 24 hours have been lost. The rising and setting of the sun
for one day has been witnessed by the people of London and not by the traveler. Actual time is the same, but in his case the division has not been marke. Going west, at grees of longitude, the navigator adds a day if grees of longitude, the navigator adds a day is proclaimed, to the consternation of the ship's parson, who is affrighted lest the prayers of the
service may not have the same efficacy. Coming eastward a day is agined, and if it is Satmade into another Saturday, and Monday becomes Sunday. Care is always taken to avoid
the conjunction of two Sundays, as that would the conjunction of
On the Science of Patching.--Will you
allow me to give the result of a rather experience in the science of patching? I shall begin with the perhaps original axiom that a
patch must be rectangular. Around or "crooked" one will inevitably thrust itself into notice, as patch should never be "laid on" but alway "set pa." To this end, first cut away carefully by a
inhread all that is in the least worn, and turn
then back and baste down an even seam all around. The corners may be slashed slightly in a diago-
nal direction to keep them square. Then to this opening fit the patch exactly, with the over" on the wrong side with thread of the presite sides to avoid trouble with the corners. Thpothe pathickness caused by the folded corners o and a little fine darning added to kep them,
$\qquad$ carefully matched; heavy woolen fabrics, such turned, the clean cut edge being strong enough
to hold. My method when properly followed,
will, I think, draw from more the boy the surprised question, "Whyl mother, are
these new trinsers? I don't see any patches."

- Nero York Post.



## Young Folks' Column.

Stories about Animals.
Our little friends like to hear queer things about animals, and we have clipped a few little
auecdotes from our exchanges to gratify them. auecdotes from our exchanges to gratify them.
Alonzo Rhodes tells the Stock ton Independent of a little black pup and a black pig of the same age that were reared together by his
brother when they were boys on the home farm brother when they were boys on the home farm
in Mississippi. The pig was a waif that came along on the tramp the day the pup was brought along on the tramp the day the pup was brought
to the farm. They were brought up together to the farm. They were brought up together Wherever the dog would go there the pig fol
lowed, and when the lads went to town thei incongruous companions following them in the stores and all about was the subject of general remark and curiosity. The pig was a vigorous
fighter aud would do battle with anything that attacked his friend, the dog. The dog would
fight for the pig too, and the two were insepa rable, playing together as two dogs. When the boys went iuto the woods hunting rabbits or
deer with the dog, the pig went along and kept up the chase until he was outstripped, when he to return. One fall, after the pig had grown to a lig hog, he was put into a pen for fattening pen a place of constant resort, spending the
time in play with his strange friend Finally when killing time ime the fread killed wit the rest, but the dog was so inconsolable ove
the loss of his companiou that he refused eat, and pined his life away in the pig sty, howl ing mournfully all the time.
There is a dairy on Bush guna and Buchanan, in this number of animals besides cows and horses are kept. Amoug the stock is an old retriever which has been train Therd stock and kee watch over the yard. The old retriever has go much inclination to wander about and his move ments are consequently slow, while his ramblings do not extend far from the cow yard. Between this retriever and a goose a singular attach goes, the latter follows close at his heels, cack ling unceasingly. The old dog seems to enjoy
the goose's compauionship remarkably well. The Tuolumne Independent has the following About 8 o'clock on Wednesday evening a sin gular affair happened at the dwelling house of Dr. Eichelroth. The family were startled by flock of linnets which flew through the open alighting on the head and shoulders of the inalighting on the head and shoulders of the in-
mates and making themselves perfectly home. There were probably 30 or 40 of them. They were finally caged and given their liberty next day. It is supposed they took a sudden
fright at a bonfire the boys had lighted next th Episcopal churcl near by, and flew in at the room as a place of refuge.

A lirtce five-year old could not quite under stand why the stars did not shine one nigh when the rain was pouring down in torrents. she stood at the window pondering on the subject
with as mucl gravity as Galileo when he looked at the swinging lamp in the cathedral at Pisa and with equal success, for all at once her coun tenance lighted up and she said: "Mother, know why the stars don't shine. God has pulled them all up so as to let the water come through the holes.
"Now, my boy," said the examiner, "If I
had a mince-pie and should give two-twelfth had a mince-pie and should give two-twelfths of it to John, two-twelfths to Isaac, and two-
twelfths to Harry, and should take half the pie myself, what would there be left? Speak
out loud, so that all can hear." "The plate shouted the boy.
"Second class in grammar, stand up," said
the schoolmaster. "John is. Who does John correspond with ?" "I know," said the little mean
sister Sus.n."

Good HEALTH.
The Standing of Alcohol.
I am recording a matter of history-of per-
sonal history, says Prof. D. B. Richardson, sonal history, says Prof. D. B. Richardson,
when I say that I, for one, had once no thought when I say that I, for one, had once no thought
of alcohol except as a food. I thought it warmed us. I thought it gave additional
strength. I thought it enabled us to endure mental and bodily fatigue. I thought it
cheered the heart and lifted up the mind into greater activity. But is so happened that I was asked to study the action of alcohol along
with a whole series of chemical bodies, and to investigate their bearing in relation to each other.
And so I took alcohol from the shelf of my laboratory, as I might any other drug or chem-
ical there, and $I$ asked it in the course of exper "Whats extending over a lengthened period "What do you do?" I asked it: "Do you warm,
the animal body when you are taken into it?" the animal body when you are taken into it?"
The reply came invariably, "I do not, except
in a mere flush of surface excitement. There is, in fact, no warming, but, on the contrary,
an effect of cooling and chilling the body. Theffect of cooling and chilling the body.
Then I turn round to it in another direction and asked itit "Do you give muscular strenthe?"
I test it by the most rigid analysis and experiment I can adopt. I test muscular power nn-
der the influence of it in various forms and de der the induence or
grees, and
sts reply is: "I give no mnscular
trent strength." I turn to its effects upon the organs
of,the body; and find that while it expedites the heart's action it reduces tonicity, and turning
to the nervous system I find the same reply that is to say, I find the nervous system mor quickly worn out under the influence of this
agent, than if none of it is taken at all. I ask
I t: "Can you build up any of the tissues of the body?" The answer again is in the negative
"I buid up nothing. If $I$ do anything, $I$ add atty matter to the body, but that is a destructive agent, piercing the tissues, destroying their
powers, and making them less active for their

Finally I sum it all up. I find it to be an ageut that gives no strength, that reduces the
tone of the blood vessels and heart, that re tone of the blood vessels and heart, that
duces the nervous power, that builds up no
tissues, can be of no use to imal as a substauce for food. Ou that side o the question my mind is made up-that thi agent in the most moderate quantity is per
fectly useless for any conditions in life t fectly useless for any conditions in life, to
which men are subjected, except under the most exceptional conditions, which none but skilled ers can declare
Diphtheria Cavaht from Calves.--Dr recently engaged in some observations upon diphtheria in calves, and its probable transmisamination of a calf which had succumbed to the disease after communicating it to other an.mals
in the same shed, he found the false membran on the mucous membrane of the jaws, the upper lip, the nostril, and the cheeks. There wer
also deposits of pus in the lungs, aud circum scribed inflammation of the pleura. A healthy calf, introduced into the shed where two calve suffering from diphtheria were housed, rapidly fell ill of the same disease, recolvering in three
or four weeks under appropriate treatment. The false membrane deposited in this case was of great thickness, and under the microscope ritic membranes in the human subject. The inspector who conducted the treatment wa was diagnosed an affection of the throat, which and several other observations Dr. Dammann is of opinion that calves are often the subject cation of the disease from them to man is highly probable.
Harmless Colors.-It is a well-known fact and the London Lancet has recently called is alin to it again) that at the present time it is almost impossible to find among the painted tain, in the colors used for its decoration, sub stances that are either positively poisouous or else injurious to the health. It seems probable that this important matter is soon to be reme-
died by the substitution, for the pigments now died by the substitution, for the pigments now
in use of a series of perfectly harmless colors, which the experiments of M. Turpin have ceeded in producing. At a recent meeting Industry, in Paris, M. Turpin exhibited a serie of samples, showing every shade of-every color necessary to fill out the entire chromatic scale of Chevreul.
Health and Talent.-It is no exaggeration the world calls talent A man without it may the world calls talent. A man without it may deeds of a dwarf. On the contrary, let him hulk, thews and set failure at defiance. A man has good reason to think himself well off iu the lottery of life if he draws the prize of a healthy stomach without a mind, rather than the prize of fine iutel
lect with a crazy stomach. But of the than a giant mind with a crazy constitution. A lean pound of energy with an ounce of talent
will achieve greater results than a pouud o
tnlent with an ounce of energy.- Home Journal.

## Domestic Economy.

## A Cake Basket

Tea Cakes.--One quart flour, one pint milk, two eggs, half cupful of sugar, two teaspoonfuls
ream tartar, one soda, piece of butter size of an egg.
Spovae Cake.-Two eggs; one-half cup of sugar, two-thirds of a cup of flour, two teaspoon-
fuls of baking powder; flavor. Cut in two and put custard between.
Chorce Cookies.-Two eggs. Two cupfuls white sugar, one cupful of butter, one-third cup-
ul sweet milk, two spoonfuls cream tartar, one tablespoonful soda, one-half nutmeg.
Date Cake.-Two cupfuls of granulated sugar, one cupful butter, one cupful milk,
our cupfuls flour, four eggs, one-half grated nutmeg; one-half teaspoonful ground mace, the rated ring of one lemon, one pound of dates, If prepared flour is not used, add to the three If prepared flour is not used, add to the
teaspoonfuls of any good baking powder
Orange Cake.-Three eggs; one cup of sugar butter size of an egg; one cup of flour; one tea-
spoonful of cream of tartar, and one half teaspoonful of soda dissolved in a tablespoonful of milk; bake in three layers; put between each layer the whites of two beaten eggs with grat-
d rind and juice of one orange and powdered sugar.
Cream Cake.--One cup of white sugar; two ne-half cup of sweet milk; one-half teaspoon-
ul soda and one of cream of tartar; one and onealf cup of flour, and a little salt; beat horoughly and bake quickly in five or six round

Cider Cake.--One pound of sugar, threequarters of a pound of butter rubbed to a cream,
ix fresh eggs well beaten, and, when added to six fresh eggs well beaten, and, when added to
the butter and sugar, beat all together very the butter and sugar, beat all together very
light; add alternately two pounds of sifted repared llour, and one pint of cider, one teapoonful of ground cinnamon, one of ginger, half nutmeg, and one ponnd of currants rubbed hrough flour.
Confectionery Cake.- Three cups of sugar; one and a half cup of butter, one and a half cup
of sweet milk; yokes of five eggs and whites of two beaten separately (whites of three left out or frosting); one teaspoonful of soda and two Divide into three, four and a half cups of four. dish; add to one-third, one cup of raisins chopped fine; one-half cup of citron; one cup of cur-
rants; one teaspoonful each of clover, cinnamon rants; one teaspoonful each of clover, cinnamon
and nutmeg; bake in layers and frost.

## How to Eat an Orange.

Editors Press:-A writer has stated that the way 'to get at the trne inwardness of an orange, is to tear off a piece of the thick aromatic rind or
peel and just bite into the orange; let the juice will." It is a mistake to the range daintily by dividing it up in the sixteenth parts. You get no idea of the fruit
rom such fragmentary morsels. In other words attack it by main force, and then you will get the golden drops square in the face-
eyes and mouth full.-GEorge RICr, Sacramento, Cal.
This poetic advice is splendid for ladies and children and men who, like Mr. Rich, keep
their lip lawns well mowed, but to shoot a whole orange at a full beard, would cause much ily bearded man meet a ripe tomato which an ily bearded man meet a ripe tomato which an
urchin had launched in the air, and we shall carefully dodge all whole oranges.-EDrrors
To Make Tea.- Scald the teapot well, (an earther one is best) and put into it a teaspoon
ful of tea for each cup, then cover close and set on the back of the stove to heat. Let it stand kettle must be puffing and singing-boiling hard. Pour over the leaves only sufficient boilng water to moisteu them, cover close and let
stand on the stove-hearth for a minute, then add a little more water and cover close again or another minutc; finally pour in the requisite quautity of boiling water, and let stand where it will keep hot but not boil. In ten minutes the infusion should be poured out, without the addition of water. If more tea is to be made throw away the spent lea
Tea A La Russe is made as follows: Have ready some nice lemons, peeled sliced and the cup, and pour the hot tea over it, adding sugar taste, but no cream.
To Stew Fresir Pork.-Cut the ribs into chops; put then into a deep stewpan; cover them with cold water; season with pepper and poonful of butter, with one teaspoonful of our for thickening, shice stew when half done One hour is enough to cook the stew.
Fia Puddina.-Half a pound of bread crumbs, half pound of figs, six ounces suet, six
ounces brown sugar; mince the figs and suet icely; a little salt, two eggs well, beaten, nutmeg
o taste; boil in a mold four hours. Servo

## PAC FIC RURAL extrisouls

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## SAN FRANCISCO: <br> Saturday, April 13, 1878

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NERE IN BRIEF on pare 229 and other parces.
AGLCULTURAL NOTES from tile various eoun-







## NEW ADVERTISEMENTS.




## The Week.

All California is charged with new life. Beueath the warming sun, all is bustle in the city streets and in the country stores. Here the drays roll heavily from the implement and gen eral supply houses to tho railway stations and
the steamer wharves. In the iuterior there is the steamer wharves. In the iuterior cliere is
hurried bursting of packages, and the clatter of setting up machines for sale to farmers, whose
guickly heading crops will tax their fullest quickly heading crops will tax their fullest
powers to transmute from fields to sacks. Over land freiglits west ward are heavy with the
results of reccut orders. "Time freight--this car must go through on first train," is the
legend which we read on a dozen cars passing iu a monent. A ship is lost off Cape Horn whic worth of agrieultural machines. In less than 24 hours word is sent from Chicago that new and thus the market will be supplied soone than if the ship, had not gone down. This is
but an incilent, and yet it speaks volumes. but an incilent, and yet it speaks volumes,
Business is awake and confident of revard for Business is awake and conficcnt of reward
enterprise. When business awakes industry springs from its couch, and even lethargic capi tal rubs its eyes.
worth an era of depression to feel the throb of the popular heart as it is now sending new life eveu to the fingcr tips of society. Farewell
uow to the group of ulcers which sluggish blood uow to the group of ulcers which sluggish blood
has giveu opportunity to gnaw so tormentingly nto the life of the State. We could hardly estrain a "hurrah" as we saw a crowd of blanke strappers boarding a ferry boat-thus flying
from the ranks of "agitation" to the lines of industry. How salutary tho cliange of masters.

## Constitution Makers.

The State is now preparing for the choice delegates to the Constitutional Convention. Th
people have been looking forward to this con vention as the tribunal which shall righ wrongs and curb abuses which act as a brake upon our iudustrial progress. The recent Leg islature laid aside consideration of numerous im-
portant matters, because a higher power than a legislature has been invoked by the people The people had appealed to Cersar and to Cresar they must go. This was the right view to take in the elections which will soon take place $^{\text {lace }}$ there will be found sovereign relief for wrongs and a favoring algis beneath which our State
will enter a new era of industrial prosperity aud progress. Everything depeuds upon the choice of representatives which will soon be made. A right choice will be a permanent
blessing; a wrong choice will either be a disap pointment or a curse. It is true that the peo ple have the power either to accept or rejec
the work of its representatives, but it is non the less desirable that they should make as surance of acceptable work, for, if this be no
secured, the hard-earned money which the con veution will cost might as well be east into the
bay. What is the work to be doue and what are the qualifications for doing it
form of written law. It is the is the highest tice. It is the epitome of the life and health the highest tribunals of justice must measur their decisions. It is the tinal test of the truth of all legislative enactuncnts. It is the surety
under which the highest citizen holds his position and his emoluments; it is the protection by which the humblest eitizen guards his
labor and this home. It is the nerve of indusltry $1 t$ is the vital point of popular existence
which no poison can enter without resulting injury to the humblest inember of the boily poli tic. As peoples have advaneed in civilization and enlightmeut, their coustitutions have advancen in the scale of univcrsal justice and in truer regard for the rights of ineu. The constitution
which is true to this age, is isdeed a loulwark of liberty; a cornerstone of justice; a keystoue which holls iu true relation all t
and individual rights of citizens.
Such leing the fact, the question arises, who shall mako a Constitution? Evidently they must be men who know the right and can zeal-
ously maintain it. Meu who cau discern the truth in principle and in its practical workings unsullied iutegrity; men with whom we would
trust all our personal intercsts if we nceded a trust all our personal Men. of whom we say "His word is as good as his bond"-men who are far above tho suspicion of wrong-doiug,
whose whoke intercourse with men has spread abroad throughout the community a fceling of esty and and integrity alone will not suffice. To houesty there must be added the highest
and widest intelligence. There must be the power not only to know the good, but to de-
lect the evil in whatever sperious form it may present itself. And in additiou to knowledge
of good and evil, there nust be a quality of cearless and impressive expression. Eloquenee is not needed; oratory may ho a burden; but to sho perception of the alded the power of plain-spoken defense and maintenance of the right and denunciatiou of the wrong. Without this power to
promote the right and lay bare the evil in faet prom tendency, wrong laropositions would pre-
avail even in presence of full benches of simply vail even in
In addition to abstract ideas and perceptions of right and wrong in principle, there must be ance with our material interests and the causes affecting their developnent. It would be well made should be coustantly them, in many eases, may be
course toward neeled reforins.
Fuch cousiderations as these, and many oth ers allied thereto, should enter into our judg ment when we come to delegate men to make al-
new Constitution for us. Ne have inade uo ald usious to partieular iuterests, for these will well to start with a general idea of qualifica. tions. Aud as we review these does it not learly appear that the choice to be made at a Coustitutional election should be actuated by tions generally. Thero is evidently no reasou for the introductiou of partisan considerations.
IIen who figure inost largely in the Ien who figure inost largely in the nsual elecin certain positions, may be wholly unsuited to certain positions, may be wholly unsuited Let thero be a general effort throughout the State, from end to end, to place the constitu-tion-making power in the hands of the best
nen-men of unspotted honor, of unquestioned honesty, of the most thorough understauding of public needs; men with no entangling allianccs, nen whom each voter in his own vicinity knows and feels to be worthy of the high trust which
the choice as delegate imposes. Let the State have none but your lest men, for none other can serve her as her uceds require.

## The Raisin Market.

There is reason to anticipate a notable in crease in the weight of our California raisin product during the present season. The year which is so propitious for all growths, will put he raisin makerin possession of a wealth plendid grapes, and if they are of the approve varieties, and right steps be taken to properly ure and pack them for the market, the result
will doubtless be a satisfactory income to th producer. There is every reason to feel en eouraged in regard to the progress of our spe inlty of raisin production. There is, as on might naturally explect in the beginning of a pon the market which is uot creditalle to the iroducers, and which cannot be sold except at sacrifice. On the other hand, so far as we know, there has been found satisfactory sale f 11 fine raisins packed in a style to attract pur chasers. This distinction will always rulc be
tween the good and the bad product, and the secret of general sucecss will be found in grow ing nothing but the best grapes for drying,
packing in attractive size and form of lackage aud in pushirg the product into all a a vailable aud in pushirg the product into all a vailabl
lines of the export trade. All these points
should be carefully considered by prcducers and in any way in which we can participate in It is of general iuterest to producers of rais ins to kuow how the eorning season will he affected by the preceding. So far as we can learn there is no accumulation of old stock to
le worked off, either iu our own State or in the orts supplicd by our rivals in the south of Eu ope. Hare market aud a lorisk demand. Of cours here are other considerations, w.lich will hoted later, as they develop, for the future o the year's market will depend largcly upon this season's work in the producing regions. Whether the turopean producers have as fair outlook a large product we arc not yet informed
We have, however, some late news
ilg the stocks of currants aud the various style of European raisins now held in the great Lon its fruit review, the Broducing centers. Mail for says: In Zante currants the season of 1s77-7 has to deal with a crop of $8: 2,000$ tons, of whicl ,000 tons have now left the shores 0 , are said to be useless. 1.ondon at this date has wherewith to supply itself for all purposes from $a$ stock of 23,000 tons. H, from what is left is ders, they receive 3,000 more in London, they win have the largest working weight eve this will be mainly in appearance, for export and grocery purposes it is probable that the stock is about the same as last year, viz., 10 , 300 tons. Though this estimate leaves a large margin, it is a recognized fact that a considera the return of warm weather will probally have to be destroyed, Quality is divided by a long range of price at present; a choice is to be hail
from 13s. to 48 s . per twt. At the present mofrom 13s. to 48 s . per ewt. At the present mo-
ment iu London currants at 21 s , to 28 s , are the cheapest in proportion to others, and some good and useful selections can be made both for home and export trade. The trade are out of stoek, o be at work a cain.
The importatious of Valencia raisins into London this season were 0,940 tons out of a crop of 19,500 tons, and a stock remains of
$2,6,30$ tons, a little of which is of the old crop It is noted in faror of the present position o Cleesmes, an unsatisfactory class of raisiu wlich has hampered Valeucias of late years, and pre vented any improved value in the popular arti cle. Valencias, in the deliveries for English cxpe inse, do not show the incease that wa expected, owing to the low prices.
took 8,210 tons only, agaiust 7,450 tons, and during the fall in November from 29 s . to 228 .
the elearances actually fell off.
Decemher pickel up, and demonstrated a larger masiness than in any year since 1869 , the home trade 1,035 tons in 1876,185 and 1874 . Iu the early months of the year few Valeucias are wanted and if matters go on as they did last year they
are likely to have iu Louton 1,000 tons left to meet the next crop.
In Sultanas there is every prospect of a steady prices moderate, and the trade are not supplied. Our contemporary says that if ever Sultanas had a chance of recovering their late fa should now, rore the value of the fruit which is nearcst akin to them.
Of tho Turkish raisins, Elemes, there is but x small stock in London. It is said that a good supply remains, iu smyrna, eomposed of lower and common qualitices, of whice thertion. About 1,200

## his

supplies of that character. uct rivals, there has been a large consumption, owing to the low price caused by pullic salcs
"without reserve," and the stock is reduced to
130 tous a against 150 in $187 \%$. This will all be 130 tous against 180 in 1877. . This will all be
wanted for export alone, putting aside the London spriug requirements, which generally Of the to about 150 tons.
interestiug statistics. are given: London, in 157, took of all raisins for lome consumption 13,957 tons. Exports were 3, 198 tons. In 1576 home consumption was 14,833 tons, and exports was 13,610 tons, ind 18,5 home consumption decrense of $18 \%$ for both purposes was 1,854 by 1,200 tons.

## Queries and Reples.

## Potato Planting.

 place. I have scen, however, thal some phtato-growers
hold, that method runs the potato out, and it becomes degencrated. They contcond that both ends of the potato
are ncecsary. or, in onher words. the potato may be eut
half in twa, fromi the bud end to the other, planting each pieee h1 a separate
BCRIRRR, Iopland, Cal.
We have no evideuce to support the clain for degeneration from cutting the patato into single eyes, except the experience which our
cites as gained by the Bodega growers. Thero is, however, as pointed out in our issue of Feb-
ruary $23 d$, is 5 , evidence that this not the best to secure a large yield. The claim that the lest way to cut the potato is from end to end and uot throngh the belt, is supported ruary issue. The degeueration of the potato should not be prone attribute it that wn method of separating the eyes aloue. The whole subject is as yet open to experiment, and deducsidered in the light of all possible ruling eausco. Chufas on High Lands.


We should think there would be no trouble is growing chufas at such an altitude, if the soing enough. The best time for planting so as to guard against frosts might have cal exper if planted late, for in six nonths from planting the ground will he filled with the new tubers. They would need

A Suggestion for Plow Makers.
Enitors Press:-Thinking that it may be of interest to some one of your numerous readers,
especially men farming foothill land, 1 ofler the following suggestions on plow points: For
plowing gravel or hari dry land, the point plowing gravel or hara dry land, the point ound and sharp-pointed, rather than flat.-Ja

GRain Chop Extending.-Mr. J. Johnson, of Bellota, in the northwestern part f San Joaquin couuty, reports that conside able land, heretofore pastured to sheep in that section, is being summer-fallowed for wheat
and barley. Improved cultivation tends to nake grain-raising more profitable upon th verage than herding. The bountitul rain of fallowing in our State this season, and we are clad to learn than many farmers are not slow to improve their opportunity
Shasta County.-Upon a recent visit, wo noted many evidences of improvement in min ang and farming prospects, betokeniug a for saril movent allong the line in this rich lieving it will he of interest to our readers to have more dufinite knowledge of the northern part of the State, we shall soou publish a con densel map and some

## Ox Fris.-"Floriculture," W. C. L. D. Kern County," R.; "sonoma Jottings," U

 J.; "Castor Bean Inquiry," 1). W.; "Nature's The Garden in April,,"
## Cruz County," M. ${ }^{\circ}$.

est," J. M. II.
Tall Rye.-We have received from Mr. C. Cressey, a fine sample of rye, fully seven feet high, from a field in llerced county, which will We can imagine the feelings of a grasshopper climbing up such

[^14]Devices for Unloading and Stacking Hay, We illustrate herewith an arrangement, pat ented through the Mining and Scientific Press Patent Agency, by George F. Kelley, of Susanville, Lassen county, for harvestiug purposes, comprising a method of unloading wag. ons rapidly as they come from the field, and, at the same time, piling the hay, grain or straw up horse power; no handling is necessary after loading the material on to the netting in the prises a method depositing hay or grain at one operation into a rolling the load from peculiarly-constructed par, which conveys the load up into the barn and dumps it in the proper place. The hole operation is pero that the time oc ing hay either stack putting it or grain or very small as com ods usually the meth Fig. 1 of the en general way how the nloading of the wag ons is accomplished nd how the stack made. A netting is agon, harvesting wagon, on which the
load is placed. Thi netting has on it ings, whinumber of rings, which eugage with hooks on the n. On the upper edg of the netting is ing, to which a rop may be attached When the wagon with he load arrives at the plaoe where a stack is
o be formed, a rope is fastened to the ring on the upper side of the netting and a horse hitched to the other en upper side of the netting, and, the lower part being fast to the wagou, the load is rolled over on to the ground, when the netting comes on top of the load. Then the rope is detached, ready to receive another load

N a boy can fasten the rope remove the load Now, this plan is adapted to forming stacks. eight or ten feet high, but for greater eleva-
tion, a little different arrangeinent has to be ting. Whe same net placed in things, wagon, as described but a supplemental Offg is required. ack, opposite to tack, opposite to drive up, is placed an pright pole, suitably aced. On top of thi hich a rope is le and down to a pulley he the lower side of nder which passing e attached it may he other end of thi which is a hook, grage with the rin n the upper side of wagon nettiug another rope, by is attached at its other
net.
n drives when the wag
the stack, this rope hangs over the stack, with By fastening the hooks in the extension ot to the rings in the wagon-net, they both become virtnally one. Now, the hook on the end of the rope passing over the sheave on top which is attached to this rope starts up, the ad in the wagon begins to roll over towards he stack, and, as the horse keeps on, the load hen it is in place, the man on the stack tting and places it back into the wagon. He hen sprearis the extension-net down beside the


FIG. 2. KELLEY'S METHOD OF FJLLING BARNS WITH HAY OR GRAIN
attached by means oif a pole or beam, as shown, $\mid$ and the process does not require the dctention and, as he walks around in a circle, the rope is of tho teans more than one minnte, depositing colled around the drum, and the car, with its | the load better than if handled by forks.
load, is drawn up on the track into the barn, stacked several hundred tons with the ncts where the load is dumped in the position required. The car used for this purpose is of peculiar construction, but quite simple. The trucks are quite low, and a large platform is hinged by longitudinal central hinges to the middle tim bers of the car, so that the platform may be frames, in either dircction. On the ontside of the car, are several uprights, all mounted on one bar, which has a lever at one end. The tops of these little uprights have anti-friction
rollers in their ends and on these the outer rollers in their ends and on these the outer
edges of the platform rest. The bar on which
the uprights are fastened is hinged at its lower nd. Now, when the car has its load on, the platform rests on the hinged central longitudi nal bar and on the uprights attached to the side
hinged longitudinal bars. When it is desired to dump the load, by pushing on the upright lever, the side bar is thrown over, carrying with it the uprights on which the platform rests, and then allowing that side of the platorm to drop and letting the load slide off. Th anti-friction rollers on the ends of the uprights action being performed easily. By this means the load is quickly and easily dumped in an

Price of car and net process for stacking comPhose desiring further incorill Cal. Authorized agents are: M. C. Hawley \& isco and Sacramento; J. D. Byers and Wm. McClellan, Honey Lake; Frauk A. Kelley, Winnemucca, Nev.; Walter
Ede, Sierra Valley; Clarence G. Kelley, Petaluma

The Constitutional Convention.
Perhaps the most inportant bill of the ses tion. Its provisions have been before given as tion. Its provisions have been before given as described by the correletin, but they may be of interest to repeat as the next important issue to be presented to the people of the State. The convention will consist of 152 delegatcs, 120 from senat large. Eight from at large. Eight from trict. The people will vote for all the delegates at large, but the eight receiving the
highest number of votes, residents of each senatorial dis-
trict, are to be deolared elected. One hundred and twenty
delegates are to be elected for the Senproportion to the repLegislature. But in Tulare, Fresno, Kern, Inyo and Mono, in-
stead of electing delegates in the same manncr as Assemblymen and the Joint Senator are elected, each of the elect one delegato will be elected from Inyo and Mono. The three representatives
FIG. 1. KELLEY'S DEVICE FOR UNLOADING WAGONS AND STACKING GRAIN to which Ventura, Santa Barbara aud San Luis Obispo are entitled are to be elected one from each county. So
will the connties of Colusa and Tehama. Each of these will elect one delegate. The election $\mid$ for delegates will be on the third Wednesday in June. The Convention is to meet on the 28 th of September at Sacramento. The question
of adopting the Constitution framed by the Con. of adopting the Constitution framed by the Confirst Wednesday in May next year.

Concerning the cost of
of $\$ 100,000$ is appropriated for the purposes of the Conven-
tion and all the necessary powers are conferbusiness. conducting bers of the The memwill reccive mileage and $\$ 10$ per day for 100 days. After that time,
if the Convention is if the Convention is members must serve from pure patriotism. San Francisco will elected from the city at large, one also Mateo, and eight of the thirty-two dele-
gates at large must be gates at large must be cisco, as constituting the First Congression. give San Francisco 39 delcgates ont of 152 . The voters of San Francisco at the elec-
tion will vote for 30 delegates, representing the city according to the Legislative apportionment, olle
jointly with San Mateo and 32 at large, inmes on the ticket. The promincnt men 63 uames on the ticket. The promincnt members the great partics, have repcatedly expressed their willingness to sink party in selecting delegates, but whether this can be offectually carried into effect remains to be seen.

Mountain's Bam.-This shrub is something of a "cure all" in Shasta and Trinity countics, where it grows abundantly. At Anderson, Shasta county, "Rev. J; T. Baldwin" has established "free tradc" and furbalnı to applicants without cost. Subsequent orders pay him. He has mailed the California 1 balm to over 20 States in the Union.
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The best Beef Bull in America. The Herefords the hest catte in the world. For particulars write to T. L Miller, Leecher, Will County, Illinois.
For Cotswold Sheep and Berkshire Pigs. nquire of
7. L. Miller.

Beecher, Wirl County, Illinois

## IMPORTANT SALE

Pure-Bred Short-Horn Cattle, Dairy Cows and Thoroughbred Horses, At Baden Farm, San Nateo county, on THURSDAY, APRIL 18th, 1878, at 1 P. M., Being the day aftcr the annual meetiuly of the Short Horn Brederss Association, by order of S. B. B. Ame Arson
and Robt. Ashburner. We will sell 30 heud Pure-Bred and Root. Ashburner. We will sell Short head Pure-Bre Cows, Heifers and Bulls, seeral of the lot being by the imported bulls Sheriff
$(29,964)$ and Kirklevingtou Duke $2 \mathrm{~d}(34,364$ and 40 head of (29,964) and Kirklevington Duke 2 d ( 34,$34 ;$, and 40 head
high yrade Short Horn Dairy Cows and Heifers, several o whinch have recently calved or are near calving, and are suitable for family cows.

Two Thoroughbred Stallions
One 3 -year-old Fiily, one 2 -year-old do, and two Brood
Mares by Belmont. Mares by Bellnontit.
Also, three Stout
Gray
7 -yr-old Mares, suitable for Work, and two 2 yr-old Colts; also, two Yoke of Large Tork axene stock can be seen at Baden Farn, close to
Taden station, on the Southern Pacific railroad, one week Catalogues with pedirrees 9. Catalogues with pedigrees can be had of the auctioneers Mountain पicw, Santa, Clara countys or, Robt. Ashburner,
Baden Station, San Mateo county Cal TERMS OF SALE
All sums under \$150, cash, in U. U. S. gold coin, for sumss
over that amount six months' time on good endorsed

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"Sreeder and Inyporter of the "Crown Prince" Also, bure' Suffolk hots a aud pifs. Short Horn and
Jersey, or Alderney cattle. Merino and Cotswold sheep, ir rices aluays reasonable. All aniuals sold are
suarnter PETER SAXE, Russ House, San Francisco and Los Angeles City, Cal.
\$25 EVERY DAY Is waranted Usir JILZ DRILLS. Took the first Iremium at the Great Exposi-
tion. Tiey bore any dianueter and depth; 100 feet a day,
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Ten head of Red Durhams from 12 to 15 monthe old, Also, 12 head of large work horses and mares will be sold this spring at private sale on my ranch, six mile from Oroville, Butte County
aid Bulls Sired by Golden Louan Duke.
M. WICK,
W. \& J. ROBINSON,

Hanford, Tulare County,
California importens and brebders of
THOROUGHBRED BERKSHIRE SWINE Pure Also, the fincst strains of
Pure Brown Leghorn Fowls.
birds and eggs for sale.
M. COOKE. R. J. COOKE

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Corner of Front and M Streets, Sacramento ALL KINDS OF
Fruit \& Packing Boxes Made to Order AND IN SHOOKS.

COOKF \& SONS, Promptly Attended to.

More About Woodward's Gardens. A late issue of the l'ress gave a cut and an outline sketch of Woodwarl's Gardens. We propose here to give an additional description in general,
into details.
As regards location, they embrace two squares between 13th and 15th, Mission and Valencia streets, and can be reached from the business part of San Francisco by the Mission or Market St. cars, the former taking visitors directly to the front entrance. The dense hedge of Monterey cypress, some 20 feet high and 400 long, sercening this front, is itself an attractive sight.
Its various departments may be summed up as follows: 1. Natural History; 2. Botany; and Numismaties;

## ertainments.

These we shall describe, in brief. 1. The department of Natural History includes some of the rarest living animal specimens of quadrupeds, fishes, reptiles and birds. These are
kept in fine condition in the open air within ktrong cages, or roomy enclosures, pits, pens, shels, aviaries, ponds, running streaua an, the latter constructed and kept mnder the supervision of Mr. C. Schuman, and certainly one of the largest and most complete to $\begin{aligned} & \text { found in the United States. This department }\end{aligned}$ is also, represeuted by most of the numerous,
well prepared and arrangel specimens in the museum proper, and in three other buildings. feet long, is one of the curiosities in the inner garden. 2. The dcpartment of Botany ell. trailers, Hlowers aud grasses, distributed i good taste thronghout the finely inplroved
grounds, along the artiticial lake and strean, aud upou the rock-work, where the large foun-
tain tosses its liandsome jets. It iucludcs the tain tosses its handsome jets. It iucludcs the coneservatory with its neat rotunda, for pail
trees, bananas and other tall tropical growth and the tropical greeu houses-all well filled
with curions and exquisitely bcautiful hot house plants; the fern-house, full of those del cately-leave, 1 , ilowcrless plants, fron the giaut
forns of which in the early epochs of the worns l's histary geology teachles us most of our
coal-beds were iormed. There are also well arranged specimens of the coarse aud fine
grained woods of the Pacitic coast in the mu grained woods of the Pacitic coast in the mu3. Mineralogy. This comprises, besides many minerals of the Pacific coast, Prof. Kaderly's
large and valuable collection fron. Japan. 4. ings beautiful pieces of marble statuary, placed at various points throughout the grounds aud buildings; the attractive art gallery, where ous and varied collection of oil paintings, ol and new; also polytechnic hall, to the forme attractions of which is being added a large
Zoographicon, an invention of Prof. $F$. Gruber, Zoographicon, an invention of Prof. F. Gruber,
consisting of a wheel over 12 fect high and $2 \pm$ consisting of a wheel over
in diameter, turning on a vertical axis, and disin diameter, turning on a verticus in succession, ferent continents, giving Arctic, Tropical ferent continents, giving Arctic, Tropical, -all studiously truc to nature; then the ca mera obscura, where for a small extra charye, ing, active scepe around you, in the gardens
and aljoining parts of the city; and finally the and aljoining parts of the city; and finally the
8 sulptor's studio, with its models of the colossal 8 sulptor's studio, with its models of the colossal
bust of Washington and other figures, a great bust of Washington and other figures, a great
attraction leeing that the process of model attraction beeng that the
making can be witnessed.
and
The ethnological collection consists chiefly the south Pacitic islands, and the division o uunismatics comprises numerous coins, med
als, and casts of seals, extendiug from times of ancient lome to the preseut.
J. Anasemenits aud Entertainunents. These
are varied and the best of tleir kind. Beside are varied and the best of their kind. Besides
daily and special entertainments in the huge paviliou, music hall and restallarant, there are the first garden is the rotary boat, propelled pretty circular lake. It forms the outer rimu o
a huge whecl some 40 feet iu diameter, resting on the surface of the water, is itself three feet wide, and will seat about 100 persous. When
filled with merry boys and girls, and whirling stealily in its place, on a bright sunny day, it is a beautiful sight. In the secoud garcen,
where most of the animals are kept, are swing Mhere most of the animals are kept, are swing
and gymastic poles of various kinds, two sty1.
isil little carringes drawn by and royal fun of rides on camcls and donkeys, and inventions for testing strength. A tine
balloon ascension is occasionally made here. Part of the indoor entcrtainments are per
maneut, hut many of the exhibitions are conmaneut, hut many of the exhibitions are con-
stantly changing. The pavilion, brilt on the highest ground in the first garden, will sea ter is $00 \times 120$ feet and forms a fine skatiug rink There daily visitors can get roller-skates and skato to their heart's content.
Saturdays and Sundays and other holiday
there are special performances from 1 to 4 P. M,
Besides the fincst of masic by Wetterman' band and the orchestrion, the best troupes and special artists that visit San Francisco, includ
ing trapeze performcrs, acrohats, juglers rope-dancers etc., are engaged from time to time.
Suffice it to say, that these performances, like every other curiosity in these justly noted
gardens, are always the very best known in gardens, are always the
their several departments.
It is admitted by all that every one, old or
young, is the happier and better iuformed for young, is the happier and better iuformed for
spendiug a day occasionally in Woodward's Gardens.

ATENTS AND NVENTIONS.
List of U. S. Patents Issued to Pacific Coast Inventors.


By Special Dispatch from Washington, D. C
Week Ending, March 26th.
Pocteri- Ynug Chow, S. F.
SASH Holdin - D. D. McLemon, Los AugeWatcu Case Spring.-P. F. Nilson, Sauta Rosa, Cal.
L. B. Walthall, Modesto, (al
ump Suction Pire--E. O. Larms, Gold Hill, Nevala.
${ }^{\text {Cimp }}$ Mity Nevada . M. McFarland, Virginia harbow Attachient por Plows.-J. M.
 Mery, Chico, Cal.
G. Rock fellow, Ashlan
arpuckellow, Ashland, Oregon.
SAND A.vD EARTH Elevator.-(G. W. Crans.
ton, S. F.

## S. F. MARKET REPORT

Nork-Our trude review and quotations are prepared
in Wednessay of eacll week (our pubbication day), and are urday, the date which the paper bears.

## Weekly Market Review.

DOMESTIC PRODUCE. ETC
General tras Frascisco, April 10th, 18,8. better feeling among all those who have their
hearts on mercliandise. In the Feed and Grain hearts on merchandise. lithe change in price and wbatever change has occurred has been in the downward course, as is generally the case
when the fields pronise nnusually large yiclds. In fruit and last season's vegetables there has been an advance, as supplies are becoming reduced. Special fcature's,
The Wheat market, siuce our last report, experienced a slight aivance, luut this has been ost again and prices in this market stand just as they did one week ago. The forcign market
has dleclined a little, as may be seen by the has heching

Range of Cable Prices of Wheat
The course of the Liverpool quotation for Wheat to the Produce Exchange during the
days of last wcek has been as recorded in the ays of last
followiug table

To-day \& cable quotations to the Proluce
Exchange connpaz
years as follows:

## 

$1876 .$.
$18778 .$.
187
Losdon, April 9th. - The Mark Lane Erpreen nys: heat is looking well. It has apparently evere weather. Deliveries of English Whea at Mark Lane and in the Provinces have been
very moderate, as growers who could afford to ery moderate, as growers who could afford to old their stocks have done so, in the hope of ealizing a furthcr advance, shonld the country
eecome involved in war. As it is, prices hav become involved in war. As it is, prices have
allied fron two to tliree sliflings per quarter for English Wheat fron the recent lowest point bor the uncertainty of politics has caused th
buillers to follow the rise with relnctance. Amer millers to follow the rise with reluctance. Amcr
and till, the trade has, for the time being, found ufficient support in the disquieting politica rumors to prevent prices giving, way under the
weight of supplies. Monday's busincss was weight of supplies. Alonday's businces was
fairly active, but, although a sufficiently strong tone has prevailed, the number of salcs mad
since has been decidcully limited. Some excep tion may be made for Calcutta Wheat, whicl
was in better demand than other owing to the scarcity of tood qualities on the spot and the impossibility of stocks heing re plenished for some time, nnder which circumter dearer on the week. Increased strength has been afforded by the continental demand Which has continued throughout the week.
considerable quantity of Russian and Indian Wheat was taken for French aud Belgian ac

## Freignts and Charters.

Rates in the market for Wheat frcights, say the Commercial thetrs, hare not been main-
tained during the past week. Business was slightly better, however. But it is becoming oading, owing to the scanty surplus of old heat in the State and the high rates demanded e given with much accuracy. Iron vessels to ail, reckoniug from the last charter of a woode ship, which was at $£ 25$ s. The supply of dis ergaged tonnagc iu port is light, bunt togcther
with such vessels as will arrive before the new with such ressele for all requirements. Handy
season, is ample the sized iron vessels to arrive have hecn fixed for however, is small. We have, at the present time, in port 9,020 tons of tonnage secured fo
Wheat and 10,481 for miscellaneons. The ship Lucille, 1,304 tons, has becn chartered to load

## Continent, $£ 211 \mathrm{~s} 3 \mathrm{l}$; Liverpool, $£ 2$ 2s 3 d .

## Eastern Grain Markets.

New York, April 6th. - The European war nestion being the absorbing feature of the been alternately firm and weak, according a cable adviccs have pointed to war or peace
The latest news looks more favorable to concilia tion, and grain in consequcnce coses lower tha this day week, Spring Wheat ranging from
$\$ 1.20$ to $\$ 1.33$ for inferior to 1 rime. of other leading kinds of produce, provisions have dragged along in favor of buycrs nnder large
suplilies at the West, while Cotton has been depressed by liberal rcceipts and apprchensions

Curcago, April 6th. - During the week Wheat has been unsettled, excited and higher, as a rule, altheug to-day the market relapsed int
phenomenal dullness. A large business has been transacted and the result is satisfactory to most traders. Corn has beeu generally tirm
and has averaged higher, although last week's and has averaged higher, although last week's
hest prices have not quite becn touched. Oats were very dull throughout and closed deciledly
lower tlian last week. Rye was unsettled Barley weakened decidedly at the close. Probut last week's hest priccs wero mot reached and at the close decidedly casy prices wer attained and a very moderate demand charac terized the whole weck's proceeding8. The 400; Oats, 223c; Rye, 58?c; Barley, 43c;
80.25; Lard, $87.10 @ 7.12 \frac{1}{2} ;$ Alcohol, 33 c .

## Eastern Wool Markets.

Bostos, April 6th. - Wool remains dull and change. 'Manufacturers are purclasing only adelphis buyers have been in the the past week for Medium Combing Wools, but there were no sales of consequence, transactions
comprising 19,600 the at $42 @ 4 \bar{c}$ for Combing and Delaino. Quotations are for the most part nominal. Transactions in Flceces continue quite
small, cmbracing of all grades 100,000 ths. Some 30,000 Mos good and choice Medium Ohio at 42 c . Ohio and Pennsylvania are still quoted at
pay over 40c for the most desirable lots. There xere small sales of Michigan at 371@38c; 37 lot 38 c are the nominal sales for good average lots
of Michigan and Wisconsin fleeces. Sales ran
 Oregon at $25 @ 33$. Salcs of California for the
week were 244,000 the at 11 ( 24 for Fall, and
 demand at $35 \mathrm{~m}(\mathrm{~m} 4 \mathrm{Jc}$, the latter for ch
Total salcs of domestic, $853,500 \mathrm{lts}$.
Philanelphis, April 9th. - Wool is dull and coarse, 5@.27c. has not recovered in the least from its previons depressed condition. Sales are effected with ing an improvement in tho Gooods market. The nutlook for the latter, however, is not at all en.-
couraging as stocks of the manufactured article throughout the country are ample for all im. mentiate wants. Tcxas, which has been held with the result of a very fair sale at a price not named, but known to have been at an ex. tremely low figure. California is still in lim. tity taken weekly. Prices still show a yielding tendency, but no actual decline can be
coportel. Daily telcgraptricad advices from San Francisco are of such a character that the feelnot at all favorable to the manufacturing class that enter the primary markets are heard on every sile
lto Oregou, $23 \mathrm{c} ; 25,000$ 1bs valley do, 29c; 20 bags
Colorado, $16 \ddagger \mathrm{tc} ; 16,000$ Hbs Western Texas, $16 \frac{1}{2}$
© 18c; 15,000 tbs Fall California, 3,000 Tbs
pulled do, 33 bales Spring California, 130,000 the Western Texas, $5,000 \mathrm{fts}$ Eastern do, 10,000 its Utah, on private terme.

## Domestic Produce

The following table shows the S. F. receipts mon to-day, as compared with the receipts of previous wceks:

| Arrcuma |  |
| :---: | :---: |
|  | , |
|  |  |
|  |  |
| Sina jace | (1,2m |
|  |  |

BAGS-There is still another fraction added to the price of firaiu Bags. Large sales have been made. Sales of 600,00018 reported on and $11 \ddagger$ c cash. Tuesday, 175,000 were sold. BARLEY-Barley is tendency
note sales: 600 sks Coast Feed at $\$ 1.22 \frac{1}{2} ; 500$ k8 Coast Feed at $\$ 1.17 \frac{1}{2} ; 100$ do at $\$ 1.22 \frac{1}{2}$,
000 sks Coast Feed at $81.20 ; 500$ do and 200 do at $\$ 1.25$ per ctl.
Bayos and Reds and a decline on Limas. Sales are small.
ComN-The scarcity of White Corn has put lso gained to $\$ 2$ per ctl. Large Yellow has large lellow at $\$ 1.60 ; 300,700$ and 200 do a
 100 do small Yellow at $81.80 ; 178$ and 85 do a
\$1.85; 115 small White at $\$ 2.02 t ; 150$ sks large
 larye, on private terms; quoted at $\$ 1.65$.
ter is still in excess try. Teing packed at 25 c , but the bulk falls below 21 c . Californi 15c. Some dairies, made in New York style, reach 16@17c.
FEED-Ground Feeds are much the same a last weck, Hay also has sold within forme range Wheat, note Hay salcs as follows: 50 tons
poor $\$ 10.50 ; 20$ do, $\$ 12.50 ;$ a boat 11. A lot of choice Wheat sold at $\$ 18$ at on on arrival.
FRUIT-supplies of Apples and tropica Fruts are light and rates high. The Tahit oming in more freely; 600 ths came one day They have sold at 15@20c per to wholesale.
HOPS-Hops are hardly a mentionable sub.
ject. The trade is so lifeless that dealers give the of weariness as arken week ending March 29th is reported by Emme this week mostly on export account, the shipthis week mostly on export account, the ship
ments exceding the receipts by some 250 bales, and the market closes very steady on last week lower, especially if the call from England keeps every prospol of its np as long as shippers can find good Hops a
the present reasonable prices." New York prices are New Yorks, good to prime, s@10
New rks, low to fair, 5 (a7; Eastern, $5 @ 8$ grow ths, 1 @?
OATS-Feed Oats are a point lower.
ON1ONS-All good Onions are now
at \$2 per ctl. gained by nearly all kinds of potatoes, as may Peen in our list of prices.
cept acept live Pork, for which 7 c is now the top
pricc. Sone Eastern Hams are held $\ddagger \mathrm{c}$ lower
TOULTli
AND GANE-The only change is a dectine ibles- Rhubarb is lower. The
first Tomatoes have come to hand from the
WHEAT - The following are aniong the sales made since our last report: 1,050 centals choice centals good milling, at Tallejo at \&s; 400 sks milling at $81.07 \frac{1}{3} ; 260$ do shipping at $\$ 2$, and 1,850 ctls shipping at Vallejo, at $\$ 2 ; 140 \mathrm{ct}$ in 40210.42 do Sonora at 82.03 3; 240 do shipping, at $\$ 2$, and 2,000 do shipping, private;
200,500 and 220 tons choice milling, at $\$ 2.12 t$;
air at \&2.10; 2,00 126, 300 and 660 slightly damaged and off at 82 , aud $7,000 \mathrm{ctls}$ choice milling at $V$ allejo, at $\$ 2.05$ per cth.
Wool-The trade in Spring Wool has opened, and the prices now quotable for the de-
scriptions so far received may be found in our iist. No Northern has come in yet. The prices
at which the market ovens are about Ie higher at which the market opens are about Ie higher
all around than last spring's opening. We onte
 burry, 13c. Receivers comp
ble amounts of scabby Wool.


FRUITS AND VEGETABLES.


RETAIL GROCERIES, ETC. Wednesday m., April 10, 1878.


GENERAL MERCHANDISE.


## LUMBER.



Signal Service Meteorological Report. Week Ending April 9, 1878.
$\frac{{ }_{2}}{29.88}\left|\frac{\text { Apr. } 4}{29.90}\right| \frac{\text { Apr. } 5}{29.91}\left|\frac{\text { Apr. } 6}{29.84}\right| \frac{\text { Apr. } 7}{20.80}\left|\frac{\text { Apr. } 8}{29.80}\right| \frac{\text { Apr. } 9}{29.86}$



192 | 178 | 141 NIND-MLES TRAVKLED. Clear. \| Clear. \| Clear. \| Fair. | Clear. | Clear.! Clear 1 RanNeall is twentr-pour hoors.
Total rain during the season, from July 1, 1877. 34.05 in
 improvements in the zoologicai departument
other features which have made it popular.

[^16]
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or J. B. Carrington, Grangers' Business Association, Gan Franclsco, or Denverton, Solano, CaL.

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slanding the piven defnitions. On the whole, it is not tuo much to say, that this dic
tionary nicets a great requirennent of the age. By rcason of the completeness of its componcnt prarts, the conpact cominand a very extensive clrc
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and farming districts for and farming districts for
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ever they hay ever they have been sold
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rier is thercby enabled to drop correctly with great rapidrier is thercby enabled to drop correctly with great rapid-
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have been long in the In the construction of Gang Plows. It is quickly adjusted eradicient knolls is is given so that changing the tongue will pass over
shares. It is so constructe position of the shares. It is so constructed that the whieels themselves
govern the action of; he Plow correctly. It has various govern the action sf; he Plow correctly. It has various
points of superiority, and can be relied upon as the best
and most desirable Gang Plow in the world. Send for and most desirable Gang Plow in the world. Send for MATTESON \& WILLIAMSON, stockton, cal.
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it is so cheap (cost
ing only $\$ 6$ ), that al-
most most any one can al-
ford to huy one. It is so rapid, it will shell
almost as fast as a $\$ 10$ machine, and seven or
eight bushels per hour
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$26,28,30$-extra finished, case hardened and check stocks. Octagon barrel, set extra heary, $24,28,28,30$ inch extra finished-C. H. \& C. S. Octagon barrel, set, $24,28,28,30$ inch-beautifully finished-C. H. \& C. s., known as "One of One Thousand." Octagon barrel, set, gold, silver and nickel plated and engraved. Carbines
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and successiul ones in the country. The following are and successiul ones
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He Window," by C. M. Pyke, 40 cents. It has a flic pic the Window," by C. M. Pyke, 40 cents. It has a finc pic-
ture title, as has G. D. Wilson's new Polka Rondo, called "Dancing on the Green," ( 60 cents, ) which is gaining a descrved popularity.
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Factories：Auburn，New York．

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（See Illustration and Comments in next week＇s Rural Press．）

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Wrought Iron，One• Wheel，Single Reaper，
For HEAVY and DOWN GRAIN，and MUSTARD COUNTRY．

## BYRON JACKSON＇S celebrated patent feeder and elevator for threshing machines，

And Patent Horse Fork and Patent Derrick Combired．


[^17]
# 荧 <br>  

D. M. Osborne \& Co.'s Self-Binder.

The interest which has been generally awak ened in self-binding harvesters leads us to present an engraving and descriptive notes of the D. M. Osborne \& Co.'s machine. This selfbinder in its present effective form is the result of 20 years' work of inventors, and it is indeed prising mauufacturers. The Osborne machine claims the prestige of being the first self-binder ever sold for cash, thus cstablishing the practical and commercial value of the principles involved
in self-binding machinery. It is an interesting local fact that Mr. R. D. Russell, who was the salesman of this pioneer machine, is now on
this coast, having come hither from South American fields to superintend the introduction and operation of the self-binders in this western
territory. By the efforts which are being made this year in the introluc
there will douhtless be made a direct issue between made a dircctand the heading
the binding an
systems of har vesting, as systems of harvesting, as
also betwcen machine and
hand binding, and many hand binding, and many harvesting operations will
be worked ont. The D. M. Osborne
Co.'s self-hinder has bee coustantly improved
inder way which every way which could
suggested by able a
shrewd experimentors. surewd experimentors,
will be interesting to note machiue as it now comes rom the manufacturers. value are claimed by them: The elevator is double, the grain being carried be un together, and hases which ery carefully, without any grain is wastell so that no of cut can be varied from of 20 incles. The tilting lever is rery conveuient, be easily tilted up or down by the driver, while it is in whole binding apparatus is
or baekward, to suit the ength of the to suit the o be bound. Straw that is the sheaves is regulated operated by the driver. The sheaves will dry better, will stack better, will not come apart by hand. Fach machine is fitted with double whiffletrees, aud with three-horse eveners, so that two or three horses can be used as desired tiou wheel, which is not affected by cold or heat drouth or moisture bundl no chauge by the driver it will mak a from but one spool, aud require but one wire twisting and citting machinery, thus relucing o the lowest point the liability of breakiug maring or getting , in design, with which the bands inay be cut at the threshing machine; they are made to cut, and hold the baud by one end, enabling the operato the handful into a box or barrel conveniently below him; such a system has always had it rreuds, but our own experience has been, that the most prontable not to cut the bauds at all will pass through the machine in one piece, cat le will not them and no wire has ever This a claim of the aill."
wire take its own course in the separator is somewhat startling and novel. We have sen
a number of letters from threshers in Utah, approving the claim and stating that the cyl inder snaps the wire without trouble and it
goes out of the machine with the straw in whole piece. One man who had 3,000 sacks of ral Theclares that there was no wire found in per acre. It is a valuable point in working a,
was shown पs, that if the wire should break binding, the needle rethreads itself without the driver stoppin
An interesting point in approval of D. W
Osborne \& Co's machine is the success attained in a competitive trial, January 24,1878 , in New
Zealand. A committee came to this city and invited the competing self.binders to a public Crial in that country. It came off at Christ paper gives the followiug as the result: prize to the Osborne machine. In stating the


Castor Beans Growing Wild.





The beans which our querist sends are cer tainly full of oil. Doubtless the postmaster
discovered this fact when lhe dropped his gentle insovered this fact when he dropper his genthe
stamp on the letter. These are somewhat carper in color than the bean which is most
approved by our oil makers. The beans have
also approved by sur ininers. Mene weans have beente, as the heal projection is m , re promi One af theoped than in the ligh er beans justify the old Roman coneeito of resenblance to the plant Rlacimus.

## Protection of Water on Public Lands.

 Senator Booth las introduced a bill in the Senate, by the provisions of which we may hope the practice so long tolerated on this coast whereby adventurers and idlers have been able ties, and hotd them for mere speculative pur poses, will be prevented. By the terms of this bill the fresh waters of all rivers and streams with a How of more than 50,000 gallons per tay, and of all lakes and ponds of more than one acre in arca, upon the public lands of the United States, are reserved, granted and dedicated to and for the free and common nse of the same sae orde situated, for drinking, washing, and remaiuder, atter said purposess ane reserved, for
irriazation, irrigation and manufacturing, in theeir respective order; and no private proverty or ownership founded upon grant, custom
 water, to supersede or pre-
 sibject, however, to such
reasouable regulations as a State or. Territory shall appropriation of water to a
useful or beneticial purpose so long as the same is actany subsequent appropria. Hereafter all surveys of of the same, to promote use to conform to and provide
for the reservations and dedication made in this act; and all patents shall be
made subject thereto by express terms
Against the provisions of
this bill, it seems to us, no this bill, it seems to us, no
just exceptions can be which private persons have which private persons have
been suffered to appropriate this part of the common heritage of the people and
to hold the same as a perpetual franchise, not pay-
ing a cent therefor and sometimes not even convelting the franchises so obtained to actual use, but holding them as articles of
traffic, has been alike uu-
said that it was made principally on the ground of simplicity of construction, lightness of draft and width of cut. Another advantage
in the Osborne undoubtcdly is the fact that the sheaves are dropped gently to the ground, upon their butt ends, a natter which would be of 1). M. Osbornc \& Co. are prepared for a vigorous campaign on this coast. The central Territory, is located at 254 and 256 Market street, in this city, and is in charge of M. Ayers, who has had a life-long experience with the machines made by the company. The agency
is intended to be a permanent institution, has a is intended to be a permanent institution, has a sts of the company ou this coast centered in it. They have connections, through Iocal agents,
all over the territory they cover. In Portland there is a special branch with Newberry, Chap-
man \& Co, well supplied with all extras suffiient to put up a car-load of machinery if needed in addition to those already set up.
Tue Convention to revise the Constitution of California will assemble ou the 28th day of September and renain in session as long of delegates takes place in June, and there is a talk of tryiug to make it non-partisan in char-

ELF-BINDING HARVESTER.
Mr. Kittle, of the Pacific Oil and Lead Works, and a quarter cents per pound, delivered in thee city. He says they are not as good as the Ighter colored cultivated beans, which, for the best samples, are worth three and a half cents per poind. The price for castor beans now pound.
The fact that the castor beau plant develops into trce form of percnnial growth has beeu noted in all warm countries where it has been grown. This habit of growth is also truc of many other plants. Like them the castor plant where thiere are no meteorological conditions to stop its progress. It has been knowu to grow stop its progres
30 feet in hight.

Prairie Wheat Crops.-The Chicago Times publishes dispatches from nearly 200 points in Illinois, Wisconsin, Iowa, Minnesota, Nebraska, Dakota, Kansas and Missouri concerning the whole of the Western Spring wheat region, which show, when summarized, that the aver age is nearly $50 \%$ greater than last year; that the condition and prospects are wetter than a and condition are from three to six weeks ahead of the usual time, and that there is an average of $15 \%$ to $20 \%$ of the old crop on hand,
just, impolitic and alsurd Where these water rights have been acquired Where these water rights have been acquired
in accordance with statutory and local regulations and afterwards turned to practical ac ount, whether for mining, manufacturing or agricultural purposes, no one will seek to uncannot, according to the provisions of this bill which will render this class of franchises even more secure thau before.
Swine and Field Mice.-A Posen farmer, writing to the Landwirth, insists upon the great and other vermin. He believes that the terrible plagues of mice now so prevalent in many parts of Germany are in great measure due to the present system of keeping swine penned up, instead of allowing them the range of the fields as was formerly the custom. He states that a aretul observer may often detect pigs in the mouse, besides which they havo an extraordin. ary keen scent for the nests, grubbing them 11 most artistically in search of the young mice, that liave beeu cropped with lupines or oats the wine, when turned in, invariably sclect the pots where the ricks have stood to grub in not, as might be thought, in search of stray grain that may lie there, but becanse these par ticular places are swarming with mice nests.

## 解orrespondence.

## English Agricultural Prospects.

Evirors Press:--Thiuking the readers of tbe Reral Press would like to know how we are
getting on in England, I send you a few notes. The recent bad seasons make us rery anxious that this one shall be a good one, for if it is not, God only knows what will become of many of
our farmers. Three bad years in succession is our farmers. Three bad years in succession is
no joke, and fariners cannot stand losing their capital to the exteut of their rent, and cven more each year, for many years in succession.
And this has been the case for the last three
jears.
Happily, as yct, this season is full of prom. ise. There is not a farmer now who has any the weather has brought everything forward.
Grass is very forward, and roots, which every Grass is very forward, and roots, which every
oue thought would be insuthcient, are not ncarly consumed. Wheat and other cereals are
coming ou nieely, and it is to be hoped that the by a dry seed bed, will be fullosilled. to he Farmersen prospects are, in a word, very bright just nows. A subject, just now engrossing a deal of atten tiou here, is a bill which the government has in-
troduced into Parliament, and which bas for its object the suppression of foreign eontagious
eattle diseases. EGylish agrieulture has for many years been suffering severely from thos eign attle. I meean, of coorse, foot aud nouth eign cattle. Tmean, of course, foot aud mouth the sutfering of late has blecome so nubearable
tbat tbey have insisted in their clubs and chamthat they have insistcd in their clubs and cham-
bers of agriculture, and societies, that the gov-
ernment shall ernment shall and must assist them to remove so grievous an iucubus on one of our greatest inter-
ests. Each year, danage to hone stock, having
five times the value of the whole foreign stock imfive times the value of the whole foreign stock im-
ported, has had to be borue from the ravages of ported, has had to be borue from the ravages on
the first named and mildest of those diseases. The government bill, which consists of 83 clauses and a number of schedules, may be briefly ystated to enamt, (1) that all foreign fat stock shall b
slaughtered at the port of debarkation; ( 2 ) tha
all milch eows shall be subject to a quarautine o all milch eows shall be subject to a quarautine of 14 days before they shall be allowed to go intoth of the United Kingdonshall be under the direc tion of the Privy Couneil, whose orders shall
have the same cffect as an ant of Parliament. It is to be hoped that the bill will pass, for with some amendincuts which it is to be hoped it
will receive in the Housc of Commons, it seems likely to effect the object for which it is in-

## Draft Horses.

A very interestiug lecture on cart horses was
ast Monday delivered at the London Farners' last Monday delivered at the London Farners In the discussion some capital speeches were
made. Mr. Finlay Dun-than whoul we have no better authority-said that in the cart horses thing like from $25 \%$ to $40 \%$ iu value, according o whether they could step or not. What should be paid to constitution and aetion." This
is quite true. Too often, it is feared, farmers is quite true. 'Too often, it is feared, farmers
leave to Irovidence that which they are well able to do themselves, with a little care and
attention, and when their pocket tells them attention, and when their pocket tells them
that they have met witb failure, Providence gets the blame when it should be their own im providence. Mr. Dun urged that not only was
a stud-book very much wanted -a list of the most valuable and best constitutional horses throughout the empire ought to be duly made and pre-
served-but also the formation of associations for the hire of the best possible borses throughout the country. It was a wouderful and most
satisfactory sight to anybody foud of horses to ee collected at Glasgow, during the show week upwards of 200 splendid draft stallious exhib differeut county associations, which seut their best and most practical judges witb instruetious
and prizes an and prizes so as to iuduce the best bred and best horses to go into the various districts through out the country. These prices varied from $£ 50$ to $£ 100$; and it was also insisted upon the num ber of mares should be loth guaranteed aud re.
stricted; aud uot merely two stricted; aud uot merely two gs. each, but
frequently four gs. per mare was given in the
best breeding districts in the north of lingland best breeding districts in the north of Lingland employ about 2,000 horses, and who at prrsent
work 1,000 in Lundon alone, began 20 years and to send their commissioners to Carlisle, aud then farther north, for the purpose of getting
horses; and so wcll have those horses thoughi not filling tbe eye so thorougbly as the Shire
horges-answered the purpose, that now in Messrs. l'iekford's establishinenent there was not probably more than a bout $10 \%$ of the linglish
bred animals, the north-country horses having almost entirely supersceded them. lessrs. Pick. ford had not only shown good julgment in the the way in anotbcr interesting department, viz,
in regard to their managenient and feeding. In in regard to their manageenungt and feeding. I thorough and systematic care bestowed upon
the horses than obtained in the farner's stable,
or in those of the smaller horse-owner. Almost every horse in their large estahlishment was
very soon taught to eats its food nearly all cut up or hruised, and reduced to a ehaff.
The result of this meeting was that a society ing of cart horses, which I hope will mect with the success it deserves. Certainly the subject deserves much $g$
My frieud, Prof. Sheldon, witb this sends an vord of which I agree. The with nearly every been and is now going on in the matter of cheese making in this country is very startling. Local
"makes" (and under that name I include single "makes" (and under that name I include single Dnulop, Wittshire and sucb like) are fast heing driven into narrower market areas. In the The people have acquired a taste for clean and ard uncolored aud with a than in any others. They are made now in all parts of England and in Scotland. In Cheshire, a few wecks ago, I was told that one or two
farmers had adopted the Cheddar system and found it paid them better than the Cheshire systcm of make. In fact, the market for roshire cheese is unfortunately getting narwhat similar in cbaracter to American cheese and, except for very hest qualitics, the Amer
can the preference. I was, a week or two ago, over some warehouses in London, and the a mistake, that he would take care that it should not occur again. He had hought up his asual quautity of Cheshire eheese, and found
that he couldn't sell it. Prices were 1ather high, and, as a result, the Cheshire eheese
could hardly obtain bnyers, and so I found the whirebouses full of unsold cheese of that make, While a more than usually good trade had been doue in American. My own opimion is that the rom milk selling for the supply of towns, i. e., exeept where eheese of the very finest quality
is made, and tbe blank will be filled by Ameri-
can aud Canadian. Herriy F. Moore.
No. 37 Wanaterforl road, Fulham, London,
s. W., England.

## Inexhaustible Soil.

Enitors Press:-I will try to answer Mr. Kauntze's question regarding the "inexhausti-
ble soil." First of all, let me. demur to his tatement that "what these lete.demur to his the ingredients that determine fertility) are, really we do not profess to know." So far as I now, no doubt regarding these ingredients exists, or has existed for 30 years past. They are those out of whicb are compounded the comchase of which untold millions are annually invested. The practically proved fact that these substances maintain or restore fertility, aud that they are again contained in the products which we take from the fields, sets at
scems to me, all doubt on this question.

## It is true tbat the merc presence of

It is true tbat the merc prosence of these inbe indispensable, is nevertheless not all that is peederl. The physical conditious of proper yct not excessive moisture, heat and perviousncss must also be fulfilled, in order that the plaut food may be available for vegetation. It is in regard to tbese conditions of availability that
our knowledge is not yet as definite as it is in respect to the mere nature of the ingredients; and the same is true as regards the specific influences several cultivated plants. tain kinds for a number of yoors, and cerceases to bear them while still undergoing the same treatment, and sulject to the samie natural conditions, there cannot ordinarily be any question that the failure is due to the withdrawal of of these ingredients is called for as the first condition of the restoration of fertility. This is the teaching of the experience of 3,000 years,
ynite independently of "the rcasou why," as versely, when in one out of ten thousand cases definitely without returns being made by its cultivators, the first and rcasonable supposition must be that, through some exceptional natural
canse, the replacement of ingredients takes place
$\qquad$
In all eases that have been fully investigated so far, such an outside natural source of suyply
has beeu found. That of the "bottom lands" the Nile is the flooding from the rivers lands of ing and washing away the fertile uplands of arc abundant; and, as regards California, the testimony of many in the flooded district would soem to sbow that if the sediment of the Sacra-
mento were allowed to cover the valley every six or cight years, we need seek no farther for the inexhanstible soil. It is true
ally hold, in cases in which waters uatnfood, and therefore continually supply the latter to the soils which they permeatc. This has, in fact, given risc to the broad statement that irri-
gation will, by itself aloue, maintain fertility.

It will do so in certain cases, and some such
seem to obtain in California. If your eorre seem to obtain in California. If your corre-
spondeut will refer to my late report, he will find
on on page 50 a case in point, in the water running
from a miue in El Dorado county. But there are more striking examples found among the "alkali soils" of the State. On pages 45 to 47 of the
document referred to will be found analyses of
the alkali from some of these soils the alkali from some of these soils occurring in
the southern part of the State, in whicb potasthe southern part of the State, in whicb potas-
sium salts form a prominent ingredient. These soils, in all probahility, will never need potash under-drainage-they certaiuly will not if re elaimed with gypsum only. Since then, soils
have come to hand whose alkali coutains both have come to hand whose alkali coutains
of the other chief manurial substances, phasphoric acid and nitrogen, the latter in the shape of potash nitrate. As it is likely that
these substances will always be supplied in sufficient quantities by the soil water, I shall not gives out" should be found among the reclained alkali lands of California.
Whether or not the everlasting wheat soils of the Andes, mentioned by Bunssingault, ow are not informed, as noi special observation have been made. There is one other possible
cause that has been oceasioually uoted, in the case of soils formed out of every decomposable makes up for
by cropping.
As to the
asscrtion that "maize may likewise without inconveuience," Anerican farmers hav unfortunately a very different story to tell.
Ask the "prairie farmers" of Illinois where are the 80 bushels per acre that they used to make when their land was fresh? It is true that maize when all but the ears is returned to the soil, tion better than most crops. But apart from the Peruvian experience (which probably re lates to eertain volcanie soils), more than that
But there are some crops whose nature hap-
pens to be such that what they withdraw from pens to be snch that what they withdraw from strong, wbose available plant food receives con action oi the atmosphere, in farther decomposing (fallowing) the soil. One such erop is cotton; field, can raised on one and the same soil al most indefinitely. The simple reason is, that in the lint, ouly an insignificant amount of soi what the whole plant removes; and in strong soil that sinall amount is anuually made good fore be cousidered inexhaustible so far as cotton is concerned, providel the stalks and seeds be given back; but it would not be so for flax or grain, unless thesc crops were bodily plowed in Whole instead of being harvested. In othe the from the soil duriug growth; while the strmble of grain, the vines of potatoes, etc., restore wh a small percentage of that sum total. When a fresh soil is taken into cultivation, it contains the accumulated riches of centuries in a vailable plant food. There is nothing surpris of wheat, in fact I think California could "see" that and "go better" in a good many districts But 16 years is a very short time to base agri cultural experience on, in such a matter as soil
exhaustion; and if Mr. $\mathbf{K}$. were to visit these same Western wheat fields to-day, he would hear of 12,10 and S busbels more frequeutl. than even of 20 . The truth is that a grea many of these broad statements regarding con books on agriculture, will not bear investigaof blat spot. Lomisiana with her thrce fee that sugar-eanc can not be planted continuously on tbe same land; and the culture of indigo in the Gull States was well-known to be "ver
hard on" the soil, before it was abandoned fo eotton.
With the rare exceptions mentioned, the vast majority of mankind will always find it neces soil. methods of culture and returns to the

University of Cal., March 20 th, 1878 .

## Nature's Levee.

Editors Press:-Many of the mostimportan, inventions of our day owe their origin to an observance of the metbols by which natur accomplisbes her objects. The best mechanical anatomy, as are doubtless many valuable chem ical compounds to physiology; and, indeed, i we were to rely more than we do upon uature for instruction in our difficnlties, we would often are far better than by depeuding on our own ontrivances. She never fails to effect her
These thoughts ware suggested to me reading the ditticulties that our capitalists and bottom-land owners have yearly to encounter in property by river overflows. But what an easy
aud conparatively inexpeusive method she has
for confining her streams to their proper chan.
nels. She scatters her willow seeds can) along scatters her willow sceds (When she she has an inpregnable barrier against all in-
roads of the river gods. This prolifie shrub, roads of the river gods. This prolifie shruh out its roots deep and wide, till they form a
fihrous wall, subject to no such accidents from either animals or flood as befall man's earth either a
works.
All $t$
when the was to is low, the is to plant cutting otherwise prepared to receive them, and them watered if necessary till the winter rain all insure life. Let this levee be tried on will demonstrate itself. After 2 firm root fonn dation, or rather cemeut, is estahlished, any sort of levee can be constructed with an adion upwe but I incline to thask that an exte stories, as it were, from two separate growths, will be found the hest.
San Franeisco
J. H. Floto, M. D.

## Tulare County.

Euitors Irress:-There is very fine grain land in Tulare county, and the day is fast approaching when Tulare will produce as much heat as any county in the State. On the l0th inst., I accepted an invitation from Mr. E Jacobs, to ride out to one of his ranebes. The ride was uot only delightful, but the opportunity value, was rare indced The ranch whicb we visited rontains 3,000 acres of level land, is situated about eight miles from the timber belt, in the center of a beautiful prairie, and is 17 miles southeast from Visalia. Mr. Jacobs is very proud of this farm, but deligbts most in body. This, I must gray, is the finest sight I ever beheld. The wheat is all headed out and by machiucry. I walked into the field and was surprised to lind tbat the tops of the heads were even with my eyes, and, on measuriug them, they were over five feet nine inches high. This of seed leing equally distributed over eacb
acr. When this tield is harvested, I shall take pains to
lication.
On oution.
On ou
On our way back to Visalia, about five miles
rom towu, I was shown an ancient which is said to be the largest in the State. I measured the distance around it, four feet above the gr
feet.

## This mighty chief, with verdant leal Now hails returning spring; Good axuan spare, don't cver dare Good axman spare, don't cver To hamm that forest king.

Long has it stood to grace this wood,
A lovely, sunny spot,
Long may it stand ths monarch gran
Brave axman, "harm it not."
This sentry bold, through heat and cold,
Ifas weathered many a storm; Has weathered many a storm
T would be a sin to cut a limb
Ur do this giant harm.

Haywards, Cal.
H. W. Rice.

## When to Do Certain Work.

Editors Press:-"I will give any man $\$ 20$ who will tell me when to cut willows and alders so that they will never sprout up again." This was the remark of one who gets tbe Pacific Rural Press regularly
He bad probably read a score of times of the neglect of exactness in making observations. We learn but little from our many experiments, because we make no careful record of the nice points upou wbich the result often depends. ${ }^{\text {The }}$ said that he had cut willows and alders which "never sent up a sprout thereafter," and that "tbe roots were out of the way iu a few months. At other times they sprouted so vigorously that n two or three years they were as large as
cfore. Some piue stumps decay quickly and
can be casily picked out of the ground, while
others remain for a greater lengtb of time as a others re
Now, I am no farmer, 'no foot of land do I
possess,' but I think that if I were troubled by
pine stumps and sprouting willows and alders,
would tiud out the hest time to cut them, I wou
even i
every
len years $\qquad$ Auburn, Cal.
-
Agricultcral Implement Exitbit at Ham BURG.-An interuational market of agricultural machincry and implemeuts will losing on tbe 17 th of June. Tbis promiscs to
be a large and useful cxhibit, and affords a goud opportuity to show our agricultural implecan be made up to the 20th of April, and
and carcful preparations are beiug made to
der the exhibition attractive and profitable.

## Poultry Yaro.

The Corbet Method of Hatching and Raising Chickens.
Enrors Passs:-I write to ask you if you know any.
thing in regard to Prof Crbet's new ine tod and alipara.


We said nothing of "Prof. Corbet" because we were advised against his claims by those whose opinion we respect. As the above in quiry calls for information, we asked an an-
swer from one who has been experimenting in swer from one who has been experimenting in It reads as follows :
ditors Press:-As regards Prof. Corbet's ew method or apparatus, I can give no opinion either, and know nothing of him more than either, and know nothing of him more than
that he uses horse manure in the process of that he uses horse manure in the process of heral generations ago, it, can hardly be called a new process, although his apparatus may be. As to the feasibility or econony of using horse
manure for incubating purposes, I can only give manure for incubating purposes, I can ooly experi-
you my opinion as based upon my owu ence. Having some idle time last year by re
son of the drouth, I made some experiments.
on of the drouth, I made some experiments.
I made a coop about four feet high, and two feet wide, out of lathes, with shel ves, and a slide on top to regulate the temperature. I pat in 60
eggs and a thermometer, and enclosed it with eggs and a thermometer, and encosed
manure. I had heat enough but the moisture
andensed and dripped upon the eggs and rotted the whole lot.
I next put a square spout on top, and covered came the trouble from condensation. The second lot of egys gave me 37 clicks, and an-
other lot 32 , all of which I raised. A setting from a neighbor's that had been deserted by the hen, were put in and hatched well.
This established the fact that chickens conld be so hatched, and the question of coonomy
only remains. I found the heat very hard to control-likely at any time to go up to $140^{\circ}$ without any warning or provocation, and as
likely to fall to $60^{\circ}$. This is the only difficulty with this style of incubator. There may be a
scientific method to keep the heat regular, but scientific method to keep the heat reguar,
I didn't work it out. To make a success of it the heat must be watched as closely as a steam
engine, watch on and watch off. I gave it no attention during the night. Where this is done I see no reason why success caunot be assured.
If Prof. Corbet has a secret method by which it need not be so closely guarded, that were worth something-otherwise I can see nothing
more for his apparatus than any old box or barrel which your correspondent conld fix up. To for hatching, as a business, I wonld avail myself of Prof. Corbet's knowledge and experi-
ence, if not too costly, for, of one thing 1 am assured, and that is that the best results of poultry raising oannot be attained uutil a sucPoint of Timber, Cal., Alpril 5th. Tarter.

## FLopicllture.

## The Garden in April.

Editors Press:-Our garden was begun laat fall, and so due allowances must be made; still I think that we make a good sbowing, althongl, of course, the winter las been favorable. The
crocuses are all done blooming, and their place will soon be taken by bedding plants. The anemones are in their prime. The bed is about four by ten fcet, and the colors range from dark purple through scarlet, crinsou, pure white and
striped, both double and single. The double remain in perfectiou the longest, but the single are much the prettiest.
The ranunculuses are also in full beauty They are all of the Turkish or turban varieties, perfect rosettes, and as large as pompone dahllas. The Persian varicties are nueh harder to
succeed with. The colors of both sections range rom white to dark purple. Both the auemone climate, so far as my experience goos, and will,
at small expense, furnish cut tlowers for several montlis.

> The pansy beds have beeu, for some weeks, the admired of all visitors. My seed, sown in
the fall, was of three strains, Vick's, Hender-
son's and that of my own saving. I took great care in selecting thy list, and the results have
been very satisfactory. Caliornia.grown pansy seed, I am convinced, can be hade equal to the best Iu all, from my three 1,000 coming on at dif-
 ngtonum, also a large mixed lot from Shasta
county, which must bloom before they can be named. Lilies need deep planting, a mulch when ready to bloom or they will lose their buds. L. Washingtonum will not bear much
moisture.
The ann om are sehizanSaponar: Anagatis, Campanula carpatica, Silene, peas, etc. Among the the biennials and per ennials, started elsewhere last year, may be
prominently noticed the Sweet Willim, Canterprominently noticed the Sweet William, Canter-
bury bells, lily of the valley, double wallfowers stilue Japonica, carnations, heliotropes, uchsias, pelargoniums, and verbenas, all be ginning their display.
The shrubs, in the
flourishing, snowballs, dentzies department, are flourishing, snowballs, dentzias, syringas; and,
above all, the well-known roses, Jules Margotabove White daily, Saffrano, Gen. Jacquiminot Agrippina, Bon sileve, Cloth of Gold, and bloom.
One of our discoveries of this spring has been that the Akebia quinata is the most delightful of vines for general purposes of use and orna-
ment. It is a rapid grower; it has bright palmate evergreen leaves; the abundant flowers are quaint, handsome and fragrant; the fruit, whcreof is only heresay, is s
are these not graces enough?
Possibly our brightest bed at present is one filled with Cimnerarias. The location being have done well, and the experiment is a pronounced success. The blaze of color which surpassed by any other flower, and I hope your
readers in the southern half of our State will try the experiment, and report progress. Sow
the seed in the fall; keep under glass in steady growth until they run up to bloom. Then try
then out-of-doors. Watch for the green ty, them out-of-doors. Watch for the green Hy,
for cinneraria is a favorite diet of theirs. Smoke them with tobacco stems if the fly begins oper-
ations. We ${ }^{\text {ations. }}$
relative to tea, coffee, etc., but it is too early for a report.
Niles, Cal.

Chas. II. Shinn.

## The $S_{\text {TAble. }}$

Speed Programme for the California Agricultural Society.
At a meeting of the Directors of the State Agricultural
was adopted

Trotting-2: 26 class. Purse, \$1,500; first horse, $\$ 900$; second horse, $\$ 550$; third
horse, $\$ 150$.
Aurse, $\$ 1,000$; first horse, $\$ 600$; second horse, $\$ 300$; third horse, $\$ 100$.
No.

Ruuning-Mile heats for untried three-year-olds; $\$ 100$ entrance; $\$ 50$ forfeit;
$\$ 350$ added; sccond horse saves entrance money. $\$ 350$ added; scoond horse saves entrance money.
No. 4. Same day-Runing - Mile dash for added; second horse saves entrance money. No. 5. Same day-Runuing-Mile beats free
for all; purse, $\$ 1,200$; first horse, $\$ 720$; scond for all; purse, 81,200 ; first hor

Trotting- $2: 23$ class. Purse, $\$ 1.500$;
$\$ 900 ;$ secoud horse, $\$ 50 ;$ third first horse, $\$ 900$; secoud horse, $\$ 450$; third No. 7 . Same day-Trotting-Free for all
four-year-olds and under; purse, $\$ 600$; first four-year-olds and under; purse, $\$ 600$; first
horse, $\$ 360$; second horse, $\$ 80$; third horse, horse,
$\$ 60$,
No. three-year-olds; $\$ 100$ entrance, $\$ 50$ forfeit; $\$ 350$ ddded; second horse saves eutrance money free for all; purse, $\$ 1,200$; first horse, $\$ 720$, Necond horse, ,360; third horse, $\$ 120$.
year olds and under; purse, $\$ 600$; first hor
No. 11. Trotting-2:30 class; purse, $\$ 1,500$ tirst horse, $\$ 900$; second horse, $\$ 450$; third horse, $\$ 150$.
No. 12. Same day-Trotting-Free for all,
purse, $\$ 1,500$; first horse, $\$ 900$; second horse \$450; third horse, $\$ 150$
No. 13. Rumning-Two-mile heats, free for
all three-year olds; $\$ 200$ entrance; $\$ 100$ forf all three-year olds; $\$ 200$ entrance; $\$ 100$ forfeit $\$ 500$ added; second horse saves entrance money.
No. 14. Same day-Running-Free handicap, mile heats; pu
if declared, added.
if declared, added.
Entries to close September 1st; declarations,
eptember 14 th.
l'iece of plate valued at $\$ 250$ to any horse Entries to all stakes will close on Saturday, June lst.
Entries to all purses will close Thursday, August 1st. Five to enter and threc to start in
all races for purses.
National Trotting Association rules to govern
trotting ruces.
Pacific coast rules to govern running races,
Pacific coast rules to govern running races,
xcept as above.
Each day's races will commence promptly at

## The Vineytro.

## Sonoma Vineyard Jottings.

Editors Press:-Since my last we have had several weeks of charming weather, and it
seems like a blessed boon to us after such along siege sise a blessed boon to us after such a long siege of "storm and flood." The 'roads hav
dried up amazingly within the past few days, and one can now take a drive either for profit or pleasure without being all bespattered with
that liquid compound called "mud." Th vineyards and orchards have all been pruned and most of them plowed and cultivated. The
abundant crops of grapes and the low prices abundant crops of grapes and the low prices
they brought the last two or three seasous, they brought the last two or three seasous,
have rather discouraged their cultivation in this section, consequently very few new vine yards are being planted.
My neighbor, Dr. Tomtom, is putting out rieties, such as Muscat, Malaga Brelgn va burg, etc. He says they pay much better than the commou kinds, selling for $\$ 25$ aud $\$ 30$ per ton when the others only bring $\$ 8$ and $\$ 10$
and even less than that. The Doctor is thorough going man and believes in doing
thing in the very best possible manner, be thing in the very best possible manner, be it
ever so little. His motto is: "A little well done is better than a great deal poorly done." And plied principle in everything he does. In preparing his ground for vineyard, he runs two subsoiler behind these, and by this means $h$ works the ground to a depth of 12 or 14 inches, and this not only in the rows where the vine gentleman was talking with him the other day
about planting vines and trees, and asked him about planting vines and trees, and asked him
how larye he dug the holes. The Doctor replied: "As large as the field." That is,
he worked the grouud all over to a uniform depth, and not in little spots where the roots
werc to be planted. He puts four healthy cut. werc to be planted. He puts four healthy cut
tings in eacl of the hills, which are 10 feet apart every way, and when the vines are well
started, takes out all but one in each hill. This ning, but pays in the end lyy getting thrifty crops at least one year earlier than by the old incles deep, making the ground four or for the cuttings
with a crowbar, and then leaving them to tak care of themselves for the first two or three
years. Can it be wondered at, if, by this latter plan some of the cuttings, after puttiug out
leaves, die outright; others dwindle along
through a febte and through a feeble and stunted existeuce for ${ }^{\text {a }}$
year or two and finally give up the ghost in
disnst; and those that liave euough constitu disgnst; and those that ave euough constitu-
tional vitality to stand such rough treatment ciome into bearing much later and never do
attain to the vigor and productiveness of vine that are set out under proper conditions and ID have another neighbor whom I will call "Dick Slasher," because he is always slashing
and splurging around, scattering his fire over and splurging around, scattering his fire over
large extent of territory, but never accomplish ing anything, for the simple reason that he
never does anything in an lionest and thorough never does anything in an lionest and thorough
manner. He set out ten acres of vineyard, and maneer. Hoice fruit trees two years ago, and The result is the greater part of them are eithe dead, or so stunted that they are not worth cultivating, and he has now concluded to turn the lot into pasture; so here is some hundreds of dollars absolutely throwu away. This is what I call a useless and wicked waste of time and money. I laugh at Dick, and sometimes
talk quite seriously to him about his shiftlessness, but it appears to do no good; for he goes
on slashing and sputtering all the same, as the on slasling and sputtering all the same, as the
darky said, "a great cry and little wool." The grain crops are growing finely and every thing is blooming beneath the cheerful smile of
of Mother Nature, who so lately and lon of Mother Nature, who so lately and long
frowned upon us so unkindly.

## Santa Rosa, A pril 8th

## THE $D_{\text {AIRY }}$

## English and American Cheese

Editors Press:-Whether or not it is a matter which causes the general English public any misgiving, it will at all events be not displeas. ing to Americans and Canadians to kuow that each year their cheese is gaining ground in our
markets, as opposed to our own cheesc. It is a fact of importance that transade Enclish markets by the pecnliar tastes and prejudices of any section of our people. Ten years ago this was not the are but slowly educated out of any old habit o thought, custom or practice; that they have a "mortal hatred of innovations, at first, and that a "reformer" has, in this country, a very uphill
fight of it. When first the American cheese begil fight of it. When first the American cheese began
to come in considerable guantity to this conutry it was only in here and there a district that thic people would buy it at all, and these were dis-
tricts which had been accustomed to dars, Chesbires and Dunlops-checse which
shape. Where our Derbys and Leicesters, and all our thin cheese, in fact, had been mostly consumed, American eheese could gain no foothold
for considerable time. They were too unlik the American for the ittey were too unlice against them until the old prejudice a a ainst i had died away. It was no matter that the American was quite as good as our own thin would not have it. Time only could remoy the obstacle, but that time would quickly the obstacle, but that time would quickly do
that was an evident fact to all who looked at the matter from an impartial standpoint. 'This is now done. Your cheese is found in every city, town and village in England, and is found
in many of them to the exclusion in many of them to the exclusion of our own makes. Thus the tables are turned.
As a matter of course, the great improvement which has been effected in your cheese within the past 12 or 14 years is maiuly accountable for this. But English cheese-that is, the bulk of it, is deteriorating where yours is improving.
No doubt there are still, and always will be a few dairies of cheese in various districts in this country, which for purity and singular excel lence of flavor, for peculiar and highly appreciated texture, and for fineness of quality as well as general excellence, cannot, at all events, be surpassed, even if they can be equaled in
any other part of the world. But these are not numerous and are yearly diminishing in number. Some of us are trying to infinse new life into the old dry bones of English dairying and we find the task a difficult one. The esprit che corps seems to have departed from our
chese makers; they seem to lave lost heart and are no longer taking the pride they used to do in cheese making.
dairy farmers that the consumption of milk in our towns and cities has iucreased enormously new opening for their milk-an them whing whic is already being used to a very large extent
This feature also bodes well for your cheese for This feature also bodes well for your cheese, for the more milk is consumed in this country the
less cheese we shall make, and the more of your cheese we shall require. Oue thing, however,
we have to complain about, and that is, that your goverument place such heavy protective
tariffs on our manufactured goods which go to your country. Now we are your best customer and pay yon scores of millions of pounds an
nually, ydmitting your wheat and corn, your
cheese your hutter cheese, your buter, your beef, and a host of
other things, free of duty, and you impose on
our goods tariffs which are really prohibitive. This sort of things, as you will easily see, is not
in the spirit of that reciprocity which American in the spirit of that reciprocity which Americans
profess to admire so much. J. P. SuELDoN. Royal Agricultural College, Cirencester, Eng.
land.

## Sheep gno Wool.

## Selling Mohair

Editors Press:-I noticed the letters :a your paper of the 6 th inst. about Angora goats, and as any subject bearing upon the agricultura
interests of this coast is sure of your considera. tion, I beg to reply to them through your col-
There is no longer any doubt from the years of experieuce that goat breeders have now had, and from the number of clips from every par of the State I have seen, that mohair of a very
good kind can he raised. The industry is one of very considerable importauce already, and believe will rapidly extend when it is found Many breeders have been discouraged by the results from shipments they made East and from the long time they had to wait for their re turns; but as there are only about two manuracturing firms in the East who use this mateWitl any extent, this is not to be wondered at. house havint establishment here, however, of goat owners may rely upon having a ready sale
for their fleece. To make this flece reall for their fleece. To make this fleece really valuable they must bear in mind that length of
staple and freedonn from kcmp and black hair is essential, and that straw or burs is a wors As you admitted Mr. Landrum,
price picepable weight I bave bought, including tho tation of his remarks. that if I wished to buy should have to give higher prices than I offere to him. I offered him 36 cents for a lot he had had here some months, and it was all it was this 1 was informed the had see don't know. My system is to give what eac clip is worth, and to this plan I shall adhere. R. B. Tetley

Adulthrated Honey in Europe-It may be of interest to our beekeepers, and somewhat consoling with all, to know that not alone in ficially preparecl glucose for honey practiced We rear that the aululteration of honey is so pre valent in the province of Silesia that the Bres-
lan Society of Beemasters has started a system of selling an articl of puranted purity, in closed glass vessels containing 1 tb . or 2 ths. or more, and bearing the name of the supplier on adhesive labels attached to them.
(atrovs ar Mospafart.

Removal.
 $=$

## Practice vs. Precept.

Editors Press:-Comments were made in a previous letter upon the manner in which life insurance is managed, and the conditions ex-
isting between companies representing that branch of the business and those by whose pat ronage they are sustained. Another phase of insurance will now be considerch, viz.: that of underwriting or marine, which is the origin and basis of insurance. It must not be inferred
from wbat is said that your correspondent is from wbat is said that your correspondent is
inimical to the scheme of insurance as originally contemplated, as nothing can be more eminently beneficent in its purpose. Objections are not against principles, but against present
practices, which it is not proposed to accept unquestioned.
Evil seldom clothes itself in selectious from its own wardrobe, but relies upou that which
is good for tbe wherewitb to hide its nakcdness. When agents of acknowledged merit are used by the unscrupulous for the purpose of
plundering those who are approached through plundering those who are approached through
their recoguition of principles, then fleceed from want of understanding what is practiced, it becomes a duty to sound the alarm.
It is not proposed to draw upon the imagination for material-or to indulge in suppositions relating to a question whicb can ouly be satis-
factorily showu by facts-whicb we regret to factorily showu by facts-whicb we regret
say are most abundantly supplied. The fol-
lowing is from a memorandum, and figures lowing is from a memorandum, and figures
as tbey stand upon the ledger of one whose as tbey stand upon the ledger of one whose
convictious have becn determined altogether by experience, and wbo believes that cost is
never to be considered, provided wisdom is never to be considered, provided Prompted by
gained or good results follow. Pre
a wish that California products should be reprea wish that California products should be repreof extending business interests, a shipment of
1,000 barrels ( 2,000 half sacks) of the best flour, was made to New York from San Francisco As soon as the flour was snugly on board ship,
according to business usage it was insured in according to business usage it was insured in marble front building in the heart of the city.
Individually and collectively the officers aud Individually and collectively the ofticers aud terfieldian in tbeir address, hland and soft as breezes from Ceylon's isle. All the surround-
ings indicated their aesthetic tastes. Counters ings indicated their aesthetic tastes. Counters of laurel, ornamented by fac similes from Cat-
tin's American aloorigines in bas relief, evi-
dences of the carver's greatest skill. Desks dences of the carver's greatcst skill. like mir-
and tables whose high polish reflected lors
rors the persons of the sleek, well-fed, selfrors the persons of the sleek, well-et, selfsatisfied tenants. fechining chairs, easy chairs,
lounges, Brussel carpets and the thousand etcs.
required for comforting those whose arduous duties draw so heavily upon their nervous organizations. Such is the capital often used to
inspire respect and awe in the ininds of persons on whom they rely for patronage- those will-
ing and ready to accept shadows for substance, ing and ready to accept shadows for substance,
glitter for gold, and pretense for sincerity,
wben thus bedecked. Holding a policy in such a company was equivalent to the possession of a company
In due time reports were returned from New aged by water. In order to comply with the lect from the insurance company, who had underwritten on the flour to the extent of $\$ 8,000$, in way of preminm, the Port Warden of New pointed two resident merchants, who certified delivered in good order. That which was damaged (12si barrels), was sold for the aecount of
whosoever it might concern, with the following charges to be deducted, which are given that in case any of your readers having a desire
for extending the fame of California productions may know bow much it costs in New
York to bandle flour slightly danaged. The following are the charges: Advertising, $\$ 5.25 ;$ Si.28; Port Warden's certificate, 83.25; ap-
prassers, $\$ 10$; commission for selling, $\$ 21.38$ total, $125 \frac{1}{2}$ barrels of a mere bagatelle for selling signors, like the fox whose tail was left in the trap,
After having received full returns from New York a claim was made upon the insurance cut down by personal attention and extra efforts on the part of the assured, in addition to his have otherwise been classed as danaged. A clain for $\$ 245.17$ was presented under the convictiou that it would be honored at once by the
insurance company, supplemented by a hand-
some doucer, or a vote of thanks, at the very
east, for all the trouble taken by the assured in saving them from loss by the care given the by the company's informing the policy bolder, in the blandest manner, that some additional
papers besides those already furnished would necessary before tbe loss could be paid Montbs went by. Another call was made, ceived. The bonest earth had twice rendered returns for the premiums paid it in seed upon the flour had been made; the safety of whicb had been guaranteed by this company, before they decided. Finally their victim resolved to have matters settled. A call brought out a roll of dust-covered papers from one of their elegant desks, the identical papers that bad been ing the claim; which papers had cost so much trouble and vexation, and had lain pigeon holed agining the company were using desperate efforts o secure that igmis fatus evidence, which they had claimed was necessary before paying his
loss. Across the face of the bill that bad been tendered for the loss, neatly penciled in gree everything
the following:
No claim: Insurance was ${ }^{\text {subject to } 10 \text { per cent. par }}$
verage, 8245.17 on $\$ 8,000$ is only 3.064025 per cent. This then was the reward received by this ictim of the assurance mania for his trouble and honest endeavors in saving property from
loss, which had it not been done would have required something more exprcssive and tangi-
ble than tbis display of decimal precentage as bendered by this company
ho has for years conducted a in the theory, religiously carrying out the doctrine, by insuring property on land or water (not omitting himself) wbose payments in premiums aggregate thousands of dollars, had occasion for demanding payment of a company for a building destroyed
by fire, (the first case of loss that had ever oc. cured to bim).
The claim was "taken under advisement" hy the company and eventually repudiated. They even went so far as to dismiss their local agent on account of his (to them) too great in-
terest in having the loss paid, or rather for his terest in having the loss paid, or rather for his proofs, etc. The ground taken for non-payment was, that their policies contained a provision that premises must be tenanted, and this
had been a few days without. A costly whistle, had been a few days without. A costly whistle,
yet one wbicb teaches this lesson: Never make or accept contracts framed in the interest of
one side solely, who, provided they arc sol. one side solely, who, provided they are sol.
vent (which is exceptional with iusurance companies), have their policies expressly drawn in order to misleal and deceive; hiding under a imal type covering up a bost of reservations, whicb are highways of escape for them it called upon to fultill, what was supposed to be of premi contract by the unsophisticated payer ing the inwardness of thime till of business, so necessary and excellent in itself,
but which is most wofully abused and perverted.
Recent Counecticut reports show that pulicyholders are losers of over $\$ 15,000,000$ from the failure of companies iu that state, where pol
icies no doubt were full of fine lined reservations, which afforded no relief in times of trial to them or their confiding victims. Experience teaches that policies are not the best honesty,
but that the original. "Honesty is the best policy" not only in insurance but in every south Vallejo, March 14th, 18.8. Peanson.
Cirangers' Business Associntion.-The adjourned annual meeting of this association was Tuesday last. The following Board of Directors were elected: Baniel Imman, Amos Adams,
John Lewelling, A. D. Logan, G. W, A. I. Matcb, W. L. Overbiser, R. S. Clay, following officers: Dauiel Inman, President; I. Steele, Viec-l'resident; Anos A
retary; John Jewelling, Treasurer.
Tue Haywaris Non. Partisan Meeting Alameda County Non-Partisan Ceutral Club, adopting with slight amendments the proposed articles of organization published last week. As the county delegates are to be elected to con stitute the future menbersbip of the Central Club.
frangers Constitctional Convention ferent parts of the Grangers' building, S. F., on Wednes-
day of this week. But little business was tran sacted in time for us to report in this issue.
Co-operation in Selling.-The Grangers of San Bernarclino county have called a convention to lee held April 27th, "to consult as to
the best mode of disposing of their surplus crops."
Frosi lincon Grange.- Wecretary retary so well ever since the organization of the Grange, has been elected Master, to fill the va-
cancy occasioned by the absence of Bro. Lord.

## Worthy Lecturer's' Visits.

Editons Press. - After a Sabbath's rest in Sacramento, the W. Master of the State Grange and State Lecturer left for Galt, where we were publisbed to be by 10 A. M., Monday, the 8 th inst. True to time, we found the Galt Grange fully alive to our visit. - The morning meeting was a closed one, and given up almost wholly to the State Master, who, having to leave by overland train to attend to a bank meeting in San Francisco, was allowed to use all the time he could give to
Tbe good of the order was well ventil ated by him in touching all the points frange lunch mabor sed ent, and the afternoon meeting being an open one, the usual lecture on the coming Constitutional Convention was delivered to a very respectable and an appreciative audience. The temporary organization of a non-partisan citi-
zens club was effected, to act iu concert with such other clubs as shonld be formed in Sacra mento county. From Galt we pursued our way alone to

## Elk Grove,

Our next place of appointment. Here we found the canse of the 'Grange almost ex
tinct from different causes, wbich appeared to cast no particular blame upon anyone, but was apparently unavoidable. In no place an the country surrouud ing Elk Grove, and all yet bope for not only complete resuscitation of Grange activity, but a renewal of tbeir faith by their works in the great Grange field hereafter. No private
Crange meeting was held hero, but an open Grange meeting was held hero, but an open
meeting of tbe citizens was addressed by us at night, on our usual subject, the coming Consti tutional Convention. A non partisan citizens club was formed. The next day, Wednesday, was our appointment for

Franklin Grange.
le time for bro. Everson, of Elk Grove, in ample time for the 10 A .31 . meeting. our full day's programme, the closed mornin meeting being one of especial interest to the
Order, followed by such a (irange feast as Franklin Grange is noted for giving, made doubly in teresting by toasts and charades. After the
Grange feast all were invited, with the public arready feast all were invited, with the public of this country village, to the building scbools as the High School department, looth schools having been dismissed to afford greater interest to tbe occasion. For more than two hours our time was engaged with our usual lecture on the Constitutional Convention and the formation o a non-partisau clul. Speeches were made by
the Worthy Naster Bro. Johnson, Frecman, and others, also by sover citizens not Grang ers. From bere we were taken charge of by
Bro. Johnson, and first with his family conveyed to his palatial country residence on the Sacramento river, and most hospitably entertained. Thence, the same evening, we were
taken up to Clanksville landing, to take boat for Sacrameuto, so as to be in readiness next day for our appointment at Enterprise. Such
live Grangers as Bro. Johnson leave notbing uudone on every occasion to serve the cause and April llth, was a most charming Thursday at Sacramento found many active Grangers in readiness to attend the meeting at

Enterprise,
Where again we were joined by not only the President of the (Irangers' Bank, Bro. (Garduer the Manager of the (irangers' Mutual Insurance Company, Bro. Johnson, Master of Franklin Grange, and Bro. Nlancock, Presideut of the and other prominent and live Grangers from differeut sections of the State, were all on hand sallied out in single buggies, livery and private tecle being the gnest of Bro. Flint, Master accramento Grange, and myself giveu up by hand to not only attend Enterprise Grange, but to convey both the State Master and Lecture all was agog, and by 11 o'clock the meeting was The closed meeting was addressed by the Wortby State Master Bro. Stcele, Bros. Colby, , some 300 (irangers and friends.
hour was spent in looking over agricultural im. plements, sent there for show by M1. C. Hawley ing machines, gang-plows, etc., all of whic added greatly to the intcrest of the day. duced to a very large audience, to address then zens' duty witb reference to it. The addres zens duty witb reference with other clubs in Sacramento county in carryin
turer.

From Enterprise the State Master aud Lec
turer were taken by Bro. Hancock 26 miles to
his own home, and there comfortably entertained till the following day, wben we were taken to
some seven miles farther. The same progranme was gone through with as at Enterprise, except the showing of agricultural impleinents, wben
we were still tbe guests of Bro. Haucock and taken to

Roseville
To attend the appointinent tbere for Saturday, April 13th. Here, as at other places, the closed the appointments, and the morning meeting the appointments, and the morning meeting ner, Bro. Hancock and otbers, and the Lecturer club as at all other points. So the work of a on, and if the whole farm and citizen element of the state will but awake to this movement, it will secure to the coming Constitutional Con-
veution such men as will give to the State veution such men as will give to the State a
Constitution that will meet the wants of the Constitution
whole people.
B. Pilkington, State Lecturer.

Ioseville, April 13th, 1878.

## Agricultural Notes.

## California.

## ALAMEDA

The Coming Season.-Washington Inde ventent, April 13: In this section of Alameda county the prospect for good crops of grain is enerally exceedingly encouraging; the same for Lrapes and there is likely to be an abund Sa rnits but not a very gool chance abundance IIt. Eden there are some gond fields of grain. but others have been injured by the continuous rains, giving no time for sowing and working the ground. The excess of rain has done damage elsewhere in the same way also. On the anguine of having a far better year than the last, or the oue before the last.

## ERN

Enitors Press. - The country around Ba kersfield is low and level; the soil a saud oam, very rich and productive. The water ried through the principal streets of the town, lalfa neadow There are alfalfa meadows sprinkle the streets, would yield a ton to the acre, and I am told that tbese same fields have been rastured all winter. Tbe same gentleman told me that last ting an average of a ton and a half to the acre each cutting. Tbere is now over 20,000 tons long the streets of the town there are growing cottonwood trees, and in this warm climate the shade is refreshing, bosides giving the town a beauty which cannot be surpassed.-R
LOS ANGELES.
Early Tomatoes, Santa Monica Outlook; Apill 13: Last year we reported that Mr. Jay of tomatoes, produced in the foothills of the Canuenga range, but it was trne. Ayertheless. This gentleman has again commenced to ship tomatoes to San lrancisco, the first lot of whicb weut on the last steamer. No doubt he will again make a "good thing" of it, as he has
fine crop, and gets top prices, because so early MENDOCINO
-Ukiah Press, A pril 11: Our farmers are as happy as they could possibly exso far. The prospect for abundant crops was
never better. The season is pronounced to be the best for years, and at least three weeks head of last year, which was a remarkably pursuits. There are a few places in the county where too mucb rain has fallen, and wbere grain is a little backward, but in ukiah and neighboring valleys it is heading rapidiy and
fine condition. The wet season which for 12 weeks hung over us like a pall has apparently
disappeared forever, and left us none the worse disappeared forever, and left us none the won ture through the day varying from $82^{\circ}$ to $92^{\circ}$ Ve predict all early harvest and a maguificen yield.

## MONTEREY

Tire Fair. Inder, April 11: We are authorerey amounce that the managers of the Monhave determiued upon bolding their second anber this year, commencing Monday the 13 th day of that month.
NAPA.
New Wine Cellar.-Reperter, April 13: We had a very pleasaut ride six miles up the valley buildiug is of stone, 112 by 57 feet, and three
stories high, walls two fect thick, with stillhouse attached, also of stone, 24


Next State Fair.-The State Board of Agriculture has decided that the opening address of hly Chambers in Sacramento, on Tuesday evening, Septemher becn invited to deliver the annual address, which is to take place on the Thursday evening
following. There will be two graud parades of following. There will be two graud parades of
stock during the Fair--one on Tuesday and the other on Thursday of that week. No stock can he entered after five o'clock on Monday after-
noon, and all races are to commence promptly noon, and all races are to con
at one o'clock P. M. each day.

## SAN BERNARDINO.

Riverside Surface Wells.-Editors Press: $\overline{\mathrm{M}}$. Sholdor well recently completed by Mr. E. M. Sheldon has eight feet

A Frostless April.-At Riverside the prob-
abilities are that peach trees, tomatoes, early abilities are that peach trees, tomatoes, early
corn, beans, etc., will not suffer by frost this spring. A week more will settle the question,
if the experience of the last five years may be taken as a criterion. The peach trees which
rested last year have a moderate amount of rested last year have a moderate amount of doing better since the
J. H., Riverside, Cal.
Japanese Pfrisimmon in Riverside.--Young
trees of tbe Micado and Inperial varieties are trees of tbe Mical
leafing out well.

## SAN JOAQUIN.

Crops.- Independent, April 13: A Linden
farmer informs us that crops never looked so farmer informs us that crops never looked so
well in all his farming experience as in that sec-
tion at present. They are even in a frame of tion at present. They are even in a frame of
mind to receive dry, parching winds with commind to receive dry, parching winds wound so
placency. The wheat covers the ground
completely that the surface of the ground completely that the surface of the ground is Some of the farmers who mowed their wheat
few weeks ago to set it back, say that one could scarcely tell that it had been mowed at all, it has grown up so rapidly. Mr. Wasley bas been running a header over his fiect of causing the
mustard. This has the effect,
mustard plants to branch out, so that they do mustard plants to branch out, so that they do
not get a higher growth than the wheat, and do
not interfere with the operations of the header. not interfere with the operations of the header. In tbe coast counties, and particularly in the
Salinas valley, this process is resorted to as a regular thing. Capt. Greer, who is just down
from the West Side, says that more rain is required over there to mature the late sown grain. Summer fallow and early grain are safe beyond
peradventure for more than an average yield. peradventure for more
Editors Press:-Since tbe rains bave come
and continued so profusely, our stock which and continued so profusely, our stock which
weathered tbrough the drouth bave continued to improve, until now they are as fat and sleek as moles. Tbere were, however, some, botb
borses and cattle, which could not stand so much prosperity, it would seem, for quite a good many have died of bloat, and a stoppage
of the bowels. On last Wednesday we bad a very cold rain, which on the Santinez mountains
(back of the Coast range), was transformed (back of the Coast range), was transformed
into snow, covering them with a mantle of into snow, covering them with a mantle of
white. Grain crops are the best we have ever
had, only some will lodge badly. Late sown grain will come on in fine condition this season. Squirrel poisoning, I see, is becoming a profes-
sion by some. Let me add my mite. Watersion by some. Let me add my mite. Waterare with us thought to be very effective. I
have found that, next to watermelons, apples used in the same way were nearly if not quite as good. Sheep shearing has commenced here.
The More Brothers took a small regiment over
to Santa Rosa island a few days ago. How and to Santa Rosa island a few days
what the quality of the clip is
yet learned.-H. E. G., Goleta.

## yet learned. -H . SANTA CRUZ.

 McLMonda
and ot
jolly
ness th
Mr.
the dr
row p
attach
doubl
with
suppo
at wi
and b others, marning, in company with Neil McLea others, we were driven by Ned Sanborn,
y Jehu, out to James Struve's farm, to wi loh
Mchean's harrow is so constructed th iver has a seat immediately over the ha
part and resting on the axle, to which ar
ed two wheels. Tbe draft is all on the ched two wheels. The draft is all on the
the harrow, other than serving as seat seat the the harrow, other than serving as seat
pport. Two brakes wbich can be operated
will, lower or depress the harrow actions,
$\left|\begin{array}{l}\text { thus obviating the old custom of stopping to } \\ \text { clean } \\ \text { chiem, } \\ \text { The } \\ \text { Mictana } \\ \text { harrow will do as }\end{array}\right|$ clean them,
much work, and better than the old kind, it $i$ easier on horses, and is easier to handle, as you
can drive it along any road, providing you have can drive it along any road, providing you have
the brakes up, and is a convenience to the man running it. All who have seen it work, call it
a great success, and our farmers hail it as a great success, and our farmers hail it as a
great saver of labor. Mr. McLean justly feels proud of it.

## SISEIYOU.

Editors Prass:-Our long continued rain has stopped, at least for the present, and the sun
shines clear and warm. My thermometer marked $80^{\circ}$ one day. Jack Frost paid us a visit
last night. All kinds of crops are now being last night. All kinds of crops are now being
put in. The last week's sunshine has dried the ground so mucb that some are calling for shower. Some potatoes are being planted now -also some gardening going on. The latest ex citement of dogs by a man with the avowed innumber of dogs by an man the killing all the dogs in the neighhor-
tention of "Oid Jess," my bloodhound, so well
hood. "Old and fa arably known in Lake county, fell a vicor 14 dogs are dead, and some chickens. Etna Mills is now an incorporated city. Prospects
are bright for good crops.-R. D. NUNNLLY French Creek.

## SOLANO.

Agricoltural Society.-Vallejo Chronicle hers of tbe Napa and Solano Arectors and memety was held at the store of J. E. Williston on the 6th instant to take steps, in consideration the State for a air this fall. There were pres ent J. B. Hoyt, President ; J. E. Williston,
Secretary ; John Barrett, of Elmira ; J. K Secretary ; John Barrett, of Elmira; J. K.
Duacau, John Wilson, Joseph Burtin, Peter Rothenbusch, H. Connolly, Ira Austin, Wm. Brownlie. J. E. Williston' tendered his, resig Brownile. . E. Tary, and A. . . MhPike was
nation as Secretar
elected his successor. It was voted to call meeting of tbe stockholders of the Association for Saturday, April 20tb, to meet at J. E. Williston's store, for the purpose of taking, prelim-
inary steps for holding a fair the coming fall, inary steps for holding a fair the coming fall,
and also choosing a new Board of Directors. SONOMA.
Carp Farming.- Healdsburg Flag, April
11th: John Rogers has at his ranch, northwest Hth: John Rogers has at his rancl, , northwest
of town, a fish pond, which originally had two compartments. In one there were nearly all
the varieties of river fish, and iu the other carp, the varieties of river fish, and iu the other carp,
obtained from Mr. Poppe, of Sonoma. Duriug the winter the floods broke away the partition,
and the fish became mixed. So on last Thursday he drew off the water to repair the damage 12 carp put in in March 1876, he recout showing that they had not increased. He believes the other one escaped his net and is still ever, increasing in size about four times, were
from 11 to 15 inches in length, and five pounds in wcight each. They are a very deep and thick fish. The carp are now about three years old,
which disproves the theory that tbey breed in wo years, but he expects breeding to begin this year, and spawning time comes next montb.
RIverside FArM.-Mrs. lua B. Miller returued last week from her Eastern visit, and will reside at Riverside farm, just south
town. Mrs. Miller visited quite a number States and most of the principal cities during her absence. While in Washingtou, D. C., she had the good fortune to obtain, through the collection of rare and beautiful shruhs and flow ers from the Botanical Gardens of Washington.
It comprises camphor, rubber and cork trees It comprises camphor, rubber and cork trees, napple tree supposed to have descended from
the Garden of Eden, African and other foreign ferus, lilies, fucbsias, roses, etc. Prof. Smitb, of the Botanical Garden, says the collection is tbe The camphor and rubber treos are moutains, The camphor and ribber Nearly we believe, the only ones in tbe state. Nearly all the flowcrs, ,erns and shruhs are of foreign varieties,
and have been imported to the United States with great care. None but Members of Congress are permitted to procure specimens from the Botanical Gardens, and Mr. Wigginton obtained these for Mrs. Miller with a special view to testing their adaptability to the soil and climate of California, preferring the Russian
River valley as the best locality for that pur River valley as the best locality for that pur-
pose. Mrs. Miller is an adept in floral culture, and will personally superintend the care of her their development with interest, for no doubt they will
county.
Prospects. - Petaluma Argus, April 11th: The agricultural outlook in this vicinity has improved very much in the past two weeks.
Early sown grain on uplands is almost univer sally looking well, barley on many ranches being waist high and beaded out. Late sown grain on low lands has improved very much recently,
and a ang a gould prove almost an utter failure now
gives promise of a fair yield. Some of this gives, promeve of a fair yield. Some of this
land, however, will have to be plowed and planted again. Good crops of barley sown as is probable that a greater extent will here. Itanted
with potatoes and corn tban usual. Thus far

YOLO.
Hungry Hollow.-Mail, April 13: T. A. Gal. lup, who was up at the northern limits of Hungry Hollow, reports tbe grain in tbat valley looking
more than average, and what is better than all, e says tbat the wheat, which was supposed to have dried out before the rains, has sprouted up, and will make an excellent crop-much
better than if it had been replanted, wbich many thought of doing, and
Langeville.-Grain prospects continue good.
Some pieces are headed out, and several others are in the hoot. The yield in this section will be ahove the average. The sheep men can now estimate their losses with certainty. All have
lost heavily, and the percentage of lambs is mall. Duncan Bros., lost two-thirds of their old stock and raise hat few lamhs. All others ear here have suffered in about tbe same pro-
portion. Fruit prospects are good, both ifully. The vineyards promise to yield boun ifuly. The favorahle season has induced our
armers to plant largely tbis spring

News in Brief.
They want a mint at Denver.
TriER a are 26 active gold mines in Georgia.
TEN Texas stock-raisers own $1,023,000$ hea of cattle.
Ranleaso building is being vigorously pushed
THE hay harvest has commenced in Los An eles county.
The railroad between Benicia and Suisun i The fami
The famine in tbe northern provinces of Cbina is increasing
Franklin
Franklin, Ind., has an eight-year-old murder
ase on the docket.
Gow is now received by Central City banks,
Gon
Colorato at par.
Colve hund res Chinese arrived in San Fran.
isco on tbe last steamer.
Texas has $57,502,240$ acres of public land
uhiect to location.
Tire worthless
poplar forests of Maine are being converted into paper.
Tü police force in San Francisco is to be increased from 150 to 400 men.
Spring CrEER, near Lodi, Wis, has been tocked witb 30,000 California salmon.
KANSAS has set ber mark at $20,000,000$ bushels f wheat as the State product for 1878 . demere are evidences for some improved EDWARD MIDDLETOWN ALMoNTE, first clown barnum's circus is dead, of quick consump-
There are still 400,000 sheep in Los Angeles ounty as the remnant of last year's drouth and disaster.
Two-THirds of the iron furnaces in Pennsy were idle.
spaper estimates tbat at least 4,000
day are arriving in that State to people.
The prices of lodging and entertainment of
11 kinds will be greatly advanced in Paris during the Exposition.
bricklayers struck in New
York last week, to enforce the Union rate of vages- $\$ 2.50$ per day
WM. M. Tweed, boss of the Tammany ring,
lied in the New York Ludlow street jail, on the lied in the New York Ludlow street jail, on the 11 th inst., aged 55 years.
ALLEN CRorf, the "most desperate of Kenucky "moonshiners," has been cat
bas detied the Marshals for years.
as defied the Marshals for years. A NOMBER of members of a colony from Ger in a pitiable condition, the veuture having proved
disastrous.
THE Diaz government has been recognized by
our Minister to Mexico, re-estahlishing full offi-
cial relations between the United States and tbat country.
THE Supreme Court of Nebraska bas decided that dealing in grain options in Chicago is
gambling, and all contracts made iu that State gambling, and all
are invalid in law
Ex-Governor Pacheco, while out in a boat he otber day, near Angel island, captured with jue lasso a large deer the land.
THE bounty installment of $\$ 100$ per month $t$ . W. Marshall, the discoverer of gold in Caliefusing a further appropriation.
Tbe Ladies' National League meeting, which organized in New York, the other day, to oper-
ate in behalf of the Indians, consisted of six vomen, four men and three reporters.
The cotton masters of Lancashire have agreed
to support each other in the event of isolated strikes against a $10 \%$ reduction of wages,
trade is stopped or the strike terminatcd.
rade is stopped or the strike terminatcd.
DURING the severe storms that occurred in
he State of Colorado in March, 25,000 sheep
$15 \%$ of the entire number in the country percattle.
This year's crop throughout the great wheat rowing regions of the northwest, will average ne-half more than last year, the prospect for
he wheat crop being better now than for the past 17 years.
Jeannette Lamiercitit, aged 67 years, ren dered temporarily insane from the death of he
husband, threw herself uuder the locomotive on tbe Oaklan
beheaded.

Tire Daily News, a one-cent paper, has been The Carson Mint began the coinage of the
The this cill The sowell (Mass)
Thilver dollar on the
The Lowell (Mass.) mill ownors have given notice of a reduction in wages from $5 \%$ to. $15 \%$.
ALREADY the heirs of Brigham Young and he Mormon cburcb are in the courts, fighting or his estate
A uttue
A LITTLE son of Clarence C. Hickok, was
drowned last week at Grand island, Colusa
There is danger now of a general rising he native trihes against tbe British government in South Africa.
Judges Hoffman and Sawyer have decided that the cubic-air ordinance is perfectly conTo dat.
To date 15 Molly Maguires have heen executhey were hangyad being six.
ON last Thursday
N last Thursday, Charles Nash was hitten losing bis life in consequence. Tue sum of $\$ 32,000$ cash was last week paid for 2,000 acres in Colusa county next tbe foothils and five miles south of Stoney creek.
Joserf callaghan was run over by a street car in this city on the 16 th inst., and mangled
so ladly that he died in a few minutes after. A girl named Brush committed suicide in
Round Valley, Mendocino county, by taking poison. No cause is known for the rash act. Owive to the inundation of the strawberry
lands last winter in the Santa Clara valley, not more than half a crop is expected this season. on the 11 th inst., while attempting to cross the Los Angeles
At the Central Pacific railroad shops at Saccars for general use and 12 passenger cars for the Oakland trade. The transit of Mercury, which is to occur
the 6th of May, will be visible all over the United States, and seven hours and a half will THE Commissioners passed tbrough Healdsburg a lew days a, on their way to stock the treams far above. They are soon to stock Russian river witb Eastern catfish.
An infernal machine has be
Truckee, intended to he used as anearthed at Teath by one of the Chinese companies in settling some Mongolian difficulties.
THE time for the surrender of the Cuban insurgents having expired, active operations will commence in the Eastern Department against The Northwestern National Bank of Chicago has advertised that it will redeem in gold all of its circulating notes that may be presented. It
is the first of the National banks to take this step.

The war in South Africa is likely to become serious. There has been continuous figbting in the Pirie Bush for a week. Four British offi-
cers were killed. The situation in Transvaal is
In an altercation in a St. Louis saloon on Sunday last Timothy Ryan struck bis oppothe neck under the ear with his fist, killing him almost instautly
A Chinaman made his appearance in Leadotice upon being interviewed but left at sbort of miners. This is the third time John has ailed to get a foothold in that section.
Treasury officials say Secretary Sherman's contract for the disposal of $\$ 50,000,0004 \frac{1}{2} \%$
Government bonds will settle the guestion of tbe resumptiou of specie payments, on the first of January next, as provided by law.
Cortland Wood, aged 65 years, at one time member of the firm of lood \& Congdon, phy's, Calaveras county, killed himself in this city on the morniug of the 13 th inst., by a pis-
tol shot through the bead. Supposed cause, tol shot through the bead. Supp,
Tea by tie American Method.-Tbe most hopeful suggestion which we have read in connection with the project of tea-growing in this country, comes from a prominent tea importer of Baltimore, wbo has resided in China, and who visited the Agricultural Department at Washington to see the 100,000 tea plants growresse the utmost contide epart the the Commissiouer's plans, and is surprised that tea culture did not long ago become a profitable branch of American industry. The gentleman
further says that in his opinion two-thirds of the labor expended in China is useless and that with one-tenth of the ingenuity displayed in the invention of the cotton gin, machinery can he devised here which will supersede and that we can produce results more uniform and better quality than can be otherwise arrived future re. Oriental accouuts be disregarded, and that a plain statement of the principles which govern the preparation of tea be substituted.
Processes then would suggest themselves, he thinks, to intelligent experinientalists and inwhich has tion, and result in the successful production of

# N <br> en 

The New Song.


















Our Boys.



 "Mary Mountain" says, in a recent number the Rural Press, that in order to be "original" we must write our own experience. But as ours dates back only six short years in the care of oracle in what we may write upon this sulject but we modestly claim, at least, to know as much as the old maids and bachelors, who proverbially have such "porfect children."
And herc opens another wide field for our matrons who have reared a family of boys to manhood, more or less successiulty, and eer-
tainly must still remember how it was done. If you made grave mistakes, why cannot you give us, who are still in the early stages of our
experieuce, the benefit of youra, that we may experieuce, the benefit of youra, that we may
avoid theu in training our own precious boys? aroid theun in training our own precious bour sons are models of manly strength and integrity, all the more do we desire to know gerate age, in guiding their feet past the siares to eugulf unwary feet. have tried our own theories of family govern-
ment and proved them failures, it is too late to retrieve the fatal error, but we and our children must bear the bitter result through all our lives."
Let us aid one another then, dear sisters, in Let us aid one another then, dear sisters, in
this fearfully responsible task of rearing our boys to a noble qud virtuous manhood.
That there are many failures, the crop of hood-
ums, which disgrace our population, lums, which disgrace our population, too surely
attest, and although the cause and cure of the evil has been the theme of our wisest men from pulpit and lecture llatform, I suppose few of sense, it is a problen that eash me must work
out for herself, after all that can be said of other people's expelienca and observation. I am imauy just degree, realize our responsibility, and here lies one alnonst fatal error at the very ately estimate the consequences of carelessness
on our part in this God-given trust, make the study oi our boys' temperaments and tendeucies a most serions and constaut duty, and try to grasp
the subject in its widest relations, instead of the subject in its widest relations, ustead of the weakest of us would oftener succeed than fail.
${ }^{\text {and self.control, patience and gentleness, whieh }}$ mother-love can summon to her aid, it is often will produce a doubtful harrest. How shall we fiud the golden mean between wants of our impletuous, headlong boys? Just what, we wonder, does Mary Mountain mean by
"keeping them well in hand," when one may be coupletely under our control, aud another without any malice or apparent thought of
wrong on his part, is always eluding our most diligent
place?
place?
Well, let us begin by trying to be gentle, firm, Wise, just, unremitting iu our watchfulness over
their faults, careful of our own tempers when trying to cultivate theirs, aud always, above all,
abounding iu that sweet quality of love, which abounding iu that sweet quality of love, which
is so ncarly, if uot absolutcly, a conqueror in is so ncarly, if uot absolutcly, a conqueror
all moral hattles. Just as I was considering
this thonght, a passage from the same wise, sucthis thonght, a passage from the same wise, suc-
cessful mother quoted above, made me shudder, cessiul mother quoted above, made me shudder,
because, monstrous as the snggestion is, it must beause, monstrous as faet, that many parents do not love their
be indlren, and either openly confess it or act as if they do not, which is the same in effect.
Who wouders that boys reared in such a home atmosphere should develope into street gamin,
and from infancy exhibit a shocking capacity for and from infancy ex
Next to this ranks indifference on the part of gither parent toward a child, who finds himself on this unperfect carth through no choice of
his owu, and has a right to clain all the aid and his owu, and has a right to clain and and dangers
protection against the difliculties and
he meets that a tender, wakeful solicitude can he meets that a tender, wakeful solicitude can
bestow. I should like to inquire how many bestow. I have brouglit shame to our noble State
boys whe hesed with any careful home training? Did
were blessed their fathers ever lay aside the eveuing newspa per to aid them in passing a pleasant social hour
indoors? Did he lend a helping hand in the solution of some inextricable puzzle in mathematics, required to pass the long, irksome days, when to his boy nature? What was the father thinking about those days and years when his childreu wero so rapidly growing towards maturity, tending downwards in the path of disgrace and woe. Perhaps the mother saw, lut could not,
single-handed, sten the current that was bear-single-handed, stem the current that was bear-
ing thein to destruction; and, ean we believe it, the father was too intent upou money getting
to think even whether it would prove a blessing to think
or a curse.
or a curse.
This is the baue of our modern society. I
will not call it civilization, becanse it has carricd us so far from that golden condition that long years must elapse before we can boast anything that the word imples as
With this universal mania to le rich, and
leave our sons with a competence, if not wealth, leave our sons with a competence, if not wealth, where is our next generation of "self-made
men" to spring from? How shall the boys of our day reach tho attained, when the incentive that lifted their
feet over the weary rounds of fortune's ladder is wholly removed? For we are assured that humanity up to its best work. What we owe our children is not so much money, as our no-
blest example, purest teaching, constant guidblest example, purest teaching, constant guid-
ance, and love that never fails, whatever the tax and strain. These first, sud afterwards that which is least, and perishes with the using. their "lunsiness" will smile at such impractical is better to teach a loy to make a fortune, or leave him oue already aceumulated without auy
estimate of its valuc.
You see, dear sisters, I do not propose that You see, dear sisters, I do not propose that onrs is the more precions if not important part.
Every year that their young lives are conficled to our care is so much gained in opportun'ty to happy for us and thes if weldig minds, and happy for us and them if we are able to impress contact with the world shall dim its bright image.-Carrie A. Colly, in Patron.

Saved by a Mule.-A mule's heels are gen-
erally considered rather destructive than otherwise, but the Pittsburg Telegraph tells the folwowing story of an accident which occured last which were loaded with horses and mules, a brakeman, whose name is not learned. IIe went down with the wreck, becoming fastened weak struggles to release himself were useless, and he coueluded that iu a few short secouds all would be over. The mules had been kicking man felt the end boards give way. Then he resent him out of his perilous position to the top a white manle rose up and strick out for the mal's tail and was safely earried ashore His injuries were not so severe but he could he
moved home to Crestlinc. Another mule eseaped by the same egress as the first, and the remaining animals perished. The brakeman a man's life was saved by a mule, and may
never again."

Punctuality.
Some noted writer has remarked that success in life in the matter of attaining wealth, consists not so much in industry or in saviug. It is equally true that suceess in any direcfuties. Nature seems to inculcate the habit iu us, for she is regular and punctual in all her operations, so that we place implicit confidence form their journey with such unvarying pres ion that the time of their reaching a certain point in their respective orbits can be ascertained with uncring certainty by those who the hlossoms and the fruit at the appointed time, and are sure to tind them, for "Order is the first law of Nature." Neither is it possible
for man by any act or device to detain the suu or man by any act or device to detain the sun ing of the products of ficles or or or rest time in its Hight; for, as liobert Burns beau tifully expresscs it, "Nae mon can tether has hoen a leading trait with thase whose tal ents or suceesses have raised them to eminence. Our ilustrious countryman, Ben. Frankin, is worthy example of one the world over a philosopher, statesman and philanthropist. cabinet and fielll to making punctuality the law Waterloo was occasioned by the tardiuess of one of his generals, who was seut to intercept the Russian army, but failed to be at the place in time, and the Ruspian commander with 30,000 moment, and turned the tide of battle, router the French army, and vanquished their leader, thus ending what might have been the brightes career in history, in an iguominious captivity. plified in every-day life, that those who arc punctual to their appointments inspire confitrausactions, and this habit also indicates the possessiou of other sterling qualities, as resolution, perseverance and promptness in action.
$J . F$. $H$., in Matron's Offering.

## Bear Hunting.

The following singular means of capturing or killing the bear is said to be frequently prac-
ticed by Russian peasants who cannot procure fire-arms. As is well known, the bear has a fondness for honey, and will track his way a
great distance to where the wild bees have great distance to where the wild bees have
filled some hollow tree. Their sting canno hurt him, and they and their stores are entirely
at his mercy. In a forest known to coutain at his mercy. In a forest known to coutain
bears, the hunters examiue all the hollow trees, till they discover a wild bee-hive. A branch of the tree is then chosen, directly above the hole
if there is no such branch a stout peg is driven if there is no such branch a stout peg is ariven fastencd, and to the eud of the cord a heary stole or a cannon bail is suspended, at about The pendulous barri modes him a good deal. Ite is an irritable brite-iu such eases one of the most irritable
and stupid in the forest. He begins by shoving the weight or stone oncside ; but it presse to free himself from the inconvenience. It re the ear. His temper is roused, and he arain pushes off the hard and heavy inass, but more violently; he gets rather a heavy blow on the
side of his skull, on its returu. He becomes furious, and with a powerful jerk seuds the rock swinging away.
The pendulum can
The pendulum cannot be the first to tire of this game; and it is a game in which the blow
are felt ou one side exclusively. The bear are telt ou one side exclusively. The bear as much by the double punishmient. His very gets. Te takes retaliations are all against himself; and for every furious 1 ush which makes his skull ache,
he receives an immediate cquivalent, which makes it ache again. At last his rage is un
bounded; he lhags the block; he strikes it he bites it; but whenever lee woull thrust head into the hivc, loack on his ear falls the obblows of his paw are of no avail. The brute is maddened. IIe faces his strange and pertina bouud from his skull. But back again it swings like a curse, which returns upon the head from
which it started. The bear falls exhansted under these reiterated blows, one more violent tham another; and if he be not dead, the lhunt-
ers, who have watched the contest from their hiding place,
the Rusqians,

Tropical Fonest is Sootland.-Those who
krow the stern climate of the rugged Scots,
would hardly believe that the land was once of
palns and tree ferns, and yet, at the recent
meeting of the Ihysical society of scotland,
Mr. David Grieve read a notiee of a reent visit
to the so ealled tropical forcst remains of Hamp-
shire at Burnemonth, in which he stated that
the renains of palms, feather ferns, and other
tropical trees and shrubs were found there,
showing that at some former time a tropical
forest must have fourished.

## Harvest Cooking.

Machinery has brought release to our Western social eustoms have bronght release to the wive of our city fathers, but not to the fathers them labor which is developing varied evils. Th holiest, tenderest characteristies of manhood are, in the whirl and rush and excitements of
our eities, heing sacrificed to the grim Moluch our eities, heing sacrifieed to the grim Moluch
of business; while on our farins and in our vil of business; while on our farins and in our vilelements of motherhood are sacrificed to the The first step to be take isy.
and husbands of the mothers and wives of on armers to the actual condition of things. N matter how distasteful the task, they must be summoned to our hospitals for the insane, where so large a proportion of the inmates are the poor ictims of overwork, brought thither from farm the village burial grounds all guide them to where "rest" at last the weary inothers land life, never enjoyed even the legitimate rest of the sabbath, smee the best dinuer of the week evitable sunday company of young folks-
young folks who would be just as well and list as happly if sent to the orchard to pick thei own fruit, as though "inother" had despoiled a
day in making puddings and pies. I wish dared to really sulmit to print the pitiful not in idlo complaings in anmers wive ness, to kuow how their daughters could be which they had subuitted. I wish I could tak you to the grave of as lovely a young woman as
ever blessed a houschold, one whese inusical gifts -ere such that a life of luxury and ease but of the strong, pure love she yore him, decided to go West as the bride of a young farmer. Not quite a year passed and she was brought home a mysterious Prorndence," exclaimed many she those who heard the story of the wor hands" duriug that stifling summer heat, thrce weeks previous to the time when her husband hoard that story of the husband. That young husband really
loved his wife. Il is criminal fault was uot in loved his wife. Ilis criminal fault was uot in
ceasing to love, but iu failing to study physiology or exercise common sense, for he had said
to the little, weary wife, "Harvest hands expect quite a feast always; be sure to have plenty cake and pie," as though cake and pie grew The harvesters had their cake and pic, and the young hasband hat a dead wife. Sulpose this able to prepare a feast, and I cannot prorur help for her. Gentlemen, I was coufident that you would prefer, as dessert, after a substautia sugar." Or, iu case he simply with cream an pose that he hadl sat up nights with the little rolle and helpell her, and beat the cake an idea," I hear you exclaim. What an absurd nay, re, natural eooks are excellent cooks Then for a moment revert to our war. Men by the thousands were summoned to do their own cooking, and proved eminently successful, if w
can believe their own statements. Did yo ever talk with a dozen "returned soldicrs" a hour in regard to camp life and fail to hear "that somehouly made the most delightful eoffee you
ever drauk ?" Or did you ever know a huntsman who couldn't broil a beefsteak hetter than an our tirst-class hotels and restanrauts employ aud
prefer men cooks? Twenty-five thousand pie are made daily in Chicago by men. The grea Napoleon buasted that he was an excellent cook
and since you may have forgotten the story, will repeat it, in order that you may have it
convenient to repreat to your boys. Mrs. Har-

Woman's Dress in New York City.-Some
time since Jenuie June, in one of her monthly time since Jenuie June, in one of her monthly which a lady inight make a creditable appenr ance in New York society. Nevertheless there
are women who move in good society and make a ereditable appearance on half, or even less than hal, of the sum which Jennie June as a yearly purchase with thein, and when bought is made at home with the assistance of a relia a dres maker who charges 82 a day. Next ycar
this dress is remodeled at the cost, all told, of this dress is remodeled at the cost, all told, of
from $\$ 15$ to $\$ 25$, and the next it serves as the Lasis of
grenadin
ity is ne
and the best care all this twisting and turning robe which is to come from such moderate al lana. A bit of lace bought now and then There are no silk stockings at faney prices, no
shoes with cost written in two figures, and pride is often mortified sorely in spite and taste
A self.assertive parishioner, who was trying
to browbeat his pastor, said: "You can't make to browbeat his pastor, said: goo deal, great as you may thiuk yourself." "I can come
one of it," quietly replied the clergyman


## Springtime in California.

For over 28 years $\overline{\text { we }}$ have $\dot{\text { witnessed thc }}$ coming and departure of the spring season i
Califoruia. There las been in the whole Califorua. There has been in the whole of
that time but few years that we did not wituess
natures bountifnl natures bountifnifiral decoration of the for
hill region of California. We do not think, un less it was the lavish and apparently extravagaut spring season of 1850 , that we ever be
held vegetation of every conceivable orde peculiar to the section mentioned, more bounti
ful and prolific than the present. Wild flowers are more abundant and vigorous than usual.
All the varieties of clover grass and plants of All the varieties of clover grass and plants of
every hue, appear to have surpassed their
for former growth and beauty. Certainly the dys-
peptic, the over-worked denizens of the shop and counter, as well as all humanity iu the
mirky, smoky, crowded cities of our State mirky, smoky, crowded cities of our state
shondd, if possible, within the next two or three
weeks at farthest, witness the beautiful footweeks at farthest, witness the beautiful foot-
hill region of California. At this season of the year the atmosphere is clear, mild and exhiler-
ating. Added to this fact, it should not be forgotten that it is also the period of the year
that California, as it were, has donned her best that California, as it were, has donned her best
holiday attire, and never was a bride more gorgeonsly attired than is she at present. Nor
can any one given locality of her vast domain, call any one given locality of her vast domain,
for exquisite loveliness of scenery, surpass the
present magnificent prospects to be seen amidst present magnificent prospects to be seen amidst
the rolligg foothill regions of tbis county. True, the scenery is not grand, mighty or awful. It may not astonish, but it does captivate and
irresistibly wins the inind to the highest pitch irresistibly wins the nind to the highest pich
of ideality. For miles the eye rests upon a
rolling sea, covered with green, checked and rolling sea, covered with green, checked and
bedecked with large rich spots of the most
brilliant of wild tlowers, of every hue and color of the catalogue. Back of this lovely waving, variegated colored sea, rises in the near back
ground the strong dark outlines of ground the strong dark outlines of the monn-
tains of old Tuolumne, whilst still further and higher up tower the white glittering peaks of perpetual snow-clad regions of the Sierras.
Truly the spectacle is worth beholding, and
thou though witnessed ofte

- Stanislaus News.

> Pretty Well, Thank You. - "Why, how
d'ydo, Mrs. Carefnl-are all your folks pretty sbe met in Hempstead she net in Hempstead a few days ago. "Oh,
yes, prety well, thank you-that is, about as
well as nsual. Father hasn't been quite well since he banked up the cellar last fall, and overmother has got the rheumatism so bad she has not been able to get down stairs for a week;
Matilda Ann has a slight touch of the diphtheabove a whispoc, for a a soys; Jinmie thrate can't speak susie is jnst
getting another rising in her ear, and the baby
has had two more spells of or can hardly do any work on account of his sore
eyes, and I thought I'd die last night with neu-
ralgia in my head-but we're all about as com-
mon in my head-but w
How's your folks:"

## Young Folks' Column.

Latin and Poetry for Cows.
Speaking of Latin reminds me that 1 once tanght my cows Latin. I don't mean that I
tanght tbem to read it, for it is very difficult tanght tbem to read it, for it is very difficult
to teach a cow to read Latin or any of the dead languages-a cow cares more for her cud, than
she does for all the classics put together. But if you begin early yon can teach a cow, or a a
calf if you can teach a calf anything, which $\bar{I}$
 ten cows, which I had to escort to and from
pasture night and morniug. To these cows I pasu the names of the Roman numerals, begin-
gave
ning witb Unus and Duo and going up to ning witb Unus and Duo and going up to
Decem. Decem was, of course, the biggest oow of the party, or at teast she was the rnerer of the others and had the place of honor in the
stable and everywhere else. I admire cows and stable and everywhere else.
especially the exactness with which they define
their social positiou. In this case Decem could "lick" Novem, and Novem could "lick, Octo, and so ou down to Unus, who couldn"t
"lick "anybody, except her own calf. I snp pose I ought to have called the weakest cow
Una insteal of Unns, considering her sex; but I didn't care much to teach the cows the declen-
sious of adjectives, in whicb I was not very sious of adjectives, in whicb I was not bery
well np myself, and, besides, it wonld be o little use to a cow. People who devote them-
selves too severally to study of the classics are apt to become dried up, and you shonld never do anything to dry up a cow. Well, these
cows knew their names after awhile, at least they appeared to, and would take their places to get before Novem in going through tbe bars (1) have heard people speak or a pair of bars
when there were six or eight of them) or into
the stable the matter of precedence was settled the stable, the matter of precedence was settled
then and there, and, once settled, there was no dispute about it after wards. Noven either put ber horns into Octo's and Octo shambled to one
side, or else the two locked horns and tried the game of push and gore nntil one gave up.
Nothing is stricter than the etiqnette of a party Nothing is stricter than the etiquetteof a part,
of cows. There is nothiug in royal conts o it; rank is exactly settled, and the same in know that at Windsor Castle, if the roya
three-ply Silver Stick shonld happen to get in front of the most royal double-and-twisted
Golden Rod wben the conrt is going in to din ner, something so dreadful would happen that
we don't dare to think of it. It is certain that she soup would get cold while the Golden Rod
was pitching the Silver Stick out of the castl window into the moat, and perhaps the island
of Great Britiau itself would split into two But the people are very careful that it neve
shall happen, so we shall probably never know what the effect would be. Among cows, as
say, the question is settled in short order, and say, the question is settled in short order, and in other society. It is said that in otber socicty place, for the leadership as it is called, and that women and men, too, fight for what is calle jure thcir neighbors by telling stories abou
them, and by backbiting, which is the meanes kind of fleas. But in cow society there is noth ing of this detraction in order to get the first
place at the crib, or farther stall in the stable If the question arises, the cows turn in, horns
and all, and settle it witb one square fight, and and all, and settle it witb one square fight, and
that ends it. I have often admired this trait Besides Latin, I nsed to teach the cows a lit not poetry, and it is a very good plan. It doe exercise for a boy farmer. I used to commit to
memory as good short poems as I could find (the cows used to like to listen to "Thanatop sis" abont as well as anything), and repeat
them when I went to the pasture, and as I drove the cows home through the sweet ferns
and down the rocky slopes. It improves and, down the rocky slopes. It improves a
boy's elocution a great deal more than driving It is a fact, also, that if a boy repeats "Thanatopsis" while he is milking, that operation, a quires a certaiu dignity.

Deathofa Baby Hippopotamus. - Behemoth, Aquarium, hippopotamus of the New York Aquarium, was faund dead to his bed, Tuesday
morning. He had seemed to be in qood health on Monday night, and had retired in good
humor at his nisnal hour. His guardiau, Dr. Oscar Kohn, between whom and himself there
existed the tenderest friendship, carefully tucked in the clothes aronnd him and bade hinn "good night," and he soon after dozed off into
a pleasant sleep. A post-mortem examination a pas made and it was found that Behemoth had died of consumption. His renaius were sent to
a taxidermist for preservation. The baby hippoa taxidermist for preservation. The baby hippo-
potamns belonged to Mr. P. T. Barnnm's happy potamns belonged to Mr. P. . Barnmy shis. At the time of bis death he was only
family
two yars and 11 mons od ponnds. He was bors old, and weighed 560 White Nile, and was kidnapped by an expedi.
tion very soon after his birth. He was brought up on the buttle, goat's milk being
used for his food on accouut of its superior strength and richness, and he tbrived so well
that if he liad lived until maturity, he wonld have attained the remarkable weight of 6,000
pounds. Behemoth was the only domesticatod
hinder

## Good HEALTH.

Color Blindness on the Railway.
Much interest has been excited of late by the discovery of an alarming prevalence of color atindness among railway operatives, to which is nability to distinguish the color or signals. M Thos T. Nelson, optician, of Cbicago, makes the
following contribntiou to the literature of the discnssiou: "From the first 1 bave been accens-
tomed to unite with the subject of color blinduess that of quickness of perception, as I fonnd in my experiments that very many not actually
color blind were practically so from the sluggishness of their perceptive faculties, and I also colors at certain distances, varying more or less blind at night and not in daylight, and vice werra. I have also considered witht these de-
fects, niderthe onegeneral head theoptical defect called 'Myopia' yenerally known as 'near-sighted-
ness,' and another defect called 'Astigmatism, both or either of which exist to a greater or less in a majority of cases not snspected. Tablets and charts are not entirely practical except for
day tests, since the results obtained with reHlected light are quite different from those obtained when direct or transmitted ligbt is the greatest safety at night. There are otber that of the circunistances nnder which color blindness may be acquired, bnt in the absence of records of individual cases kept for a period
time, this must remain a question for further investigation. My facilities for determining to any certainty just what part defective vision adequate, the reticence of railroad companies
upon the subject of accidents not being condupon the subject of accidents not being condupelled in a great measure to reason by analogy,
but I have no doubt that in many instances of lunders or mistakes which are usually attribuled to carelessness or rccklessness, where defec-
tive vision conld enter as an element, investigathe accident.

Antidote to siake Bites.-On the subject of snake bites, a very interesting communica-
tion has lately been received in India from an Anerican gentleman, Mr. Koscicky, recommending the gall of rattlesnakes as a a autidote
for snake bite. Mr. Koscicky, who became acquainted with the antidote at Verezuela, states stantaneous ond wonderfnl in its effects; crows
sta dogs in the last stages of the and dogs in the last stages of the poison recoverthem. The preparation of the antidote is
simple: Tbree rattlesnakes'galls put into an ordinary wine bottle filled with $30^{\circ}$ spirits, and allowed to stand for a week. In ordinary cases
one or two tablespoonfuls are taken; in extreme cases, three to six. Mr. Koscicky recommends
experiments being made in this country with experiments being mare in this country with
other snake galls. Dr. Fayrer agrees with, this
recommendation, and refers Mr. Koscicky's let ter to the committee at Calcutta for investiga ting snake poison. The idea, however, tee says,
is not a new one, for in the "Thanatophidia of is not ane one,
India" the result of an experiment with the
antidote is recorded; and he is of opinion that antidote is recorded; and he is of opinion that
when brought to the test of scientific investigation, it will not prove more successful than the
many otber "antidotes" which have hitberto many otber "antidotes"
beeu tried and have failed.

## 

American Women. - American women, says Harper's Bazar, take vastly better care of
themselves than formerly. They have more acquaintance with bygienic laws, and hold them exposed themselves to de days when they cold, in thin slippers and silk stockings ; when
they abstained from flannels next to the skin: they abstained from flannels next to the skin;
when they pinched their waist to semi-suffocawhen they pinched their waist to semi-sulfoca
tion; when they sacrificed comfort and healtb to what they conceived their appearance-these
foolish and unhappy days have gone forever, foolish and unhappy days have gone forever,
have barely been known to the rising generation. have barely been known to themen have no mawkish and morbid no tions as to themselves; they no longer think
that to be unhealthy is to be attractive; that that to be 111nhealthy is to be attractive; that
invalidism and interestingness are synonymous that pale faces and compressed lungs are tokens of beanty. They dress seasonably; they wear thick boots and warm clothes in bad and cold
weather; they allow themselves to breathe freely, and they find their looks improved, not injured by the wholesome change. There are
exceptions-many of thein donbtless-but the rule is as we have described, and the exceptions are constantly diminishing. It may be safely they have not yet become, converts to natnre and that they heed her behests, rccognizing the great principl
be beautiful.
Home-Made Court Plaster. - The following recipe comes to us well recoinmended: One
ounce of l'rench isinglass; one pint of warm water; stir till it dissolves; add ton cents tinctu
silk
ture.

## Domestic Economy

How THE Ancients ATE.-Two or three thousand years ago, late suppers were not fash-
ionable, as in the present degenerate age. Tbe ionable, as in the present degenerate age. Tbe
noble specimens of humanity of that day, whose noble specimens of humanity of that day, whose
deeds of valor and other wonderful acbievements still inspire our respect, after a score of centustill inspire our respect, after a score of centu-
ries, never formed the acquaintance of dyspepsia, that hydra-headed monster whic of civilized bun man beiucs of a large prot day. This fact may b airly attribnted, in a reat part at least, to the simple dietetic habits of those pioneers of science, art and civilization. Those noble Grecians who were the compeers and contemporaries of the
great Hippocrates, the acknowled ged father great Hippocrates, the acknowledged father of
medical literatnre, knew nothing of the elaborate courses, the infinite varieties, and the exquisite indigestibility of modern fashionable dinner meals a day, as do some at tbe present, a fact Which is clearly stated in the writings of Hippowill be readily seen that in adopting the two ways of his forefathers, rather than adopting any new or untried theory

Steamed Beef.--For a family of six or seven persons take fonr pounds of beef, cross-rib is
best; get a piece of suet the size of your hand, cut in small pieces and fry out the fat; you the snet is brown, take ont the scraps and put in the meat and two ouions cut np; when the
meal has become a dark brown on one side turn it over on the other, and let that get the same when onions and meat are thoroughly brown pour in a pint of boiling water; whenever tbe
meat gets dry add water, but it mnst always be boiling hot; throw in a handful of salt, three spice and whole pepper, cover with a close fit ting cover and let it cook for three honrs; when half a cupful of water; stir this in the gravy, taking care not to bave any lumps in it; when yon wish to serve it, strain the gravy through
a sieve and pour a few spoonfuls over the meat.

Flour Improvement. - It has long been
known, says the London Farmer, that the keeping properties of flours may be very greatly im.
proved by the simple expedient of driving off a portion of the water present in freshly-gronnd grain by means of heat. This fact was once for arried out under the direction of the emineut chemist, Payen, between 1860 and 1867 , some of the samples of flour thus treated laving beeu kept for upwards of 16 years without undergogreatest drawback to the general adoption of of suitable apparatus. This difficulty has now
been overcome, M. Touaillon having succeeded in perfecting a machine in which four metric centners of flour per hour can be effectually heated at a trifling expense. The grand prize
of the "Societe des Agricultenre de France" has been awarded to M. Touaillon for bis invention.

Minced Fowl.-Take the remains of a cold
roast fowl and cnt of all the white meat, which miuce finely without any skin or bone, but put the bone and skin in a stewpan with an onion,
alade of mace and a handful of sweet herbs tied up; add nearly a pint of water; let it stew or an hour and then straiu and pour off ther gravy, putting in a teaspoonful of shire sance; take two hard-boiled eggs and chop hem small, mix them with the fow, pepper and mace according to taste; put in the minced lemon pecl and one teaspoonful of lemon juice, two tablespoonfuls of flour, made into a smooth paste witb a little cold water, and let toasted bread. Some persous prefer cayenne to common white pepper.

Beef and Tomato Sour.-Take two pounds of red beef-a neck piece, or from the round carefully remove all the fat, and cut nitb two quarts of cold water, and simmer slowly one honr. Remove all the scum as soon as it rises, and keep covered close. Scald until quite soft, throngh a colander; add to the broth from which you have removed the meat, and boil half an hour; pnt in a sprig of sweet marjoram or thyme, then take to ears of sweet-corn, and also two tablespoonful of flour and one of sugar, browned but not burned, mix with half a tea clupful sweet creann or milk; add these ingre
dients and boil tifteen minutes. Seasou with little salt and cayenne pepper.

Lyonnaise Potatofs.- Put a tablespoonfu
outtcr into a frying pan, and, when melted, of buttcr into a frying pan, and, when melted, Have ready, sliccd, a pint of cold boiled, o stcamed potatoes. When the onion is turning ped parsley; season to taste with pepper and salt and turn the potatoes over with a broad-

## PAC FIC RURAL exaritos.ias

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## The Scientific Press Patent Agency

 DEWEY \& C0., Patent Solicitors.
## SAN FRANCISCO <br> Saturday, April 20, 1878.

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GENERAL EDITORIALS-D. M Osborne \& Co.'














## NEW ADVERTISEMENTS.



## The Week

The week has been marked by a group o April showers, varying somewhat in weight o
water thrown down. They seem to have Water thrown down. They seem to have cov-
ered quite a wide area of the State, and their work was, in the main, salutary, as in sonve
parts a protracted norther had produced dust and erust. It was, however, rather a cold
storin. The crests of both the Coast and Con. storin. The crests of both the Coast and Conwhite feather, and along their sides there were spots where hail plied its sharp rattle for
time. The winds $w$ were high and mueh of the early sown and tender-sternmed grain was low. stead of the hay, for whicll the fields werere, des-
tined; but on the whole the tined, but, on the whole, the effect of the rain
will be refreshing, a valuable contribution to the Eurface moisture, and another assurance of promise for this unparallelled year. The storm
has passed and the sun is the brighter and the
air the air the elearcr for it.
How sweet the sunlight sits upon a thousand
ales and hillsides. The mountain brools rales and hills:des. The mountain brooks bab-
ble their weleome. The pienic spirit is abroad
in the land. The ble their wcleome. The pienic spirit is abroad
in the land. The roadways are dotted with
excursion parties, aud sinitited teams loads of visiting ruralists. Let the pecrless days give new strength to all, for the work
comes ou. It will be liard and long, but promise and reward will soon clasp hands as brothers.

Shallow Culture for Light Soils. We male some remarks, last week, upon the truth of shallow eulture on light soils and support of the position that a deep theory is not
as wise as the old shallow praetiee in some situations. One point made was that althongh growth of blade and stem of grain might be excessive whilc the surfaee layer was well satu rated by abuudant rains, there would lee after ward an interruption of the upward movemeut compact enough to faeilitate the action of eapil lary attraetion. The upward movement of the water stored in the lower layers of the soil is cssential to the growth of eroys anywhere and
is the sheet anchor of sucess in this State is the sheet anehor of success in this State where the surface is not moistened by summer showers. Here, the water stored deep in the
soil is the fund from which values are drawn soil is the fund from which values are drawn,
and to so till the soil as to destroy its eapilarity is like cutting loose from one's bank aecount and attempting to do busincss with a sma purse, which 18 soon emptied and only replen
shed onee a year. We had expecte enient season, the peneral deduetions from what experieuce here and elsewhere has shown
to be the true system of culture of light soils, but we have received, during the week, a copy of a lecture recently delivered by Prof. S. IW Johnson, Director of the Connectieut Agrieul
tural Station, whieh uotes the consideration which we had in inind to present. Althoug
whitate whine which we hal in mind to present. Although
written with special reference to treatment of light soils to guard agaiust the shortcr periods
of drouth which prevail during Eastern summers, the principles are the same which app here. Iulfeed, as we have hintel, they are o more eertain weight hcre, beeause with us the
summer drouth is as sure to coune as the sumsummer drouth is as sure to come as the sum-
mer solstice, and earlier in its coming. Thereore, we shall engage Prof. Johuson as counsel in the issue at natural law which we make and propositions whieh we shall lay down for the propositions whieh we
attention of our readers.
That stratum of
to loosening tillage is wet soil sometimes may be advantaryoously plowod for the purpose of drying it. A dry
soil may be made too dry by deep and repcated illage. The reasons are: 1st. By loosening, he soil is made to expose a vastly greater vaporating surface to the atmosplere than the compact soll presents. 2d. The capillary con-
nection of the loosencd earth with the underying soil is impaired aud its pow or of taking
up and distributing bottom-water is diminished Thus the sources of supply are rendered less rapidly effeetive. It is evident that the amount
(depth and frequency) of tillage which would benefit crops on a clay soil might danaage those on a sandy one.
To eonserve the water of a loose-textured soil its main tillage should be shallow, so that
the bulk of the earth remains cornpact enough to hold the rain and to trausmit botton-water steadily from the subsoil upwards to the root
of crops. The surfaee only, which las been puddled by the hearay rains, need be disturived in suring time to prepare a seed.bed or to
loosent it around the growing stens. That suriace, as often as it settles to compactucss or
forms a erust, should be loosened up again with Corms a erust, shoull be loosened up again with
the eultivator, if for seeding, or the harrow it the grain be started, so as to unaintain over the ratcr-conducting body of compact earth a rcla culy inon-conducting layer of lonse soil, to
cut of the escape of inoisture into the atmos phere.
The
and of use of the roller after harrowing in secd the hill after planting, is obviously to facilitate
the access of moisture to the seed. The capil lary comection between the surface-soil and the noist earth below is largely interrupted by puttiug in the seed, for that is in itself a loosen. ung process. The soil must be compacted in
order to restore that conncetion and insure to order to restore that conncetion and insure to
the sced and young plant a steady and sufticient upply of water. of water in the soil. If a eompact elay or loam will more readily pass through the loosened tilth and will penetrate and remain in reserve in the soil immediately underlying. This will
be advantageous in two ways. It will, first, ge advantageous in two ways. It will, irst, calthy root-bed, and, second, it will tend to coarse-textured soils, deep and frequent tillage may too much promote the descent of rain and thercfore be detrimental to vegetatiou.
Primiusis for Cct Flowers.-We notice that Mr. James Viek, of Rochester, ng to 840 at each of the State fairs througnt the United States if the managers of the fairs give him notiee of the aeceptance of his 1 remiwill put the Vick prizes in their premiun list
for this year. Although this is a land of flowers there is still room for more general growing
them around our homes and the enjoyment them around our homes and the enjoyment The more floral premiums which we have at our florieulture will be stimulated and advaneed Mr. Vick does a valuable public serviee in this
offer of premiums as in many other of his enter prises.

The Conmercial Position of the Dairy Industry.

 Our querist does not state whethicr he refers oo the dairy interest of our state or the whole
country. The best we can do, perhaps, will be to give suel facts as we have undcr both heads, premising that there are no statisties in cxistence which will enable us to treat the subjeet with full accuracy. With regard toour own State,
the most comprehensive statistics are those of the most comprehensive statistics are those of the State Surveyor General, and they make no
account of the value of the milk sold in our account of the value of the milk sold in our
cities or villages, nor of the value of the poultry produetiou, wis is long usage comected in the Eastern States butter and cgys have for in the lastern states butter and cggs have for
years been carried to market in the same wagon. The Surveyor General's figures restrict us to mere mention of the pounds of butter and eheese produced, and the latest year reported is
1876 . Using these amcunts, and estimating 1876. Using these ampunts, and estimating
their value, we have the following: Butter.
Chees.

## 

## Total valuation

\& $4,108,875.58$
To this total should be added a large sum for he pork produced on dairy ranehcs, but we have must he used as an iudefinite quantity, to cons must he used as an iudeninite quantity, to con-
siderably inerease any position which the industry gains by comparison with other indus. tries. Bearing this in mind, let us cite the value of other of our lealiug produets for 1876:

## Wheat Barley Hops. Wool.

Wine, , , alions
ruit crolp

|  |
| :---: |
|  |

From this the readcr can parative valuc of the dairy and other leading agricultural products. The figures are not complete, but they are the best accessible, and serve
to give the dairy a lcading conmercial importo give the dairy a lcading
tance anong our industries.
tance anong our industrie
Naw Hork city is the headquartcrs of the dairy trade of the Unisticians have been most zealous an Cow York statisticians have been most zealous, and of interest in this connection. The New York
Stinquing List furnislies the following facts and figures in the United states at the prescut time over 12,000,000 milch cows, valucd at $\Sigma 40$ each. They represent a total value of $8480,000,000$. The laud nceessary to their naintenanee is vhese product of the United States is $\$ 2 / 6,000$, 000; value of the whole make of butter for the past year, $\$ 1 \bar{\circ}, 000,000$. To these tigures may be added the value of condensed milk for conisumption at home and abroad. It is estimated that in the United States the last year there
were manufactured $300,000,000$ pounds of butter, or, $1,0 \% 0,000$ pounds for every working day in the year. The growth of our export trade in
cheese is best illustratcd by the following ofticial statisties

## 

## 

Of this England loought $90 \%$. The export of

The exports of cheese and butter from the United States have increascd within the past $66,204,250$ pounds of elheese, valued at 86,251 , 730 , in the year ending June 3uth, $18 \% 2$, to $21,52,2+2+2$ pounds of buttcr and $107,640,742$
pounds of chese, valued at $\$ 17,151,221$, in the yeur cuding June 30, 1877, an increase of nearly
$150 \%$ in butter and 68 , in che $150 \%$ in butter and $68 \%$ in cheese. 111577
there were received in New York city 530.000 larrels of eggs, valued at $\$ 9,000,000$. Over $34,000,000$ pounds of poultry were received in dairy from 15 it is is as follows: Milk, eream, butter and clecse
Milk, eream, but
Yalue of ergs.t.
Value of poultry
Total

These statistics so to show that the butter cheese and poultry interests eombined, rank in point of nooney value, and are constantly ncreasing in importance.
Roses.-Our friend, G. C. Pearson, of Vallejo, remembers our weakness for roses, and brought in his semi-annual armful of, rich and rare ones for us the other day. Mr. Pearson calted our attention again to the California tendeney in his
roses. Some varieties he had been wont to roses. Some varieties he had been wont to
grow in the Fiast for their compact and fine buds take on somcthing of the eabhage style of effusion, or, "in other words, are troubled bomewhat
with the "big head." This is a complaint wlich perhaps, we shall attributed to Californians, and, pernaps, we shall be obliged
preralence-among our roucs.

## Queries and Replies.

## Lime Juice.



## 





We shall take pleasure in telling what we know of the namufacture of lime juice in some ern markets now chiefly come If our California lime crowers any practice they may have had, we shall be pleased to receive accounts of thicm.
One of the leading producing regions is the island of Jamaica, and the process there em-
ployed is very simple. The fruits are pressed in a mill of no grcat power, probably no greater than our good cider milis. The resulting juie which a common open evaporating pan of copthat there nced be no haste from the press to the evaporator, as the juice does not deteriorate
by keeping a reasonable length of time. This would be a considerable length of time. This producer, for his press would probably work rastcr than his evaporator. The juiee is evapo volume until about one eighth of its origina volume, and then it is put into easks for expor
tation. The Jamaica juice is chiefly taken to New York, where it is largely ealled for by dyers, to fix certain eolors in their fabrics. In 1874, Jamaica sent to New York, $10 \overline{0}, 558$ gal $\$ 26,890$. The present wholcsale price in New York is about $70 \leftrightarrow 75 \mathrm{c} . \mathrm{pcr}$ gallon. The lime
juice sold in this eity is chietly from Tahiti, and it is put up in pint bottles, for medicinal use on oard ship and the hike. 1t is eommonly sol in this market for about 2 cc . per bottle. Ther market, as it is lironght iu by sca captains and the market is suon overstocked. Probably an average price would be from 40 c. to 60 e. a gal lun, according to quantity and quality.
577 , the remarked in the Priss of Mareh 10th, ndustry in scems also a chance for a protitahle juce from pressing out and concentrating the all from the trees or are otherwise unfit fo narket. Even if it was not though best to facturing eitric could be shipped in easks to London, at a low rate of freight, and there it would find sale to the citric acid makers, who now draw thei supplies from the waste fruit in the Sicilian orchards. The process enllloyed for extracting
this jnice and the manufacture of citric acid is fiven in the Press of March 10th, 1577

## Cattlo Breeders' Meeting.

The Cattle Breeders' Association met, aceording to announcement, in this city, on Wednes ay afteruoon. There was a good attendance. Hon. Cyrus Jones, President, was in the chair
In the adoption of a new constitution, it wa consist of lireeders of Short Horn cattle and their grades.
There were some remarks made coneerning the object of the society being to encourage the use of thoroughbred bulls and that the inter ests of the society demanded the enlistment o all cattle breeders. This view was maintained by Mr. Overhiser, and he insistcd that the pretock should be increased. Mr. Bornck read fron the new 1 rcminm list of the State society, showremiums; in some eases adding a third to the year every cattlc breeder in the State would take an interest and exhibit at the State fair President of the society would be toward building up all the interests which ean claim repreMueh of the tine of the neeting was of cupicd in adopting a new constitution and by had for Wiek, of Oroville, Viee-President; Robet Ash II, B. Sturges, Centerville, Alameda county Treasurer.

Bank of Califonsia.-At the last meeting
of the Directors, Mon. William Alvord, on
resignation of Mr. Mills, was chosen Presideut
of the Bank of California. The selection is
eminently a proper one. Mr. Alvord has served
the bank well as Vice-President. He has dis.
charged, with great eredit, several high public
trusts which have been comnitted to him by
the citizens of San Francisco. He is a man
whose integrity is unquestioncd, whose ability
is universally recognized. The bank has done
well for itself and for the community in it

## Mr. Blowers' Drying House

The success gained by Mr. R. B. Blowers, of Woodland, Yolo county, in the manufacture of raisins which lead the market, has created a wide interest in his arrangements for drying. Last year we gave quite full descriptions of his methods and his own account of his success in
producing a first-class raisin by using sun-heat if it was available, and if not, by putting the grapes through his drying house. It was also shown how he used the heat of the sun during the first stages of drying and finished the raisins by artificial heat. The fact is he has succeeded in producing a raisin by artificial heat which is so indistinguishable from his sundried, that they were all accepted together by the parties to whom he contracted the season : yield. He told these parties that they were
only in part sun-dried, but they discerned no only in part sun-d
difference in them.
Mr. Blowers has used his drier for two years, and assures us that in that time he has cleared, above all expenses, more than three times its original cost, in drying raisins atone. His
drier, includiug house, 42 feet square, with basement, furnaces, 16 drying rooms and 5,000 trays, laviug 19,584 square feet of drying sur-
face and holding over 30 tons at one time, costs $\$ 2,500$.
Mr. Blowers has secured patents through the
Mining and Scientific Iress Press Patent Mining and Scientific Press Press Patent
Agency, and the small engravings on this page Agency, and the small engravings on this page
will give an idea of the construction of this drier. will give an idea of the construction of this drier. draft chimney, $D$, in the center, on the right and left of which are the furnace rooms, On . ting on them are the drying rooms, $A$, taking the hot air from them at the top and again part the hot air from them at the top and again part way do
is shown
eleats.
Fig. 2 is a transverse section taken across the
heating and drying chambers. The right side heating and drying chambers. The right side
shows the transom, $J$, open, and a lateral and shows the transom, $J$, open, and a lateral and
downward moving current of heated air passing laterally in the flues (the flues being made by the solid bottomed trays, placed side by side on cleats), the downward movement boing at the
alternate ends of the flucs, as shown by the alternate ends of the flucs, as shown by the
cut. The air finally passes through the trap cut. The air finally passes through the trap
door, $L$, into the flue, $M$, thence into the draft chimney.
The left side of Fig. 2 shows the lateral and upward current. The downward moving curupward and downward current for lumber. With this arrangement, it will be seen, an uninterrupted ourrent of air is secured. In the
first way with a downward pressure, drying the first way with a downward pressure, drying the
fruit on the trays thoroughly without turning, and in the secoud way with an upward pressure, drying lumber alike on both sides. It will also be seen that one room or up to 16 can be built on
the same principle, but uot with equal cost per the same principle, but
foot of drying surface.
We have, in an article on the subject last year, so fully described Mr. Blowers process of
raisin drying that we ueed but allude to its advautages at this time. Like most all driers hot air is used, but in this, owing to the peculiar construction a very strong draft is secured, enabling him to dry in large quantities without
condensation of moisture on the fruit farthest from the furnace. The result is that raisins retain, the grape bloom. The capacity of, the drier being very great, there is no necessity of dipping the grapes in lye or other preparation,
to facilitate drying, and thereby injuring the to facilitate drying, and thereby injuring the
hloom and aroma of the raisins. One feature hloom and aroma of the raisins. One feature
in favor of the Blowers evaporator is that the grapes are picked on the trays in the vineyard grapes are picked onoved to the drier without further handling the fruit. Thirty tons can in this way be placed in the evaporator in one day. When the drying process is complete they are packed ready for market directly from the trays and are consequently unbro
therefore, more salable.

Mr. Blowers has received a group of medals and rewards for his raisins and his apparatus, brought him both fame and profit.

The Proposed New Territory

## According to the bill now before Congress

 providing for the new Territory of Liucoln, the latter will comprise within its limits 97,800square miles. Of this domain, 76,200 will square miles. Of this domain, 76,200 will
consist of a portion of the present Territory consist of a portion of the present Tcrritory
of Dakota; 14,400 being taken from Monof Dakota; 14,400 being taken from Mon-
tana and 7,200 from Wyoming. As con-
stituted, stituted, it will be larger than any of the
Western States, and will contain within its more than 2,000 miles of river valleys. The present estimated population is 25,000 . The friends of the measure have represented that
there is more gold in this Territory than in Calthere is more gold in this Territory than in Cal-
ifornia. During the past year there were 175 500 teams were constantly employed more than year carrying freight to the Black hills.

## - Sale of Orchard Land. - We note the sale

 ries, near Niles, Alameda county, at the figureof $\$ 500$ per acre. Grain land in the vicinity
ranges at $\$ 200$ to $\$ 225$ por acre plant treen.

## Differential Pulley Blocks.

Ourengraviug on this page shows an adaptation of a new device for multiplying one's strength by proper mechanical aids. It has been found that a single man (or a married one for that matter) can be made to pull 1,000 pounds on the top of
a stump, and if this amount of power will raise the stumps in his soil, he can clear his field with ease. We shall describe below the mechanism by which a man is able to exert such force on an obstacle, and it will be seen that it is adapted to many farm uses. If a man wishes to lift off his wagon-box, he can do it alone and leave it hanging in the air until he is ready to
replace it. If he is killing pigs, he can pull up replace it. If he is killing pigs, he can pull up
his scalded porker with one hand aud the pulhis scalded porker with one hand aud the pul-
ley will hold it in position while the concluding butchering operations are performed. In short, beyond the power of a man with ordinary applivice makes him
master of the sit-
uation. differential pulley block is one of the most notice-
able of the smaller mechanical inventions of the age,
It met a want whieh had existed from the beginchanic arts. In
nearly every me. nearly every memore or less hand. ling of heary
weights is involy. ed, aud numberless contrivances have
beeu devised for enabling such work to be done with
ease, safety, and the employment of
comparatively comparatively
small power. The ordinary device in use all over the
world is the com-
mon rope mon rope tackle
and blocks, by the use of which the

efficiency of a man, | ar hisis capacity to |
| :--- |
| lift, |
| is |
| Increased |


like mauner, when the pulley is revolved in the
opposite direction, more chain is given off from opposite direction, more chain is given off from amount of this difference.
Since its invention by Mr. T. A. Weston, the direct differential pulley block has gone into most exteusive use in all parts of the world, but its application is limited to the handling of its size becomes too unwieldy and the power quired to operate it too great to admit of it advautaceous employment. The object of Mr. Weston's recent improvement is to extend the
utility of the differential pulley block to the handling of weights of from 3 to 10 tons, or, i necessary, even greater ones. This has pre-
viously been done to a limited extent by the employment of large sprocket wheels and gearing, but only in such form as to be almost use less for practical purposes. Mr. Weston, how lar differential block a system of the regu

## compact and so powerful as to give all

Stump Pulling with Differential Pulleys. fold, according to the number of sheaves in ferent ways in which it the blocks. The apparatus in an be applied, reuutility and is in universal use, but its mul. for instance, in pulling up stumps, or raising tiplication of power is very limited, and its $\begin{aligned} & \text { heavy stones. One man can can accomplish } \\ & \text { use necessitates provision against the "rumning } \\ & \text { more work with one of these pulleys than hal }\end{aligned}$ use necessitates provision against the "running more work with one of these pulleys than hal
down" of the loads suspended if the power be a dozen could without it. These pulleys may pulley block arises great value of the differential pulley even less compass than that of a rope tackle of correspouding capacity, a multiplication o
power of from 30 to 300 fold is easily attaina ble, and its principle is such that the load suspended, no natter how heavy, can never run
be seen at Dunham, Carrigan \& Co., agents, S. F.
Australian Seed Exhibi
Paris. - IV
catalogue from C . F . Creswell, receipt of Melbourne, Australia, of the large exhibit of
seeds which he will exhibit at the Paris exposi


## BLOWERS' PATENT FRUIT DRIER

desired increase in
the efficiency of
the block, without the block, without
practically increas-
ing its bulk or
ing its bulk or
weight.
With the plain
or direct differen.
or direct differen-
1,000 pounds is the
maximu load
which can be lifted
by one man, wlile by one man, while
with the new pattern of geared
blocks the etficiency of one mau is
increased so that
he can lift from 2, 000 to 4,000 Iths.
This increased effi. ciency not only en-
ables the blocks to be used for hand-
ling much heavier
loads, but also
makes the smaller
sizes of the block sizes of the blocks
available for use in places where the
load to be lifted is more than can be led by the number for the purpose.
The general utilThe general utility of this pulley, Report of the University Alumni.-We
ave received a copy of the able and very truthful "report ou the practical character of the instruction given and benefits conferred by the University of California." It was made to the
Alumni Association by a committee consisting of graduates Arthur Rodgers, Frank S. Sutton and E. A Parker, who were appointed to ex-
amine and report for the information of the alumni. The report will strengthen the popu-
lar regard for the institution, because, abating har regard for the institution, because, abating the love and loyalty which alumni have for their alma mater, none are better able to judge of the
practical benefits of an institution than those
who have carried its influence with them into practical benefits of an institution than those
who have carried its influence with them into
the walks of life the walks of life. The report makes proper
allusion to the college of agriculture, and be alosion torited credit upon its wise and zealous
stows
promoter, Prof. Hilgard. We hope the report promoter, Prof. Hilgard. We hope the report
will be widely circulated and we may find space to present its points more fully hereafter.
Treatment for Wire Worms.-There has been some complaint of the work of wire worms in different parts of the State. Where the grain is not too far advanced it might be well to
try the following treatment, which is pronounced by the London Agricultural Gazette as
productive of good results on light soils. Heavy productive of good results on light soils. Heavy
rolliug followed with a top dressing of threefourth to one cwt. of nitrate of soda, mixed with two cwts. of common salt, forms a valuable courages the worms and the accelerated growth courages the worms and the accelerated growth
speedily places the crop bcyond the reach of
farther

Printing Ink. - We bear cheerful testimony to the excellence of the printers' ink furnished
us by Chas. Eneu Johuson \& Co., of Plilaus by Chas. Eneu Johuson \& Co., of Phila-
delphia and New York. It is elegant material and may be fairly classed with the improvements which we made on our paper during the last year. Most files of newspapers will not the spread of poor ink. This we escape by the quality of the ink we are using. We have unia hint worthy the notice of other publishers who may not be equally well served.
Chufas For Chickens. - We notice that a writer in a Florida paper has used chufas for chicken feed. He says: "For chickens, I plant some near the barn, and, when ripe, plow one let the chickens scratch for them. At first they do not usually eat them readily, but in a few days they will eat them with the greatest
Farming Changes in San Joaquin County. From an old friend of the Press, Mr. J. W. Johnson, of Bellota, San Joaquin county, who made us a call during the week, we receive tidings of agricultural changes in the northwestern corner of San Joaquin county, in which he resides. The region lies between the Mokel umne and Calaveras rivers, 18 miles northeast of stockton. This region was until recent year used chiefly for grazing, but now is being chosen as a resideuce by increased numbers of farmers and the land is put under cultivation. It has been fouud that the rainfall is more generous
than in some other parts of the county, showers falling there when other parts were neglected by the clouds. The result was that good crops were grown in 1870 when there was little elsewhere, and the dry year 1877 showed a repeti. returns from suminer fallowed land. The soil is a sandy loam, sometimes red-gravelly, but very productive. Wheat is the leading crop,
but barley aud rye also do well. Fruit, as tried, thrives well. A German has vine growing well without irrigation, on sandy loam with clay bottom, the land a little rolling. Johnson has now I2 tenauts on land he formerly grazed, and 12 teams were at work summer
tallowing when he left home. Mr. Johnson has last year, and this year 3,000 is being farmed last year, and this year 3,000 is being farmed
by tenants. He will break up more land next year. Other large land owners are Baily \& Carpenter, who have 5,000 acres, and W.
Prather, who has 3,000 acres. The highest val. uation of these lands has been $\$ 20$ per acre hitherto, but it is believed that bringing them crease them. There is abundance of soft water free from alkali, to be had by digging common carried through by Mr. G. C. Holman, as lately described by a correspoudent of the Press, wil advauce the intercsts of the region. the swine of the neighborhood, mainly through have also been improved, but they are going by the board to make room for the cultivators Mr. Johnson has now 6,000 sheep, aside from
his flocks iu Nevada, but he will reduce the number and still keep some for farm stock, though not as grazers. The general interests of the region hetween the rivers are advancing,
and we shall expect interesting uotes of prog ress in the future

Report of the Univeraty Alumi and E. A Parker, who were appointed to ex
down or descend of itself,
The priuciple upon which the differentia The priuciple upon which the differential follows. The load is carried by an endless chain suspended from a double sheave or pulley at the top, and in turn supporting iu its lower loop a single sheave or pulley to which the pulleys at the top are in reality formed of on piece of metal, and therefore revolve together, one of them being slightly smaller than the other. The two sides of the chain which pass load, pass over different and thus carry the sheave-that is, one of them passes over the large groove of the top sheave while the othe
passes over the small one. It thus follows that when the top sheave is revolved in one direc tion the loaded part of the chain is being taken up on the large diameter, and given off (on the raised by the amount of difference bctween the
tion. It is the fullest, and, at the same time most condensed list of the seeds of trees, slirubs and plants indigenous to Australia, Tasmania coutains the names of nearly a thousand species each with its natural order, botauical name common or native name alld the country in which it is found. It enumerates 54 species eucalyptus. The list is one which importers of Australian trees, shrubs aud plants will find much value for consultation and we presum Mr. Creswell will send it to all who apply for committed a careless bluuder in last wcek' Press in writing "Tasmanian grasses" when we the modern name of Van Dicman's land and has modennection with the province of Zealaud.

Tue Seuate Committee on revising the pres ent method of choosing a President, have de-
cided on the bill which provides a tribunal for conflicting cases. The Committee is opposed
Constitutional amendment on the subjeot.


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Our friends of the Aldenf fruit drying persua sion assure ns that the outlook for their products are very flattering. The agents for the Alden whiel they cannot fill. It will be six months before the new goods can reach the market. is no difficulty in maintaining list prices for ehoice articles. Several years ago Gen. Wilson,
U. S. A., was detailed to investigate all the various processes of food preservation. He vis ited Europe, and has large volumes of reports
nipon the subjeet. His conelusions are in favor of the Allen methol, and Aldeu goods are uow on the list of regular army and navy supplies.
In alvertising for sealed proposils for dried " fruits and vegetables they always stipulateWe are told that the proprietors of the Alden faetory, at San Andreas, creeted last year, are
so well pleased with their investment that they have reeently bought the exelusive right of the
patent for Caliveras aud Tuolumne counties, those propose ties shrint the or more factories in We have reeeived for examiuation a box Alden raisins, whieh are better than any w
have seen before. They are made from the Uvi Larga grape. They are of anber color and
almost transparent, and are therefore handsome. This is, of course, a departure fron the standard appearanee of raisins, and whether
consumers will take to the style is yet to be de termined. The popular demand now is for rieh-ecolored raisin, well evered with "bloom."
The sanple whiel' we have before ns is of ex being filled with a finely jellied tender skin application of the Alden proeess to the by the use of raisins has heretofore beeu hamperel purpose, and the makers believe that by using
the Muscatel grapes they ean slow as great sue cess iu raisin making as in the preserving of
other fruits and vegetalles.

River Vs. Rail.-The Louisville Courrier
Journal says of the $J$. B. Willams "boss" tow, that it was "the largest tow ever taken from
Louisville to New Orleans, or any in the world-makiug 22,200 tons. Her freight bill at three cents per bushel, anounts to $\$ 18$, ,
000 , equal to 81 cents per ton. It would tak 000 , equal to 81 cents per ton. It would take
1,800 ears of 333 bushels to the car to transpor this amount of eoal. At $\$ 10$ per ton, or $\$ 100$
per carr, the freight to $\$ 180,000$, or $\$ 162,000$ more by rail than by to New Orleans in 14 or 15 days. It would re port this Grov, o00 bushels of coal, and if it makes take all summer to put it through by rail."
See advertisement for furnished house in
the eountry
 improveinents in the zoologicill deparment, beeides th
other fealures whicl have mide it popular


## Farmers! Farmers!

Throughout California are requested to send their orders for any kind of labor to the "Free tabor Franeiseo. All hands carefillyy selected fre of clarges to employers and employe
crons, are referred to wr. Feral Fribbic, of tor sure Shasta County, cal., who has some 15,000 acres for sale i
pears from time to time in this paper.



Axy Plotoora rulur having a large Cam
aalo will ploase notify "N. s." at thisothoo
S. F. MARKET REPORT



Weekly Market Review.
DOMESTIC PRODUCE. ETC
Trade is progressing without many notable features,
supplies. Agricnltural implement men are full of busiaes and condell of clearing there war to the interior are large.
The Wheat market is firm, and sales have The situation is still one of expeetancy, becausc of the eontinued nu
settled condition of affairs abroad. The Liverpoo market has held the full week withont change, Ro
Range of Cable Prices of Wheat
Whe course of the Liveryool quotation for days of last wcek has been as recorded in the
following table: following table:


To-day's eable 4 Exclange eompare with same date in former
 The Foreign Review.
Londos, April 16th.-The Nurk Lane E. C press says: The present aspuect of Whent does not appear to give rise to any eomplaints. The while a somewhat larger l,readth than usnal has Wheat have been moderate in London and the priucipal country nuarkets. A weaker tone o prehensions, has been indieated in a decline of aout one shilling per quarter, as millers conbeing light and the weather not adverse to the future erop. The time has now eone when
Ameriea and linssia will resume their usual places in the list of eountries whenee we derive our principal supplies of Red Wheat. Last
Monday's arrival list slowed the importation of about 37,000 quarters of Whent, nearly all of
which was furnishel by these eountries but present the interest centers prineipally in Amer ien, seeing that the reqnirements of southern very large proportion of the Graiu from the
Blaek sea; an musual number of (iraiu-laden steamers from Odessa and southeru Rus.
sian ports having been divertell to Mar sian ports, having been diverted to Mar
eilles. The demand of the past week has bee strietly of a consumptive eharacter-at a slinllattributed to the paeitie aspeet of wolitieal iffairs. With swall arrivas ar ports of eal or Wheat rnled steady, without quotable hange in values. Maize, on but few arrivals, vanced fully six-pence per quarter
Frelgnts and Cnarters.
The past week, says the Commercial Neur, arket. The full in the freight and charte this eity, and the unsatisfactory condition of
prices in England, liave alike operated allversely orices in England, lave alike operated aikersely
o shilpers, and we have no uew engagenents
to tor of tonnage for spot loading to record. 'essel leting eargoes, and it is quite probable that stanees. The list of disengaged tonnage will, ront this time forth, steadily inerease, as the are holding off in the expeetation of more remuverative business when the new Wheat is
moved. The last clarter was lixcl at about f.2 5s for a wooden vessel to loal for Liverpool
direct. We have in port 9,029 tons of tonnage sirect. We have in port 9,029 tons of tonnage The list of disengaged tonnage in port aggre

## Eastern Grain Marketp.

New Yoik, April 13th.-The Wheat market week-the range of Spring growth being 81.18 West the erops never promised better at the
1eriod of the year. It is estimated that the average sown is fully, 35 , greater than last year;
while, of last season's crop fully 25 ? is still in the hands of the farmers. Theve faets, in conaet as a wet blanket upon speeulations. Grain act as a wet blanket upon specuations.
freights have deelinell to ss 9 ll to fo per quarter for orders, with business dull and slip owner less hopeful. Canal navigation commenees o Alonday, and larger supplies and greater.
are looked for by the enil of the month.
Cuncago, April 13th. -The markets for the
week have been generally interestinl, but have week have been gencrally interesting, but have
tended decideclly downward, with an excep-
tional nuward tlirt on Thurady tional npward flirt on Thursday and Friday.
Wheat dealers have been doing a pretty good
business in the aggregate, although the marke
has oceasionally relapsed into dullness and caution. It opened heavy and dcelined, reach
ing the lowest range to-day. The erops are re ported as exceptionally fine the erops are re West. sales of May were $\$ 1.07 \frac{1}{2}$ @1.102 . Cori was pretty aetive, nnsettled and the tendency prices. sales of May at 40 OB @ 42 t. Oats were

 being to-day. Barley opened heary and lower, but closed firm at ontside rates. Sales of cash $\$ 1.06$; Corn, 33 e ; Oats, $22 \ddagger \mathrm{c}$; Iiye, 5 sc ; Barley
 edge v
ligher

## Eastern Wool Markets.

New York, April 13th. - There is nothing o an interesting charaeter that can be said in tirely nominal, due to the indifference that bny ers mauifest regarding stoek, while dealers are patieutly waiting a clauge for the better, but
in the meanwhile would elose out present in the meanwhile would elose out present
aecumulations on exceedingly favoralle terms. have leen received here and thousl the eondi tion is prononneed good, the staple is exeeed ingly short. Holders do not name a price, and the opinion prevails that they will be fortunate if they succeed in getting back cost and ex-
penses. Sales for the week embrace 5,000 bbls old spring California at 23 e; 58,000 lbls Fall
 ern Texas and Mexiean, 14@
of the fast day, the aggregate business of the of the fast day, the aggregate business of the amcunting to only $66 f, 000 \mathrm{fts}$. Manufacturers continue to purchase only for the immediate
wants. The high priees recently prid in Califoruia for the new elip are causing surprise here, as they are three eents higher than curreut sales in this market. Transactions in
Fileeee Wool inelute Ohio, part at 41 (c 42 e for $X$ and abore and XX and above, but round lots eould not be placed at over 40e, and the narke is settling down on this priee for the most
desiralle 1ots of Ohio, Penusylvania and West Virginia. In Mieligan Fleeees there has been quite a concession, some small lots selling at 35 c, bit they eannot now be quoted at over Miehigan. For conrbing and delaine Fleeces there is an increased demand; sales at $40 @ 46 e$, and sone very choice at 50 e . Pulled Wool is
quiet; $2 \overline{7}$ @ 37 za for super and X , ineluding low and medisales at 18(a30c for spring; $15(20 \mathrm{c}$ for
Fall.
PrinlanelpinA, April 16 th .- Wool is quiet;
priees nominal. California fine and medium, picc 30 c ; coarse, 15 ( 24 c .

Domestic Produce.
The following table shows the S. F. reeeipts of Domestic Produce for the week ending a
noon to-day, as compared with the receipts of previous weeks:

| Articlse. | $\left\lvert\, \begin{aligned} & \text { Wreк. } \\ & \text { Mar. } 27 . \end{aligned}\right.$ | Wexh. April 3. | $\begin{array}{\|l\|} \hline \text { Wker. } \\ \text { April } 10 . \end{array}$ | Werk. April 17 |
| :---: | :---: | :---: | :---: | :---: |
| Flour, quarter 8 a | 30,257 | 42,852 | 18,229 | 67,610 |
| Wheat, centals. | 111,493 | 78.721 | 94,050 | 109,522 |
| Baricy, centals | 0,768 | 12,290 | 10,806 | 14,255 |
| Beans, sacks. | 941 |  | 1,118 | 843 |
| Corin, ceutals. | 7,263 | 1,761 | 3,640 | 3,352 |
| Oats, centals. Potatoes, sacks. | 19,173 | ${ }_{16,380}$ | 186 | -9,912 |
| Onions, sacks. | 1,052 | 617 | 720 | 1,033 |
| Wool, bales. | 298 | 607 | 1,675 | 4,528 |
|  | 27 |  | ${ }^{20}$ | 64 |
| Hay, bales. | 1,577 | 1,267 | 1,436 | 1,565 |

BAGS-Prices have not changed since our last report. The market is firm, and sales ar BARLEL-Barley is dull, and takes a sliglitly sales: 340 sks Coast Feed at $\$ 1.10 @ \$ 1.121 ; 100$ do at $\$ 1.17 \frac{1}{2} ; 600$ do Bay Brewing at $\$ 1.384$;
500 ctls Good Feed at $\$ 1.20 ; 600$ do do, $\$ 1.20$; 600 do do at S1. $17 \frac{1}{2}$ jer etl. dvaned for nearly all sorts, and priees have

CORN-W Wins. Corn has taken a further step npward. We note sales: 150 sks Large Yellow, $\$ 1.92212$
DAHI
DAIRI IRODUCE-Butter gains a point, which is very gratifying, ald it is to be hoped good. On the other hand, Checse has dropped as the receipts accumulate. Old style Car nia is not quotable above factory made, is hel
to take the place of imported Eastern.
EGGS-Eiggs have advanced about
FEED - Corn Meal and Middlings are a point higher. Hay takes a lower range; a large cargo
of poor stoek sold for $\$ 9$. The best Wheat is now held at 817 .
rone Apples are about berries have been held baek by the storm, and the price is still 15 c aud 25 c , aceording to the

HOPS-We hear of no local movement in
Ilops. Emmet Wells reports the New Fork market for the week ending April 5th as fol only inquiry at present coming from those who
meet their immediate wants; stocks, in conse quenee, are aecumulating. The war elond in trade in tends to depress many brauches of mentioned the Hop trade, and prices, according to eable reports, have suffered a slight deeline Our own market, in synıpathy, shows signs of prices are now as low as possible, and leare any bottom to the market-
OATS -Oats are in small sale, and prices are thaterially changed. Choice lots are scarce. POTATOES-All are nehanged.
POTATOFS-All good old Potatoes are now worth abo
PROVISIONS-Fresh Beef is a little easier and in good supply. Mutton aud Lamb are trade in Cured Meats is active at the price given in our list.
VEGETABLES-Asparagus is higher to-day because of the bad weather which has prevailed Rhubarb is also a little np. Green peas and WHEAT-Pri
400 etls choice Milling at $\$ 2.15 ; 1,000$ de sales \$2. 14; 800 and 500 do Milling at $\$ 2.05 ; 600$ do Smutty at $\$ 1.90 ; 500$ do do at $\$ 1.75 ; 1,200$ do, Tallejo, at $\$ 1.95$, and 9,000 do choice Milling Vallejo, at $\mathbb{S} 2$ etl.
WoOL-Sales have
choice free Wool than eloped a higher rate We have record of sales of $90,000 \mathrm{tbs}$, of whie Burry sold at 13@16c, and choice Free a


RETAIL GROCERIES, ETC


Gold, Legal Tenders, Exchange, Etc.





## BYRON JACKSON'S

## CELEBRATED PATENT FEEDER AND ELEVATOR FOR THRESHING MACHINES,


trouble of crawling under the stacks or of going around to set the Separat
6th The euginecr can see everything connected with the machine or crew, thus saving
7th. The sacks can be piled on either side of the separator
not be over estimated It saves time labor and grail. No thresher will bo without them From 100 to 200 sacks per day more can be threshed by a common thresher when using these Price of Feeder and Elevator (completc) $\$ 300$. Derrick, Table and Two Forks, with Ropes Price of Feeder and Elevator (completc) $\$ 300$. Derrick, Table and T
Blocks (complete), $\$ 175$. For further particulars scnd for catalogue.

Nurserymen.

## SHINN'S NURSERIES.

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Fruit Trees and Ornamentals,


 DR. J. W. CLARIE,
Dr. J. W. CLARlǐ, No. 418 California St., San Francis
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䬿 OAKlaND, Cal.
James Hutchison, Seeds-
man and Florist. New and Lase Plants, Evergreen Trees,
Shrubs and Flowering Plants.
 Halty. Janamese Persimmonat Reduced Rates. Blue Gums and Monterey Cypress; Ilutehison's Seed-
ling Gooseberries; Bnlbs, Flower and Tree Seeds; Veretaling Gooseberries; Bulbs, Flower and Tree seeds; (evetas
ble seeds. Iary Clinnhing Plants, Convervatory Climb-
ers, Choice Ilants for IIanging Baskets and Vases. An

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Semi-Tropical Nurseries,
Riverside, San Bernardino Co, Cal.
100,000 Orange, L.emon and Lime Trees
 L. M. NEWSOM,

Nurseryman, Seedsman and Florist, East Tweltth strreet near Tubbs Hotal, East Oak-

Floral, Ornamental Fruit Tree \& Seed Line. A larystactok of Bepirinin Cumellias and Azzleses,
the tropical nursery

 CHAS A. REED, Santa Barbara, Cal.
POMONA NURSERY $\begin{gathered}100 \text { arese of } \\ \text { Vinues, } \\ \text { Tress } \\ \text { Plants }\end{gathered}$



## Seedsmen.

## R.J. TRUMBULL \& CO.,

 R. J. TRUMBULL,Growers, Importers, Whotesale and Reta
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INGES, GARDEN HARDWARE. Comprising the Blost Complete Stock EVER OFFERED ON TIIE PACIFIC COAST. Prices Unusually Low. **"'cuide to the Vegetable und Flower darden
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Crosby's Extra Early

$\left.\begin{array}{l}\text { Early Canada } \\ \text { Early Dutton }\end{array}\right\}$ Yellow Flint, Corn. Early Dutton Long Red Mangel Wurtzel Yellow Cllobe
White Sugar

Beet Seed
also, every desirable variety of vegeta
BLE AND FLOWER SEEDS, GRASS AND WhoLesale or retail
GEO. F. SILVESTER,
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SEEDS. TREES. SEEDS.
Continually arriving, NEW and FRESI KENTUCKY
BLUE GARSS, RED TOP TISOTHY, SWEET VERNAL, MEZQUUTE and other Grasees.
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EASTERDAY'S SEED PLANTER.


Was A warded tbe first premium at the Calitornia state Tair, 1877 , as the best corn and secd planter. It has no
equal as a bean planter, having a double alterunting ear. rier is thereby enabled to drop eorreetly with yreat rupid its if desircd. Is easily attuehed to eithier single of gang of the plow Every machine warranted. Priee \$35 Send for Deseriptive Cireular. Made and sold by,
G. H. BREWINGTON \& C $\cap$. Watsonville, Cal.
a ${ }^{3}$ baker \& hanilton, San Francisco and sae



HORTON \& KENNEDY, Managers for California and Pacific Coast.
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IT IS THE ONLY MACHINE That snlts Alat or tuhular wrik of all gizes;





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Adjustable Grain Lifter for Headers.


All fanners wbo wiskl to save grain without waste in




 ${ }^{\text {by }} \mathrm{O}$ BONNET, 221 Mission Street, S. F.

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 pold noort desirable 'Gally Plow in the world Send fo
eircular to MATTESON \& WILLIAMSON,

> STOCKTON, CAL


## GREAT ENTERPRISE :

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## Sierra Flume \& Lumber Co.

Have over 100,000 Acres of
SUGAR PINE, YELLOW PINE, SPRUCE
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Employ 475 Men and 550 Oxen \& Horses.
The Sugar Piue is unsurpassed in quality, and tbe The Yellow Pinh lis frin, fine grained and guperlor to
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The spruce has kreat gtrength, durable when exposed, and cspeailly adpted to Bridge and ship Building. . While
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purpoeses.
Last year thirty millions of feet were eut and the esti-
mate for Isi7 is fifty nillious; fifteen nollivis are now on hand, thorouglily seasoned by the hot climate of Red
Blufiand Cliico. can be filled on a dayg' notice for all
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kinds of

Rourh or dreseed dry, by which elegant and suhstantlel
work nay be aeconplished without delay at tbe usual cost work nay be aceonapished without delay at tbe usual cost
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#### Abstract

Have increased to an extent, necessitating the establishment of Warerooms in London, England, and connected with it is a Concert Hall, the whole combined making the most elegant Pian Warerooms in Europe, and stands there as a monument of American genius and industry.

It is impossible to mention in the limited space of an advertisement the innumerable umphs of this energetic firm. They stand foremost as inventors in Piano building in America and in that respect, no small compliment to their inventions is the undeniable endorsement of all their competitors, as shown in their imitative efforts. Certain principles of the Steinways, are however, so completely protected, that no imitation or subatitute is attempted at all, and th shallow method of crying such inventions down are resorted to and relied upon.

The Steinways designed and perfected the Overstrung and Iron Frame systems. The ap plication of the Agraffe Arrangements to Square and Upright Pianos. The Patent Duplex Scale creating the most beautiful treble tones, (the Duplex Scale is of recent invention and only to b found in Pianos sold recently). The improved Double Dampers. The later idea extending th Agraffes to every string in the Piano. The highest finish to an parts of the instrument, melu ding first qualy or ivory, ebony, large coph, etc. experience alone permits. haracter, that the employment of large capital and experience alone permits. actory record of 18 years'trial on the Pacific Coast in itself assures the purchaser the the vestment is no speculation, but one of perfect security.

The oft-repeated story of rival makers claiming to have been Steinways' foreman, etc.


should have no weight with purchasers. An immense manufacturing business like the Steinway's is divided into departments for the varions classes of work, and a foreman of one department superintends that alone, and cannot be perfected in other details.
The Steinways (a numerous family) are the inventors and designors of the principles of their pianos, and are alone responsible for the thorough execution of their own ideas.
In the Machinery Department at the late Centenuial Exhibition, Steinways were awarded a special medal for an invention for testing their iron frames under a pressure of 5,000 pounds to the square centimeter. (This award was distinct from their medal for the bost pianos cxhibited.) The iron frames in Steinway pianos are the only ones so tested, and while other makers rely on castings from an ordinary foundry, the Steinways maintain their own foundry, and manufacture a frame of composite metal, which adds greatly to the resonant quarities of the instrument in general. It oftcn occurs that the attempt is made to raise the character of pianos constructed on less costly principles to the rank that the Steinway maintains, by naming a price, the same, or astonishing discounts for cash, or extremely long credits; systems not entertained in to make class business. In selling a Steinway piallo, a guarantee of worth is eiven protceting th irstclass business. In sellng a Stemway piano, a guarantee of worth is given protccting the purchaser for five years, and catalogues issuen by the Pacific Coast Agencies have an umform rate with an additional charge of simple interest on deferred payments. Catalogue mailed on application to
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Combined Reaper and Mower,
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Single Reaper,
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string measuring from center of tar-
get to center of each shot, 32 et to center of each shot, 32
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Commend it to the attention of all who use a Rifle, either for Hunting, Defense, or Target Shooting.
The San Francisco Agency is now fully supplied with all the various kinds and styles of Arms manufactured by the Winchester Repeating Arms Company, to wit:
Round harrels, plain and set, 24 ineh-blued. Octagon harrel, plain, 24 incb-blued. Oetagon barrel, set $24,26,28,30$ inch-hlued. Octagon barrel, set extra heary, 24, 26, 28, 30 inch-blued. Octagon barrel, sct, 24 26, 28, 30-extra finich, case hardened and extele heary, 24, 26, 28, 30 inchextra finished-C. H. \& C. S. Octagon barrel, set, $24,26,28,30$ inch-heautifully finished-C. H. \& C. S. known as "One of One Thousand." Octagon barrel, set, gold, silver and nickel plated and engraved. Carbinos hlued, also gold, silver and nickel plated. Military rifle muskets, model 1873. Rifles, muskets and carbines, model 1866. RELOADING TOOLS, Primers and parts of arms.
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It is of Pure White and any Shade or Colur Desired．

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It is the most perfect substance known，possessing unsnrpassed beauty，great brilliancy of color，allher－ ing firmly to the wood，and giving the riehest，most agreealle and umform tints． wi m fact where any Hhouses painted with it are distingnishable for years by their supherior brillisney of finish，over those painted with any other paint．

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From the linest Vermilion，to the more common anl cheaper colors，are specially fine，and being ready mixcd，meet the wants of the public completely．Every person owning a wagon，or any hind of ma－
chinery，shonld oceasionly give them a fresh coat of paint．It would add to the durability and appear－
 chinery，should oceasionly give them a fresh coat of paint．It would add to the durability and appear．
ance of the articles a hundred times its cost．


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Volume XV.]
SAN FRANCISCO, SATURDAY, APRIL 27,1878
Number 17

## A Remarkable Fossil Bird.

Heretofore Europe has led us in the discovery or fossil remains of the higher types of birds, but now, through the researches of Prof. Hayden's survey, a locality has been found in the inseet-bearing shales of Colorado, which bids fair to furnish our naturalists native material of a high order for their studies in the rock-written ehapters of natural history. The highest type of extinct birds heretofore found in this country is a Picariau bird (Uintornis lucaris), related to the woodpeckers. This fossil was described by Prof. Marsh, and w
of Wyoming territory
The engraving on this page presents a matter which is therefore new to the scieutific records
of our country. It is from advance sheets of a Bulletin just issued by the U. S. Geological Survey, and scores another good point for Prof, Hayden's scientifie investigators. The discoverer of the fossils from which the drawing is
made was Mr. S. H. Scudder. The fortunate discovery is described by Prof. J. A. Allen, wellknown as an ornithologist. He gives the new found bird a new genus and new species, and calls it Palcospiza Bella. The description of
the species is based on some beautifully prethe species is based on some beautifully pre-
served remains from the insect-bearing shales of served remains from the insect-bearing shales of
Florissant, Colorado. They consist of the Florissant, Colorado. They consist of the
greater part of a skeleton, embraeing all of the greater part of a skeleton, embraeing all of the
bones of the anterior and posterior extremities bones of the anterior and posterior extremitres
(excepting the femora). Unfortuuately, the bill (excepting the femora). Unfortuuately, the hill
and the anterior portion of the heal are wanting, but the outlines of the remainder of the head and of the neck are distinctly traceable. The tion a high ornithic type, probably referable to the Oscine division of the Passeres. The specimen bears also remarkably distinct inpressions of the wings and tail, indicating not ouly the
general form of these parts, but even the shafts general form of these parts
and barbs of the feathers.

In size and in general proportions, the present species differs little from the Scarlet Tanager
(Pyranga rubra) or the Cedar-bird (Ampelis (Pyranga rubra) or the Cedar-bird (Ampelis
cedrorum). The bones of the wings, as well as the wings themselves, indicate a similar alar the wings themselves, indicate a similar alar
development, but the tarsi and feet are rather smaller and weaker; and hence in this point the agreement is better with the short-legged Pewees (genus Contopus). These features indicate arboreal habits aud well-developed powers of flight. The absence of the bill reuders it
impossible to assign the species to any particular family, but the fossil on the whole gives the impression of Fringilline affinities.
The bones still rest in the original matrix,
and, being somewhat crushed and flatlened and, being somewhat crushed and flatlened, do not admit of detailed description and compari-
son with other types. The furculum is well son with other types. The fureulum is well
preserved, and the limb-bones are all in place preserved, and the limb-bones are all in place recognizable. The position of the cervical series of vertebre and the general outline of the skull can be traced; but no structural characters of the head ean be distinguished, except the proximal portion of the naandible. The dinal groove, due evidently to compression and fracture. This groove is distinctly traceable, even in such slender bones as tibix, tarsi, and elavicles. In point of size, while the furculum and the bones of the wing have all about the
same length as the corresponding parts in same length as the eorresponding parts in Am -
pelis cedromem, they apparently are considerpelis cedromim, they apparently are eonsiderever, he due simply to flattening from pressure. The tibiæ and tarsi are shorter than in the species last namod, but the difference is slight. is the definitemarkable feature of the specimen Both the shafts and the barbs are shown with great distinctness in the rectrices, and the tips of the primaries of one wing are also sharply defined, overlying the edge of the partly expanded tail. The tip of the opposite wing can also be fully preserved that even the claws are perfectly distinct, as shown in the engraving.
The specimen is divided into an
lower half, the greater part, however, adhering to the lower slab. The bones adhere about equally to the two faces. The, drawing is tails filled in from the upper one.

## Horse Breeding in California.

We print in this issue of the Press the second of a series of articles on horse breeding in California, by Joseph Cairn Simpson. Mr. Simpson is in the very front line of writers on the horse and allied topics in this country. Before eoming to this coast he did leading work upon journals which make a specialty of the "noble animal," and the position accorded Mr. brecding at the East, is high and ample testimony trecding at the East, is high and ample testimony
to his merit. During his life bere he has gained
specialty of arriculture. As this view will be
well fortified by plain descriptions of our advantages, it will be well for any of our realers who have Eastern friends interested in horse breed ing to call their attention to this series of arti-
cles. We have already made notable points in the demonstration of our horse breeding resour ces and adaptations, and we are glad to prom these qualifications of our coast in compact and these qualifications of
As our object is to make a truthful and comin its wide sense as a breeh of on this coast not merely as a meaus of sport or fancy, w


FOSSIL PASSARINE BIRD, FOUND IN COLORADO.
a local good name both as a practical horse invite all our reaters to communicate their exman and by his work as turf editor of the S. F. Spirit of the Timex, and writer on turf topics
for the Morning Call. Convinced of Mr. Simpson's titness for the task, we have engaged him to prepare a series of articles for the Rural horses in this shall cover the subject of brecding ject systematically. Heluding porsue the suball practical points of breeding feeding an and training of horses, under our local condi tions, and thus will give our readers a fresh re view of a subject which is at the foundation of agricultural success. Mr. Simpson is strong in the belief that California is of all regions of our country, most favored for the production tain universally recognized preeminence in th
periences upon any point which Mr. Simpson may advance or any others which may seem to to them of importance. We all love a good horse and we are all proud that our State can demonstrate its ability to produce such ani mals. Now let us takc up the subject with not all learn and tach sometling about the breeding of horscs, which shall enable us all to go forward with steps of improvement until ou toric fame of older regions.

Secretary Schurzattributes his recent ill
uess to the large quantities of green tea which
he has been drinking to preduce wakefulness for night work,

Timber on the Public Lands.
What is known as the timber bill, now pending in the United States Senate, is designed to guard the forests on the public domain against being cut down and used by lumbermen, as heretofore, without any compensation being made therefor to the Government, as well as to preserve these forests against wasteful and wanton destruction by any and all parties. Some such legislation as this has for a long time been needed, and it is to be hoped that the provisions of the bill now under consideration will be suftiently stringent to secure the end pro-
posed. This bill allows the free use of all timber necessary for domestie purposes, such as farming, mining, etc., upon land not subject to entry, or, in other words, upon mineral lands entry, or, in other words, up
There is one feature of the
its application to some of bill, however, that in its application to some of the mining districts the clause which declares that no timber shall be cut in the mountain regions within three miles of the upper edge of the timber, commonly known as the "timber line."
In so far as the wooded mountains of most of the country on this coast are concerned, this
provision of the bill, should the latter become a provision of the bill, should the latter become forests extend to the tops of the mountains, having a lower but no upper timber line. This purpose preserving the timber along this purpose of preserving the timber along this
three-mile belt, as a mcans of guarding against three-mile belt, as a mcans of guarding against freshets in the valleys below, this protection of the snow on the higher mountains tending also to prolong the supply of water in the streams descending therefrom. This being its object, the strips of country to be protected from denudation should have been the summits of the mountains, where these are timbered, as in most cases they are. As most of the forest lands west of the Rocky mountains extend up to an altitude of, 000 or 10,000 reet, there is little need to protect their upper line against the depredations of the lumberman.
There is one peculiarity of the principal sideration of this question of timber preserves has not been kept sufficiently in view-and that is their wonderful power for self-renewal. The coniferous tracts of the entire Sierra Nevada, when stripped of their timber, are at once covered with a vigorous growth of young trees, which, when protected against fire and other destructive agents, come along so rapidly that they are large enough to be cut for saw logs in the course of 25 or 30 years, yiclding meantime mmense quantities of posts, poles and firewood ar the thin first a prozess, for they grow must necessarily die before they reach any great size. However much we may require tree planting elsewhere, nature will attend to the work of forest reproduction in these mountains if only we give her a fair chance to do so.
Grranjums and Snakrs. - We lately read an account of a miuing locality in Calaveras county being infested with suakes. In this connection we may observe that the report is that every
species of snake may be permanently driven way from an iufested place by planting gera away from an iufested place by planting gera-
niums. In South Africa the Caffir people thus rid their premises of snakes. A missionary of South Africa had his parsonago surrounded by a narrow belt of geraniums, which effectually protected the residence from any kind of snake. A few yards away from this geranium belt a snake would occasionally be found. It is well known that the whole geranium genius is highy redolent of volatile oils-lemon scented, musk scented, and pcppermint scented. What, therefore, is a very pleasant nose-gay for man is
repungent to the serpent tribe. epungent to the serpent tribe

Douglas Spruce Seed.-Anyone having a quantity of Douglas spruee seed (Abies Dougce put in the way of obtaining an extra price for the same by addrcssing this office. We know of a European order which must be filled

CGorresponoenoe.
$\frac{\text { We aulmit, unendorsed, opinions of correstrondents.-Eos }}{\text { San Luis Obispo County Notes.-No. } 2}$
Editors Press:- When we say that San Luis Obispo is oue of the most thriving cities of southern California, the assertion seems trite among those who are familiar with its choice
location, its salubrious climate and the great resources of the large and fertile county of whicb it is the seat. We hazard uothing in tbe prediction that it will he eventually onc of the most considerable cities of the State, no less from
the natural beauty of the place than from the immense territory of whieh it is the commereial center. A sligbt

May be of interest to your readers. The city is
built upon the site of the old Mission, San Luis Obispo de Toloba, which was founded by the
Order of Franciscans, September 1st, 17I. It subsequently became one of the most, prosperous
missions of California, and with its countless missions of California, and with its countless
herds roaming over broad ranges of surpassing richness, its quaint, red-tiled adobe dwellings,
and the long mission chapel environed by luxand the long mission chapel environed by luxitants ambitious of nothing beyond an easy life oram away days a seene of rare simplicity, and
one singularly at varianee rith the order of tbings whielh now prevail in its stead. The zeal which tho padres dissrlayed in the early
days of their missionary labors, was turned by the tide of prosperity from its legitimate pur-
pose to the mere aequisition of wealth; then pose to the mere aequisition of wealth; the
followed the secularization of the Missions, the restraint of the friars to purely elerical duties, the assumption of the functious of government
by government offieials, and the plaee passed
from mission to pueblo the ineinieney af present town. Some of, the old mission of uild
ings have fallen to decay, but the largest stil remain in a good state of preservation though more than 100 years old, and promise to bridge
the past to a period far in the futurc-long enduring objects of interest to the students of onl
early history

The Environs of San Luis.
Our modern san Luis was iucorporated in I 8,0 , and ineludes an area of four square miles.
Its population borders close upon 3,000 souls, of Tts population borders close upon 3,000 sorls, of It is situated in a lovely valley of the Santa
Lucia range, midst circling lills, by whish it Lucia range, midst circling hillis, by which it is
perfectly gheltcred. The best view of the town
and and surroundiugs is obtained fron the summit
of Mt. Bishop, which lies just north and rises of MIt. Bishop, which lies just northe and rises
to an altitude of 1,000 feet abore the level of to an altitude of 1,000 feet above the level of
the streets. It is nained from a fancied rescmthe streets. It is nained from a ancied rescm-
blanee to a bishop's mitre. It is carpeted far
up the sides with native grasses. On the way up the sidcs with native grasses. On the way opposes a sharl) renonstrauec to our progress iu
that direction. The approaeh to the sunmmit is over a rough declivitous surface, and the rocky
crest is surm crest is surmounted by a pole seored by nuany
initials and dates. Froin this point spread out
on all sides we behold on all sides we behold a panoranaa of fine effects
and living colors. The view embraces within and living colors. The view embraces within versified surface. Westward, stretching away
in the illimitable distance, may be seen the in the illimitable distance, nay be seen the
great Paeific, the bricht great Palitic, the bright sheen of whose waters
is plaiuly visible. Girling its shores area low
range of mountains whose graceful outhines fall like the folds of a garinent over the rocky skele tin uuderneath. Mi. Bishop is one of a line of
isolated muntains, extending 12 milcs north ward and terminating at Morro hay, in Morro
rock. Eastward lies the beautiful Eanta Lucia range sloping gradually downt the the edge of the
town, cut by uumerous canyons and watered by a thousand springs, whose location we eau de de tect at near points by the presenee of cotton-
wood or willow. Extending north and south are low fothills strown out in voluptuous proportions, and along whieh is a thermal bellt,
adapting this portion to the successful cultiva tion of the semi-tropical fruits. Along the
eastern and western base of the mountain are eastern and western base of the mountain are
the productive Chorro and Laguna valleys,
dotted over with the entages of the farming dotted over with the enttages of the farming
commuity. Nesthing cosily at the foot of its
southern slope lies the town tat the in southern slope lies the town bathed in the warm
sunsliue. Two streams, one from Chorro valsunshiue. Two streams, one from Chorr val-
ley and the other from a neighboring canyon,
meet in the center of the city, unite meet in the
The extreme eastern portion of the town is
nnown as Phillip's Addition, and comprises 50 aores, intersected by Palm street. In the
southern limits is located the Plillips and Beebe Addition of 400 acres, and in the western
the Laguna traet of 1,200 acres, well adapted the Laguna traet of 1,200 acres, well adapted
to the most diverse cultivation, aud subdivided int oltot of 10 acres each.
The Missioll
Monterey street. Its courtyard walls are on bling, and the whole place is quiet in the mindst
of the bustling activity of the surroundings. of the bustling activity of the surroundings.
The body of the town is built along Mouterey and Higucrra streets, which run parallel east
and west. Shorter strcets cross these at right and west. Shorter strcets cross these at right
angles, on which are many tasteful cottages
with pleasannt grouuds attached. Scattered the various quarters of the place are the hand-

Tbe Public Buildings.
Tbe court-house is one of the finest build-
ings in the county, and was ereeted at a cost of ings in the county. and was ereeted at a cost of
$\$ 40,000$. It is situated ou Mouterey street neat and tasteful grounds, and was completed neat and tasteful grounds, and was completen
in 1 I7. Above the courthouse is a fue two-
tory scliool building, recently eompleted, which story gchool building, recently eompleted, which,
with two other public schools, has an averaue daily atteudance of 300 pupils, under the tui-
tion of an effieient corps of teachers. The sevtion of an effieient corps of teaehers. The sev-
eral religious denomiuations have eael ereeted neat churel edifices, in which serviecs are reguarly held and punctually attended. The san
Luis Bank building is a handsome twostory strueture, conveniently, loeated, and oeeupied tions. The bank is ineorporated with a capital of $\$ 200.000$. J. P. Andrews is President, and C. H. Phillips Cashier. Mr. Phillips is also agent or a large and desirable linc of real es-
tate, of which we shall have oecasion to speak
in another artiele.
Hotels are uumerous, well built and well
kept. There are several large stores which do kept. There are several large stores which do
heavy business in gencral merehandise a heavy business in gencral merehandise, com-
nanding trade 100 miles from the intcrior, from the southern part of Monterey and the northern part of Sauta Barbara counties. The mechanie tradcs are well represented. There is a
foundry on Higuerra street. The streets are ighted wis
The San Luis water works sulply an abun-
danee of pure water sufficient for all houschold danee of pure water sufficient for all houschold
purposes, for fountains, and for the irrigation of purposes, for fountains, and for the irrigation of awns and shrubbery. A large stone reser broull flumes from the nev failing surite erystal clearness, two niles distant in a shaded canyon.
Two
Two uewspapers are at present flourishing Chas. A. Wood, has been but reeently launeled on the sea of journalism. The other, the San
Luis Obispo Tribune, has been long established, Luis Obispo Trilune, has been long established,
and is known and esteemcd as one of the best and is known and esteemed as one of the best
lapers published in this part of the State. Sinee papers published in this part of the State . Thern
the resignation of the late editor, $O$. F. Thorn ton, the paper has been conduetcd by his for mer partners the 1 resent proprietors, Messrs
Tuley i Watcrs, who will devote themselve assiduously to the development of the county, and the general prosperity of the people. We
were the recipient of numerous courtesies fron these gentlemnen duriug our recent visit to thi
county for which we tendcr our tbanks.
onnty, for which we tender our tbanks.
The different societies are well relresent here, and nearly every intelligent citizen is menber of oue or more. The societies are a
follows, viz: The F. \& A. M., the I. O. O. F focial Clul, and the $S .1$. O. (irange, whic meet monthly, semi-monthly and weekly. Th Hon. Geo. Steele, and is rapidly increasing in numbers.
The ceity is connected with Port Harforl lyy a
narrow-gange railroad, known as the San Luis Ohispo and Santa Marie Valley Railroad. It is $1 \frac{1}{2}$ miles in length, and there is some intention
of extending it this summer to the Santa valley A large freight and passenger depot Ncar the depot are the

## San Luis Nurseries,

J. F. Becket, proprietor. We had the pleasure
of neeting this gentleman, who is doing much of ineeting this gentlenan, who is doing nucll
by pen and example in developing the horticul. beveral thousand trees during the importe months, for which he finds realy sale. 1 saw in his, grounds many fine fruit, slade and orna-
mental trees, and a large and choice collectio flowering plants in open ground and unde
glass.
The climate of this place is halthful, pleas-
ant and invigorating. The averace tempraraant and invigorating. The average tempera-
ture is $65^{\circ}$ and the average rainfall 16.50 inches. Tbe surronnding country is beiug rapidly im-
provell, and land is held at fron $\$ 50$ to $\$ 100$ per acre.
South o
 already lieaded out. The lill lands raise tine wheat and crops are surcr here than on the
low-lands, where frost sometimes catches the grain. Wheat yields fron 30 to 60 bushel and barley from 50 to 80 bishels per aere and
even more. Messrs. Harford $\&$ Chapman own 2,000 acres in this county, most of it being renters. One mile west of and his is the
Laguan, a small body of water, which is per-
manent. West of this is a well improverl ranch with liandsome residence and tasteful grounds the property of S. W. Foreman, who is absent,
superintending a mine in Arizona. Dairying.
Two miles nortlicast of this place is the dairy acres, 450 of whihich is rich botom land. This
land borders the laguna, where the cattle find land borders the laguna, where the cattle find
green rcgetation the year through. The rancl
is stocked with miked, making 85 ponnils of butter per day hlood and are a tine herd, some of there having
yielded from 50 to 63 pounds of milk per day The proprictors are fitting up for the prodnction of cheese, butter making leing scarcely profitable at present prices.
A short distance
A short distance from here is the O'Connor
this plaee, 90 of which are milkcd. The cows are commun stock. Cheese making commeneed
here January I5th, and eight cheese a day are now turned out, averaging 27 pounds apiece.
 rennet, the
vats are us
Los Osos."
From the Laguna, 12 miles uorth to Morro
bay, the valley is known as the Los Osos bay, the valley is known as the Los Osos (the
bear), so named from its being in early times a favorite resort for grizzly bears, who eame here in large numbers to feed on the burr.elover, of
which they are very fond, and wbieh here grew early in the greatest luxuriance. North from
ent these dairy ranebes, the road leads through a beautiful ranch, owned by the Warden Bros. 100 aeres of $f$ eol had made a good stand and was eight inches tall. North of this raneh is another laguna
and beyond this the 320 acre ranch of Mr Fowler, for which he paid $\$ 10,000$. Adjoining is another ranch of 330 acres, whieh was pur
chased two years ago for $\$ 15,000$. These chased two yave ars ago for hittle hill land, the balance being rich, low level lands and monte. J. W. Slaek which the adjoining ranch on the north, through part of the rauch is sand, which produees good wheat at the rate of 35 to 60 bushcls per acre.
To the west, beyond a low rance of hills, in a To the west, beyond a low range of hills, in a
wooded eanyon, lies the 4,000 -acre dairy ranch of Messrs. Cole \& Reid. They have I30 cows, 30 of which they are ranch, 100 cows, with the larger part of the ranch, being rented out and used in the prodnc-
tion of clicese. We fouud these sentlemen practical men and elose observers.
practical men and elose observers. A con-
veuient arrangencnt for feeding young calves is a row of stanehions, forming oue side of an
enelosurc, in whieh the calves are kept. At feeding time eaeh calf is fastened in onc of these
stanclions and a pail of milk sct bcfore it on an stanchions and a pail of milk set before it on an
inclined board. The pails are scalded daily and thus kept elean and sweet. Mcssrs. Cole \& of the Durlam, whieh they believe to be the best breed in existcnce for dairy purposes. best breed in existclce for dairy purposes.
They use a three-quartec Durlan bull, a re-
markablc tine one, whict breeds back to Durham. When tbey came to the county, several best herds of sonoma, but the grades they are now working they consider much superior to the
olld stock. They clain for the grade Durham greater hardiuess, also saying that they lave lost 10 common-stock calves where they have lost only onv grade Durham. They claim for
this grade that it will range over the hills just as well and keep in better eondition than common stoek and attain a much greater weight at a given age, while it is invariably in good con-
dition and ready to kill for early beef when prices are best.
From this ranch we procceded southward, wendiug our way by wiuding grades upward
and over the hills into the picturesque See canyon, a eapital corn country. All the land is here taker up ine pre-emption or homestead
claims. From the See canjon we enter the San Luis valley, whieh we follow to
Near which is the residence of Jobn Harford. Mr. Harford owns ann interest in the railroad,
the wharf and the warelouse. Port Ilarford is one of the best ports on the coast, the storms being few indeed when a steamer cannot make a landing. It is well protected by the bold, jutting Point San Luis on the northwest. The
wharf extends into the bay over 1,000 feet, close in beside the point. The people's wharf is being rapidly repaired at Avila, for the accon. modation of a competing boat, whith, it is
rumored, will run this sumner on the coast. Mr. Harford's ranch consists of 4,000 aercs, well of it being fine farming land. 1 e is milking 4, cows, from whicl he is making butter. He tells Ime that he can make as many pounds of butter on
his rauch as he can of beef wheu properly fixed. He prefers grade Jersey for this purpose, and intends, in course of tine, to get 300 cows for
his rancb, which is used now for dry stock and San Luis, April 5th, 157 s . H. E. Halletr.
shep.

## Tuolumne County.

Fitrors Press:-The flood is a thing of the past; summer weather is covering trecs with aud varicty. The fruit crop will be enormons. Fear of frost is about over. We bave heavy growing luxuriantly. Abundance spcaks from every garden and hillside. Without the occur rence of an unforeseen aecident California will
njoy one of the niost prosperous years of he civilized existence. Day by day the laboring element are heading towards the great San soaquin plains to help harrest the abundan
crops. The city iller need bo idle no longer as soon as the mower and header begin opera
tions. And by all aplucaranees, Europe will re quire onr overplus to feed their many arnics.
To think of it in this day and Christian senera. tion, for tho one corner of the globe to kill of the denizens of another corner inerely to
pride and ambition. But they will pride and ambition. But they will require
something to eat, until they eat an ounce of lead,
fornia will be willing to exchange food for their surplus gold.
Small patches of Egyptian corn were planted
in this county the past season, with in this county the past season, witb good resulte.
Preparations are Preparations are naming for a more exteusive
cultivat of this prolifie plant, by introdue.
ing the have such a deadly effect upou stock as we bave just expericuced.
come more genera
vided for a higher grade of breeders and milkers.
If not worth good care they are not worth
having, as the day of general out-door forage is nearly gone, except a few months in spring
smongst the foothills and amongst the higher
Sierrat Sierras in summer. The same principles will
hold true with sheep. Alfalfa and Egyptian eultivated to advantage wherever irrigation may be obtained. Few valleys among the foothills poses, either from natural springs or company ditehes. Tbe orchardist can use the water when not required for mining.
It is a self-evident faet that settlers in the than almost any other location in Uncle Sam's variety of products is lare is equable. The day are suffieient for goodl health. The firesid
dine is cosy and comfortable. There is an absence o live and let live. I know of no more desirable location for passing a long and happy existence
than in the valleys of these same grand old mountains, clad witb pine and chaparral. The wintersare not scvere. . he spring and autumn
are truly Italian. The summer is made endurable by cool nights and pleasant shade by day There is still room for the worker with smal apital. Time will bring a value to these valley Railroads will open up the hidden value o these negleeted spots of fruitfulness and beauty

Mt. Pleasant, April 7th.

## Horticultupe.

## Thin Your Fruit

Editors Press:-Last year there was a ligbt crop of fruit, chiefly because the trees ex-
hausted themselves the year before. Now again the trees will be orcrloaded, the fruit will be small, and next year there will be almost noth ing-all old trees will have established the habit of producing once in two years. This is a great evil in growing fruit. Ist. Bccause
when there is a good price you have noue to sell. 2d. The canning and shipping busiuess is iuterrupted by a short crop every other year 3d. The trees are stmuted in their growth by being overloaded. 4th. The year of the larg How Can this Evil be Prevented? Simply by picking off all except what the the time to begin with apricots. If the top of the tree is bushy, eut out half the twigs, and then pull off until you can lay your hand W and at the grouud literally eovered with little apricots, you will say, jearrectop. Wait two months, and you will not tonched it, and it will be good, and bring a good price. Follow the same rule with

Peacher,
Only observing the time to begin is when they
If the tree lias the curl leaf, tbe fleshy leares should be picked off at the time of thinning.
This will enre the evil effects of the curl-leaf discase. Do the same with

## A pple Trees.

The process of thinning may be contiuued The earlier it is done, however, the bettcr, inas-
much as the tree will give all its strength to the much as the tree will
fruit which remains.
Pears follow the same rule.
Plums nced thinning, so that they will not Plums nced thinning, 80 that
press together when fully grown. Cost and Proft

## One much.

much."
Let us see. It may eost 10 cents per tree,
where the tres bear forn boxes cacll. Ir in tot
thinned, the fruit may bring 23 cents per bor.
If properrly thined, it will tring tore readily
sl per box. The expense of puting a box of
fruit into the market is 25 cents; hence, we
have: Tree, not thinned, four boxes small fruit, $\$ 1$;
 thinning, 10 cents; marketing,
penses, $\$ 1.10$.
Yrofit of tree, $\$ 2.9$

Conclusion
Either dig op your trees and plant oth r things or thin off your fruit. While you send
small, infcrior fruit to the market, you injure
yourself and me. One box of poor fruit will ast a family as long as two boxes of good.
Centerville, Alameda county

## The Stable.

Breeding Horses in California. - No. 2.

## On well established grounds it may be con

 idered that the climate of California, is as well adapted as can be for the breeding of all kinds of horses, and that the other reguirements are in keeping with the climatic.The breeder is assured of this from the past experience of others, and those who have been bere for some years, and who have paid attention to the subject, have deduced the same facts from not restricted to one class of horses as is the case in other countries. From the thoroughbred to the heavy draft horse, from the fast trottcr to the saddle pony, all can be reared in perfection, and at the minimum cost.
The history of California has proven tbis. rom the time of the settiement by the spaniards ession of wonderful animals wben the circumstances attending their production have been duly considered.
sent to Mexico, the same metiods of breeding followed; in Mexico the breed degenerated to race of vicious, worthless animals, while in California tbey were capable of performing won-
derful feats, and covered long distances in an derful feats, and covered long distances in an ment which other families conld not have enment which other families conld not have en-
dured. Confued in a corral over night, saddured. Confiued in a corral over night, sad-
dled in the morning, "stakcd out" where they could only obtain a scanty supply of grass at at noon-time, and ere the sunset, upwards of a
hundred miles were accomplished. Perfor mances like this were not of rare occurence, and journeys of still longer distances tban a hundred miles
authenticated.
While therc is no doubt that the progenitors of the native Californian horses were the finest animals of the time, at least the very best for
the purposes which horses were then the most the purposes which horses ware then the mos treatment awarded them here would have resnlted in palpable inferiority. There was litte bred promiscuously, the best of the stallions bere promiscuously, the best of the stalions turned loose with "the band" to take care of
themselves. Abundant as the green and dried grasses were in the early ante-aurifcrous days, there was a period in each year when they were
on the "ragged edge" of starvation. When the on the "ragged edge" of starvation. When the and germinating the seeds, as the farmers of the oldeu time spread and rotted their Hax, the muscle and bone-forming material was scant
enough, and the growing colts must have had enough, and the growing colts must have had
such backsets as ouly could be overcome by the plenty whicb was sure to follow. Suppose thatin lieu of this entire trusting to nature, the horse we write, had taken the same care of them we write, had taken the same care of them hand when the season of scarcity was on hand and before the plants bad drawn on the sun and
air for stronger qualities; had carcfully chosen air for stronger qualities; had carcfully chosen
the best of both sexes for procreative purposes rigorously excluding the inferior and moderate; had, from time to time, imported the best that
could be got to mingle a fresh current, who will could be got to mingle a fresh current, who will
say that there would not have been a breed here equaling the fam
The writer implicitly believes that the original stock of the thoroughbred was largely the California horse has sprung, and that the same intelligent care the English have shown in perfecting the race, wolt
lowed with the same result
This is predicated on the success which has followed the lack of all care, but which the superiority of soil and climate has overcome, as
shown by performances which only the thoroughbred could excel. I have been informed horse before a single thoroughbred was iniported, that in addition to the rare quality of would be a fair rate for a race horse, with heavy leconds, and wile in about one minute and 50 of a mile at a great Hlight of speed. Treat the nustangs were used for the the manner these ny other country there would be such a woful
alling in Again, if this country has such a manifest uperiority over others, as the breeding ground
or all classes of horses, there should be further
roofs of roofs of it than the hardihood, iudurauce, and
pced of the can be sbown elsewhere, and this determined fanciful estimate. This would confine the no-
tice to the horses of the turf and the tracks, as tice to the horses of the turf and the tracks, as
others would have to be classified by opinion only, which would not be a sati
to those who disputed the claim.
In selecting track horser, to prove the ground In selecting track horser, to prove the ground base the argument on; and though there are base the argument on; and though there are
plenty of large powerful work horses in Cali-
fornia, and quite as many fine coach and carriage horses in proportion to the number, there is riage horses in proportion to the number, there is
not absolute proof only in the cases where the record supports the allegation.
"Thad Stevens" and his sire were bred in California. "Thad" has the fastest record for the
31, 4th and 5th heats of a mile ever made, the 31,4 th and 5 th heats of a mile ever made, the
time $1: 43!, 1: 46 \frac{1}{2}, \quad 1: 4.5$. The same horse has time $1: 43!, 1: 46 \frac{1}{2}, 1: 4.5$. The same horse has
the fastest second heat of four miles to his redit, viz: 7:30. "Thornhill," a California bred horse, and only three-quarters thorough and "Ballot Box," also of California birth, was only beaten a short distance in the fast heat of four miles. "Ballot Box" was only three year it a great performance for him. It would be held a piece of folly in the East, to think of running a borse of so little breeding as "Thorn-
hill" among race horses, and doubtless there is

 inay prove in the forthcoming match in which already done enough to carn a legitunate claim to rare excellence. But the instances given in which California has the "best record," are suf ficient to prove that the best qualitics of the other highly meritorious perfornances might In trotting, a California horse, "Controller," can show the fastest record for ten miles by upwards of 30 seconds, and in making this held the scepter in the last for a long time in
this class of races. The number of horses which have beaten $2: 30$ is very large when compared
with the total which have been trained, and a record of $2: 16_{4}^{3}$ made by "Occident," $2: 20.1$ by
"Sam Purdy," $2: 23 \frac{1}{2}$ by "Nerea," $2: 22$ by
" On " 2 " and $2: 2+$ by "Defiance," all bred in California while there are many others which have trotted nearly as fast as the examples given. At a
pacing gait, California heads the list for twoinile heats, "Defiance" having made a record for that distance of $4: 473$, which is not only
the fastest pacing time, but is two and threequarters seconds better than the best trotting
time in the calendar. "Defiance" also pace time in the calendar. "ine the only horse which ha praced that fast and also trotted a mile in 2:24 It would be supererogatory to illustrate fur-
ther, and if so many of the fastest have been
bred in the infancy of the comparatively few animals, what may not be expected in the future. When I come to writc variuus families will be considcred and the the mentation which has been made to the breeding stocks in the few past years. Iu the first place
I have aimed to show, in a few words, the great I have aimed to show, in a few words, the great natural advantages wbich are here presented to
the breeder, and which insure him success, provided he follows the pursuits with ordinar judgment and care. While there may be profit attending the breeding the best of all
kinds, it is only really superior animals wbich will prove remunerative. How to succeed in

## Arboricultupe.

SUbstitutes eor Boxwood.-It appcars, says the British Trade Journal, that in consegueuce decrease in quality, one of the principal importers of thisceded in introducing two American woods to be used instead of box in the manufacture of shuttles, a purpose for which immense quantities of boxwood have hitherto heen used The woods so substitnted are those of the cornel and persimmon. The first is appareutly the
Cornus Florita, a deciduous tree, about 30 feet high, growing abundautly in woods in varions parts and is used chietly in America for the handles of tools and for shuttle-making, and, when properly seasoned, is mucb superior to Persian box
wood. The same may be said of the persimmon (Diospyros Viryiniana), a tree belonging to the
ebony family, a native of the United States, ebony family, a native of the United States,
where it grows to a hight of from 50 feet to
( where it grows to a hight of from 50 feet to (i0
feet, and a dianneter of a foot or 18 inches. The heart-wood is of a dark brown color and very
hard. The trunk is covered with a very thick, hard, and rugged bark. "One great poiut to be particularly remembcred in the preparation of
these woods for shuttle-making is the very gradparticularly by artiticial means; this is the more cornel, nnduc haste in seasoning, it is said, havthe wool. As an illustration to some exten
of the effects of the war, it may be stated that whilst in 1876 over 10,000 tons of boxwood ed shows
5,000 tons.

Flopiculture.
California Lilac-Ceanothus Thyrsiflorus.

## Emirons PREss:-Enclosey you will find the flower and stem with leaves of a shrub found prowing in this count




Edirors Press:-The plant specimens sub mitted to me for determination are twigs of the exceedingly beautiful Ceanothus thyrsiforu (Esch.) or "California Lilac." It is of the same
fanily as the "Jersey Tea" of the Eastern States, so celebrated as the herb used by our Revolutionary heroes instead of Chincse tea unfairly bearing a heavy duty imposed by old England
There are 18 species of the geuus Ceanothus and some very fragrant, either by their flowers and some very fragrant, either by their flowers
or foliage, while others still are much relied upon for forage plants.
This species thyrsifforus, is a tall shrub 6 t squarc), leaves oblong or ovated (i. e. nearl a half inches long, usually smooth and shining above, canescent beneath; flowers bright biue in dense, compound racemes (i. e. a thyrse, like
the well-known lilac), which termiuate the nsually somewhat leafy peducles. This spe-
cies is well worthy of cultivation, also several cies is well worthy of cultivation, also several
others, among which may be mentioned the others, among which may be mentioned the
curious "Mountain Carpet" of the Sierra, $C$ prostratus (Benth.). It spreads on all sides for
yards or droops over banks, covering rocks or logs in its way with a thick carpet of bright green, prickly leaves, hidden in spring by
abundaut blue or white Howers on low umbels. This species being a slow grower, would make an exquisite lawn or cemetery plant.
C. spinosus (Nutt.), found on the foothills the southern coast, sometimes becomes a large
shrub 12 to 20 feet high and a foot thick. Branches spiny, leaves coriaceous (leathery) deep-blue, in a small thyrse; fruit resinouscoated. This species forms large swelling
of the trunk just under ground, (the "red-root') so much prized for fuel, as luckily it flourishe where forcst trees are few or entirely wanting.
C. intezerrimus (H. \& A.), rcsembles the first but is more slender, with terete (round) branche and large (four to six inches long) thyrses reaching limbs: This species abounds both in highly prizizountains and the sierra. It eashly prized by stock raisers for forage. Cattic
eawn the weak bushes and brows
off the slender branches with off the slender branches with their fragrant
leaves and Howers. I have frequently heard stock men say that they valued land covered by
this shrub-called by them "White Tea" or this shrub-called by them "White Tea"
"Deer-brush"-equal with the best grass grain lands. Another beautiful species of simA.), with blue flowers in short, simple, axillary racemes, one-half to two inches long; leave
ovate or cordate, often tomentose beneath and sliky on the nerves.
These two species last described might be very profitably introduced into the treeless, whost nowhess, coast hills near san Francisco,
where now the poisonous Rhus diversiholas
(poisou oak), and other useless plants are al lowed to run riot.
While on a recent weck's exploration of Mt.
Diablo and vicinity, I was mucc impressed by the bare condition of some of the, apparently iruitful slopes of the Contra Costa inountains,
and was about to bring up the subject of plant and was about to bring up the subject of plant
ing them with Cecanothus, now bappily called up by your lady correspondent. I hope some on will set about planting sucb slopes perhose re fered to with forage plants, and perhaps none pense than these fragrant "tea "llants."
beeds of $C$. inteserrimus, or in ither tea, can ties of the Sierra, while seeds of thyrsifforus and sorediatus can be obtained from the south, by advertising for them in time. While certain
wise and prudent minds are reclaimiug the hot wise and prudent minds are reclaimiug the hot
descrt regions of southern California and Arizona with eucalipti, lct some equally wise ones cover our bare coast hills with the several beautiful, fragrant, forage-producing species of Cec-
Alaneda, April 16th

## Herbaceous Vines.

Ebrons Press:--There is no class of plant more charming than vincs. In California cspee ially are they worthy of more care and atten few I have found of the hardy herbaceous vines particularly adapted
walls and arbors in our State
Climbing Roses
Are among the finest, and there being several varieties it is hard to make a choice. The Baltimore Bclle has no superior for delicacy and
exquisite fragrance. The flowers arc of a pink ish white color, very doublc and borne in larg
grower, which for profuseness of bloom bas
been surpassed by none of its tribe, while fo covering large trellises rapidly there is notbing
better. The flowers, however, are ratber coarse better. The flower
and lack fragrance

## Honeysuckles

Are the finest vines I am acquainted with for any purpose, and were it possible for me to suckle. The botauical name is Lonicera. The finest of the family is $L$. flexuosum, or Chinese makes a rapid evergreen honeysuckle. It usting insects, and is particularly desirable for the rich, dark hue of its evergeen foliage. The lowers are very fragrant, produced in abunlance in spring, and, if watered, blooms freely during the summer and autumn. L. hallieane or the Golden Leafed Japanese honeysuckle, is
an equally desirable varicty in equally desirable varicty. The flowers ar very profuse during spring and possess a rich
fragrance. The foliage is netted and veined rich golden hue. The netded and veined honeysuckles is a handsome bloomer, but is so iable to the attack of the plant louse, that I advise all to respectfully let it alone

Passion Vine,
Or, as it is botanically kuow, Passeflora, is one only to the honeysuckle. The foliage is very pretty, of a good color, and I bave never known it to be injured by insects of any description.
The flowers, which are very abundant during he summer, are odd and pretty, but lack the desirable quality of fragrance. There are seve Incarnata bears ricb purple blooms, and is the one generally grown. There have been severa new sorts introduced during the last few years. altbough of slow growth should not be forgot, or its lack of bloom. Bignonia grandiftora makes as grand a sigbt
uring the late summer inonths as any one could wish to behold; the flowers of a bright orange scarlet color are very large trumpet-
hape, from which the plant takes its common shape, from which the plant takes its common
name of trumpet vine.
Answers to Inquiries.

Double carnations are usually propagated from slips or layers; they are all originally,
however, started from the seed. From a packet f choice seed you would get a number of fine double flowers, while the siugle ones could be bed, transplant when sufficiently large to
handle. Keep them well watered handle. Keep them well watered during the summer, they will fower the second summer
from seed. You will not get many seed in a
packet of the choicer strains.
Lily Pardalinitu.-I have a hulb of this lily, I planted
it in a box of sand. Should it be kept moist or dry ? - X Your L. pardalinium should be planted in soil composed of one part leaf mold, one part
sand, and one part garden loam. If kept in a pot, set in a cellar and keep moderately dry. In the spring water freely and until it blooms Dallus.- When should dahlias be planted in Califor-
nia? I planted mine in the fall and they decayed.-A. R. I plant my dablias in the latter part of May the winter. If planted earlier than May 15th they bloom in the heat and dust of summer the flowers being generally small and inferior
El Dorado, Cal.
The Use of the Precious Metals in the Currencies of the World.

At this time, when so much is being said silver in the currencies of the world, it may interest the public to know the countries, with their populations, in which silver alone is recognized as the standard, those iu which both gold and silver are employed and those in wbich gold alone is in
using nations are


The bi-metallic nations, that is those using oth gold and silver as a standard, are Relgium.
Bolvivia...
France..
France.
Ireeco..
tapy....
thail
Switzorland. $5,100,000$
$1,800,000$
$6,100,000$
$1,500,000$
$2,800,000$
to this we add the.................. $\begin{array}{r}16,500,000 \\ 2,700,000\end{array}$
00. we have $1,012,000,000$ peoples, 45,000 , either silver or silver and gold standards, while ireat Britain and her provinces, Egypt, Portufermany, Sweden, Denmark, Norway. Chile nd Japan, with $180,000,000$, use a gold stand

growers have their gardens dressed and the
outlook is promising for a hounteous yield. growers is promising for a hounteous yield
outlookberries will be in market this week
Strawber Vineyards and orchards are worked up. Veg-
etables are sown. Egyptian corn will be
planted by many parties on the plains for stock peed. It has heen grown before and found valu-
fere ahle for that purpose. will again resume; crops can be put in by July, so pumped out and the levee repaired this summer. The flooded district below the city will put in use as far as practicable for the season. Nature's Howers aud those in cultivated form rose jassamine, orange blossoms aud hundred of variegated forms of wild flowers send out
their sweet-scentcd perfume on the surround ing atmosphere, makiug truly the home of the hushandinan
Twenty-Five Dollars an Acre.-RecordUnion, April 20: The high water in the Sacra mento river and the many breaks in the levees
on both sides of the same, have dealt a heavy blow to the many vegetable gardens bordering the same. The Italians, Portuguese and Chi-
nese who had been each year occupying more and nore land below Sacramento city in raising garden truck, and who have kept the city and many of the surrounding towns and much of the adjacent wheat-growing country well sup been this year completely drowned out and other localities and other land to cultivate. Large numbers of these people have moved up son and rented lands for gardens. They are son and rented lands for gardens. They are river having been comparatively low this season, the lands bordering it have been compara tively dry, and being generally of warm early doned. It is not probable that very large profits will be made after paying so high a rent,
but the renters will keep themselves and their vegetables in the market, and thus hold on to the trade for the future. Whell the water goes down on the Sacramento sufficieutly, the most
of these gardeners will clean up their places on of these gardeners will clean up their places on
the Sacramento, and put in a late crop of some kind, and thus have things ready for another year. The three nationalities of people above the vegetahle producing business in this vicin ity, American farmers having generally turned dairying.

## SAN JOAQUIN.

Whisky Slough Dammed. - Independent, April 15: The work of damming Whisky as an adjunct of the reclamation works, was engineering skill that it is worthy of note. The dam was commenced in November, and has enever since. It has been done iu the face oit the grcatest difficulties and at a cost of about $\$ 20,-$
000 . So excellent an authority as Gen. Alexander pronounced the construction of a dam across this slough an impossibility and advised
an ahaudonment of the work. The slough and An ahaudonment of the work, the slough and the dam, and it carries a depth of 30 feet of wa
ter for ten miles. The dam is at a point where the slough is 42 feet deep and 202 feet wide, nately, were of sediment formation, and quite solid, although the ouly available material for
making the dam was peat sods stripped from he land within a radius of 1,000 feet, placed carefully interwoven. The dam was built in
sections of 15 feet at a time advanced toward he center from either shore, with rows of piles lriven firmly into the hardpan as guides.
When the gap was narrowed to 40 feet, the ressure of water was so great that its roar in
jassing through could be heard a mile. Large
lusters of vere placed in the mid together with chains vere placed in the midde and the foundation
if the gap was laid with 15,000 sand bags.
Che men worked at the closing for 24 hours vithout cessation, and when it was all over the vent was celebrated by a dinner given on the
teamer Clara Crow. The dain is 85 feet wide in top, and is being widened to 100 feet. One
undred and fitty piles, each 70 feet long, have een used in the work. The dam has now be
a a week, and shows no signs of weakness. a a week, and shows
Editors/ Press:-Vegetation is again being
efreshed by fine showers which fell during the ast night, and at this writing are still falling,
1aking the beautiful scenery by which San laking the beautiful scenery by which San
uis Obispo it surrounded, the more lovely
ould our Fastern friends but "View the land cape our Fastern friends but "View the land
we speak from our own feelings and experience Vermo been persuaded to try the hills of old we endured, not eujoycd, for two and one half years. Although among friends we loved, the
supposed necessity was very trying and the ope vain. -We are convinced if the varied bounties of the Pacific coast will not bring health, it is not to be found.-J. H. Fisher, SONOMA.
Remarkable Growth of Tobacco-Flag, April 23: Andrew Maynes informs us that he has at his ranch, six miles northwest of this city, two acres of the finest Cuban tobacco, the plants now standing three feet high, and wil tender plant, the fact is a proof of the wonder bility of successful tobacco raising in this section. Mr. Maynes understands the busincss of curing as well as raising, having had the expeready sale for his cured tobacco at 50 cents per pound. The laud best adapted is medium-
that most productive of weeds and suitable for grapes, but not for grain-otherwise the growth
would be too rank. The yield will be ahout a hogshead per acre, or 1,000 pounds. - [We should be well pleased to lhave Mr. Maynes
give us an account of his method which cures give us an account of his method which cure
tobacco successfully in this State. There are
many men in search of such a method.-EDs many me
Press.] Rains. -Santa Rosa Times, April 23 The north wind of last week parched the Plowing became a difficult job, breaking the crust in great clods, and making it hard work to get in the spring crops. But the gentle and restored the soil to a good working condition. The bad efiects of the sirocco-dike winds
have disappeared. The Cpops.
Phe Crops. - A few days ago we made a trip Rosa. Grass is a luxuriant crop all the way.
Eveu in the timber and on the rocky lills there is plenty of feed. Wheat, through the plain last year. It is uneven, short, aud with or corn and potatoes through is progressing where the soil is a lighter loam than in this valley.

MA.
Fifty New Farmers. - Red Bluff Cause The people of Tehama are rejoicing over the
liberal provisions of the will of the late R . H. Thomas, as though they foresee the settling up of greatly to their advantage, as well as the ad Tweuty-two thousand acres more or less of the finest arable land in the count
ble iu lots to suit purchasers.

## TULARE.

Farming Prospects in Tulare County.Tulare county is in a nore prosperous condition jubilaut over the encouragiug prospects. The bushels, against 200,000 in 1877, and 500,000 iu 1876. There is now from 14,000 to 15,000 tons or last year's crop ou hand, mostly in the hands much land in harley this your one-fourth will require an immense amount of grain-bags
to hold this year's crop. There are about 50 000 second-hand sacks in the county, and it is estimated that it will takc 400,000 for the grow ing crop, when harvested; and, at $12 \frac{1}{2}$ cents
apiece, it will take $\$ 50,000$ to furnish this county with grain bags alone. About 18,00 Tulare city, last year. There is warehouse room for 100,000 or 120,000 sacks, and the deficiency of storage roon in the Mussel Slough Probably several uew warehouses will he buil this summer, but even then the amount that
will lave to be left unprotected will be great Sheep will nearly double in aud are not likely to fall off in price. The raising of hogs will receive a new impetus, and
will likely become one of the inost important industries of the county. Therc is a remarkable planted this year. The area of irrigated land will be greatly enlarged, and capital increased. The sums paid to the Government and railroad digious, all of which leaves this part of the caused a scarcity of money and a high rate o interest, which has been a great drawback in develcping the resources of the county
Water-Fallowing.-Delta, April 11: W
often hear people say that the laud in thi county is not fit for farming purposes; that the
dry season is toolong, and there is not dry season is toolong, and there is not and what little there is is controlled by those who have oldlor charters. Nearly every stream in the is now runing full, and the water running to waste and it. Thousands of acres could bc flooded, the land water fallowed and prepared for sumand spring, when water is plenty, would recrops without irrigation. There is enough crops without irrigation. There is enough
water just now for all, if it be properly distri-
runs to waste annually, would irrigate more
land if used in this way, than that which is used land if used in this way,
by the present method. YOLO.
The Rain.- Mail, April 18: The rain which fell on Sunday night ineasured 0.72 of an not being in perfect torrents at times, but but little damage to the heary wheat, much of which is now from two to four feet high, and standing very thick upon the ground. On Mon-
day there was a little rain aud some hail, but day there was a little rain aud some hail, hut
not cnough to do damage. The weather was not cnough to do
YUBA
Severe Hail Storn.-Appeal, April 20 There was a terrible hail storm upon a territor of half a mile or so south of the Buttes, las Saturday evening. Hail stones as large as hick.
ory nute fell for several minutes, and in suff. ory nuta fell for several minutes, and in sufth-
cieut quantity to completely cover the earth. We also understand that M. O'Connor lost over 100 fowls, they being killed by the hailstoncs. Probably other damage was done.
terviewed oue of our orchardists as to the fruit prospects for the season, when he informed us
as follows: Peach trees are suffering with curled-leaf, but are likely to recover and bear a fair crop. White apricots will be plenty, but
Moorparks very scarce. The cherry trees are loaded with fruit, and a large crop is promised. There was a fair crop of cherry-plums, but the
heavy winds of last week knocked most of them off. Apples, plums and pears are the most

News in Brief.
Reno is again iufested by tramps. The Paris Exposition will open May lst. The river Danube is now open its entire The new canning factory of Rio Vista is A company is being formed to light Paris by
Dr. Carver, the great shootist, is now starr Peter Cuoper is said to be a milliouaire o Seattle shipped to San Francisco 8,925 tons coal during the month of Harch. There is in the vaults of the State Treasury The Open Letter, the Workingmen's organ, has been changed from a daily to a weekly. Alexander condidate for the Presidency. They had a severe shock of earthquake Constantinople about a week ago.
Count Joannes has cleared $\$ 10,000$ this season by his Shaksperian riots. or \$12 per ton.
About two and a half million silver dollars have been coined to date.
Duning a recent gale along the northern coast ouring a recent gale along the noin, 150 fishermen were drowned. The authorities of Sea
that city of opium dens
Governor Castajon is making determined fforts to rid Lower California of had characters. was fatally crushed at Omaha, while coupling Over 11,000 passengers were carried over
the California Street railroad on the opening
In. San Francisco the rainfall amounts to 35.11 inches for the season, against 10.85 for
1877 and 30.72 for 1876 . The House has passed the bill appropriating Thomas Jefferson.
Boston pays about $\$ 640,000$ yearly in assisting poor families-an average of about $\$ 35$ to License Collector Sinton issued 3,005 hicenses in March, for which the city received \$30,910.
ELKo
Elko people have a dead thing on their
county prisoners. They make them work imroving the cemetery.
Industrial exhibition thite will hold another August 6 th.
August 6 th.
Only the personal friends of Wm. M. Tweed attended his funeral, which took place from the attended his funeral, which took place frs.
resideuce of his daughter, Mrs. Douglass.
Archduke Francis Cinarles of Austria left
a fortune of $\$ 12,000,000$, one-third of which is
o be applied to relieving the poor.
Tue horse "Controller," on a $\$ 1,000$ wager,
made 20 miles in 58 minutes and 57 seconds at claimed to be the biggest feat on record.
Caft. James Goonwin, an old citizen of
Oregon, was murdered on the 18th inst. near his residence at the foot of the Cascade mountains, for his money.
ber of early scttlers to California, and who be came the moving spirit in the Lobos island enterprise, died recently in the city of New York. On the 14th inst six inches of snow fell at Grass, howey and vicinity, the not broken down nor the young fruit injure
The Receiver of the Visalia Land Office has received
ceive sil
for fees.

On Weduesday of last week, many of the
higher peaks in the Coast range were covered with snow.
The Nationalists of Pennsylvania are to hold their State Conveution in Philadelphia on Wednesday, May 8 th.

> Vigorous fightis going on between Chicago St. Louis roads for the Missouri river and S

Paris dispatch says: Greece has accepted the invitation of the United States to in national bi-metallic Conference.
plicity in the murder of the Earl of Leitrim plicity in the murd.
The Coopers' strike in this city is at an end, the employers who held out having made the concessions demanded.
A FIRM in San Antonio, Texas, have been
shipping arms to Mexico for some weeks past A movement against Diaz is suspected.
The New York Herall has several dispatches from the Solith and West, announcing bank and other establishments paying out gold at par.
Three Louisianians are credited with killing 0,000 alligators last year. They saved the oil and sold the hides for 75 cents apiece
A Boston paper estimates that at least $\$ 10$, to be invested in mining stocks
Blosius Pistorius, an ex-priest, has been denied a new trial in Montgomery county, Pa.,
for the murder of Isaac Jaquette, and will be hanged.
THE
THE resurvey of San Diego harbor has been completed, and shows $23 \frac{1}{2}$ feet at lowest water
on the bar-a notable improvement since the of 1856 .
A. D. Remington, an old paper dealer of Sall Francisco, has purchased the Lick mill property,
in Santa Clara county, and is fitting it up for the manufacture of manila and printing paper.
Thos. Batcieldar, of Fulton, Oswego county, 80 years of age, has been uninterrupt edly engaged in the printing business for 67
years, and claims to be the oldest printer in the United States
The Iron and Steel Association's Bulletix says that the total production of pig iron in the nited States last year was $2,314,585$ tons
2,000 pounds, a gain of 221,349 tons over 1876 The jury in the case of Breen and Cowie derer escape at Virginia City, having failed to gree werp nine heing for acquitta chased in the neigborhood of Troy, N. Y., and in the western portion of
A serious riot occurred lately near Glasgow Some miners on a strike attacked the Sheriff's officers who were serving notice of ejectment.
Several houses were wrecked aud telegraph ines destroyed
Larkin G. Mead has designed a monument to the late Oliver P. Morton-a shaft rising from a base and sub-base, and bearing at a hight the attitude of speaking. Cost $\$ 100,000$.
the attitude of speaking. Cost $\$ 100,000$.
Tire schooner Paloma, in port from Tahiti, reports that on February 7th, a scvere hurri-
cane raged in the Pamotas, and that about 120 persons were killed aud a great deal of property destroyed. panied with wind, thunder and lightning, at Deadwood, iu the Black Hills. The town was
flooded, the roads torn up and nuch damage ir is alleged that important documents are coming from Cuba, as a result of Judge Leon-
ard's visit, showing that the kidnapping of Florard's visit, showing that the kidnapping of Flor-
ida negroes and enslaving them in Cuba has been carried on extensively
Frank Spearman, a native of Ireland, aged about 45 years, was crushed to death last treet railroad. He was a carpenter and leaves wife and six children.
The late Mark Hopkins left Great Barring rough boots, and a little money given to him hy his uncle. Last year his wife visited Great Barrington in a special palacc car, with a large

A thirty-mile race was run at Vallejo on the 20th inst by W. V. Smith and M. Stilts. Six horses were us hour and 25 minutes, but the race was awarded to Stilts, Sinith laving sprained an ankle and being aided to mount during the contest.
anker, Mayor pro tem. and owner of the En $n$ -uirer-Sun in Columbus, Ga., was fatally shot in the back while entering a train at Seale, Ala.
by Dr. R. M. Palmer. The latter had sued alishury for $\$ 250,000$ damages to his character he jury awarded him one cent. Palmer fled blew down a number of houses, killed a son of George Wallace and a son of Mr. Pearce, and wounded twenty or thirty other persons. Trecs were torn up, and the country presented the
appearance of bcing ravaged by a terrible cyclone. A man nained Reilly was carried over a house and over trce-tops, and set down un. injured. Cattle were hurlod to long distances
and killed. Hailstones fastened together in great masscs. Alfrcd King's residence was ifted from the ground and dashed to a thousand pieces. His mother was instantly killed. A a prodigious high

#  <br> 4: 

On a Jar of Butter,
Some ycars ago a lady residing at Pond Hills, poet J. G. Whitticr, presented him with a jar
of butter; for which he returued the following characteristic expression of thanks :




## My Mother's Prayer.


She prayed that my future path might be
Fron ever sorrow and danger frees
The

 Cer the etorny wave of Lite's dirk tikite,
A glorious beacon - anid "angel guide."



## Farm House Chat.

[Writen for the Press hy Masy Morntans.] It is out in the country among the cabius and
farm houses that a loving, patient mother has truly "the making" of her children; and if her heart is full of love and care to-day it will be full of love and pride by and by wheu she sees
that to raise good men and women is the grandest work given out in this world. It would be 2 confort if she colld see this now; and also understand how much better chance she has to
do her work thoroughly than she could have in town where no one can, hope to keep a child
from evil influences after it is old enouch to open gates and climb fences.
On the farm they may play and work in the pauy with the beauty and innocence of Nature that help sileotly the growth of a pure mind If they are to be "bonnic bairus" with bright they nuust have plenty of plain, well-cooked
food; brown bread and milk, grahant bread and gems; oatmeal, cracked wheat and honiny
if cooked just rizht and served with cream or milk and sugar, are "fit for a king," while veg. and abundance on every farm as to justify all our Cahiforma boasting.
Bathing is a cheap we ought to make comfortablc arrangements for it in our houses and patiently instruct the
children iu a habit that helps to insure temperance, health and self-respect. out thinking of our most famous and radical teacher, Dr. Dio Lewis. ber 13 th , his lecture "About Our Women." It is full of good things bravely spoken; and that the doctor not only gives the result of an
houest conviction, but really trcats his wife as might seem if he had to chauge places with That is the Test.
with quite the cau talk glibly of woman's rights the cause; while they inflict upon their own
wives alternate courses of absurd flattery and arbitrary meanness, with other "tricks and manners" of an ignoble nature.
But I have referred to thi
But I have referred to this lecture chiefly to
reaall the conclusion of it which alludes to "us
un farmers' wives" as a leau, faded, tight.laced, thin-soled, hith heineeled class, who spread our things, and who, "for some mysterious reason, refuse to accept the great blessings of air and and curtains, keep the windows closed and eultivate an active horror of night air.
How did we all feel when lather faint and cilfy, when we read that? uocked hand gnilty, and pretty thoroughly hard hit ; and that somebody ought to take the defensive and "speak up like a man, ' unles
indeed we were altogether crushed and done for

When I am badly hurt it takes me a long time for rally, and all these nonths inaave heuld the and explain. $I$ found 1 Nen the iar hicading of the lecture, my heart junpped for joy, that the right woman had stepped into the right place. But she "had other hish to fry,
and as usual serves them up in the toothsome style that al ways makes us hungry for more.

## Dr. Lewls Versus Farmers' Wives,

 By saying that I have ealled up to the bar ofmenory all the said wives I have known in Cal ifornia, and but yery few of them could plead
gnilty to the Dr.'s heavy indictmeut. Just a ew are so silly or ignorant as to be brought in guilty of one or more of the counts-not one is
guilty of all. A few nore are so poor as to be quitc tree from the temptatiou of corsets, high-hecls
and window-blinds ; and during this hard winand window-htimds; and during this hard be thankful for pork or any fried things to keep the wolf from the door.
cannot tell what the Dr. has found as journeyed to and fro in the land, but if all," it is right and just that he should let us
see oursel's as thers see nis. It scems as of this close and truthfnl observer with mournful compassion,
cumbereth it the gronud."
Yea, verily, we have conforted ourselves in
vain when we fondly belicved that we were ain when we fondly belicved that we were
'developing"-slowly and surcly cutting clcar from the absurdities of close, dark roous, extremes of silly fashion, and staples of fat pork.
Some of us had even lcarnel sueh self-respect (or thought we had), that the average husband
is no longer astonished when told that the egg money is not always sufficient to cover the ex-
peuses of a growing family. What with the peuses of a growing family. What with the
influence of our excellent lival Prass, we influence of our excellent luval Prans, we
must be amazingly stupid if we are, as a gen-
cral rule, still sticking iu the old ruts. Let me cral rule, still sticking $1 u$ the old ruts. Let me pretty familiar knowledge of for several years a pretty famitiar knowledge of Dr. Lewis' radi-
cal teachings, so that after our confidential talk was spiced with this or that saying of "Dr.
Dio," in regard to cookery, hygiene, and the Thwise doings of dressmakers, bootmakers, etc. onrished vigorously, even in California. But will it not be egotism if I conclude that iny own
circle has raised the ouly crop of-what shall circle has
we call it?
"Every-Day Common Sense
t is so much pleasanter to believe there is a Fide-spread thriftiness of intelligence and senWe have been reading this winter Froude's History of our Planet. They teach lessons of patience without limit; growth and movement Where there seens but stagnation and death.
So I am firm in the faith that within the next thousand years farmers' wives will gloriously
emerge from present lenighted conditions, and And now I must ask pardon of the mothers or letting the chat play its old trick of frce and casy wandering. I was about to say that and perfection of her children, the mother is better chance for schooling than the country af fords. Some of us lay too much stress upon
mere schooling. The wise and affectionate home mere schooling. The wise and affectionate home
training, with the wide-awake iufluence of good papers, books and nagazines, and even a mod-
erate amount of schooling, will start children rery faicly upon a road that leads to the high very fairly upon a road that leads to the high
est seats if they have the courage and energy to go. on and up.

That the ambitious country child has no reason to be faint-hearted. Away at the very begiu-
ning the parents must teach that prime firsl sle loward any success,
The Habit of Industry.
I would like to say cheerful industry, for that I would like to say cheerful industry, for that that work is "the salt of tho earth," can we not to hate it? There are so many different ways of getting at a thing. Nearyy all farn
work is pleasaut to do if managed in the best way, and it is worth while to study for that best way, or, as the Tribune uscd to say, "mix
brains with your work." Having a small share of the profit will act like a charm with many world lyy the nose. But there are not so very many fathers who are honest enough to do They may be so honest in other directions that there is only one person in the world besides the children that they will cheat, and that is the mother of the children. Some of these ancouscious of the wrong as to be easily forgiven by those who find it easicr to forgive than $t$ looks and cruel words when reminded of the "when it was little," aud I have heard some pitiful stories from grown people of the way
therr childish faith was imposed upon. Children therr childish
do not forget.
This peculiar crookedness results from a sellieve, fast losing its authority; and if mothers

## boys and girls that truth and thorough-going

 justice are houscholdefended at any cost.
And now if one or two of the family floek show extreme eagerness for knowledge that
cannot be obtained at home, and if there is not means to pay for the extra sehooling, why not let them earn money and pay their own ex penses, as we used to do in tankee-land! began to pay my own way when teachers' wages
for a girl was from 84 to 86 per mouth and "board aronnd.". Just hefore coming to Cal ifornia, in '53, I thonght myself extremely lucky in securing a village school of 60 scholars, not teach all the time, so worked some at house not teach all the tune, so worked some at honse some at the great shawl mill iu Lawrenee, Mass, and, jnst bofore leaving, became skillfnt enough to earn \$2 pcr week,
bcsides board. It took scveral ycars of harid work and closest economy to earn enough to
pay for a few months' schooling. But, without along the way. Fverywhere I met ambitious girls engaged in the same sort of struggle, aud
some had become quite old maids, but were still savi ing. What lessons of hopeful courage I learnce the glimpse I had of their useful, devoted lives. Just now I want to run over a few folk a good start in life:
-orking health of body and brain; habit of Working; habit of saving; a sturdy honesty and along on credit or borrowed money or any sham along on credit or borrowed money or any sham
of "keeping up appearances;" no hankering for atoon, grog-shop or fashionable ball-room Love of home they will have if lome has been
ovable. Love of farm life the more scusible will have, lit may not be so lucky as to know
We will ho
e as well started. but many city children may that they have fallen iuto so is far more dange tion or extravagance that will spoil their lives

Diffrresice in Beis.-Every nation has it own opinions and customs concerning beds, aud
their titness for the comfortable repose of the occupants very mnch depends upon that occupants idea of what constitutes comfort. A Perwhere a grand canopicd state bed had been prehis andience chamber, receivel his visitors seated on it, and retired to sleep on the earpet in the
corner of the room, in accordance with the Eastern custom. Iu taking a furnished house in lussia, on inguiring for the servants' bedrooms and beds, it comes out that the Russian the passage, on the floors, on the mats at the rooms - carpets in the sitting stoves in the winter scason. Beds have been
suffed with all sorts of commodities-feathers, wool, horsehair, what is called flock, which is an omninm gatherum of all sorts of productions, shavings, hay, straw - and in the South of Europe with the soft and clastic dried Ieaves o maize ; dried seaweed has also been used, but it not desirable. In one of the seasons when hops were abundant in England it is related of a beds in his he sold the fcath them with hops In another year or two, when the hops failed aud the price becamo very high, the same hops
were disinterred from their bed and fetched a considerable sum, far more than sufficient to considerable sum, far more
replace the former feathers.
Frafirance. - O, world of mystery, that everywhere liangs about us and within us Who can, even in imagination, penetrate to the our daily life? Take, for instance, one of those pots of narcissi. We have ourselves had a plant of the variety known as soleil d'or, in
tlower, in a sitting-room, for six weeks, during the depth of winter, giving forth the whole of that time, without (so far as we know) ceasing,
even during sleep (for we need hardly tcll our even during sleep (for we need hardly tall our
readers that plants do slcep), the same full stream of ragrance. Love itself does not seem most liberally dispensing it! That fragrance most liberally dispensing it ! That fragrance by our finest tests. What millions of millions of atoms must go to the formation of even a single gust, as it were, of this divine fower
breath! let this goes on, through seconds, minutes, hours, days, wceks, and ceases only with the health of the flower petals. Where, then, in these petals-these thin, unsubstantial
cream-flakes-may we look to find stored up all these inexhanstible supplies? Where indeed ? And if they are not stored up, but newly created as given forth, is not that even more the nature and mudes of operation of such miraculous chemistry.-Leigh IIuni's Journal.

Why Rabbits Haye Short Tails.-Rabbit he wuz gwine tro the ole house one day, an' he see an ole ghos' a-settin' upon de rafter. An' Rabbit
nos' all him tail in ole ghos's han'


## Concealment of Years.

Gray hairs and a faded complexion are the outward and visible signs of the fact that the foman is no longer twenty or thirty, but is forty,
fifty or sixty, as the case nay be. The ques fifty or sixty, as the case may be. The ques-
tion then is: Does the woman who dyes her hair wish it to lee supposed she is only twenty when she is fifty? Notoriously she does so no what is the result? that her whole life is tion she assumes in society, her carriage demeanor, opinions, the degrec of experience
knowledge of the work and anthority where with she can and onght to speak at fifty, mus carefutly hidden abd orcgone if she wishe to appear twenty years younger. Of conrse she ailly a failure a parion is asthetiy kind of failnre. The dark or polden hast and brilliant complexion jar miserably with th aded eycs and all the indescribable changes of ines and contours which distinguish age from outh. But the physical disharmonies ar nothing to the moral discord which takes place between the inward character and the outward apearance. A8 years go oll the unhappy woma caught in erap or he dare not wash and be clean, less she revcal or appear in white hair to-day, having worn ven locks yesterday.
She is actually obliged to keep up her artifices ll at lan she may wish to renounce them iously monstrous to be endured, and the ome propitious illness or journey is made th ccasion of a sudden transformation from twen y-five to seventy. And what a price the poo enility! What lack of wholesome ablution enitity ! What lack of wholesome ablutions
What dcpendence on the fidelity of her con fidential maid, or the secrecy of that room the hair dresser's so ominously marked 'pri ate" on the door! Or, still rorse, what peri of exposure from a shower of rain water, from the too hasty kisses of a child, of the fac that she employs the witch ointment of Mme
liachel! And all this for a wretched, paltry purpose, for which in her innost heart sh must despise herself
We have all langhed at the pious grocer who
told his shop boy to "sand the sugar and then
come to prayers." It hardly seems a more ap. propriate preparation for a lady's repose that enamelher face before

$$
\begin{aligned}
& \text { er ller gentel limhe doth she undress, } \\
& \text { And lies down in her (artificial) loveli }
\end{aligned}
$$

When woman cease to be taught that the onl honor and purposc of their lives is to obtai and beauty, they will look on all these "vile arti padded, bewigged and berouged ol dandy of the masculine gender. They wil come to the opinion that, far from bcing a "dis
grace," the hoary head" is-for a woman as well grace," the hoary head" is-for a woman as well
as for a mau- "a crowll of glory," if it be found in the way of dignity and sense.-
cis $P$. Cobbe, in the Contemporary Rerier.

Babies and Tears. - It is a well-known fact ill very young infants do not cry tears. They ill scream and cry loudly, lamed with blood, the eyes contracted an mouth open with cries, and yet no tears run
down the face, as in older children. Darwin lown the face, as in older children. Darwin takes especial notice of this fact, assuming that cars do not often make their appearance earlie he says, "I was positively assured, tears ran of 42 days. It would appcar as if the lachry nal glands required some practice in the individual bcfore they are easily excited into action. Now, in uy own case, a finc, healthinl infant
hed tears from the very first. It was a pitiful sight to see the large dropss swell under the eyelids and run down the little chceks. "Bora upon inquiry, that this a common superstition which would scem to imply that
cases of this kind are not infreqnent.


How Porsons Are Spresd. - Mr. G. Owen Rees, Consulting Physician to Gny's Hospital, London, has called public attention to sone

## at



Be Kind to Children.
Reader be kind to your children-then yonr name will be held by them, in after years, with a grateful remembrance-for impressious formed
in childhood, though trifling in their nature, are in childhood, though tri
If we spcak an nnkind word to a child, how soon a shade of gloom will steal over its little
brow; and if they have really done something that deserves censure, remember they are but children, and you must expect they will do things inconsiderately; but it is yonr duty $t$
forgive, and treat them with kindness, for w forgive, and treat them with kindness, for we
are satisfied, from what has come under our own observation, that kindncss will coutrol an obstinate child far better than
trne, be kind to children.
trne, be kind to children. so obstinate that I cannot help speaking to harshly." But remember, mother, your harsh
words have lost their power, and if you would words have lost their power, and if you would sontrol as the Eolian harp.-Hall's Journal of Health.
[The above is a beautiful theory. It may be
practicable in the millenium, but in these days of an unchained Satan, we cannot always ap-
prove it. Our bright little two-year-old is prove it. Our bright little two-year-old is gentle that the birds in their cages begin to flit and twit. The little minx respects authority,
and runs to kiss away a frown, but she does not and runs to kiss away a frown, but she does not believe in the Eolian harp system. Our advice your voice be low and soft, and yet strong and
full of meaning; when necessary put yonr hand full of meaning; when necessary put yonr hand where it will do most good, and when the little
spirit yields obedience, kiss back the smiles and
cherish the repentant little heart by the warmcherish the repentant little heart by
est signs of loving.-Eds. Press.]

Poison in Artificial Flowers. - Danger from picric acid lurks not only in colored stockings. The material is used for coloring in the
manufacture of artificial flowers, and a welldefined case of poisoning therefrom is reported
from New York. Mary Dougherty, aged 13 , from New York. Mary Dougherty, aged 13,
who had been employed a few months in a flower maunfactory, has just died, Her death
is attributed to poison which is snpposed to have been communicated to the girl's system by
the material with which she worked. The case needs to be carefully investigated to the end, acid may be made known. Men who dye the have made into Howers, receive no harm from
working bare handed in the liquid. It is alleged sickness among the workers in the colored goods
is the exception. Some organizations must be more susceptible to the influences of picric than
others, or Mary Dougherty's death must be trace able to other canses. It is
will be carefully examined.
Country Air. - "People may say what they like about conntry air being so good for them, '"
said Mrs. Partington, 'and how they get fat
upon it; for my part I shall always think it's
owing to the vittles. Air may do for camamiles
and other reptiles that live on it, but I that men must have something moresubstan

## Young Folks' Column.

The Dream on the Hillside.

Oown on an old hillside,
Where violets were poeping,
And the widd rosen oloone din tueenly pride,
A fair young cliild lay sleeping.
One hand was raised above her headid,
nd nothing save the rabbit's tread.
To break the soundruess of her rest.
Old eqhyry sidhed among the trees

 The light winds played with her curls at will,
And the buttertly filted here and there



 It carried her on to the slid of a ariver,
 They told her that just begond it stood
The biesesed ditity of libitst,
 The light stifi pushed from the pebly strand
And thated out on the siver tide.


 And tod dher of inl the engels bigight,
She was as pure as any there They attached to her shouldera a pair of wings
Sind pliceed a harp within her hands
thinings







And here, much to her regret, the dreum ended,

And Ah! Thiat eadness filed those eyes

Time has o hangad, that childs s a maid,
But still her memory loves 5 g yide.

Dr. Holmes to a Boy. - The kindly poet, Dr. Oliver Wendell Holmes, has been writing, says the New York Tribune, a pleasant letter to Master Holmes Dunlap, an eight-year old Tennesseean, whose parents so admired the Doctor
that they gave their son his name. The little hat they gave their son his name. The little
fellow wrote a pretty, childish letter to the fellow wrote a pretty, childish letter to the
autocrat, adding this postcript: "P. S.-My autocrat, adding this postcript: "P. S.- My ing to a poet, I think I shall write to Shakes-
peare." And thus Dr. Holmes answered: "My Dear Little Namesake: I have so many letters that I cannot do more than answer yours in a very few words. I am glad that yon go to school, and have already learned to write, and do sums in arithmetic and find places on the maps. I suppose you know where
Boston is, where I live. It is a pretty large Boston is, where
city, but what do you think Is a pretty large
this forenoon city, but what do you think I saw this forenoon
out of the window of my library? It was a
or out of the window of my library? It was a
flock of wild dncks in the Charles river, swin-
ming abont jnst as much at home as if they Ilock of wild dncks in the Charles river, swim-
ming abont jnst as much at home as if they
were tame ducks in a pond. We have had a
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Gooo HEALTH.

## Wearing the Beard.

Hair is nature's protector against cold. Our beneficent Creator does nothing in vain. Row. land says on this subject: "It may be safely argued as a general physiological principle that Whatever evinces a free and natural development of any part of the body, is, by necessity,
beantiful. Deprive the lion of his mane, the beantiful. Deprive the lion of his mane, the
cock of its comb, the peacock of the emerald cock of
plumage of ith stail, the ram and deer of their
horng, and they not only become displeasing to horns, and they not only become displeasing to
the eye, but lose much of their power and vigor. the eye, but lose much of their power and vigor.
And it is easy to apply this reasoning to the hairy ornaments of a man's face. The caprice of fashion alone forces the Englishnnan to shave off those appendages which give to the male countenance that true masculline character, inThe presence or absence of the beard, as an
addition to the face, is the most marked and distinctive peculiarity between the countenances of the two sexes. Who can hesitate to
admire the noble countenance of the Osmanli admire the noble countenance of the Osmanli
Tnrk of Constantinople, with his un-Mongolian langth of beard? Ask any of the fair sex
whether they will not approve and admire the whether they will not approve and admire the
noble countenance of Mehemet Ali, Major Herbert Edwards, the hero of the Punjaub, Sir Charles Napier, and others, as set off by their
beard? We may ask with 'Beatrice,' 'What beard? We may ask with 'Beatrice,' (hat, or his chin worth a beard ?' I have noticed the whiskers and beards of many of our most prom-
inent physicians and merchants encroaching inent physicians and merchants encroaching
upon their former narrow boundaries, while it is well known that not a few of our diviues
have been long convinced of the folly of dis. obeying one of nature's fixed laws; but hitherto their nnwillingness to shock the prejudice of their congregations, has prevented them from
giving effect to their convictions. The beard is not merely for ornanent, it is for nse. Nature never does anything in vain; she is econ-
omical, and wastes nothing. She would never
erect, bulwark were her erect a bul wark were her domain unworthy of
protection, or were there no enemy to inprotection
vade it."

## Drain and Ventilate

We refer to these subjects very often in this column, and fitly, because they are the corner
stones in the preservation of health. The Polytechnic Review thus presents the sinbject: Wher-
ever the soil water, inpurified by contact with ever the soil water, impurified by contact with
unclean organic matters, sinks into the earth, it leaves behind it a moist and unwholesone
residuum, and the warmer the air, the water residuum, and the warmer the air, the water
and the soil, the more energetic are its nn wholeand the soil, the more energetic are its nnwhole-
some influences. Whether the infectious mat ters are transierred from the soil into the wel
waters, or whether they enter the air directly with their gaseous products of decomposition or by evaporation, are merely incidental accidents
which do not at all affect the result, since, in every case, it is those who dwell upon or near snch unwholesome soils who are the greatest
sufferers. If the air of our dwelling houses is not frequently renewed by ventilation, or
water charged with organic impnrities is per mitted to saturate the soil about them, or if decomposing organic natter (or what is the
same thing, filth) is stored up in the neighborsane thing, fith) is sored up in the neighborimpregnate and saturate the soil about and
beneath the house, or if the channels by beneath the house, or ir the channels by which
these offensive matters are removed from the honse, as in the sewerage systems of cities and towns, are not propcrly eonstructed or guarded,
the air that enters a dwelling thus environed, will be charged with disease-breeding emana tions arising from the soil or from the sewe pipes. The drinking water may become im
pregnated, and the unwholesone products thus pregnated, and the unwholesome products thus
introduced into the bodies of its inhabitants will, beyond all question, exert the most per nicious effects upon health, producing, accord pecnliarities, consequences more or less fatal.
Candy and Teeth.-Hall's Journal comes to the rescue of our candy-loving little ones, and says it is not true that sugar and candies are of of those who injurious to the teeth or the health less injurions than any of the ordinary forms o food when employcd in moderation. It would be a strange contradiction in the nature of
tlings, if sngar and candy in moderation should be hurtful to the human body in any way, for
 it cannot be mote not a ripe fut of whic orchards which does not yield it in large on portions, and it is the main constituent of that "milk" which is provided for the young o ane this and men all over the world. But to use this information intelligcntly and profitably,
it must be remcmbercd that sugar is an artificial product, is a concentration, and that if used in much larger proportions than would be found in our ordinary food, as provided by the hencfi.
cent Father of us all, we will suffer injury. We cent Father of us all, we will sufter injury. We
should never forget that the immuderate use of anything is destructive to human heal th an
life, if persevered in. The best general rules to life, if persevered in. The best general rules to
be observed are two: First, use concentrated -cweets at meal times only; seco

## Domestic Economy

## A Farmer's Stew.

A Canadian jonrnal remarks: "In Canada we have learned something from the French abont cheap living. Perhaps onr pot-pie came
from them, because they are famous for their rom them, because the rich, Wholesome stews. Take a joint of any veal, I like mutton, because my father kept long wool or mutton sheep. In the city you can get snch a joint for a dime, and in the coun try it ought not to cost more. In all cases put the meat in cold water, add enongh water to
cover it, and boil until it is tender-for beef and mutton say two hours, for veal say on hour. Addl salt and pepper. Abont half an
hour before serving but in six potatoes, pared hour before serving, but in six potatoes, pared
and quartered, and let them boil with the meat. In the meantime prepare the dumplings by taking one quart of flour, a tablespoonful
butter, and two teaspoonfuls of sifted powder; wet with milk enough to make a sti batter, so it will drop from a spoon; ten min utes before serving drop the batter into the stew, a spoonful at a time, until all is in, and hen cover tightly and boil 10 minutes. If the meat is not sufficiently fat, add butter, but not butter. The batter thickens the gravy as well as makes the dumpling. Serve, of course, on a large platter. Here you have meat and the
juice of the meat, bone and the juice of the bone, potatoes and flour, all healthy and nour ishing, good for brain, muscle and bone
Enongh fora large family does not all like it; and we at home have this stew at

Morths IN Carpers. - The carpet moth makes ners of the carpet. If this is an ingrain or three ply fabric, snccessfnl war may be waged on him by wringing a cloth out of hot water, laying it over the bindings and cdges, and irouing with
as hot an iron as can be used withont scorching This will destroy both the moths and theiregg and after a few snch visitations they disappear. But this steaming and ironing process is not
effectual with Wiltons, Moquettes, or any heavy carpetings. The heat cannot thoroughly pene-
trate them, and ironing injures the pile of the trate them, and ironill
velvet. Still, it is best to draw the tacks occasionally, and lay the edge of the carpet overone side only, or a part of a side, at a time-
and steam and iron it on the wrong side. Then,
beside beside this, the floor should be wiped as far under as the arm will reach with a cloth wrung re-1ailing, the binding and edge of the carpet should also be wiped with it, rubbing them
hard. Some have recommended sprinkling salt hard. Some have recommended sprinkling salt he carpet, bnt we should think this objectionable, as the salt absorbs moisture from the air and inay thus cause too much dampness.
To Keep Nails from Rusting.-Heat a quantity of then on a shovel, and throw them, White quite hot, into a vessel of coarse oil or that the grease will be made to smoke freely. Cut nails prepared in this manner are improved in every respect. They are rendered tongher,
and they will outlast any kind of wood, even though buried in the ground; while unprepared nails arc completely destrcyed by rust in a very
short time. Probably melted paraftine would short time. Probably melted paraftine would
be still better than ordinary grease, as it forms be still better than ordinary grease, as it forms
a very effectual coating, penetrating the pores and preventing the access of air or moisture.

Apple and Bread Pudding.-Break and rub -sweet apples keep their place and take a little longer to cook; butter a pudding dish, then put a layer of apples an inch deep, then a layer of bread-crumbs not quite so thick, then another
layer of apples, alternating, till tho dish is full layer of apples, alternating, till the dish is full;
bread being last. A little butter may be added bread being last. A little butter may be added
to each layer of bread or a tablespoonful of to each layer of bread or a tablespoonful of
cream sprinkled over each. Bake an hour, or creaun sprinkled over each. Bake an hour, or
till the apples are thoroughly cooked. Serve with sweet sauce or cream.

Harness Polish.-Take of mutton suet, two ounces; beeswax, six ounces; powdered sugar,
six ounces; lampblack, one ounce; green or yel low soap, two ounces; and watcr, one-hale pint.
Dissolve the soap in the water, add the other solid ingredients, mix well, and add turpentine. Lay on with a sponge, and polish off with a bush.
Tomato Custard. - This is said to be a bene ficial dict for consumptives. It is made by
training finely stewed tomatos through straining finely stewed tomatocs through
coarse sieve and adding two pints of milk, which coarse sieve and adding two pints of milk, winc
has becn scalded and coold, and one pint of for four carss, and one te sugar. Bake in small cups quickly

Rat-Proof Paint.-Mix fluely powdered glass with pitch or coal tar and rosin, and paint
your grain bin with two coats, and it will be too nuch for rats' teetlh. They don't like the tar and the sharp glass is still more disagreeable.

To Regtore Mahogany Polishi,-One gill of raw linsced oil, one pennyworth of butter o
nutimony, and one tablespoonful of vinegar


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 S. Tins Prank will be guplied to the trade through the

 our latest forms go so preess Wedhesday evenng. Quack Advertising positively declined.
The Scientific Press Patent Agency DEWEY \& CO., Patent Solicitors.

SAN FRANCISCO:
Saturday, April $2.7,1878$
table of contents.


 CoRR ESTPONDENCE. San Lonis olispo County











The Week.
The week has shown us another mosaie of
clouil and sunshine, pelting storm aud gentle cloun and sunshine, pelting storm aud gentle
mounliyht. Better days could not be had, for
they place a ehce npon the effeet of drying
winds, and give to the the they place a ehcek npon the effeet of drying
winds, and give to the late-sown fields just
the eucouragement they need. The renewed the eucouragement they need. The renewed
rains reeall the opportunity for summer-fallow
plowing, and men who ean drive 10 -mule teams plowing, and men who ean drive 10 -mule teams
have been in dcmand in the grcat valley. In have been in dcinand in the grcat valley. In been quiek work done in putting in late grain,
and as we roole this morning through the and as we rote this morning through the
Alameda valley, we saw eight four-mule teams
moving iul line aeross a 10 -aere field, eovering moving in line aeross a 10 -aere field, eovering
with harrows the fresh dropped seed. The days
have served well for oreharil and vineyard have served well for oreharil and vineyard
work. The showers have mellowed the surface
for the eultivator, and the rows of trees aud work. The showers have mellowed the surface
for the eultivator, and the rows of trees and
vines are as seen upon the landscape, straight vines are as seen upon the landscape, straig, ht
and cleant footed as a regiment of soldiers on
dress parale. Tu the earlier parts of the dress parale. In the earlier parts of the State.
haying is well nuder way. Grain hay will haying is well muder way. Grain hay will
yiell unusuall weights of tender stens and
leaves, and we hear of areas large as townships yield unusual weights of tender stems and
leaves, and we hear of areas large as townships
where the mower may be put to profitable work Where the nower may be put to prontable work
on the growth of uative plants whied the pro-
pitious season has brought forward. Stock is pitious senson has brought forward. Stock is
rolling fat aud where last year raek o obones re-
clined against the strawpile, his suceessor, clined against the strawpile, his suceessor,
plump and sleak as a hoose cat, lazily rolls plump and sleak as a house rat, lazily rolls
around on the rieh forage whieh he eannot eat.
Iu trath it is a ploasant year.

Wave-Riders and Deck Barnacles. There is a sport callcd wave-riding among th dwellers on the islands of the scas. To play it,
the natives venture out as far as they dare int the surf, and then, heading toward the shore they throw themselves upon the crests of the largest breakers and go dashing along toward the beach. Just what are the rulcs of the ganne
we do uot know, but it is a contest for superiority, aud he gains the plaudits of the multitud of observers who rides his wave the best and is carried farthest by its onward rush. It has ten occured to us of late that this sport o Paciftic islanders has many aunagies in ou
political, soeial and iudustrial life EVery way of progress of any kind whieh has upreareu national horizon, cau be seen to be bestridden, if one looks closcly, with a host of wave-riders, pulse except as it serves to carry them forwari to the sunuy beach of a hife without labor, or,
it may be, to the gollen smads of official enoluproduce nothing. If they stimulate any production it is that they may draiul its fatness.
is plain that they excite no wholesone ardor the eause upoun which they intlict themselves.
If they succeed in fanning int flame any spark progress, their own great hands will cover it and they alone are warmed. And yet they
would have the earcless spectator think that would have the earcless spectator think tha
they are the guiding light, the motive power, all the people's effort toward adrancement. They shout as they ride; until the strong undcr the accompauinent to their heroic solos. They puff out their cheeks as they ride; until they
persuade themselves they have the cave o Persuas between their jaws, and the euee comes
the blast which stirs the popular ocean. They the blast which stirs the popular ocean. They
curve their arms on high as they ride; and as the shallow retainer looks upon then, he is
prone to think that all the force of tides and currents whieh move the people's miud and
heart are lut the manifestations of the waveriver's power. Such are the tricks in trade, Atlases.
Let us to the beach, kind readers. We shall see these wave-riders as they draw near the
sounding slore. We are ust in tinne. Herc souncs the wave of political refform; its white
comell
cap all dotted with the parasites we seck. It is a gool wave. It is kept iu motion by a grow ing sense of justice in the national mind, and a
strong deterunination to erush abuses, in the strong deteriunuation to erush abuses, in the growth of our general lirogress in civilization years when a declaration of equal rights before crnment by and for the people was conceived.
It is carrying us onward to the time when all early declarations shall be realized in the prae tical workings of our constitutions and laws.
But uote the riders: liear their demagogie cries. As they shout their mandates and lill the ai with vocendiary threats, the crowd applauls
and votes thent gods, as, eeuturies ago, a throng deified an ambitions Herod. Proudly they ride their wave. They forget the undertow whie
draws the crest-riding rubbish back ayain to dhe dark oblivion whence it so latcly came. As we retect, the wave of reforins in socia
life approaches. It is a wave of power ann
beaut beauty. Its strenyth centers in the fundannental
idca of idca of happy homes, upout which rests the
whole fabric of our civilizatiou. Its impetus spriugs from the poppular longing for a higher through all the channels which promise to aid labitation and a name. It is going forward are industry, frugality and ecooomy. It is plant ing new impulses in careless nininds. The picture
of a seat beneath one's owu vine and tig tree is of a seat beneath one's owu vine and tig tree is
taking ou new colos, and is delighting the gaze of our humblest eitizens. The force of this wave of home desire is each year registering new
names in our county records, and eael1 year swelling the ranks of true citizenship. But see
for wretehed self.agurandizcment by loud eries which aim to delude the pcople with the thought that they ean give them homes which they have
not earned. With what pride they vaunt themselves bcfore the careless or the abandoned, ani eajole them with the promise of reforms, which
slaall, by law, wrest the rewarls of industry, shall, by law, wrest the rewarls of industry,
frugality and foresight from those who rightily enjoy them, aud bestow these prieeless treasures title. Anl how the unwary are entrapped by the folly, fallacy and sophistry of theose wave-
riders. They themselves seen to forget the verge of destruetiou npon which they staud. This wave, too, has its undertow, but it draws
deeper than the oeean-bed of politieal oblivion No sulphurous eavern of earth's eore is deep is in the lurid light of a soeial hell. Mene eali

The strong wave of industrial progress comes apaee. It is a majestic moveneut, and its fruits in manufactures and in agrieultural proluctions whieh all the world admires. Its ruling power
is in organization; in the nuited efforts for de
sired ends among different elasses of our ind us
trial population. It is an idea which has already
given us the mastery in the markets of the rorld, and whieh will carry our productive en present we cau dream, but hardly realize. would think that such a wa ve would engulf and destroy all light stuff which aimed to sport upon its crest. And yet, wonderiul to behola,
there is uo wave of the incoming tide of prog ress which sa many silly adventurers bestride.
These wave-riders lay hands upon every impulse toward organization among the indnstrial
classes. They rub lamp-black ou their luands that the mechanic may think it the genuine
color of the shop; they beseed their hair, so that the unthinkiug farmer may regard them as fellow toilers in the hay-mow. With these
 of labor, which they have never rightly learned, and the knowiug ones laugh as they beholid trusting industrial classes bowing before these Madanc exelamation would have been: "Oh, Industry what bilks have bcen supported in thy name. Aud yet proudly aud eontidently they ride was said of such tares annong the wheat: "I them grow together until the harvest: then shall they gather the wheat iuto my , garuer, We tares shall be burued with fire of wave-riders which we have named cau ever ttain the ends at whieh they aim. Neither can they. And yet they are elogs and brakes upon
all canses to which they antix themselves, and
the hey shonld lec swept away. They flourish in ar sufferne of popular attention and of popubnt it inupelles its progress. These wave-riders are barnaelcs, but they do not seek the obscu-
ity of tlic hull to attach themselves. They fix pon the sumniest tuarters of the deck for their aankols. There is but one renedy. Let the
ercw sare themselves as did Jonah's shipmat but for the ease of future voyages let them
choose a species of whale which is not sulject

## Cheese and the Microscone

At the last meeting of the Sian Franeisco Microscopical Socicty, Mr. E. J. Wickson, elitor of the Pactric Rural Press, asked the attention
of the menibers to a slide containing sections of ordinary full crenm cheese and cheese madc ly he desung oleomargariue of making rine chcese, uamely, by removing the crean margar crenin. The mass is agitated and rennet euough adddel to form a curd quickly before the oil ean
separate from the skim milk. The aim of the separate from the skinn milk. The aim of thic
proeess is to form an emulsiou of oil and a ment proeess is to form an emiusiou of oil ani a meil
truum of soluble caseiu, like that whieh exists in uatural milk. This process has sueceeded so well that chemical analysis has shown the arti-
cial cheese richer than the gennine, and great an improvelnent on skimued cheese that
large guantities are sold in New York and hipped to Europe. Mr. Wickson stated that he had studied this artilieial cheese with the
nieroseope, aud found that the emnlsion made by the cheese maker was not nearly so perfect as that made by nature in the cowl; and ther grish between the two products. ln the $:$ lide hich was shown the two sections of chees full ereain milk was seen to le of close texture, and the natural fat was incorporated in the sub tance. The oleomargarine cheese showed cav ntroduced far shape imprisoned when the cur innmed. The differencec simply consists in the results of an imperfect em thion in whe the fat exists in masses rather than in glohules, as
in nilk. Mr. Wickson remarked the difference in nuw. Me cavities usually formed by gas in all milk chicese and those which held pointed out the tifference between the two
nakes of eheese, and regarded the mieroscope as an iufallible detective of oleomargarine heese, until the nauufaeturers sueceed in mak encese
ing an
milk.

Santa Clara Fiee Reaming Room- W
 perance free reading room." This praiseworthy enterprise takes its plaee among others whie
have, during the last year, sprung up in severa in our cities and towns. The movement towar establishing places where all nay go to pass their
eisure hours in reading and eounneudable recre ation instead evil surroundings and teudcncies, is one which start, and it is with pleasure we note that the lica is gaining wide approval. We wish the anta Clara enterprise all success in its nobl
work. We potiee in this conuection that eotemporary, the San Jose Agriculturist, has arrangemeuts to provide visitors with chea unches as well as free mental pabulum.


## Queries and Replies.

## Hatching Ducks' Eggs.


 tiee of ducks with pertect sueceass and never heario of
soaking the egss in warmu water; and, if so, why is Pekin


There is no differcuce between the eggs of he Pekin and of any other duck, as lar as they seek the water as soon as they leave the nest, and whel they return their feathers are wet anul so the cggs are moistenca. The nest emanating from the eartl hel us to soften the shell. If duck eggs be set under a hen and in on straw or lay they are levired the moisture and the inner coating of the egg becomes dry and hard and the duckling often it is well to soak the egys three or four times luring incubation in water at a temperature of $100^{\circ}$ Fahr. If set under a duck or the nest is made on the ground, this may be unnecessary, the efls. Our best freeles or facs hato the ego always anxious to have the eggs they send out
hatch well and consequently. they give such

We do not clearly understand the second the movement of its contents can be heard, the shaking itself will probably prevent its hateling.

> Rabbits and Fruit Trees.

Editors Press:-As I discover, you have Well settled the soot and rabit questiou,
so far as grain is concerved. I propose,
with your kiud permision, to settle the with your kind permission, to settle the
rabbit and fruit tree question, for the benefit of orehardists, nurserymen and the public in genoccupied a conspichous place in the Rera l'ress at various times fur two years, it must eertainly lue of vital importance to many of its
readers. I wholly ignore all remedies hereto. fure suggested for reasons too obvious to men-
tion. I recommend an apulication once a of stale hogs' lard, fat skinmings or ham rind, Whow rubbed on the trces, from the gronnd up use the best lard yon can get and you will fiud these short-tailed little rascals will not trouble
your trees any more. The same remedy, if properly ajplied, will, in many easts, prevent auts, caterpillars and other insects from
ascending the trees and feeding ulpou the leaves, Howers and fruit, to your great annoyanee. Any one noting the erst instance of a aille
the rabbit reneedy I lave nainerl, will please Press,-Win. S. Downise, Half Noon Bay
Malva as a Forage Plant.

Didions Press:-In your last issue, by two disadyn tare of matya are forate was forcihly, and, doubtless, honestly diseusserd 1 do uot wish to curage in the discussion farther my possessiou. In the fall of 76,1 bought a sinall place in Los Angeles county, where, on a portion, the malva had alrealy started from
irrigation. In staking out my cow, 1 saw she ate it very reanily, and at first tried to avoid
it, fearing it might in some way be injurious, it, fearing it minght in some way be injurious,
but as we could detect nothiug wrong in the milk, butter or health of the eow, 1 permitted her to eat it until it was eut down, some two or feeding it to some sloates in a pen, which
seemed to thrive and do well with very little, and, part of the time, no other foed. Subse. quently, in conversation with those who had
tried it as feed for milch eows, they atfirmed that it was sinperior to many other kinds of
feed for quality and quantity of butter, aud ful, however, and not allow it to get a start ainong trees and viues or any other place where F'tsurfe, San Luis Obispo, Cal.
Red Clover bv Irrigation-Large Vegetables. Editoks Press:-Having seeu in the Press all inquiry about raising red clover on irrigated
land, I will state I have raisell it for eight yoars alongside of alfalfa. It cuts three cropa
for the season and does almost enual to alfalfa.
I has Have also raised millet, whish
also raise the finest kind of potatoes, beets and earrots do well. I raised, last scason, 640 cab .
hage plants, the least of the lot weighiug 10 pounds and the largest $30 \pm$ pounds. 1 also half
thiree blaek radishes, weighing four and a half, five and three-quarters and sevell pouuds each,
whieh is doing very well for way up in the whieh is
nnountains $\qquad$
We are promised regular Eastern correspond enee on practical subjects by Dr. Robert tirim.
shaw, well-known tlirougla his conneetion with the Franklin lustitute, and his editorial management of an
technic Reriple.

## The Wool Market and the Tariff.

## It cannot be doubted that much of the hesi-

 tancy and depression which is now reported each week from the Eastern wool markets is owing to the overhanging clond of tariff revision which is threatened by propositions now pending in Congress. All other tendencies and influences seem favorable to a revival from the depression which has characterized the woolproducing and manufacturing industries for the last few years. It is true that there is still life enough among Eastern manufacturers to enable their agents, now in our markets, to pay prices for our spring clip which Eastern critics declare are unwarranted by Eastern conditions. This, however, is but a slight advantage to us compared with that which we should enjoy if Eastern manufacturers should have free field to invest, in full confidence in the revival of business which seems about to be realized all over the country. This they cannot feel so long as the clance exists of importing both material and manufactures at much less cost than they are now ruliug at.All our wool growers will be interested, then, to know just what is the measure of this proposed tariff revision which Mr. Fernando W ood
offers the country. We have secured from the offers the country. We have secured from the
East a full statement of the provisions of the proEast a full statement of the provisions of the pro-
posed tariff and have placed in connection with each classification both the proposed and the each classitication both the proposed and the graphs which follow will give an idea of just what changes are proposed.
Wools of all kinds-proposed tariff, $35 \%$ ad valorem; present tariff, 10 c to 12 c per tb . spc -
cific duty, and $10 \%$ ad valorem. cific duty, and $10 \%$ ad valorem.
Woolen cloths, woolen shawls,

Woolen cloths, woolen shawls, and all manufactures of wool not otherwise provided forproposed tariff, $50 \%$ ad valorem; present tariff,
50 c . per tb . specific duty, and $35 \%$ ad valorem. 50 c . per It . specific duty, and $35 \%$ ald valorem.
Flannel, blankets, hats of wool, knit goods, balmorals, woolen and worsted yarns, and all manufactures of every description composed wholly or in part of worsted, the hair of the alpaca, goat, or other like animals, except such as are composed in part of wool, not otherwise provided for, valued at not exceeding 40 c . per pro-proposed tariff, 25 c . per 1 lt .; present tariff, 20c. per th. specific duty, and $35 \%$ ad valorem. Valued above 40 c . and not exceeding 60c. per
lb . - proposed tariff, 38 c . per tb.; present tariff, 30 c . per th. specific duty, and $35 \%$ ad valorem.
Valued above 60 c . and Valued above 60 c . and not exceding 80 c . per Ib .
-proposed tariff, 50 c . per 1 tb ; present tariff, - proposed tariff, 50 c . per tb ; present tariff,
40 c. per tb . specific duty, and $35 \%$ ad valorem. Valued above 80c. per 1 tb .-proposed tariff, 60 c . per 1 tb .; present tariff, 50 c . per Ib . specific duty and $35 \%$ cul valorem.
bard; present tariff, 20c, per 20c. per square yard; present tariff,
and $35 \%$ ad valorem.
Clothing ready made, and wearing apparel of
every description every description, and balmoral skirts and skirtfor like purposes, composed wholly or in part of wool, worsted, the hair of the alpaca, part of other like animals, made up or manufactured wholly or in part by the tanlor, seamstress or manutacturer, except knit goorls-proposed tar-
iff, $45 \%$ ad valorem; present tariff, 50 c . per th . iff, $45 \%$ ad valorem; present tariff,
specific duty, and $40 \%$ ad valorem.
Aubusson, Wilton, Brussels, velvet and sim-
ilar carpets, proposed tariff, $50 \%$ ad valorem ilar carpets, proposed tariff, $50 \%$ ad valorem;
present tariff, 40 c . to 70 c . per yard specific present tarift, 40 c . to 70 c . per
duty and $35 \%$ to $40 \%$ ad ralorem.
Ingrain, three-ply and Venetian-proposed
tariff, $40 \%$ ad valorem; present tariff, 17 c . per yard specific duty, and $35 \%$ ad valorem
By a comparison of these rates of duty, it will be seen that the new rate canuot but effect
a notable reduction both in the price of raw a notable reduction both in the price of raw
material and mauufacturcd goods. Take, for material and mauufacturcd goods. Take, for
example, the first classification: "Wool of all example, the first classification: "Wool of all
kinds $35 \%$ ad valorem." On a pound of wool which would answer to our best clip of spring merino, which sold, last week, at 24 cents per
pound, the new tariff proposes a duty of $35 \%$ pound, the new tariff proposes a duty of $35 \%$, cents. The present tariff imposes first a spe cific duty of 10 cents and an additional duty of
$10 \%$ ad valorem, which would make the full impost nearly $12 \frac{1}{2}$ cents per pound. The uew
tariff, then, on such a case, would be about equivalent to a reduction of $33 \%$ on the one now
in fould be about in force.
The pr

The proposed reduction on woolen manufactures is greater than on the raw material, and while this on the face of it seems to give an
advantage to producers over manufacturers, it adlvantage to producers over manufacturers, it
would be in effect quite otherwisc, for the fact is that with such a reduced duty upon manufactured goods, manufacturers could uot buy our to use imported wool at the reduced figure. per pound. The proposed duty is 25 cents per pound. The preseut duty is 20 cents per pound specific duty and an additional duty of $35 \%$ of 34 cents per pound. A similar condition would be visited upon our manufacture of clothing of nearly all kinds. new tariff on wool and woolen goods as nearly effect upon the prices of one of our leading pro ducts would be very depressing.

## The Eclipse Incubator.

The numbers of inquiries which we have re ceived of late concerning the progress of artificial incubation and the devices for securing it have led us to present engravings of some of the inventions which are proposed for this purpose, and which have stood, to a greater or less degree the test of practical operation. We expect to show several incubators for which good things are claimed, and the engravings and
descriptions will enable onr enquiring reader

The illustrations give a good idea of the ar-
rangements relied on to secure the regulation of rangements relied on to secure the regulation of the heat and other necessary points. The eggs are contained in drawers, which slide in and out of the incubator, as shown in Fig. 1. Ly same temperature that they are, is the the pyrometer which regulates the heat. When pyrometer which regulates the heat. When pyroneter closes the electric circuit, which puts in action the electro-magnet $A$, Fig. 2, and causes its armature to lift up; this releases the escapement of the clock movement and causes


FIG. 1. THE ECLIPSE SELF-REGULATING INCUBATOR-FRONT VIEW to form judgments for themselves of their effi- $\{$ which movement calises the crank, $C$, to make a page, is called the "Eclipse Self-Regulating In. quarter revolution and opens the damper, $D$, cubator." It is the invention of Edward A. Samuels of Waltham, Mass., and is manufactured and sold by him. Mr. Samuels is a scl practical poultry breeder. His first attempts lamp by the lever, $E$. As soon as the temrera clectric circuit is opened, the damper closes,
and the lamp flame burns up brightly. The whole action is automatic, and the machine re at artificial incubation, were mndertaken to se- ${ }^{\text {phose }}$ quiresupervision except the filling of the


FIG. 2. THE ECLIPSE SELF-REGULATING INCUBATOR-END VIEW.
cure opportunity to study embryology as shown lamp and winding up the clock gearing. in the progressive hatching of eggs. His ex- An incubator should, to be successtnl, be perimcuts in incubating for this purpose were
so successful that he went on and worked up tilation, and the supply and character of the his incubator for practical poultry brceding. In this direction he has attained results which moisture furnished the eggs within it. To control the heat aud ventilation I have, certainly entitle his apparatus to the attentionf
of those interested. In giving our readers an


FIG. 3. ECLIPSE ARTIFICIAL MOTHER FOR CHICKENS.
idca of Mr. Samuels' methods and claims, we cannot do better than follow the narrative which he sends. He says: In the autumn of 1876 ,
being quite an enthusiast in ponltry husbandry, I constructed a housc adapterl to the artificial rearing of chickens. This house was large rearing of chickens. To accommodate many hundreds of chickens, and in the following winter and spring it was run to its full capacity. At one
time I had in it over 700 healthy, thriving chicks, all hatched in my incubators.
certain point, operatcs on the escapernent of a clock movement attached to the case. This canses a large ventilator to open, the hot air
cscapes and cool air e aters. At the same time ascapcs and cool air eiters. At the samo time turns down the flame of the lamp.
When the interior of the inc sbator cools a riffc, the ventilator closes, and the lamp burns up brightly again. This opening and closing occurs on the average about once in 15 minutes,

The incubator may be set to open at any given temperature by a pyrometer, which is of my own invention, and is very sensitive and constant. It is much more reliable than mer cury, which in a short time becomes worthless
both as a mosor and electric conductor, by rea. both as a mocor and electric conductor, by reaano as an electric cir I abandoned its use long The pyrometer is as sensitive as mercury, but it is much more constant, and in its construction is simplicity itself.
The whole strength of the clock movement being brought to bear upon the ventilator, it must open and shut; there is no possible chance otherwise, and the danger of overheating and
cooling off, which has been the bane of incucooling off, which has been the bane of incu-
bators heretofore, is thus entirely avoided. Another important provision is also secured, and that is the proper degree of moisture furnished the eggs. It is uow well known that incubator heat is, as a rule, much drier than the lack of moisture is supplied by sprinkling and turning the eggs. and iu others the moisture is furnished in the form of stean; but sprinkling eggs is injurious to them, and torning them is a nuisance, and is, moreover, entirely unuecessary. I have kept careful memoranda of the hatchiug of eqgs which have been turned in the incubator daily, together with those which have been turned but once a week, and there
was no appreciable difference in percentage of was no appreciable
chickens hatched.
Steam is injurious, and if it is given in snf ficient quantity to cause the eggs to be moist it is fatal to the embryo
After many costly
After many costly experiments I have per-
fected a method for antomatically moistening the eggs in just exactly the right degree, and all necessity for sprinkling, turning, and steaming the eggs is done away with.
The question is often asked me what propor-
tion of chicks I can hatch artificially. I have repeatedly hatched much greater percentages of chickens than 1 have with incubating hens, set on eggs from the same lots as those placed
in the machine, and at the same time, and on in the machine, and at the same time, and on no account would I ever again, in my poultry
operations, be troubled with such a nuisance as is the average sctting hen. I have lost enough is the average sctting hen. I have lost enough half a dozen incubators. In good, fresh eggs, laid by healthy hens which are mated with vighatch from $85 \%$ to $90 \%$ of the fertilized eggs. The Eclipse incubator is so simple in its management that a child can run it. About all the supervision necessary after the machine is
started, is to fill and trim the lamp once in 24 hours, and winding up the clock movement at the same time
There is as great want felt for an artificial
mother for chickens, ducklings. etc, mother for chickens, fuckings. etc., as there is the case that an artificial mother is needed for hens, or those which have been abandoned by the mother hen in the inidst of cold, inciement weather. Ithink it is the experience of every been glarl of something that would take the place of fussy, savage, careless hens.
The essentials in an artificial mother or
brooder are: 1st, a provision for furuishing the brooder are: 1st, a provision for furnishing the proper heat above the chickens; 2 d , a good
method of ventilation; 3d, a perfect freedom method of ventilation; $3 d$, a perfect freedom
from harboring places for vermin, and a simple from harboring places for vermin, and a simple
arrangement of attachment by which the fleeee arrangement of attachment by which the fleece
or woolen lining may be removed and clcansed readily and at any time.
The Eclipse altificial mother meets all these requirements, and it is the simplest, most port-
able, easiest managed nachine of any for this ase that I have seen. The heat may be sup plied or withdrawn at any time, and its form is such that chickens brood in it with perfect immunity from the stifling and crowding which have been the bane of all the artificial mothers that I have seen.
Ox File.-"Alfalfa and Daries in Southern California," J. H. S.; "Apiary," J. D. E.; E.; "Anong the Chickens," C. H. S.; "Draining and its Appliances,"A. R.; "Eucalyptus," P. S.; "Malva Growth," and "Squirrel IntroD. W.; "Poppy Growing,"J. H. D.; "Acacia," G. H. B.; "(irass Nuts," J. C. B.; Notes in
Stockton," J. W. R.; "Fiber from Tulare," Stockton," "W. W. R.; "Fiber from Tularc,"
J. R. H.; "Worthy Lecturer's Visits," B. P.

We are making arrangements to lave ou papers represented and pushed vigorously East papers represented and pushed a journalist and engineer of ability and experience, who will devote himself to the acquisition of information of interest to our readers, and will also see that our advertisers interests are advanced by a rapid enlargement of our Eastern circulation. Until further notice
le, P. O. box 1,947 .
Powell's Grain lilevator.-An illustrated advertisment in this issuc shows the Electric Blevator, invented by Thomas Powell, of Stockton Cal. Practical threshors assure us that the apparatus works as well as any they have ever secn. Some hold it is worth attention from grain kind. It
growers.
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tilumias richardson, Manager

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LANDRUM \& RODGERS, Watsonville, Cal. Im porters and breeders of Pure Breed Angora Goats.

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Qualities of ground raw bones, while
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crease the laying of hens $50 \%$ they cuulath. When fed rected from to to quantitity of jelly wards oft many diseases thcy are subjeect to ou this Coast. Pnt up in sacks and shipped C. O. D. by express or by
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et just what is wanted by sendiug orders to her
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I offer for sale a lot of choice Spring Pigs, farrowed February 22d and March 1st, ready to ship about middle of May. Also,
Three Fine Young Boars,
Seven to Eight Months' Old.
FOUR BOARS AND FIVE SOWS,
Four and a Halp Months' Old.
Can furnish pairs not related of the younger pigs. Stock well boxed in light strong orates, with feed for journey, and delivered at Car or Boat, in Stockton, free of charge. Prices reasonable and satisfaction guaranteed. N. B. - No poor, unthrifty pigs crer leave my pen, ALFRED PARKER, Bellota,
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Ten head of Red Durhams from I2 to 15 months old, Also, 12 head of large work horses and unares will be sold this spring at private sule on my ranch, six miles From Oroville, Butte County.
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## Patents and ofnentions.

## List of U. S. Patents Issued to Pacific Coast Inventors.

 By Special Dispatch from Washington, D. C

## Week Ending, April 9th.

 Carriage Door.-A. Bink, S. F. Sornage - A. Hansen, S. F.SPINMING Top.-C. Raetz, S. F. Govervor.-J. A. Rigby, Carson, Nevada. Pump Valve.-A. W. White, San Jose, Cal.
Vemicle Giears.-J. J. Gallagher, Davisville. Ladder.-D. D. Hayes. S. F.
Gimin Merer.-J. C. Hunt, Sheridan, Cal. Device for Holdict Cois.-J. Ostergard,
Cherry Creek, Nevada. Starfeubeil and J. Horse Napkin Holder, -l. Thompson, s. F.
Coveraling Plates for Ice Machies.-J. Congealne Phates for Ice
P. Jones, Gold Hill, Nevada
'ehiche Weret Vehicle Wheel.-T. H. King, S. F.
Qutcrsilver Fursice.-R. F. Knox, S. F.

## \section*{Re-fssems. tefeldt, S .

 <br> Furvace, -C. Stetefeldt, S.}Laundry Bleting, etc.-The Western

## Dr. Lewis' Camping Tour

We have received from Dr. Dio Lewis the following spirited note about his camping tour, to which we have alluded before. We belicve the trip will be productive of health and pleasure all who undertake it Edrrors Press:-On the first of May we be gin our camping trip through the mountains of
this State. IVe shall be a hisent four and a half months, and travel between one and two thonsaud niles, almost exclusively iu the mountains. Already more than Members of the party will pay just enough t meet the actual expenses.
If about 15 persons, slarcs of the alcoholic
appetite, would join us for the sunmer 1 would engage to cure them of their uninappy malaly.
In such a life more can be donc to cure this dis. In such a life more can be donc to cure this dis-
ease of the brain and nervous system iu a ease of the brain and nervous systent iu a
month than can be donc in a year in any of the institutious established for that purpose, Per-
sons may join at any time up to Iuly Ist, and
man sons 12
can sen
Cal.

## "Fabrics for Spring Costumes."

Some of the lending modes for the preseut
and near future are very semi-masculine. The and near future are very semi-masculine. The under borly with front in vest form, the regulan vest being nsually proferred for handsome nia.
terials. Coats are worn for eveuing, reception, terials. Coats are worn for eveuing, reception,
dinner, carriage and promenadiug costuncs.
"Cutaway" jackets are constantly iucreasiug in "Cutaway" jackets are constantly iucreasiug in
popularity as the spring advances, and no wonder. Why, the jannty and coquettish air that pervades them is sufficient to make any laty go
into ecestasises over then. Rich toilettes o
Res. plain or self-colored silk denand the vest
brocaded silk in pale rose, bluc, lavender color, cream or nankcen tint. A fashionable in basket pattern. One shade is plum, nary blue, brown, gray, Beige Havanne or deep car-
dinal, and the other is straw color. Biege Havdinal, and the other is straw color. Biege Hav.
anne iu English is Havanna brown, and has the soft yellow cast of tobacco. The vest may be
in striking contrast with the color of the dress in striking contrast with the color of the dress
or harmonize in one of its shades with the solid or harmonize in one of its shadcs with the solid
material. White and nankeen pique vests are ing popularity of plaited skirts has led to throwing popularity of plaited skirts has led to the
introduction of patterus for this garment. The
skirt may be made of any dress fabric that can skirt may be made of any dress fabric that can
be plaited, and if desired, it may be decorated
with flat braids or folds about the bottom with flat braids or folds about the bottom, A bining the skirt with a eutaway losque like
model No. 6,230 , or jacket like No. 6,187 of model No. 6,230, or jacket like No. 6,187 of skirt, No. 6,228 , can lee obtained of the same
firm. See advertisement. Grain Thrbshisf. - An alvertiser in this
week's Press desires to correspond with parties who may need his serviecs for the coning harvest. He has threshed in San Joaquin valley,
Sacramento river islands, Half Moon bay and Salinzs vallcy, and is prepared for all kinds of work. He will burn straw or wood, according
to the locality. Read advertisement Stent \& Co., 132 Nassau
St., Now York, "Magle Claw," and when you St., Now York, "lagle
order mention this paper.
See advert
the country.


Thirteenth Industrial Exhibition
the Mechanics' Institute, S. F. The Board of Managers have the honor to annouuce that the Thirteenth Exhibition of the
Mechanics' Institute, and the tifth annual one given in the graud pavilion on Mission, Market and Eighth streets, will open to the public Augnst bth, and closs september ith, The public are respectully requested to ro spond liberally as exhibitors and visitors, and shous enable the Board of Trustees to realize from this fair a sum sufficient to liquidate the
small indebtedness now due on the Mechauics Institute library property, and to answer speedy fulifllment of the sanguine hope of the
Trustees and well-wishers of the Society to make it a free library for mechanics and ap prentices, the Board to institute perman
classes for iustruction in the mechanic arts. The exhibition building is 550 feet long, 200
feet wide, centrally located, and accessible b six lines of street cars, giving direct communication with all parts of the city.
The promenade is a gallery under the main
nave, 16 feet wide and 1,000 feet long, from which an unobstructed view of the interior i In addit
In addition there is au annex 220 fect long by 75 feet wide, containing the cxotic garden,
which will contain all that is rare and beantiful in the floral and horticultural world, increased
by the finest rustic and by the finest rustic and picturescuuc effects ob-
tainable. The whole, pavilion and garden, will be brilliautly illuminated at night.
be made specially attractive by paintinge, will uary aud works of art. The Managers are hapyy to announce that the San Francisco Art
Association have kindly cousented to take charge of the same, and that our local artists have promised to display their best productions.
Among the many attractions this year the musical part of the exlibition will be a noted feature, as the best obtainable orchestra wil mental concert, introducing the latest and mosit pleasing novelties of minsical composition.
A tiue refreshment saloon, restaurant, an 4,500 co:nfortable seats will be provided for the
convenience of visitors, of which the average attendance during the last exhibitiou was 12, The per day. of Managers particularly desire hat the natural and manufactured products of that end all possible facilities will be extender to exhibiters of such articles.
A larie and powerful enginc will furnish ann ple motive power, while stean and water will
he furnished for such machines and appliances is require then. free of cost to the exhilitors.
The main line of shafting is 490 feet long, with alleys sulticient for all requirements. onpanies will convey goods intended for exhi ition at one-half the nsual rates. Ternined nyon. in any infornation regarding the exhibition
ill be given or scnt by audressing the sied ir any be givell or scnt by address
Filtary.
Eoard of Managers:
Irving 31. Scott, Heury L. Davis, Asa K spaulding, Janues Drury, H. ... Smeth, Janes piers, N. ACDonald, J B. stetson, H. I
Hutchinson. Nathaniel Huuter, A. L. Fish.
J. if. Cctver, Secretary, 2, Post st.

## Signal Service Meteorological Report.

 Week Ending April 23, 1878.



Clear. | Clo'dy | Fair. | Clear. | Fair. | Fair. I Fait
Fotnl railu luring the season. from July 1, 1877, 3511 in .

## Farmers! Farmers

Throughout California are requested to send Labor Exchange," 33 and 3.5 O'Farrell Street, f charges to employers aud employees.

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S. F. MARKET Report.

Nors.-Our trule review and quotations are prepare n Wednesday of each week (our publication day), and ar ot intended to represent the state of the
rday, the date which the paper bears.

## Weekly Market Review.

DOMESTIC PRODUCE. ETC
ar Fancisco, April 24th, 1878.
Thera has been but little of cspecial note in the tradc of the week. The grain market is frin. There has comc an advance in the Eng. ish market, and about 5 c per ctl has been dded to the local price in consequence.

Range of Cable Prices of Wheat
The course of the Liverpool quotation for Wheat to the Produce Exchange during the
days of last week has been as recorded in the days of last
 inducements in the way of low, prices, but buy
ers anticipate they need, showing no disposition to and Ohio X@XX are now offered frecly at 35@ 40 c , and even these prices are not apparently
the bottom. Fiegarding Fall California there is a slightly inproved feeling, which is natural nuder the circumstances, the supply being very sinall and choice parccls hard to obtain. A
small parcel of new Spring California has been disposed of, bor the terms were very carefully 000 tl s fornia, 13@16c; 12000 the scoured do, $45 \mathrm{c}, 5^{5}$ 000 tts spring do, $14 \frac{1}{2} @ 20 \mathrm{c} ; 12,000 \mathrm{tts}$ scoured $6,000 \mathrm{lbs}$ F $15 \frac{1}{2} \mathrm{c} ; 14,000$ Hs Western Texas, 15@16c; 60,
000 tts X and XX Ohio fleece, $41 \mathrm{c} ; 10,000$ Ibs 000 tts X and CX Ohio fleece, $41 \mathrm{c} ; 10,000$ 16s washed Western do, 43c; 2,000 tbs scoured Western Flcece, 4 Gc; 8,400 lbs super pulled, Fall Califoruin, 000 les Spring do 16 Ftis Colorado, $4,5,000 \mathrm{tts}$ Orean 500 tbs scourcd medium Territory, 25,000 tos Western Texas, $3,500 \mathrm{lbs}$ scourcd do, $40,000 \mathrm{X}$ and above Ohio, 2,000 lis No. 1 do, 20,000 libs X and above Nichigan, 65 bags super pnlled, 125 do
combing do, and 160 do X do, on private terms. Domestic Produce.
The following table shows the S. F. receipts The fork ending noon to-day, as compared with the receipts of previous wceks:


BA(SS- Bags are unchanged, but the trade
irm and sales large. We hear of one sale of $1,000,000$ (iraiu Bags to a speculator at $11 \frac{2}{\mathrm{c}} \mathrm{c}$ cash.
We note -Barley sustains a slight decline. ity, sold at $\$ 1.0 \overline{5} ; 100$ fair do, $\$ 1.07 \frac{7}{2}$; and 200 at $\$ 1.10 ; 500$ sks Feed sold at $\$ 1.07 \frac{1}{2}$ per ctl . rise all around, as shown in our price list. We note a sale of White Navy Beans at \$4.
CORN-The demand is strong and prices
have advanced. We note sales: 100 ctls White (very weevily) at 81.50 ; 212 do large Yellow (wi.87⿺ 300 do at $\$ 1.90$; 200 sks large llow at (weevilly) at $\$ 1.77 \frac{1}{2}$; and 85 large White (weevily) at \$1.90 per ctl.
DAIRY PRODUCE-P
DAIRI PHODUCE-Packing is being done quite largely and the result is an advance on is as good as ever came to this market, and is packed with confidencc. Some dairymen report their cows not doing as well as usual in amount of producc. This, we believe, is due to the abundance of over-succulent food and will
correct itself. The large yield per cow may come a little later in the eheese is un. changed.
EGGS.
-Fresh Hens' and Ducks' Eggs are doing a littlc better, haviug reached 2je per FEED-Corn Meal sympathizes with the rise in Corn, and is now held at $40 @ 41$ per
ton. Hay is unchanged, having $\$ 17$ per ton as the top price for clocice Wheat. We note Hay
salcs: 30 tons choice Whent sold at $\$ 17 ; 30$ tons poor Barley at 89.50 ; a car-load of stock at 88, and a boat and
FRUIT-The ships are beginning to arrive
with fruit from the Pacitic islands. The with fruit from the Pacitic islands. The
schooner Louisa Norrison, from Raiatea (Sandwich islands) brought 207,000 Oranges and 8,500 Cocoaunts. This is the fiuest cargo of are quoted at $\$ 35$ per thousand. The Paloma,
from Tahiti, brouglit 270,000 Oranges. These are quoted at $\$ 25$
being 200 inon priee was $\$ 7$ to $\$ 12$ per chest.

HOPS-The local market is still lifeless, and we gain no news. Emmet Wells reports the
New York market, for the week ending April 12th, as bales, Brewers probably as many more. Prices remain nominally unchanged. Without a re vival of the export trade we must look for dull dragging business.
OATS-Oats are still dull and sales small.
Prices are unchanged.
ONIONS-Good Onions now command $\$ 2.2 \overline{5}$, and the rate is expected to advance during the week. POTATOES-All good old Potatoes have ad vanced $50 @ 62 \frac{1}{2} \mathrm{c}$ per ctl over last week's prices. New Potatoes now bring $3 @ 4$ a c per it.
in frist-quality Beef, and the price is advance to 8 c per to for the best. Other meats are good supply, and prices unchanged. Cured Meats are active; the only change in prices is the reduction of te per Hb on California bacon. RYE-Last sale of California at $\$ 2.40$ per ctl ments of String Beans, and they have sold a 50 c per Ib . Asparagus has now 4 c for the top price. Caulitlower advances to $\$ 1$ per dozen. WHEAT-The prices are generally 5 c per
ctl larger than last week. We note sales: 1,000 ctl larger than last week. We note sales: 1 , 00 18,000 ctls choice Milling bought in the interior for delivery here at $\$ 2,15$, and 1,200 ctls on the spot at the same price , $4,500 \mathrm{ctls}$ goud Ship. ping, at $\$ 1.95$ per ctl; 450 ctls choice Milling at $\$ 2.15 ; 1,600 \mathrm{do}$, at $\$ 2.12 \frac{1}{2} ; 700$ good do, at $\$ 2.10 ; 1,000$ fair do, at $\$ 2.07 \frac{1}{2} ; 600$ weevily do, at $\$ 2.02 \frac{1}{2} ; 157$ do, at $\$ 2 ; 2,000$ do Milling, ou private terms, and 2,800 do Milling at Vallejo, at $\$ 2$ per ctl.
WOOL-Wool sales are quite large, and about at last week's prices. Northern frce Wools are coming in slowly, and place the top of the market at 26 c , although exceptional lots may reach 1 c more, Some of the $6 @ 8$ mos, clip The price is regulated by quality rather clip. The price is regulated by quality rather Some fine Wool is arriving from the southern coast. We note sales $200,000 \mathrm{Ht}$ various dcs. criptions, $15 @ 24 \mathrm{c} ; 22,000$ northeru free, $26 \mathrm{c} ; 15$, 000 San Joaquin, 6 mos. 14@18c.

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## FRUITS AND VEGETABLES.

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second Choice ii to 16 Kil.
Cornellian, 12 to 116 to 16
Femal...
14
4 to 16 Kil............... 12 Kii
14 to 15 Kil. Females. 12 to

## simon, 20 Kil . 24 Kil.

Rohert Caif,, ani $9 \ldots$ Kil.
Kirs, Freuch,
Ch
French sheel, ail colors.
Eastern Calf for Backs, ib.................
Sheey Roans for Topping, all colors, doz
For Linings

Good French Carf
Best Jorlot Calf.
Leather Harness, it
Skirting, to
Welt, doz..
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Engraving. $\begin{gathered}\text { Sulucrior Woord and Mctal Ein } \\ \text { qraviv, Electrotyping anal ste } \\ \text { rentypiug }\end{gathered}$ reotyping dine at the office of
die Minive and scikntic Prese, San Francieco comble ra'es. Scnd stamp for our eireular and samples.


## REAPERS! <br> REAPERS! <br> REAPERS!

FALLEN AND TANGLED GRAIN Harvested with Ease and Without Loss by Using Walter A. Wood's New Sweep Rake Reaper. Eel River Valley, Humboldt Co., Cal., August 20, $187 \%$.
Messrs. Frank Bros. \& Co., San Francisco:-Gentemen-I have used the
Walter A. Wool's New Sweep Rake Reaper this senson and tind it superior
to any Machine I have ever used, and superior to any I am acquainted with.
I have used the Champion, Kirby, Buckeye, Wheeler and Fussell Machines,
and ean do better work in lorged and tangled grain with the Wood's than with
either of the Machines named, and ean eut grain well that neither of them
eair cut.
The draft of the Wood's is lighter, and I eonsider it absolutely the Best
Macuine ever introduced into Humboldt County. Yours truly,
G. C. BARBER.


No Reaper ever introduced on this Coast has met with the brilliant success acquired by the Walter A. Wood's. No Grain is so badly lodged that it will not cut and deliver it in good shape. Send for Circulars and Catalogues.

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It is the most perfeet substance known, possessing unsurpassed beauty, great brilliancy of color, adhering firmly to the wood, and giving the richest, most agrecalle and uniform tints. ont is equally as good for miside as nutside work; orer old work as well as new; in fact where any Houses painted with it are distinguishable for years by their sulperior brill painted with any other paint.

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roofs not only fills np the cracks and prevents the shingles from warping, so as to preserve the roof and prevent its leaking, but its fire proof gualities are such, that a roof thoroughly coated with it is nearly as safe from lire as if made of iron. This featnre, together with its chenppess, makes it nost desirable for warehouses, brilges, mininy buildings, and for all purposes where durability and fire proof qualities are desircd.
Ask your
Ask your dealers for it and take no other. Sample Cards of Colors and lrice list mailed free on
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## California Paint Company,

No. 329 Market Street, San Francisco, Cal.

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## Volume XV.

SAN FRANCISCO, SATURDAY, MAY 4, 1878.

Work of the Laurel Borer

## We receive from A. O. Carpenter, of Ukiah,

 a specimen of California laurel wood which isalmost turned again to the dust from whence it almost turned again to the dust from whence it laurel borer. Upon the exposed surfaces of the block there remains no trace, of woody structure; all is turned into a light yellow powder and looks as if you could pineh it up like flour or snuff. By brushing the surface it is seen
that there is some wood remaining, but it is completely honey combed by the borers. This insect has long been observed in counection with its ruinous work with our native laurel
and has given the laurel a poor reputation, because unless means are taken to destroy the larve and eggs which may be in the raw lum ber, the insects are quite likely to
the finished surface of our furniture. At a recent meeting of the San Francisco report on the laurel borer which will be found of interest in this connection. He said: I have been fortuuate enough to hatch numerous specimens, so that 1 now posscss the insect in
all stages of its life. I discovered ou the lst of January this year, the larvex, the chrysalis and conditions and have been able to study them I cannot say preciscly at what time the mature insect appears in our forests, but, in sunny ex February, or as soon as the sap begins to flow in the tree. The mature insect, generally the
female, for protection, hibernates in the already bored holes. From, these she emerges in the warm spring days and begins her work of pierc-
ing the bark of the young wood and depositing her eggs. The egg is hatched by the warm suu and the larvæ begins its work of boring. After
boring for a considerable distance, it chambers out for itself a place and changes to the chrysalis state. In a short time, if the weather be
favorable, the perfect insect emmerges from the chrysalis and makes a straight and rapid cut for the outside. I do not know how long it takes it eut its way out, but I have seen one hide itself in a few hours. On boring out, the insect escapes for its work of reproduction, and the wood or furniture, as the case may be, looks as if tine shot had been fired into it.
As to the trouble from this insect in furniture,
I am quite certain that it arises from either the intentional or careless use of lumber alrealy infested by the larva. The puttied-up places told, on what seems to be good authority, that timber cut in the fall is less liable to its rav. ages. In the course of my inquiries, laur has
that in several instances where the laurel ha been used in ship building, it had been shown that when eut in the fall it had exhibited no signs of insect work, and, in one case certainly, in the spring and had suffered severely. This matter needs investigation. mat destroyed with a little care. I would sugges that instead of the ordinary kiln drying by continuous heat, the lumber be subject to a moder process be reeted several times at interval of a few days, and I feel confident that all germs, whether of the dry rot
will be thoroughly destroyed.

Aprian Apricots.-Mr. Rix, of Washington Corners shows what heavy burdens our fruit trees are assuming. A twig eight inches in length shows 20 apricots wedged in around it, each larger than a pigeon's egg. How many of these must
be brushed away to meet Mr. Brier's advice to have a hand's breadth between the fruit? And yet to secure full sized aud high priced fruit,
there must be generous thinning on nearly all our trees this year. It seems cruel, but other dium and small fruit, which will not pay it

Rural or Suburban Dwelling.
The picturcsque (sothic villa, shown in our engraving on this page, is a style which is fast becoming prevalent. It is designed by Isaac Hobbs \& Son, of Philadelphia, and is something
like numbers of handsome dwellings lately re numbers of handsome dwellings lately in other parts of the State. It is a graceful de sign, and the buildings which we have seen in the same style are fully as handsome as the
picture. The shape and ornamentation of the

12 feet each; $C$ (on the left), cham
eet ; $B R$, bath room ; $B$, boudoir The tloor above may be finished for a comadious attic, or made into two or three pretty sleeping roomı. Any one desiring more explicit
information eoncerning the design which we pre sent herewith, or other points on building, will be interested in the lusiness announcement of
the architects which appears in our advertisigng the archit
Mlek and Water. - Ont friend who writes on agricultural topics for the Recorl-Union, in.
aulvertently departs from his usual accuracy


## design for a picturesque gothic villa.

building comport well with rural or suburban ing such a house unless he could give it handsome trees and tasteful grounds for its cnvirontion of rubble stone well pointed, or upou con crete, or upon the wooden base which is more common in this State. The superstructure is
of frame, and the roof may be of slate or shinfles. The principal rooms and hall of the first
loor may be finished with black walnut, or with kitchen,
vestibule Second Story. $-P C$, principal chamber, 14
by 16 feet; $C C$ (on the right), chambers, 10 by

some of our handsome native woods. There
are uew and tasty designs for finishing with the uatural wood, which are exceedingly neat in appearance and inexpensive. It is estimated that
villa like the engraving can be well completed with modern appliances for about $\$ 4,000$.
The following will interpret the lettcring upon the ground plan, and give the sizo of the rooms. First Story. $-P$, parlor, 14 by 16 feet, with bay window; $D R$, dining room, 12 by,
20 fect ; $S R$, sitting room, 14 by 15 feet ; $K$,

Second Story. $-P C$, principal chamber, 14

## FLOOR PLANS OF GOTHic villa.

cream the lighter it will be." Crean ap.
proacles nearer the specific gravity of water proaches nearer the specific gravity of water
than milk does. For this reason milk which has an uuusual percentage of cream may have a suspicion cast upon it by the lactometer, which is merely a test of its specific gravity as comared with wate
Quotation Marks. - A long article in Satur nized and on Woodward's Gardens is recog commentary on lengthy texts borrowed from our columns. We must suggest to the commentator the valne of quotation marks in such instances,
when he remarks that "the more milk watered the heavier it bccomes, etc." The
pecific gravity of pure milk ranges from 1,018 to 1,045 , according to extremes of all observa tions, when the water is 1,000 . The average specific gravity is alout 1,032 . The fact is that the more water there is added, the lighter it becomes, or, in other words, the nearer it
specific gravity approaches that of water. A though our fricuy makes the richer milk is in
right when he says that "the

## Our Editorial Rooms.

The editor thus publicly makes acknowledgement of the indebtedness which he and the readers of the Press owe to the publishers, for a complete renovation and refurnishing of our editorial rooms. We count the readers in the walls, crystal windows, briehlly thin snowy work, and clealy wood work, and cleanly covered Hoors, must tend to
sharpen editorial points-whether they be of sharpen editoria points-whether they be of
scissors, pencil or braiu-and the result would se a fresher character to the matter which fills our columns. Whether this will indeed follow,
the future only can tell. At all events, we feel as fresh for work ter. At all events, we eel and as complacent amid our comfortable surroundings, as the country youth driving to the tair in the new buggy. All we lack, perhaps, is about 10,000 calls from Rural readers, each one bringing us fresh notes of whatever is do-
ing in the lines of development, progress and improvement or ready for then ; iu fact, we are as hungry for
visitors, as the housewife with a new parlor carpet. If they cannot come in person, the boy will escort them up from the postoffice. Our pathy with old Goethe in his cry for "more light." There is one point which may be of
practical value to some of our readers who are contemplatiug improvements of their abodes or outbuildings. We have had opportunity to tost
the qualities of the Averill mixed paint by occular demonstration, and we do no thesitate to ing quality, and a beauty of finish which makos ing quality, and a beauty of finish which makos the rosy morning. It speaks its own praise to
Heavy Shearing. - Messsrs. Severance \& Peet, Meriuo ranch, Niles, Alameda county, have just completed the annual shearing of their fiue flock of thoroughbred Spanish Merinos. This flock has become widely known through the during the last five years at our State fairs The flock also stands high among breeders, as is shown by the fact that many of the best flocks in the State have drawn upon it to build up their excellence. The result of this springs shearing more than justifies the previously
well-established reputation of the flock, and shows a steally improvement iu the weight of fleece, quality of wool, aud length of staple. The weight of some of the breeding ewe's fleeces we give, as follows: 22 tbs., 28 do., 20 do., 20 do., 18 do., 20 do., 26 do., 24 do., 20
do., 25 do., 25 do.
do., and so on- 26 of them averaging 21 pounds lo., and so on-26 of them averaging 21 pounds
6 ouuces. These ewes all raised lambs, and some of the r lambs at 10 months of age cut 14 to 16 pounds of wool per hcad. Twenty-five rams cutau average of 28 pounds 9 ounzes pcr fleece, and individual fleeces ranged from 24 to 36 pounds. Nany fleeces show a length of
staple of four inches and over, all of which is the result of great care and constant improvement in breeding, and provcs, what has bern
the experience of all breeders of fine stock, that one can hardly pay too high a price for a perfect sheep.
Personal--We had the pleasure last wcek of calling upon M. E. Fuller, Esq., of Wisconsin, at Frank Brothers \& Co.'s store, on Market street. Mr. Fuller is largcly interested in this firm, and is also member of Fuller, Jolmson \& Visconsin. Mr. Fuller came to this coast on a business trip, and was hurried away without seeing as much as he desired of our country. He went, however, to Oregoll, and was much pleased with the business character of our little sister Portland. 1Le finds the business of his firm, both here and in Portland, in satisfactory
 work in this active year. We hope Mr. Fuller
may come again at a more leisurely season of the year, and make wide acquaintance with the people of a State whose interests he is advan
ing by the investment of his capital here.

## Korgespondenoe.

## The Malva Question.

Editors Press:-I send you sanple of the stalk of "wild malva." You pereeive that it is pretty tongh and over half an incl through. It was obtained under the following circum stances: On November 24th, 1877, I took this with others, all tiny plants, from our almoud orehard. They had but just started from the ground. I $p$ laced them in a grape box and watered then1 carefully; my purpose was to see
whether the wild malva grew only from the whether the wild malva grew only from the
seed or could be propagated from the stump by irrigation.
On Deeember 7th 1 eut them to within au inch of the ground, learing mot a single leaf
growing on them. (On Marell 27 thl (having
 had sprouted from the stump, and grown to he
plants 30 inches in hight, sone of them the size
of the sample I send you. At this date I cut of the sample I send you. At this date I
them down the second time to within t inches of the ground, close enough to remove
all the leaves; they have only been watered all the leaves; they hav
Now, April 231 two-thirds of them have sprouted again, and from the old stump, not
from the root, as you see in the sanple sent,
and I expect the others will yet sprout. and I expect the others will yet sprout. small field of alfalfa, and the faet that it sprouts
from the stalk makes it a source of trouble, befrom the stalk makes it a source of trouble, be-
cause the irrigation of the alfalfa gives new life cause the irrig
to the nalva.
Now for the way animals eat it here. Iu a
pasture of fine grasses where the pasture of fine grasses where the uralva has
been started ly irrigation, the cows left it alone, only eating off a fewv, leaves here and there.
The waifs and strays along the road, horses and The wails and strays along the roan, horses and not eat it if other grasses are to be obtained.
They will eat it if nothiug else is obtainable, so They will eat it if nothiug else is obtainable, so
will sheep.
I send yon seeds of the "wild," as also of the I send yon seeds of the "wild," as also of the
"tame malva." Simnltaneously with phanting the "wild malva," 1 planted some seeds of the
"tame malva" tree, to determine its habits and peculiarities, hoping therelyy to find a "forage
pree." It the "tanie malva" can hc prumed to tree. If the "tanie malya" can hc pruned to
any desired shape and will send forth new loaves in the sumner, to replace those stripped
off by animals, it may be in some situations or off by animals, it may be in some situations or
localities a valnable tree. I have tried animals with the leaves of the "tame malva" tree and find they eat then.
Mlission San Jose, (Cal

## Another Testimonial

Editors Press:-The malva question is diseussed by Mr. lyun, of Ventura, in the lPress
and shown in its true light. I ate my New Year dinner at Los Angeles and stayel with a
friend of mine there nearly two weeks. He is friend of mine there nearly two weeks. He is
int the pork-packing business and lhe does the buying of the hogs for the firn, and of course
has to travel over the best part of the county in seareh of corn-fed hogs, as they do not pack any
other kind. He lias been, as I was butcher, and, as I wanted to see the country, he invited me to go out with him erery day:
He and I discnsssd this malva question. He was in favor of the malara and I opposed it. I told him that was a very easy question to set-
tle, as I was willing to leave it to the dumb brute and if he could show me one fat cow in
any of our travels that lived on malva alone I any of our travels that lived on malva alone I
would give up my point, but if he failcl then I
should consider that I was right. 1le looked every day but failed to find a single one that there was malva two feet high in nearly every ficld on the bottom land.
I came from Los Angeles to Santa Barbara
and there I found plenty of malva, lut no fat cattle, and the butchers there tohl me that they
were obliged to send to were obliged to send to San 1 ranciseo for their
beef as there was no beef eattle in that the cointry, for all theere wastle in that part of the cointry, two feet hill. This I know to of malva a fact
there and this proves that the malva theory falls to
the grouud, as all the cattle that 1 saw were $\underset{\substack{\text { poor. } \\ \text { Rocklin, Cal. }}}{ }$

Perniclous Weed.
Elurtors Press:--Your correspoudent, Mr. the weed called malva, by some kuown as "marsh mallow." For fear that some person might be induccd to cultivate it, I write to
add my testinouy to that of Mr. N. Lyon in the same number (April 13th). The weed has no merit whatever as a forage plant. Stock of
any kind will not eat it if they have a choiee.
It is the first weell to start after rain It is the first weed to start after rain, annd,
whilst it is young and tender aud the ouly greeu thing in sight, a little of it will be cons.
sumed, but as soon as the alfilerilla and bur
slover sumed, but as soon as the alfilerilla and bur
clover have grown nothing touches it. lu a year of scarcity 1 have known a tlock of sheep
kept on it for three weeks, that beeame so kept on it for three weeks, that bceame so
weakk that when it hecame necessary to move
them a slort distance to other feed, numblers them a short distance to other feed, numblers
of thcin diel from weakncss. The only good
thing 1 can say in favor of it is that, where it
makes a large growth it is a good indication rich moist soil. Our lest lands are full of the seeds, but as it is the first turng to start atter
the rains the rule aunong our farmers is to wait then plow and sow. The grain will be up an graning hefore a second crop can start, and th gronsing hefore a second crop, can start, and the
malva does not give any further trouble. But
it is ery troublesome in volunteer sud summer. malva coes not
it tallowed troubl
fall
The tree lualva is an entirely different plant and stoek cat it readily.
$M y$ advice to the
Hy advice to the farining cominunity is, to destroy the malva weed wherever it appears,
and not to attempt to propagate it. The mus and not to attempt to propagate it. The mus.
tard is not son manageable. it does not start so
sooul is well startell and the meance after the grain is well startell.
clip it of or pull it
Analhein, Cal.

## Notes On Stockton Manufactures.

Editors l’ress:-I spent a few days in Stockton last weck. While there, I noticell recent will no doubt be of interest to farners in other portious of the State where the Reral finds thousauds of readers. Mr. Thomas Powell has derrick and nets for stacking hay and grain (o which I see au illustration in your advertising columns), and is mannfacturing a large number. This is the best derrick riy for
stacking grain that 1 have seen.
The Lissenden Agricultural Works are manu facturing 13 machines for cutting, threshing and saeking as they go. This machine is a
combination of header and thresher. It cuts 12 feet and the drapers convey it to the cylinde (12 ineh). It is worked by four men and
horses. Mr. J. C. Ilolt is the patentee; h claims to eut au average of 30 acres a day.
1 also noticed a friction hoisting apparatus $t$ be used instead of horses for hauling the der
rick forks with grain to the talle alongside of the separator. It is run by a belt from the en-
gine, saves one man, and gives the liorses a gine, saves one man, and gives the horses a
chanee to get well rested for moving. It re quires a top-mounted engine for this work, such is old, but the application to threshing ne Mr. Reynolds is fitting up a 32 -inch cylinder thresh. The power for the separator is to he independent of the power propelling the header This strikes me as a better plan than that o the Holt machine, which is altogether pro pelled by the encentrated power of 16 h orses The machine takes the place of header wagon. 1 will endeavor to watch the further progress
of this machine, and report at sone future day. of this machine, and report at sone future day.
As you have already announced in the Press, As you have already announced in the Press,
the Australian govermment offer a reward of $\$ 20,000$ for a suecessful machine to cut and
thresh. That is worth striving for by Holt, Reyuolds, or auy other man, of an inventive turn of mind.
1 also uotieed improvement in the Marster
self-feeder, which is now being mauufactured self-feeder, which is now beiug mauufactured
in Stockton. It is a very simple macline and in Stockton. It is a very simple machine and
not likely to get out of order. Onc purehaser of this self-feeder ran two of them on his sep-
arators last season. This speaks well for the arators last season. This speaks well for the
feeder.
Mr. King is engaged in putting his straw. mirning attachuent on to wood-burning en gines.

## Chufas.

Enirors Press:--I have been considerally interested in oceasional articles which have ap peared in the leckal. Press alout chufa or earth almonds. Twenty years ago when the
Californit Cutturist was startel, I was a subscriber. The glowing accounts of the wonder ful productiveness and great value as food for valuable acquisition of the department of agriculture, chufa, published in that periodical, in-
duced to to invest six tollary duced me to invest six dollars in as many
pounds of the tubers, which I planted and cultivatcl, in accordance with the best lights 1
hal. The soil was not a sandy loam, but good grain land, which afterwards produced 30 bush els of wheat to the acre. The plant came up
indifferently, made a scant show on the surfacc, and with careful harvestiug, 1 seeured, to the
best of my recollection. abont a milk pan full of the tuliers. Neither the piigs, the clickens, or
the cliildren cxhilited any markel fondness for the new esculent, and my own taste pronemncei it a poor substitute for the echestnut, which
had such sport in gathering and pleasure in eat. ing when I was a boy. I supplose I onght $t$ o
have given it another trial, luat I did not have given it another trial, hen a resident of
Now, MIr. D. W. IIough, theen
Oakland (1 saw his name reently in print ) who exhilited clufa of his own growing at the valued cural fair in is, or Pr other man," has achieved any such results in
this state as elainued 20 years ago by the elitor of the Alaboma Colton Planter ( see Cal.
iformua Cultur ist, Vol. 1., page 223), or as reprcsented by C. C. Laniglon, also of Alabama,

tural injunction, "prove all things, hold fas that which is good," is especially applicalle to
uriculture, and if there is any thing of value in tericulture, and if there is any thing of value in
elufa fora California farmer, I want to ive it another trial.

Seed Potatoes Without Eyes-Rain.
When will the savants decide the vexed question of seed potatoes so we cominon people will knowu what to do about it? Shall we plant the seed ends, the butt ends, the whole aud money experiment until we shall know
little at least definitely upon the suljeet. Two inonths ago I plarted 15 hills of seed, four piees to each hill. Cut from the butt end of potatoes, and with no eyes; eael piece alout an They are now the best looking potatoes I have growing, but this may be because I have eason for potatoes, and the experiment is wort nothing, only as proving that potatoes will grow
without eyes. liain, rain, rain yesterday, rain to-day
Farmers are getting alinost as hlue as last year when we had no rain, almost. Barley is get round so wet it cannot dry; ground plowe for corn, covered with weeds. I lave planted and replanted eorn to have it again and again
partially washed into the ocean, to be again replauterl: and 1 propose to continue thus unto ers' life has its hariships, so does that of any other ealling. With gool courage, and persevering indngstry we will eventually come out as siven to grumbling and looking upon the shady side, than those in other walks of life. Were We to try a little mote to he happy, we should
not fail of success in the undertaking.
Santa Barbara county, April, 20th 187 s .

## Squirrel Breeding

Editons Puess:- I have undertaken a syste matic investigation to ascertaiu the facts about the reproductiou among ground squirrels, by opening a number at stated times and keeping record of the results. The following is a cop of my squirrel record thus far this month April 2d.-Opened two; found six young in each.
April 4th. - Opened two; found 11 young Ae, none in the other
April 5th.-Opened three; one had 13 young A pril 6th.-Opened four; one bad eight young ree had none.
April 10th.-Opened one; no signs of young. April 13th.-Opened five; one lrad eigh April 231.-Opened one; found 10 young 1 of the young were very small.
Mr. Cull, of Washington Corners, who makes guirrel poisoning a business, iuforms ine that also thinks they are defective in the sense o smell. If any of your eorrespondents kuow
whether the squirrel has more than one litter a whether the squirrel has more than one litter a
year, the information will be valuable to all year, the information will be valuable to al
engaged iu their destruction. Notbing but per sistent persecution will rid us of this enemy.
Mission, San Jose, April 234, isis.

## Poultry Yaro.

Poultry Yards at Washington Corners
Editors Press:-Mr. A. D. Pryal and myclf lately paid a visit to the poultry yards of Mr. Rix and of Mr. Threlfall, at Washington Alameda county. Some notes which we took ound Nr. A. O. Rix busy in his beautiful gar den. Lcaving his work, he showed us over his well-arranged yards. He has a scrics of smal picketed enclosures, kept clean and well supplied with food and water. The various labor-saving 1r. Rix has the Silver Spaugled Hamburgs, the White Leghorns, the Brown Leghorns, the Black Spanish, the Hondans, the Dark lirahowls. ile gives the preference for laying pur poses to the lrown and White Leghorus, and the record of each lot is extremely simple. card, ruled for the days and months is linng in
cach hen-house. The person who nightly athers the eggs, lencils the number in the every month. 1 give a fow figures which eopied from No. 3 contained Jaunary. Ist, 6 Brown
Leghorn hens. These laid in January, 112 eggs, Leghorn hens. These laid in January, 112 eggs, rere arlled, aud the 8 laid in that mouth 17 eggs. The prodnct $6,6,7,6,8,3,5,7$.
April ran tlius, $, 8,6,6,7$,
liard No. $i$ eontains 34 White Leghorn hens, all young. They began laying late in Jannary,
in February they laid 484 eggs, in Mareh, 773 , Mr. Rix has few Houdlans as yet, bint they Racks are also a showing. The Plymouth with pleasure that Mr. Rix's experience shows that thoroughbred poultry pray to keep, for Mr. Pichard Threlfall joined us before wo
finished our inspection, and we shortly went aeross the road to look at his establishment.
He has long ranges of small yards, coutaining He has long ranges of small yaris, coutaining
in the aggregate 3,300 hens. 1lis daily ship. 120 dozengs has, for some time past, averagen selected young fowls of no particular breed. The Leghorns, however, are leginning to pregiven a lage rariety of fool, and an oceasional wider range, so that they lock unusually well.
Both Mr. Lix and Mr. Threlfall use a small henhouse on ruuuers for each yard. The frame and runners are of light seantling, the sides aud tyle of this valley, as it is cheap, portable, and cau be easily cleaned
Mr. Threlfall informs me that by careful ses 12 per dozeu; also the obtains a couple of cents a dozen above the market price for his eggs, on account of shippiug them every mornThg, thus insuring their freshness.
The poultry and egg busiuess of this section is largely on the increase. Mr. Horner has all he cau manage, and the foothills are filling up rapidly with small "elicicken rauches." Su cess to every
Niles, Cal.

Perpetuation of Puysical Traits.-M. Lenglen, a physican of Arras, bas recently cal traits. A certain 11, Gamelon, in the last century, was sex-digital, having two thumbs on each haud and two great toes ou each font.
The peenliarity was not noticeable in his son, but in each of the three subsegnent generations it has been strongly marked, some of the childistinetly as their great great-grandfather. M. de Quatrefages has noticerl, a few months ince, a simil
A six-toed
peeuliarity to his descendants it has spread to such a degree that in the distriet where it occured the ordinary
nore to be met with

## Sheep and Wool.

Selling Wool According to Quality.
Eidrors Press:-For some time now-in fact alnost since wool became one of the recognized made ond that raised the sonthern parts of the State, on account of the constant occurrence of grease and hurs and other extraneous matters, and consequently southern wool has been and stil is sold as such, irrespective of its quality and freedom from dirt. There is no doubt that a erage northern wool is superior to wool of erage quality grown in the southern conuties, beems unjust that all south country wool account. I think any one coming to this State with the unfairness of this systcm, as, fortunately, agricultural and most other produce in generally sol
trinsic value.
Now, here, we have exceptional facilities for sending a clean sample to the market, having fact of being able able to so ow alfalfa, use of irrigating ditches for washing the s under such favorable
 nded as "southern' $\qquad$ why fetch the miserable 12c. or 13 c

$$
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## er of southern wool with advautage hot

ireseut, there is very little encouragement to sperior quality orol in the southern con ties of the statc. And I think
merits, that many of the wool growers in thas produce a eleancr and less greasy sample, and that the wool-growing interests, enefited thereby.
Hanford, Tulare County:
Some remarks on this sulject may

## THE DIIRY. $_{\text {A. }}$

Alfalfa and Dairies in Southern Cal ifornia.
Editors Press:-Mr. Nadeau, of Los Angeles, asks this question: "What profitable use can
be made of the alfalfa produced and producible in Southern California?
This question occurs without satisfactory answer to our leading thinkers on the subject of agricultural economies and to us farmers.
The qucstion is of vital importance to the
entire commonwealth, to all trades, business entire commonwealth, to all trades, business
occupations, professions, productive and consumptive economies, to agricultural and horticultural societies, which are the bourses of the tillers of the soil, whereon they mect to exchaug facts, thoughts, argumeuts and conclusions. Mr. Nadeau ought to be less perplexed in the premises than the average farmer, because he has been for years under the necessity of habituforage, in its relations to the Cerro Gordo Freighting Company, of which he is the chief and which is, perhaps, the most extensive horse-muscle transport.
Mr. Nadeau is otherwise specially qualified to reason on the subjeet of forage. To say noth-
ing of his grain fields in Los Angeles county, rivaling those of Lankershim, Van Nuys and
Baldwin, of the same county, which, ius their Baldwin, of the same county, which, iu their
turn, rival those of the Sacramento, Mr. Nadeau is a 1 roducer of a
hogs and horses.
hogs and horses.
The question challenges atteution. It is not within the knowledge of auy one person to
explore and develop the sulject in its great explore and develop the sulject in its great fact, arguinent and conclusion, to which it
obviously entitled. An earnest, persistent and
universal interchange of information is the demand of the hour.

The Relations of the Inquiry.
It nay as well be mentioned here that the inquiry relates not to the qualities of af pur-
as feed for stock. Its great value for that pur-
pose is now well settled. Its nutritive properpose is now well settled. Its nutritive proper.
ties are only $2 \%$ inferior to the best 1English
lay. The alimentary elements of alfalfa are lay. The alimentary elements of alfalfa are
more soluble than those of English llay It therefore has a wider range of utility
A pig, at any weight over $: 0$ plounds, thrives A pig, at any weight over 30 pounds, thrive
on alfalfa, green or dry, especially if grazed or summer, is from 15 to 18 days after mowing. The pig at any age would starve on seedless fed in the condition of dry forage.

## A Dip into the Classics.

Alfalfa and lucerne are nearly allicd species o
The genus Trifolium. Both are snail trefoils. the genus Trifolium. Both are snail trefoils.
Poth have long tap roots. An opinion of lucerne, as to alinentany value, may be fairly approp Columella who tlourished
time of the Emperor Claudius, and from whom has come down to our times the work entitiled
"De Re Bustica," and the book entitled "1De Arboribus," puts opinions on record on the sule ject of lucerne, as follows: '"Columella esteemed
lucerue as the choicest of all fodder, because it lucerue as the choicest of all fodder, because it
lasterl many years and bore being cut down the land on which it grew, fattened the cattle the land oul which it grew, fattened the cattlc
fed with it and was often a remedy for sick cattle.
"Virgil addressed himself to a congener of
lucerne or alfalfa, in celebrating cutisus, fo causing cows to yield abundance of milk, while its flowers are grateful to goats and bees. "Medicago or moou trefoil; legume lunate,
making barely, more than oue snail-shel complete turn,", are some of the descriptive
terms applied to a species of medicego, identiterms applied to a species of medicago, identi-
fied by $M$. Amoureux in the Mem. de la Sor. d'A Agriculture de Parix, fo
the real cytisus of Virgil.
"Medicayo sativa, purple inedick or lucerne;
flower stalks racemose, legumes contorted into
the form of a snail-shell the form of a snail-shell. In some instances or moon-polded variety of medicago". Conpare
these terms with those used in describing the mon trefoil or cytisus of Virgil. Go into a
California fielld of alfalfa and see trifolinun,
purnle-Howered, purple-Howered, racemose inflorescence, suail
shell legume, long tap roots, and, one must con shell legume, long tap roots, and, one must con-
clude that alfalfa, lucerne, and the cytisus of
Virryil Viryil are congenerous.
Medicayo satira or lu Spaniards, the grand trefle of the Fronch, columellas, choicest of all fodder: the seconn
cousin of Virgil's cytisus and the first consin of alfalfa.
1 am known to the ancients, whieh was of no value known to the ancients,
at least as stock feed.
Theophrastus
Theophrastus describes
ony; Ovid mentions oue as a wild-whod
rub; Dioseorides describes a cytisus, as white ad useless, to which Hygininus also white,
Dioseroridco, also mentions another
as food for eattle. It was raised from seed
This must have been the cyytisus of Virgil The Alfalfa of To-Dav.
My own experiences with alfalfa run parallel species and confirin, or at any rate strengthen, belief in the similarity of qualities. My bee hum among the purple flowers of alfaca and fatness and their distended udders overflow the pail. My Angora goats eat, frisk and gambol without discounting Virgil himself, for that "re liable and energetic
heard from Landrum.
A cow was hrought in from my band on bur clover, too poor for a sahara desert commissary,
and with eye-halls as white as a leper. Alfalfa and with eye-halls as white as a leper. Alanyll
curel this cow. It took six months. Columell might have wondered why it took less than a year. The fariners of to-day are enlighteued
by the accumulated experience and wisdom of ages, testifying to the great value of the genus species.
If Napoleon had not used up most of the sublimity, of 40 centurise looking down upon things, I would be tempted to exclaim to the
farmers of California: Centuries are looking lowu upon your alfalfa fields with conclusive testimony in their favor. Looking, down not
from the stupil pyramids, Napoleon's perch of 10 centuries, but from the immartal records tiquity. And as lawyers patiently explore the ages to inbue their minds perfectly with the all other professions work the mines of ancient experienc
example.

## Cure For Clover Bloat.

I have been prolix on the ancient testinony in favor of the alimentary value of Trifolium,
because there is a lack of appreciation of alfalfa in many quarters. Some go so far as to de-
nounce it, because cattle and shecp have been destroyed by it. If cattle or sheep are unac-
customed to alfalfa, and especially if they have been on dry feed, there is danger of injury
Green alfalfa is so appetizing that stock gorge themselves, bloat and die, sometilnes. Soda is
perlhaps the lest remedy for alfalfa bloat. One cow, dissolved in water, and given by drench ing, is apt to cure. The cow's dose given to a
horse with colic is an almost infallible remedy. I have curcd several with soda-never failed in a single instance. A fine horse died last year
iu Downey City. His feed had leen alfalfa cut too old. A post mortem disclosed halls of al
lied clover, very popular everywhere, kills as does alfalfa, but it is not rejected on that ac of the first rell elover fiel, ever plated in cer tain county of central Alabama. The nex
morning three fine cows were deal of clover
bloat. I never heard of hogs or horses dymo
of clover or alfalfa bloat. 1 turned a band o nearly 100 cows on alfalfa yesterday. They had beeu on abmudant green wild feed. No harm resulted. Have pastured sheep, cattle and
horses on aifalfa without harm.
What Shall Be Done With the Alfalfa? Widently the inquiry in the premises relates The inqniry relates to the well. known national capacities of sonthern California to produce a
volume of alfalfa vastly in excess of any pres. ent profitable use, and this branch of the
ject I will take up in my next letter.
Joun. H. Shiclds. Florence, Los Angeles Co., Cal.

The Medicinal Springs of California.
From an interesting article in the Pacitic Mertical and Surgical Journal for April, written
by John $\$$. Hittell, we present the following extracts: Mineral springs are more abundant in California and Nevada than in any other equal area in the civilized world, and will prob ably at no distant time attract many visitors and be of much interest to pleasure scekers,
invalids aud the medical pi ofession. They are especially numerous in the coast mountains and alleys for a distance of 100 miles northwari
rom San Pablo lay (a branch of San Francisco bay), about Mount Lasseu, and at tle easter base of the main ridge of the sierra Nevada, near the Oregon line. These districts were the aud the subterranean lieat coines near to the surface now. At the Geysers large quantities of hot sterm rise constantly from blow-holes, and at the Sulphur Bank, ncar Clear lake, the
earth at a deptli of a few fect is scalding loot. Many of the springs are warm, or hot, are that when they shall have been fully examined disease as all the mineral waters of the Atlantic States and Europe together. As yct, scarccly a score have been analyzed.
shape such knowledge as is now obtainable been analyzed, $l$ have prepared some tables, in which the waters are classified according to
reputation in the course of ages for their cura tive power.
The leading

Classes of Mineral Springs
Are the alkaline, with carbonates predominaut; good proportion of iron, the chalybeate, with the purgative, with sulphates; the sulphur, with an odor of sulphur, and without much strength in either carbonates, chlorides or sulphates; and the thermal, which are prized hese classes, save the purgative, abound in California and Nevada, and probably after more have been examined, purgative spriugs will be
found too. The follo
The following is a table of the number of grains in a gallon of the water of alkaline
spriugs. Wherever in that or the following tales, the quantity of any solid given is less than erisk. The quantity of gas is given in cubic inches. The name of the chemist making the
analysis is given, if known.

Mallat

prized as remedies for anemia, ehlorosis, and all
diseases curable by mild tonics. Chelterham called the best chalybeate of England has called the best chalybeate of England, has
three grains of carbonate of iron, and 129 of three grains of carbonate of iron, and 129 of
sulphates of magnesia and soda, and 330 of chloride of sodium, to the gallon, so that the than the chalybeate.
The Skaggs and Geyser springs have very
ood qualities, but I regard the Napa soda as best chalybeeate water known. It thas more iron than any other springs the analysis of which I have seen. It has little inert material, and its
active salts are good in their kind, amount and proportion. The quantity of carbonic and is not reported, but it is abuudant. The spring is not reported, but it is abundant. The spring
is covered by a copper vessel, into which the gas escapes, and from which it is pumped into a machine, which agaiu forces it into the water before bottling. About 720,000 bottles of it (equal to 45,000 gallons) are sold anuually in San Francisco, where it is consumed largely as a pleasaut beverage, and a check upon the after
effects of distilled and fermented liquors. The spring is situated about 35 miles north of San
Francisco and Francisco, and 1,000 feet above the sea, on the
western slope of the western slope of the mountain ridge east of
Napa valley, commanding an extensive and charming view. The place has many advanit will in time become. It is not yet prepared
ind for the general reception of visitors, thaugh many go there. A chalybeate spring at the
dieysers, 100 miles north of San Francisco (hut which one of the hundred springs at the Geysers, the proprietor of the place does not
know), has excellent chalybeate water, fully equal, 1 think, to either Schwalbach or Spa.
The presence of a small quantity of sulphate of soda in the three chalybeate springs of Califor nia above given, is an advantage over their
European rivals. There is suspicious similiarty

The most noted European thermal pring that is, warm without any strong mineral chat acter, are Gastein and Schlangenbad. The rheumatism, and certain foralysis, chronis the latter for skiu diseases, rheumatism, gout, hysteria, and erethism of the nervous system. The Calistoga water bears a close resemhlance
to them, and is doubtless equally good for to then, and is doubtless equally good for
drinking, while for bathing, on account of its larger proportion of chlorides of sodium and lime, it should be better. It will be observed
that Vichy, which is drank in large quantities, that Vichy, which is drank in large quantities,
has twice as much chloride of lime as Calistoga The temperature is also better than that at Schlangenbad, and has very uearly the best degree of warmth for a thermal spring.
The following are the Leading Sulphur Springs: and inflammation of the stomach. It will be observed that the New Almaden spring, sixty
miles south of San Francisco, has a close resemblance to the Yichy; and the Etna, in Pope
valley, seveuty miles north of San Francisco, to valley, se

The Adams, which for several years past has attracted more visitors than any other Califoruian'spring that has been analyzed, is de-
cidedly inferior to the New Almaden or the cidedly inferior to the New Almaden or the
Etna: The last, at the eastern base of Mouut St. Helena, in a little valley surrounded by
mountains, with shade, game, beautiful walks, mountains, with shade, game, beautiful walks,
drives, and abundant water, 18 miles from a railroad station, is well fitted to be a favorite resort for poor as well as rich invalids. The San Francisco, might be classed with the chalybeates, thongh I have preferred to pht it with
the alkaliue. It has excellent qualities, but its fitncss for daily use by persous iu good health is doubtful, though much of it, after having sold for that purpose. As an alkaline chalybeate I do not know of its equal.
It will be observed that in bonates are reported, in others bicarbonates. Wherever there is fiee carbonic acild, most of reduce them to carbonates. Eichty-four grains reduce them to carbonates. Eighty-four grains
of carbouate of soda contain 2 s much soda as 100 of the bicarbonate, and the other 16 grains of carbonic acid equal to about 16 cubic incher, may be counted as part of the carbonic acid gas.
The following are the leading chalybeate and thermal springs of Europe and California:


The carbonatcs of soda in the Napa, feyser, the Geyser and Skaggs springs are donble or bi-

The best
The best chalybeate springs of kurope arc sides the component parts mentioncl iu the table, has traces of phosphate and borate of soda, and carbonate of magnesia, of which the
 in the Etua, and the carbonate of lime
in the New Ammaden, in the above tahle, are double, or licarbonates. The Vichy water is,
for a large class of diseases, considered the best for a large class of diseases, considered the best valu in dyspepsia, disease of the liver, diabetes, gall stones, gout and paludal cachexia. Large 'quantities of it are sent, in coming to the shores of the North Pacific. The
waters of Fachingen differ considerably from those of Tichy, yet are found effective in the
saine kinds of disease. The Ems water is useful ia chronic bronchitis, granular pharyngitis clergyman's sore throat), and catarrhs of the When drank in excess it causes constipation


The carbonates of soda aud magnesia in Pas Robles spring No, 1 , are double or bicarbonates.
Aix-la. Chapelle is noted for the cure of chronic rheumatism and diseases of the skin; Aix-les Bairns for chronic rheumatism, diseases of the skin, syphilitic complaints and paralysis syphilitic affections (for these latter the best in Europe), postulous eczema, psoriasis, pityriasis, curope), postulous eczema, psoriasis, pityriasis,
ichtlyyosis, rheumatism and old wounds. The last spring is very weak in its mineral character, and prohably owes a large part of its efficiency to its high heat and its extensive use for bathing. Aix-la-Chapelle contains traces of iodide
and bromide of soda, and Aix-les-Bains has traces of iodide of potash and sul 1 hate of alum. ina. There are also traces of iodine and bromine
in laso liobles No. 2 (the mud spring), and they give that spring a superiority for diseases, and rheumatism resulting from them, over any other yet analy\%ed in Califortia.
Sulphur Spring No. 2, has 6 cuhic inches of sulphureted hydrogen in a gallonf; No. 6 has 4
inches, and No. 7 a trace. These waters arc gool White Sulphar water were heated to $115^{\circ}$ it would be fully equal to the Bagneres de-Luchon; but there are numerous sulphur springs of sim-
ilar composition in Califonna, and loot enough by nature.
Adurteramon or Boneasir witm Phosiborthat A. V. Wachtel has discovered a large
amount of phosphorite in samples of boneash As this sulstance dissolves so slowly that it is is especially deceiving, as it would yield to or dinary elemical tests the proper amount of
phosphoric acid. It can be detected by the large amount of iron present, by the fluorine, also

## 


Worthy Lecturer's Visits.
Editors Press:-Sunday, the 1Sth, found us at Roseville, ready to take the 4 P. 3. train for Wheatland, our next place of appointment. In company with Bro. Garduer, we took the train
on the Oregon division of thic railroad, and on the Oregon division of thic railroad, and
landed at Wheatland at a little after five o'clock. Bro. Gardner going on to Marysville, and Bro. Jaspcr, of Wheatland Grange, meeting ns, we spent with him a pleasant night and were taken to the Grange hall in time for the 10 o'clock morning meeting. On account of the
rain and storm of the night previons, as well as continued showers, there was a great disnppoint.
ment in numbers, lue there was no less interment in ulumbers, thet there was no less interunder the rule of the Geod of the Order. At
F2 o'clock a Grange lunch was well served and partaken of. The opent meeting, at 2 P. M.,
was called to order hy the Worthy Master Bro. Kirshuer. He first introdficed Bro. Gard ance Conpany, was istcued to with great attention upon the subject of the rast and present
standing of that institution. After this we were iutroduced to a very resprectable andience,
both in numbers and intelligence, and addressed both in numbers and intelligence, and adllressed
them on the conning Constitutional Convention from a Grange standpoint. We were listcned
to with wrapt attention for over an hour, whel others were called upou to give their vicws nupo
the subject under discussion, resulting in the the subject under discussion, resulting in the
organization of a non partisan club for Yula county, to take charge of the selecting delegates
to said Constitutional From Wheatland, we proceeded, after a night's
eutertainnent loy Worthy Master of Whcatlaud Grange, Bro. kirshner, to
Where at 10 A . 3., on Wednesday, the Fith inst., the Grange was called to Order by the
WForthy Master, Bro. Hull, of Yuba City
Gren Grangc. Nearly two hours was spent iu discns-
siug questions of immediate interest to the sing questions of immediate interest to the
Order, when a reecess was declared for the pur pose of taking lunch, which proved to be the
enjoyment of a splendid harvest feast, as four enjoyment of a splendi harvest feast, as fonr
caudidates has just taken the fourth degree,
with the conferring of which we were especinlly with the conferring of which we were especially
honored. Here, as at Wheatland, Bro (Gardner gave his account of the Grangers' Insurance
Company, which greatly interested the audience. At 2 P. M., the oplen meeting was called tut land, when for more than an hour we discussed
in detail all the questions of interest relative to the coming Constitutional Convention, and atter the lecture, committces were alpointed ti
confer with the Republican and Democratic Central Comnittees to call a mass meeting of partisan capacity, to seleet candidatco sor elec-
tion as delcgates to the Convention, to meet tion as delegates to the Convention, to meet
in September next. This meeting was an un usually interesting one, full of thought and
earnest work, with an expressed desire to seearnest work, with an expressed desire to se
care good, able and honest men to represent
Sutter conuty in the Convention. We were Sutter conuty in the Convention. We were
taken home ly Bro. Walton, in company with
Bro whom wc hal a genuine feast on the issues of the day. From Yuba (ity, we, in company
again with Bro. Garduer, made our way to our appointinent at Grand Island,
Part way by stage, part by sailing boat and part
way by row-boat, and no little of tho way by row-boat, and no little of the way on
foot; but, by diut of perseverance, after going,
many miles out of our way, we reacled many miles out of our way, we reached Grimes
Landing, oue of the places on the island where find that we could not get a meeting on account of the overllow and continued rain. So, next
day, procuring a conveyauce we rode till noon throngh the rain, overfowed country and muddy
road to Colusa, some 18 miles, where we found road to Colusa, some 18 miles, where we found
Bro. Mvers, who welconed us most heartily, and at onee, after dinner, provided with a good
span of roadsters and a most comfortable two span of roadsters and a most comfortable two-
seated spring wagon, took ns some 30 miles
farther across the plains, throughl the finest grain growing country it has been onr privilege extensive ranch, to fill our appointment at

## Antelope Valley

On saturday, the 20 th. Wc reached this valua ble ranch at a little after six o'clock, having
traveled through overtlowed lands in part and traveled through overthowed lands in part and
through fields of wheat and barley that promise
well for 60 lushcls to the acre well for 60 lushcls to the acre. We were most
heartily weleomed lyy Bro. Logan and his happy
fanily and after a fanily, and after a good night's enjoyment and
rest, were the next day taken some 10 miles farther, to Antclope schoolhousc, to fill an
appointment. To both Bro. Gardner and ourappointment. To both Bro. Cardner and our-
selves it was a great trat. State Deputy Bro.
Nlese Myers acconnpanied us therc. We met not a
large, bnt good Grange, as shown ly their
intelligence and earnestness in their Grauge
work. We hcre filled again our mission and
were duly appreciated by all present. It wa
a most interesting a most iuteresting visit and we hope good was
done for our glorious canse. The Lecturer wa done for our glorious canse. The Lecturer wa ner by lro. Logan, who all aecompnnied us, on Grange revival elsewhere So goes on the frange work -not dead no
dying but grcatly in earnest to accomplish that necessary reform in the agrieulturists' interest. Antelope Valley, April 21st, ISïs.
Another Account of Franklin Grange Meeting.

Editors Press: -- Waclnesday; April 10th "Franklin Grange" was honored lyy a visit from our Worthy State Lecturer, Bro. Pilkington We had a closed meeting at I0 o'clock, A. M. and were favored with an cxcellent lectur designed for the good of the Order. By a
manimons vote the Grange adopted the senti ments of our Worthy Lecturcr. We then re baired to the hall below where a table, laden with rieh aud tempting substantials interspersed rith "Flora's" brightest and lovelicst gifts as soon arranged to which we, with many friends and neighbors, sat down "to refresh the

The company then adjourned to the Acaldom to hear Bro. Pilkington's public address. 16 m introduced our Worthy state Lecturer, who, a nce iu a very impressive and forcible manne sideration and action, with reforence to the approaching "Constitutional Convention," an subject that will ever le brought before them, that the asricultural interest, and take care by delcgates, who are able, "honest and full of
integrity." That therc are and can lee found arimers compoctent for the work, we were re
ferred to the "State Constitution," of Alabama characterized for its legality, justice and econ-
omy, drafted ly a farmer and a Granger. The subjects upon which change and leform ar none could fail to perccive the need of them. Bro. Pilkington paid a handsome compliment to The close attention and earnest faces of the andience showed the interest our Worthy Lecture was awakening, and we hope the words of our worthy brother may have fallen on good ground
and "bear fruit a hundred fold." A unanimous ote of thanks was tendere Bro. Finkington for his able adiress. Upon a motion by l. $R$ call a meeting for the organization of a non
partisan clnb at Franklin. That Bro. Pilking ton may le permitted to go on with his good arousing Grangers and farmers generally to the exigencles of the hour" is the sincere wish
"Franklin Grange"
S. G. B. Franklin Grange."
Franklin, April 12th.

## Enterprise Grange

Emmes Press:-I have been a constant snuscriber of your most excellent paler, almost
from its infancy, and an eager and interested reader, and will yon grant me the favor rinting this-my first article for the Prass.

Thursday, the llth inst., Enterprise Grange hold a meeting in their fine ncw hal
about eight milcs east of Sacramento. It was for the purpose of hearing the Worthy stat Lecturer, B. lilkington. The meeting opened at II A. M., and was largely attended, and adFrange: Bro. Pilkington, State Lectnrer; Geo
 the Grangers' Insurance Company of San Fran cisco. At 1 oclock t.te company, numberin about 400 persons, sat down to a bonntifu unch furnished gratuitously by the After lunch the Grangers procceded to loo at the finc display of machinery provided b ne entcrimse and energy of the several we Hamilton, Marcus C. Hawley \& Co., Fish \& stake Plow Co., Mr. Hill from Nau Leandro was present to exhibit his celebrated Eurek fang plows. His plows have attained their
perfection and well-known celcbrity through his nutiring energy and perseverance blows and mowers at woik, the rakes to see the he busy hnm of the scwing maehines, than a Pilkington adiressed a large and attentive audience on the Constitutioual Convention and other questions of decp, interest to the farmer. for the benefit of the hall. Church and Jones fnrnished excellent musi
Wras incrished by the ladies of Enterpris in the ball-room.
hat parties, thice new hall is not large enough. The farmers in this section feel jubilant ov
Thice new hall is not large enough. their prospects of bountiful crops of fruit and yrain and overtlowing granaries. And last, but not least, 1 must mentiou the (rrangers Co-op)eration about four months, and so far it has leen a perfect and wonderful success, and will continue to be as long as they sustain a cash
basis. It is not only Iargely patronized by irangers, but by the pcople in sacramento and inity

## The New Constitution

Hlon. C. Wr. Colby, in a late address before Ford rirange, made the following allusion 1 believe the eoming Constitutional Convention will be composed of the best men will not be behind in reputation. The time has arrived for sifting out demagogues, Kearnyism and chaff. If the results of the expired Leg. slature, independcnt of Execntive checks, was have little to expect but to pay the expense aud a veto of its labors by the people. The old Constitution needs but little repair other than re strictions upon the power of Supervisors in dclet-creating and money-appropriating powers, imitatiou of time fur decisions of questions and cases submitted to District and supreme
Courts, with the neecssary penalty; quadren. Courts, with the neeessary penalty; quadren the frovernor for specitied purposes; general ap propriation bills to originate in the House and o contain nothing but appropriations for ex tional provision that all bills shall be read once section by section before final passage. Taxes shonld not be increased upon lands of settlers on acconnt of cultivation, or growing crops
without the adjoining uncultivated laud of same puality lears a like increase of taxation. There shontd also be provision, that any lierson sel-
ling or purchasing votes or who violates a posiling or purchasing votes or who violates a posi-
tion of pullic trust by defalcation, peculation be forever disfrauchised from voting aud holdState Lecturer's Change of Appointments Edrtors Press:-Finding that the appoint ments made for Plumas, Lassen and Modoc counties for the State Lecturer to fill during the month of May, could not be reached a localities, which lias not as yct permitted the tages to run on the public routes, they are thereforc changed by deferring them to July, ppointinents can be reached on time. The fol lowing Grange are therefore herely notitied that they will be visited in July uext, and the appointments for the same dnly published in will be reached in the following order.


The above appointments for July and August date, to give ample notice to each individna frange. B. Pilkingion, state lecturer.

## Election of Officers.

Castoria Grange.-H. W. Cowell, M.; W.

## In Memoriam

## April 13th.

Whereas, the All-wise Disposer of human events, on the fith inst., removed from this ter-
restrial to a eelestial sphere, Doctor $W$. xgston, a worthy menber of our Order, there fore,
Rexo
Rost an evelv, That by his death, this Grange has faithful husband aud affectionate father the comnunity a valuable citizen, the deserving poor a constant friend, and the sick and suffer.
Resolverd, That we herely tender the warmest sympathics of this Grange to his afflicted fanily
Rexolved, That these resolutions be spread upou our minntes and a copy therenf sent to
the Claverdale J fews, the Pacific heral l'reas and the C'alifor

State Grange Master and Lectuper at Oakland.-1. C. Stecle, Master of the State Grange, and 3 . Fikington, State L.ceturer, will way, Oakland, on Saturday, Mlay IIth, at one oclock, on matters of interest to the minibers of Temescal (irange and farmers generally; It
will lic an open meeting, and all interested are will he an open m.
invited to attend.

## AqRICLTURAL Notes.

## California.

alameda.
Mlsstarl. - Livermore Herald, April 24 Only second to the squirrel nuisance in onr
 this plant will in regular tree, from six to ten fuet in hisht form ing perfect forests, and, if not entirely chokiug out the wheat, rendering it inpossible to rmn a header or harvester through it. The mustard Phant, if the prop,er means are taken, is very in Washington and Eden townships, which, a few ycars ayo, were overrnn with the weed, are
now perfectly clear of it. The mode of treatment yery simple, merely to keep the plan ways and raising barley instead of wheat or hay. The barley is a rapid prower takes quick start and crowds out everything elsc, the ean le included. By this means the weed farmers should caniceald $s$ thatter at once. The present growth should be killed off, as far as practicable, this season, and then a general
effort at prevention made next year. The weed can be snbdued if the people will but take hold to do it.
COLUSA.
COLUSA
Crors.-Siun, April 27: The weather has continucd favorable for the growth of crops and Colusa county has never had so good a pros-
pect, althongh the extreme wet weather has not been so goond, even for some of the upland, heen. The grain, or a great deal of the adobe land, is thin, and has not started ont as it
would have done without so much wet weather. Would lave done without so much wet weather.
With a continnance of anything like good weathcr, however, the grain must be very heavy. There is mach of the land adapterl
a very wet season, where the grain will be extraordinariy heavy, and we explect to hear of
a great many fiells turning off from 50 to 60 bushels to thic acre.

## FRESNO.

QUick Growtil-Expositor, April 20: H. Zoella, of the Fggers farm, exhibited some producel haricy in town, Munday, that were of March. The stalks wcre headed out and were over three feet high.
LAKE.
Black Fish. - Democrat, April 13: The lake
shore was never yet visited by such. schools of
black fish as at present writing. So thick are they that men wade into the water and gather the day, and it is no exaggeration to say that
one one gig has impaleid $\begin{aligned} & \text { hro of these fish in two } \\ & \text { hours, and they weigh from two to three pounds }\end{aligned}$ apiece. We caunot, however, thiuk them good eating, though the Indians are glad to take ful arc these fish, that along the connty road
near Mr Tucker's, Wm. Whitou, of Middletown, gigged three without leaving the roa
The sport after a time becomes monotonous an The sport after a time bccomes monotonous at a
one tires of lifting them in oul the gig, two at a time. Thrce are often mipalca, sut the mnsnally
on the prong usually slips off. The
wet eason is the only reason we have heard multitndes of these tish
LOS ANGELES.
Lalige Orange Tree.- 1 recently visited the ranch of Messrs Wakefield o Barr, in Olive while there
the ycar lefore Iast prodncell over 3,010 oran
 portant article of export.

The Fair, - Vallejo Chronicle, April 27: The Stockholders meeting of the Napa and Solano o'clock. It was called to order and J. E. Williston elected as Chairman pro tem. The following pertons were then elected Directors for the ensuing Wilson, Andy Goodyear, Robert Brownlie Wm. Carter, W. A. Fisher, Johu B. Carrington, . K. Duncan, W. P. Durbin, H. Connolly, J, Farnham, John Callender, D. W. Harrier, J. M. Thompson. The Stockholders' meeting zed by the election of the following officer Johu B. Carrington, President; John T. Dare
Vice-President; J. K. Duncan, Treasurer; A Vice.President; J. K. Duncan, Treasurer; A. the fair Septenber 3 d . The ineeting adjourned
until Saturday, 27 th inst. until Saturday, 27th inst.

## PLACER.

Editors Press:-The growing crops, incrcase around Auburn aud Newcastle are.beyond even our expectations. Early sown wheat and alfalfa
are so rank that much of it has fallen down The amount sown exceeds that of any previous year. Late sown grain will certainly make a
good crop. It is surprising to see the amount of new ground turned over this spriug, beside one-third in our farming population during the past year. Tbe fruit-growing interest has cer-
tainly increased more than one-half. An enterprising spirit pervades the eutire farming comare men of ability and experience. It is noticeable that this new elemeut has inspired new are determined to grow at least their own fruit and vegetables, as well as meat, butter aud
eggs. - H., Auburn, Cal. eggs.-H., Auburn, Cal.

## SAN DIEGO.

Wheat. - Union, April 25: The finest wheat
we have seen this season was brought in yesterwe have seen this season was brought in yester-
day by Kimball Bros. from their National City farms. It is six and one-balf to six aud threefourths feet high, well headed out, and vigorous in stalk. Some specimens of this wheat may
be seen at the Horton bouse; as also wild oats seven feet high, which may be seen growing all over National ranch
SAN JOAQUIN

## Tie JOAQUIN.

Tie Coming Crop.-Stockton Independent,
April 27: At last the farmers on the West Side of the San Joaquiu have got enough rain and are entirely iudifferent about having any more. In
fact they would rather not have it rain than fact they would rather not have it rain than
otherwise. This is a remarkable state of af-
fairs, and has no parallel iu our recollection, as fairs, and has no parallel iu our recollection, as
coming from that normally arid country. Grain which was sown as late as the first of April
will make a good crop, and the entire crop promises to ripen early. Crow \& Smith y esterday bought the expected crop from 160 acres
of land, to be delivered at Patterson's landing, on the San Joaquin, June 20th. The price was
$\$ 1.50$ per cental. $\$ 1.50$ per cental.
SANTA CLARA.
Progress of Salt Maesh Reclamation. -
San Jose Mercury, April 28: an English company obtained A fossession years ago eral thousand acres of salt marsh in this county mation. Levees were constructed of reclagates to shut out the high water, and then the rich black soil was left to dry out. The summer
sun and winds caused the soil to crack open, aun and winds caused the soil to crack open,
leaving great crevices sereral feet in depth and
from one to two or three inches in width. Then with the winter rains the ground was plowed
The rain leached the salt from tbe soil, and
after a few seasons it hecomes productive, and after a few seasons it becomes productive, and
hencefortb very valuable. The company above
mentioned, under the direction of Mr. John
Lillie, have now been four years at the work.
They have reclaimed about 3,000 acres of land,
now in crop-in wheat, rye and barley. The
grain is doing nicely, and although not quite as rank as grain in other portions of the valley,
it will nevertheless make a good crop. A few it will nevertheless make
years hence these lands will unquestionably be the most productive lands in the valley. This
shows wlat can be done with these lands, and shows what can be done with these lands, and
the example is well worth imitating in otber the example is well worth imitating in otber
localities. We have millions of acres of just localities. We have millions of acres of just
such lands in this State which will yet be reclaimed.

## SONOMA

Fruir Prospects.-Healdsburg Enterprise, April 27: The late rains greatly benefited all
kinds of fruit in this section. Peaches will be a very short crop this season, the trees having a veen stricken by a blight, which destroyed most of the young fruit, especially in low grounds. the caterpillar nests which filled their orcbards are now reaping the reward of their negligence,
in the myriads of worms whicb infest their in the myriads of worms whicb infest their
trees. A sure way to exterminate these pests has been discovered by a gentleman in this city -he takes a piece of cloth or sponge saturated
with ammonia and holds it under the worms with ammonia and holls to curl up and drop dead to the ground.
Plantiva the Maize.-Flag, April 25: Th rain of last week retarded by rendering the ground too wet winds had baked the earth it has been of great advantage and will undoubtedly increase the
breadth of this cereal. This is the time gener ally adopted for planting in the bottoms, but the delay cannot be disadvautageous, for we learu from J . R. Truitt that he pree.ers from the
Ist to the 15 th of May; from A. T. Warne that the best crop he ever reaped was planted about the middre of May. The principle is this If so planted the ears wind and thus the crop re period of its growth. period of its g .
Rallroad and Frutt Crop.-EDitors Press: In my last article from Tuolumne county my
closing remarks were as follows: "Railroads will open up the hidden value of these neglected spots of beanty"- referring to the foothil
region. Little did I drean then that tbe wisb was so near a fulfillment. Capitalists from San Francisco, whose interests in Bodie and Aurora
demand a closer connection with business cen ters, have almost perfected arrangenents for constructing a narrow-gauge railroad from
Stocktou to Bodie by way of Kuight's Feriy, Chiuese Camp, Sonora, and across the Sierra
by the Mono road. Such an enterprise--i carried out in accorlance with present plaus-
will be a new era in the development of the southern portion of the State. San Joaquin, Stanislaus and Tuolumne counties wilt be
brought together in a net-work of iron with the busy world on both sides of the high Sierras. The results of such an undertaking canuot be comparatively new and full of lateut weath Bridgeport; also in Sonoma and
counties. No better investment
could be devised to do the same amount of good, supplying a real want to all parts inteuded t
be traveled. The Yosemite will be within on aud a half days travel of San Francisco; cars all the way to chinese Camp; staging something
under 60 miles. Capital, when thus employed, becomes of universal use and good, bringing in a fair return to those who conceive and carry out encto to the human family. Iu bousiness sation with orchardists I find that the peach crop has ${ }_{j}$ suffered through the curled leaf-a something which follows wet seasons. Then The plum is also affected in some way. Apples will
be abundant, which will give employment to be abundant, which will give employment t
the fruit driers which are being established in
and around Sonora. Pears will be an average crop; last season the yield was extraordinary. Grapes will also please the producer. Raisins
will be produced by the driess and must be of will erior qrouality, as our foothills produce the superior quality, as our foothills produce the grapes. There seems to be a new departure for
a higher development of all our manifold resources. Property will increase in value; euterprise will engender a widc-spread pros-perity.-John Taylor, Chinese Camp. Yolo.
Grain Prospects.-Mail, April 27: We presume there never was a better prospect for presented. The wheat is growing rapidly, and the stalk, which was very tender from ex-
cessive damp weather, is strengthening under cessive damp weather, is strengthening under
the warm sun. Much of it is headiug out, andi the indications are that the harvest will begin early. The hay harvest cannot but be very rank. The eartb is full of moisture, which will make the clover growth rapid and heavy without the usual irrigation. The graperines are
full of bunch shoots, and promise an immense yield; while the fruit trees have been burdened with flowers, and so far no frosts have ap-
peared to destroy the expectations of orchardists. Money is not very plentiful as yet, but
we notice a brisk revival in business which always precedes a bright prospect for a bountiful ways prec
harvest.
Gentral

Rainfall in Fresno County.
Editors Press:--Knowing that it has always been an object with you to give as full and accurate reports as possible of the raiufall of each season in all parts of the State, I send you
the following results for February, March, and April, at two points in Fresno county. For them I am indebted to Mr. Geo. H. Stebbins, of the Central California colony, and Mr. E. S. Russell, of Borden, who measured the amounts in their espective localities.
At the colouy-between two and three aniles south of the town of Fresno-Mr. Stebbius reports for February, commencing the 4tb, 2.53 uches ; for March, 1.13 inches. He mentions that the storm of March 18th was accompanied
with heavy thunder and vivid lightning, lasting about three hours. Such a thunderstorm, you know, is a very rare occurrence in our large in-
terior valleys, by no means averaging one eaob year. Mr. S. being a late settler only began
observations February thth. Mr. Russell re.
ports at Borden for Ayril, to the 23d, 1.41 ports at Borden for April, to the 23d, 1.41
inches. This makes for the entire season at Borden to above date, 13.05 inches. The paper
of Mr. B. B. Redding on the clinate of Caliiornia, published recently in the Press and other
papers, is certainly valuable. But the casual peader should be cautioned uot to form a wrong impression ahout the average amount of rain-
fall at Merced, Fresno, and points further south
in San Joaquin valley. The average of about in San Joaquin valley. The average of about
three inches for two years there given, is much below the average for any 20 consecutive
Obears.
Obervations for more than two years go to prove that the general average is nearer
10 inches than three.
J. W. A. W. May lst.

News in Brief.
There were 93 deaths in San Francisco last Tre Pope will not quit the Vatican during Abour 20 persons were killed in Texas by the
An THE communists of Chicago are said to be The Weuban miue, Cortez district, Nevada is turning out bullion at the rate of $\$ 12,000 \mathrm{per}$
day. A rich ore discovery is reported to have been
nade at Yankee Blade, three miles from Austin, Nevada.
NEARLY all the peaches in Siskiyou county were killed by the frosts and cold weather of THe Intcrnational Telegraphic Congress, an
ounced for July next in Londlou, has been post poned for one year.
AT a fire in Coburg, Ontario, lately, a wall fell in, burying a number of firemen in the ruins, our of whom were killed.
Tre conditions imposed on Nicaragua by the erman Govcrument have all been scrupulously ulfilled.
Rerorts from the graiu-growing districts of
Oregon indicate an unusually large crop this
The Pacific coast delegation in Congress are ouminus in opposition to the proposed residential contest. Three distinct shocks of earthquake were tbe 15th ult.
GEORGE ColliNs, foreman of the Alta dashed to fragments.
Ir is reported that Secretary Sherman is
about calling in for redemption $10,000,000$ o the five-twenty six per cent. bonds
Most foreigners who go to Guatemala remain
to get away. his home from San Francisco, and is now thought to be insane.
Germany, with a view to increasing her rev enues, will tax home-grown tobacco, to the cul
ture of which some 75,000 acres are devoted Ture which some says the Hon. Beverly Douglas habitually goes into the House of Representa tives armed as well as drunk.
England has a good standing army. "And
the stiller it stands," says the Czar, "the bet
ter it will be for it.'
THE sales in the San Francisco Board, for the week ending April 23d aggregated $\$ 1,780$, ${ }_{\text {The }}^{000}$
THE schooner General Miller, is undergoing refitting, and will be ready for sea about May 12th, when she will sail on a fishing voyagc.
The American section of the Paris Exhibition is filling rapidly, and it is thought it will he is filhng rapidy, and it is thought it will he
little, if any, behind the others on the opening day, May 1st.
HaNS JENSEN, a Dane, committed suicide at
San Diego, by shooting himself through the head. He was a laboring man, 40 years of age and much respected.
first bux of the season reached San Framcisc on the 18th, of April. It came from Briggs
orchard near Marysville.
few nights since on the corner of ${ }^{\text {Fan Ness }}$
fevenue and Jackson street, and brutally beate
because he carried no money.

IndiANs on Puyallup reservation are busy clearing and planting, and tbis year will cultiate more land tban ever before.
THE talked-of fusiou of the Republican and Democratic parties for choosing delegates to the Constitutioual Convention is likely to prove a
failure. failure.
A bill has been introduced in the Ohio Leg. islature providing for the abolition of high
schools and of instruction in languages in the lower grades.
THE reading room for young women started ThE reading room for young women, started Women's Christian Association, is a marked
Tue rainfall for the season has been, at Grass Valley, Nevada county, 52 inches; in the more
Horthwesterly parts of the State from 60 to 95 inches have fallen.
Jonn Runk was hanged iu this city on Friday of last week. The knot was arranged in such a bungling manner that his neck failed to be
broken, and he died from strangulation. broken, and he died from strangulation. all medical officers of marine hospital service
make use of the metric system of weights and
The prize fight between Joe Hearn and Tom Haverly, occurred in a barn in Brooklyn, N. Y.
The latter was beaten aud probably fatally in. jured.
The late party of divers, under Capt. Win-
aut, returned from the wreck of the San Franaut, returned from the wreck of the San Fran-
cisco with $\$ 16,000$ in bullion, and five tons of A woman caught the high French heels of her shoes in a railroad track near Merideu, Minn., Iorat: Railroads should he abolished.
copy of the act which gives landlords a lien on the baggage of their guests for rent due is
posted on the doors of their rooms they cannot legally seize anything,
As a means of settling the Mormon question, Nevada-a plan that might prove effectual if that State would consent to such an enlargeolygamous neighbor. Ir is proposel, by a company formed for the
purpose, to build extensive floating sea baths at orth Beach, the honse to have the form of a e fitted up iu the best style throughoument A great northern loon was shot last week at San Gregorio lagoon, 40 miles south of San Dunn, of this city. This is supposed to be the first specimen of the species ever seen in this latitude
The people of Oregou are delighted with the new steamer bearing the name of their State,
which lately arrived out from New York in the hort space of 57 days 2 hours running time. She is the largest and finest steamer that ever
isited Portland. John Gavace both shot and stabbed A. J. Le Breton, a lawyer, in San Francisco last week.
The wounds are serious. Le Breton is accuscd of shamefully abusing the confidence of the sister of Ciamage.
ter of dainage. Workmenen of cilroy have adopted
resolutions opposing the formation of military resoutions opposing the formation of military
companies or vigilance conmittees for political purposes, and condeming the use of incendiary or commuistic language.
Three thousand miners bave met at Udding. ton, seotland, and resolved to demand an ad11 Scotch collieries, and if refused, to strike
TiEs stamp of the Union Boot and Shoemakers is being distributed to retail dealers, who before the sum of $\$ 2,000$ that the stamp would be used on none but goods manufactured wholly by white labor.
Wh. H. VANDERBiLT has gone to Europe.
Many rumors are in circulation as to the object of his visit abroad, oue being that he proposes to arrange for a new steamship line to be run in
alliance with tbe Ceutral road. Mr. Vanderbilt, alliance with tbe Ceutral road. Mr. Vanderbilt,
however, says that his trip is one of recreatiou. however, says that his trip is one of recreatiou.
Trie gross earnings of the Ceutral Pacific ailroad for the first three months of the year responding period last year. It is alnost certain that the earniugs this year will be greater than iu 1877.
All of the wheat vessels which sailed hence prior to Jannary 1st have arrived out with the There nia to England with wheat.
Work has been actively resumed on the
Sheba mine, in Humboldt county, Nevada, and Sheba mine, in Humboldt.county, Nevada, and cars. Sone 12 ore 14 years ago a large quan tity of extremely rich ore was taken from this mine, the ore body finally giving out, or being lost through a "fault" in the ledge.
Sandal Wood in Fijl.-The Sydney Herald
ays: "A large forest of sandal wood has heen says: "A large forest of sandal wood has been
liscovercd iu the center of Viti Devu. This is due to the active explorations carried on by to prescrve it from the fate of similar predecessors, has were received in town the other day, and are very fine specimens of this valuable comFiji and .
rivalled."


Deacon Babbit's Phonograph. Heacon, Ball, whit was progressive and enlightened in his
He perused the seivice sonthly and the Reviews rainy
 is moort. pouse
daily puffed.
It would make an old-time firmer stare around as in

And eall hise help to dinner with a patent telephone

Then the deazeon he got crazy to posssen a phoulosriuth
Why, said he, jest think of storiu' up for a future gen
A prayernueeting, or conference; 'twonld be their suro
or good otition, hyms; these modern ones are jist as light
Thur's no luse talk in', 1 must have a pateut phonograph.

Then dondined his hat, and souglth the atreet, the eall in


They conld not tell the purpose of the tin foil on the
drumur
They drumi $\begin{aligned} & \text { draenened angrily to kick the thing to kingdom } \\ & \text { conle. }\end{aligned}$
 The Deacon Underneath.
The deacon, founul the elder with his work before him
But he meade him leave his serruon at the forty-seeonnd
Aud dowd the street, hls smoking-eap disported in the
Hisfunlind:dgured moruing gown sprend gaily out leh:nd. Tozether they sought Deacon Smoorth, a mand of sotill





The wow, "" dropled the handle, while the sweat stood on
The deaco

The elller domed his smoking cap and started for the Bo ir,
But Denuoth winked slyly, saying he would like
somene mire:
 He grasped the lanulle firmuly, caring noching for the
 And "Wante", it up, my hearty boys," "Farewell to Mary

## But Deaeon, smooth had stood it all conservative and Until henuld, whr dance eane along, anul then he raised his hande

And hander the phonosraph a blun that laid it on the
A masts of wheels and broken springs, a thing of life mo
 saying mildly" to himself, "When mall deserts his
peleererates to hidden things, he'd better stand in
fera

But Deacon Bahbit, gooul uld man, will raise his head no


The boys at noon were curious about the new macline,
But the deneon told them "w "shut up" with suteh a


## Woodside Papers, No. $1 \hat{6}$.

## Writen for the Etral Prras by Jeswifer. Jankson.

 When the day eame for the next meeting the Ladies Benevolent Society, Mrs. Payson dinner-dishes had to dance to double quicktime, for she said to herself, "Emina will have so much to do, I will jnst go early an
perhaps 1 can help her." Her work was soon out of the way, and he fore 1.5 minutes had slipped way, Mrs. Wendall was saying, "I am so glad you came first. My
mother has been sick, and I have not bad mucl mother has been sick, and I have not bad much
time to prepare for the society. I have made
raised hisenits, and sponge cake, after the old raised hisenits, and sponge cake, after the ol
Berwick rule. I remember, years ago, I ate Berwick sponge calke in Berwiek, Maine, and to that kind of cake
I suppose yon will laugh, but I think I mns The first person who ever took tea with us wa a solemn iudivilnal who looked as thongh ha needed something good for his stomach's sake So 1 made a plain eake, as light as a feather theu I passed it to him, he was about to the sponge eak "'Do, sir,", said I; "but it is very plan, no "I never take anything bit sponge cake,"
said he, and I felt as thongh I laad eoummitted a great sin in not keeping a sunpply of sponge hike a trap, and he never ate another nouthfnl. Please give me the recipe," sail Mr. Pay "Certainly, right from Berwiek," said Mrs.
Wendall. "I took the whole quantity to day though 1 usually take hut half, which makes
one cake and a roll jelly cake. The roll take hint little, you know, as 1 miake it quite thin,
spread jelly over the top, and roll it while it is a little warm. I will give you the whole rul Nix egys, thrce eups siggar, four cups flour
beat the egys and sugar five ninutes, add two
teaspooufuls cream of tartar in two cups teaspooufnls creaml of tartar in two cups of
flour, one teaspoons soda in one cup cold water
and beat two minutes; then add the other and beat two minutes; then add the other
cups of tlonr, heat one minute, and hake. "That is the rule, hut I put in a teaspoonfnl o
salt. The flour must be measnred after it is sifted and the sane size of cup used for all
measures. The laatter will be quite thin com. measures. The wath other cake-dough, but that is the beauty of it, because cit is so much more moist
than other sponge cake. It is not much work than other sponge cake. It is not much work
to beat the eggs with a good egge beater. Just
see me beat the frosting for the cream. Two or three turns of the wheel will beat the eggs as mnch as they could be beatenn
with a fork iu a long while. 1 do not heat the eggs for cake half as long as I nsed to before 1
lhaid the beater. By the was had the beater. By the way, this cream has
some salt in it, thongh yon forgot that impor tant item when yon gave me the recipe."
"I presume so," replied Mrs. I'ayson, are very apt to leave out that ingredient or say
a pinch of salt. But here is Mrs. Johnson and Mrs. Towne, and 1 nust go to work."
Mrs, Wendall's eosy sitting room filled with willing workers, eager to benefit others and gain kiowlellge themselves.
"Mrs. Towne, what's the tronble?" Mrs. Joh moral lave.
Pike. Sh! I was ouly thinkin' abont por hushand's ben turned off, Pike. Since her husband's ben turned off, she
must have a harder time than erer, "Have they discharged him? "Yes, he got so drunk, peoplc wouldn't ride with him. He couldn't sit np straight on the
lack, and they was afraid he would have a smash-up."
There, there, that woman knows what
trouhle is," said Mrs. Gralam. "But that makes me think that I brought a piece of black alpaca, aud, if Mrs. Paysonn will citt it, we will
make a dress for Mrs. Dike. You sec I make a uress for Mrs. Tike. You sec 1 got the
number of yards usually sold for dress and number of yards usually sola for dress and
trimming; then, when I eoncluded to have it made plain, I had enough left for another d ress,', "I shall he very ghad to eut it, as I have Mrs. l'ike's measure; and I wish I might have a chanee to ent a.dress very often for some poor
person, froin eloth which is needlessly used for person, from eloth which is needlessly used for
trimming ly those who ean afford to buy the fashionahle quantity. I hope the days will soon be passed when one must put 25 yards or
nore into a dress in order to be fashiunaly more into a dress in order to be fashionahly attircci. There is
run home and briug my moresg limast, and he and
which will which will ent almost everything from a man's coat to a child's wrapper.
Finner was very willing
soon eame hack with the chart
As Mrs. Tayson folded the yard and a half of
silesia, whieh Mrs. Wendall silesia, whieh Mrs. Wendall had contribnte
for a lining for a lining, she said: " Iadvise every woman
to buy a good ehart, if possible. This is
yo fit myself better shench system, and I ean employed. If one ean't get a good chart and next hest way is to go to the best dressmaker they ean find, get a good fit on a dress and have
her cut a pattern like it from good, firn, smooth her cnt a pattern like it from good, firm, smooth
paper
tion in tion in regard to the stretching of the seams,
as there is a difference in charts about that.
"We will suppose the lining is cut, as this is,
I drafted it with a lead pencil, and those marks must be on the uppor side. Wie lay the dress
cloth on the tahle with the right side down, cloth on the talle with the right side down,
lay on the lining, see that both are smooth, and lay on the ilining see that hroth are smooth, and
take a coarse baste all aromnd the onter ellye, that they may be kept even. Baste onter upouthe line or seann of all the liases, and down the where the point is to be turned back, for the
button-holes; but I presunue you knew that before." "No, we didn't, at least, 1 did not. like to have you talk to us as though we didn'
know anything about it. I know what I'm know any thing about it. I know what I'm go-
ing to do. 1 m coming right up to your house aull have yon eut a dress pattern for me,"' said "WFell," re
hink of" getting into business, luut I will eut one if yon wish. I presmme I shall omit some items, while I ams speaking of this, but will tell yon what I think of, for, when one knows
nothing abont dressmaking these liints come handy. By-the-way, yon notice, here in the ueck, a very small bias, perhaps a quarter of an
inch or more wide, and about half way bench or more wide, and about half way be-
tween the hem line and the shoulder seam. When one is hollow at the neck this is the the neck-hones. the dress set be taken he ore the liuing is Dasted to the outside, and nust eome like the others, next the person and not next the dresscloth, which lays smoothly
over it, the front edge of the liming coming over it, the front edge of the liming coming
even with the sclf-edge of the cloth.

$$
\begin{aligned}
& \text { en with the self eege of the cloth. } \\
& \text { Another way of fitting such neeks. }
\end{aligned}
$$

"Another way of fitting such necks is to turu
back the lining more than the hem, then pmit it to the edge of the cloth, or, 1 might say, pull the lining past the elge of the eloth, perhaps
half an incli at the top, but the first way is the hest I think
uless the cloth and lining are quite thin, only the cloth, as two thicknesses of eloth and and two of silesia are too much to work buttonholes thruchl. 1 donot cut the lining quite to
the hem line, however, but leave ahout a scann's idth to give stability to the edge and the frout the buttonholes.
"On the other side I fold back the lining and it at the front and stitch it, thus making a firm foundation for the buttons; and l leave the cloth cut its full wilth, so that it may slip
lider the other side when huttoned. Alter hreal is basted in to slow where the hutton holes are to be made, it is a very great help,
especially if the cloth frays easily, to stitch round the place, then cut hetween the stitch
"I have a cording thread mate of a double liread of silk and one of twist or two double
hireads of coarse silk, waxed (it is well to have it twisted also). These will go in a coarse needle, which I put in at the lower back corner of the This is the hest way I have ever fomd for mak ing but tonholes, and mine hardly ever wear out.
in tako it and overcast the scams, while I cut the sleeves and skirt. As dresses arc very short on
the shoulder now, I draft the sleeves high and rounding upon the outer side, and run a threal in to full it evenly. I have already a pattern
fitted for Mrs. Dike's arm, so I will let Mrs Jolnson cut them, while I cnt the skirt. She may want to alter it some time, so we will put brealths in the b:ick. For the front brealthl, the width at the top as the cloth lies double,
must be four inches, and 12 at the botton.
, must be four inches, and 12 at the bottom.
This makes it cight at top and 24 at loweredge.
If If I were to have two gores, 1 should have the
first oue six inclies at the top and 14 at the hottom, and the second eight at top and 16 at
the botton. The cloth is single, of course, for these. The gored edge of the front breadth may be one-half iuch longer than the middle (or the straight elge as it is folded double).
The gored edge of the first gore, one inch louge than the straight cdge, and the second gore the siume, unless a train is wanted, when it wonll
lave to he longer in proportion to the length of the train. When only one gore is used, it must in the same way, the looping and praiting giving length of the back for plaiting at the side. II will make no overskirt for this, bnt will trim the skirt. ,I do not think she would eare for an
"Oh, let me show you a nice way of bastiug that skirt, Mrs. Johnson. Lay the straight ellge
ane the table and the gured edge above it. the haste, taking care not to stretch the gore. I chine, but run it by hand, as I always use it for something else after it is worn. This will probably be niade over for one of the girls. I guess
there will be enough left to make the smallest one an apron.
eek and no-sleeved be for little girls; and they save an immense amount of washing. They are trimmed with
narrow searlet braid pnt ou plain tost of the narrow searlet brad
way, but brought up in a dittle embroidery pat on the tals which loop earelessly hehind. "Ml rs. Payson, how is this lasgue to be fin
ing of thes
it is the
aud then it will be ready to turn and hem up." must be he gause I have talked afternoon. It given the rest a chance to work I am going to make a martyr of myself, and keep, still for
half an hour. "I do not th
(iralam. not think you haal better," said Mrs, rememher it I shall profit by it."
Motuers of Gireat Mex.- hord Bacon's mother was daughter to Sir Anthony Cooke she was skilled in many languages, and traus
lated aud wrote several works that displayel lated aud wrote several works that displayed learning, auteness and taste. Hume, the 1). Falconer, president of the College of Justice, as a woman of "singular merit," "nd who though in the prime of life, devoted herself entirely to his education. Mrs. Francis Nher idan was a woman of considerable abilities. It tirst introduced ber to Mr. Sheridan, after wards her husband. She also wrote a nove highly praised by Doetor Johuson. Schiller strong relish for the beanties of nature, and was passionately fond of music and poetry.
Schillur was her favorite child. Goethe thins speaks of his parents: "I inherited from my father a certain sort of eloquenee, calculated to inforce my doctrines to my auditors; from my mother 1 derived miy facnlty of represent ing aht that the imagination can conceive with wasgy aud rivacity. Lord Erskine's mother was a wollan of superior talent and discern the bar. Mrs. Thomson 'mother of the poet, with a warmth and vivacity of imamination scarcely inferior to her son. Boerhaave's mother acquired a high kuowledge of medicine. Sir Walter scott s mother, Flizabeth, daughter of 1r. Intherford, W. S., was a woman o ascomplishment. She had a good taste for, and Wrote poctry, which alpeared in print iu 1789 . Napoleon's father was a man of 110 peculiar
mind, but his mother was distingnished for her understanding. The T'acker.
Why Wosiex shoeln Read.-Laying aside the thonght of our own rest and confort, Iet us
luok a little higher. For the children's salie we wok a little higher. For the children's sake we
nimst make the most of onrsclves. Many an unselfislı mother has said, "Oh! I cannot take all this time, there are so many things to do for may do more for them in the end by cultivating herself than if she spends all her time on clothes and cooking. A gencrosity which makes the curse. Have you not seen grown-up sons who bunbhed their mother's opimions in the same breath with which they called her to bring "trotted around" to wait lithers woman has they have eome to think that that is all she is hack and is "so uncultivated," forgetting that she has always worn shabliby clothes that they may horny with hard work that the wight be kept soft and white for the piano, and that she has demied herself books and leisure that they might have both. And there are other children, keen though secret sense of loss as they kiss the dear withered cheek and think how much she liad not shut herself pway from the eulture and sweet companionship of books.-Scribner or Apr.
The Vohez of American Women.-The Rev. countrywomen. He says that most of them talk with a shrill woice, and if they wish to gain ing, rather than sy spening the note or some, and of themember at the great dining saloon argest and finest dining hall I ever saw, when 500 people were dining at once at their different tables, I conld single out my own country women in all parts of the hall, uo matter what neir distance, by the shrill yell, more or lea ordered soup, asked for a napkin or passed from pastry to lee eream. Auzz. buzz-buzz of 500 voices in conversaionl, youl could distinguish the war ery of these
ight or ten Americau women, as you distiuuisl signal roekets at night alove a long and dark line of entreuchments." Mr. Hale ascribes
these unpleasant tones to the custom of making these unpleasant tones to the custom of making in the grammar and primary schools.
 - Independent.

## - Chaff.

## Woman tem drink himself.

A rouriss, just returned from Italy, remarks that the lean on
a builder's one.

## builder's one

The discovery has been made that the world does not revolve with the same motion that it
did a thousand years ago; but it still swings around fast enough to satisfy the man with heavy note coming due
A young woman applying for the situation of
overness to a village school, being questioned governess to a village school, being questioned
by the clergyman as to her qualifications, reby the clergyman as to her qualifications, re-
plied: "I ain't much of an arithmeticker; but plied: "I ain't much of an

A Boston paper says: "A butterfly was caught at the South End yesterday." It may End, but when you go to grab a wasp, you want
to catch it at the northeasterly end, drifting to catch it at the northe
westerly toward the head.
There had been some sharp discussion about the report of a committee, when a member rose and moved that it be adopted and the commit-
tee discharged. "I should think the committee had been discharged, from the report we've just heard," was the quick rejoinder on the other heard,'
side.
"What can you do on a farm?" iuguired a farmer of a man who how to build a stone wall?" "Oh! yes.
know fool knows that. You jest have to set one stone on another." "No you don't!" thinndercd
the fariner. "You have to set one stone on the farmer. "You
two. You can go.
A Ticket agent in Rochester has been searchhis advertising card appears the following legend; "In those days there were no passes
given," and underneath are the following texts: "Thiven shalt not pass."-Numbers xx, 18. "Suffer not a man to pass."-Judges iii, 28
"The wicked shall no nore
15. "Nass."-Nahum i,
"None shall ever pass." -Isaiah xxxiv, 10 . 15. "None shall ever pass."-1 saiah $\times x \times x i v, 10$.
"This generation shall not pass." Mark xiii,
30. "So he paid the fare and went."-Jonah i, Billions and Trillions.-The ocean (says
"Cyion the "Cyyclopedia Britanica") contains 290,000,
000 cubic miles of water. Each cubic mile contains $5,431,776,000$ cubic yards. Therefore, in rounds numbers, the ocean contaius $5,400 \times 300$
billion, or $1,620,000$ billion cubic yards. Therebillion, or $1,620,000$ billion cubic yards. There
fore, $1,620,000$ cubic yards is one-billionth par of the ocean. Now $162,000 \times 10$ yards rcpre-
sents a pond 30 feet deep and about 33 acres in superticial area, or to put it in another way, a Roughly, if the Serpentine were 30 feet deep it would be about a billionth part of the ocean.
The "Cyclopredia Britanica" also tells me that
a millimeter cube contains $5,000,000$ blood corpuscles. If so, a square meter of the thick
ness of one millimeter must contain $5,000,000 x$ ness of one millimeter must contain $5,000,000 x$
$1,000,000$, or $5,000,000,000$ blood corpuscles and a cubic meter would contain 5,000 billions
of them. Neglestiug the difference between meters and yards, the ocean would contain 1 ,
620,000 billionx 5,000 billion or $8,100,000,000$ billion, or eight thousand one hundred million trillions of blood corpuscles. How much but certainly much more than would cover square meter to the depth of a millimeter,
there must be in each of onr veins a good man billions of blood corpuscles.
The Coming Transit of Mercury.-A good deal of interest, says the Independent, is
felt by astronomers in the transit of Mercury, Which is to occur on the 6th of May and will bo
visible all through the United States. The ob servations of this phenomenon will have a con-
siderable value, by themselves considered, as giving a very precisc determination of th planet's place; thus furnishing a severe test of the accuracy of Leverricr's tables, and conse-
quently of the reliability of his conclusions re specting an intra-mercural planet or groups of
planets. But the chief importance of the observations lies probably in their bcaring upon
the observations of the transit of Venus. The the observations of the transit of Venus. The optical appearances must be nearly identical afords excellent practice in the way of preparation for the more inportant event. By the
liberality of a French banker, who appropriated
30,000 francs for the purpose, Mcssrs. Andre and Angot, French astronomers of distinction,
have been sent to this country, to makc the necessary observations, and will take their sta-
tion at Ogden, on the Pacific railroad.
Character. -The differences of are never more distinctly seen than in
times when men are surrounded by difficulties times when men are surrounded by difficulties and misfortunes. There are some who, when
disappointed by the failure of an undertaking,
from which they had oxpected great things, make up their minds at once to exert themselves no longer against what they call fate, as if
thereby they could avenge themselves upon fate; others grew desponding and hopeless;
buta third class of men will rouse themselves just at such moments and say to themselves,
"the more difficult it is to attain my ends, the which every one should impress upon himself prosecute their plans with obstinacy, and so perish; others who are more practical men, if
they have failed in one way will try another. -
Niebuhr.

Young Folks' Column.
May-day Customs.
Though May-pole and Morris daucing were the most common, there were other curious customs in different parts of Great Britain. In
one place, the Mayers went out very early in the woods, and gathering green boughs, decor ated every door with one. A house containing a sweetheart had a brauch of birch, the door of a sernly person had the mortification to find a branch of a nut-tree at hers, while the young
people who overslept found their doors closed by a nail over the latch
In the Scottish Highlands, in the eighteenth century, the boys had a curious custon. They would go to the moors outside of the town, make a round table in the sod, by cutting a down to their it, deep enough for theml to sit wonld kindle a fire and cook a custard of eggs and milk, and knead a cake of oat-meal, which
was toasted by the fire. After eating the custard, the cake was cut into as many parts as there were boys; oue piece was maye
black with coal, and then all put into a cap.
Each hoy was in turu blindfolded, and made aach hoy was in turin blindrodded, ande made black one was to be sacriticed to Baal, whose The victim in that day had only to leap
through the fire; but there is little doubt that the whole thing was a survival from the days In the island of Lewis, in the west of land, there prevails a custom of sendiug a manan very early on May-day to cross a certain river, belleving that a woman crossed it first the
salmon would nome into the stream for a
The Dutch May-pole was still different, being surrounded by trees stuck into flower-pots,
and ornamented with hoops with garlands aud gilt balls hanging.
Another sort had wooden dolls made to reyre seut the figures of peasants, nailed against the climbing it. There were also figures of birds and people. In some parts of Gerinany it wa
the firm belief of the commou people that cer tain ill-disposed beings met on a ligh moun-
tain on May-day to dance and feast, with no good intentions to their human neighbors.
Accordiugly on the day before, evcry family
was careful to have a thorn of a certain kind, was careful to have a thorn of a certain kind, which was stuck into the door as a protection
The Scandinavians, whose first of May is not
very balmy, had of old a curious fight between very balmy, had of old a curious fight between
Summer and . Winter. Winter-or the man representing him-was dressed in skins, armed with fire-forks, and threw snow-balls and pieces
of icc. Summer was dressed in green leaves and summer dress. They had a mock fight welcoming Summer," and in the Isle of Man, where Norwegiaus had rule for many years But died out, and a few years ago May-day was in London simply the festival of chimney-swecp: and milkwaids, certainly a falling off from the
times of King Henry VIII. The only traces of the old custoin of going a-Maying were the gar
lands of the nilk maids and the Jack-in-the green of the sweeps. The garland (so called)
was made of silver plate, borrowed for the day and fastened upon a sort of pyramid. Accom panying this droll garland were the maids themand attended by musicians who played for them to dance in the street. Sometimes a cow was dressed in festive array, with bouquets and ribbons on her horns, neck and tail, and over he ornamented, the meek creature was led through the streets.
The sweeps brought out the Jack-in-the-green, which was a tall cone made of green boughs decorated with flowers, gay streamers and a thag,
and carried by a man inside. Each of these structures was followed by a band of sweeps who assumed certain characters the fashion which had been handed down from the palm times of May-day
There were alw
idiculous imitations a lord and lady who wore inade ludicrous attemptthonable dress, an mauners. Mad Moil and her husband were another pair who flourished in tawdry, gay sweep's broom and she a ladle. Jim Crow and a fancifully bedizened ballet-dancer in whit muslin, often swelled the ranks, and the rest of
of the party rigged out in a profusion of gilt and legs colored with brick-dust made up conical crowd But even these mild remain of the great festival are almost entirely banished the rural districts, and
there.-St. Nicholas for May.

Svook's boy heard him say the other day that there was money in hens, and he proceeded to
investigate his father's poultry-yard. He had gone through a dozen fine specimens, when the old gentleman came upon hinm, and the
wondurs if there is aus balu iu Gilead.

GOoo HEALTH.
Longevity
The London Capital and Labor has an inter sting article on the above subject, which will be read with interest. It says: " "Medical writers
who have given considerable attention to the snbject of vital statistics, have arrived at the somewhat extraordinary result that the highe personal indulgence, the smaller are the chances of long life. Many people accustom themselves consider the possession of wealth an effectual guarantee for a tlourishing condition of body.
Such persons will be surprised to learn that in proportion $2 s$ the wholesome stimulus of work
is withdrawn from any class, iu the same proportion the average duration of life is shortened
A little reflection, however, will serve to show me reasonableness of snch a conclusion. Many a uring a prolonged period suddcnly retires from bnsiuess, with the notion that he has only to now may enjoy himself. In the generality of taken to shorten life. Having nothiug to ocany pursuit differeut fron that which has chiefly
been followed, the rctired tradesman or manuacturer speedily falls into a physical and mental oondition favorable to disease. The only chance ployment or recreation which shall insure activpractical wistom in the story told of the tallow
chandler who, in disposing of his business said to have made a stipulation 'that he should be allowed to go to the shop on boiling days.
None of us are able to bear a prolonged fit of
fit dleness, and least of all those who have been

Taking Cold.-The New York Independent
sys: How shall a person who is sensitive to
cold, who takes cold whenever a door is opened cold, who takes cold whenever a door is opened
or a window raised-how shall such a person cquire that hardihood which will enable hin to endure exposure and avoid taking cold? In portion of each day out of doors. He should
do this at all seasous of the year and in all kiuds of weather. Secondly, he should watch with in which he spends the remainder of his thimeoth the living room anl dormitory. Thirdly,
he should each day bathe his chest and neck,
nd, if he can bear it, his whole body in cold nd, if he can bear it, his whole body in cold
water, and follow this with a rigorous rulbhing
with a coarse towel. What is called the splash with a coarse towel. What is called the splash-
bath is, perhaps, better than any other for this purpose. It consists simply in dashing water
against the body with the hand. This causes a against the body with the hand. This causes a
 This can all be accomplished in a few minutes, in a cold room or in the open air. Of course, a person unaccustoned to this should not comummer, he will find, as the winter approaches,
bhat hiss ability to endure the lath will incease with the falling of the therinometer, and that
his susceptibility to changes of temperature will his susceptibility to chat
be greatly diminished.
Col. Bell's Coueg Mixture.- While at acramento the other day, says the Napa Re-
porter, wo were given the formula of a cough mixtnre by Col. Wm. H. Bell, Sergeant-at.
Arms of the Senate, which we have tried and Arns of the Senate, which we have tried and
found most excellent. In fact we feel that we ought to recommend it to all sulfering from sermula: One ounce golden seal, one ounce myrrh, one ounce gum arabic, one ounce prickly
ash, one ounce senna, one ounce seneca snake root (cimicifuga), one teaspoonful cayenne pep-
Put these in a vessel with half a gallon Put these in a vessel with half a gallon
ter, and slowly boil or siminer three or four hours, uutil the strength has becn ex-
tracted from the several ingredients. Reduce tracted from the several ingredients. Reduce
the guantity of liquid to a quart and strain off. Then add two sticks'of licorice, a pint of whisky
and a pound of rock candy. The dose is and a pound of rock candy.
tablespoonful four or five times a day-one al
ways at bed-time, and the first thing in the norning. The inixture is a gentle laxative,
therefore be careful not to take enough to canse inconvenience in that way. Each person must learn to regulate the doses to his own particular case and idiosyncrasies.
Consanguneous Marriages.-Mr. George
Darwin, after a searching investigation, con cludes that 'the widely different habits of life of men and wonlen in civilized nations, especially among the upper classes, tend to counter-
balance any evil from marriage between healthy losely related persons." Mr. Darwin's view are in a mensure snstained by Dr. Vorni's in
quiry into the commune of Batz. Pat\% is rocky, secluded, ocean-washe! peuinsula of the
Loire Inferieure, France, containing over 3,000 people of simple habits, who do not drink and conmit no crime. For generations they have
intermarried, but no cascs have occured of deaf-mutism, albinoism, blindness, or mallfurn
ation. and the number of children born
above the average.

## Domestic Economy

An Essay on Sweeping.
Mrs. B. writes for the New York World some of her ideas on sweeping: A house to be clean must be swept, we all know; and if all the housekeepers iu the land could give their way of doing it, nine out of every ten doubtless would say: "Oh, I sweep once or twice a week, and brush up a little every day." Now, it is not to the housekeeper who has had the broom
question in full consideration that we offer these suggestions; but it is to the many who in their hurry seize a vicious-looking broom, and give
the carpet "'a good going over." Rather roug treatment this. It is much better economy to kep a nice, new brom for the carpets; let
be hung up and kept for that sole use. Put it entirely away if there is danger of its heing
taken to brnsh the out-door steps or round in taken to br
the kitchen
In sweeping, the dust is to be brushed off the
surface, and we think a light broom is better than a heavy one. In the first place, let all the delicate oruaments be put away. Let the bed
-if it is a bedroom-be carefully covered, an have upholstered furniture also covered as far
as possible. Then open the windows, and after scattering danip tea-leaves over the floor, swee clean, but lightly, using a small broom for the corners and around the stove. Taking up the
dust as it is gathered in little heaps is certainly neater than rolling the whole mass from on
side of the room to the other. Let the furniture then be dnsted, wiping it with a clean dusting-cloth; and inany people forget entirely it may. Sem, we have seen people fairly rub
chiutz furniture covers with dusting cloths that were simply filled with
with dirt dusted, a a room the has been thoroughly swept, thcir places, one feels that it is clean and delight-
ful to contemplate; but, if this is the sitting room or the dining-room, the next thing, a fev
crumbs or threads are dropped, or sand crumbs or threads are dropped, or sand is
brought in, notwithstanding the mat at the Then comes the brushing up. The
oroon is picked up in a hurry and flour scrub-broon is picked up in a hurry and four-
ished over the floor, but there is no time to dust the furniture. Now the question is, would
it not be better to use a crumb-cloth under th
dinig dining table, and oftener employ the small wreeping until it contd ben, nicely done
In truth, we abhor the brushing up business.
We visited in a house ouce where this style prevailed. It was a very pleasant house to
visit except for this. The mistress was charmiugly agreeablc; she could talk, and also knew how to cook everything in the micest manner
without making fuss about it; but we could
never wear our best black cashmere dress to never wear our best black cashmere dress to
the dinner table, for the chairs were often cov
ered with dust. The "brushing up" sometime took place just before dinner; generally, how inmediately after breakfast. We wanted per haps a moment's chat with our friend, and she if weys ladid on a morning dress of crimson cash mere, and our hair was "done up," why then,
we hurried off. Oh, that everlasting broom!

Potato and Onion Soup.- Put four mediun
sized peeled potatoes in some cold water with a Potato and onion soup.-Put four mediunı
sized peeled potatoes in some cold water with a
little salt, and boil them until well done and mealy, then drain and mash then smooth, and
add gradually a quart of scalding milk. Strain Whileugh the colander, to remove all lumps. While the potatoes are, cooking, put a smali
tablespoonful of butter in a sauce-pan and when tablespoonful of butter in a sauce-pan and when
melted, put in three or four sliced onions, and stir them until they are quite brown, then draw
them to one side and put in half a teacupful them to one side and put in half a teacupful of
flour, and stir and mash it until it begins to brown, when the onions nay be mixed with it, and when the flour is of the same color add by degrees the milk and potato ; season to taste minutes watching carefully that it. does not burn. Serve hot with dry breal cit in dice
and fried in boiling lard (crouton.), and a little chopped parsley

The Brst Method of Arresting Fires.On the first discovery of a tire, it is of the ut-
most consequence to shut, and kecp shut, all most consequence to shut, and kecp shut, all
doors, windows or other openings. If the fire apears at all serions, and there are fire engincs arrival, as many buildings have been lust front opcning the doors, aud attempting to extinengines are within reach, it is well to keep a haud-pnump. If that is not to be had, the next best thing is to collect as many buckets outside the room on fire as can be obtained, keepling the door shut; then creep into the room on
the hands and knees (if the heat and smoke are considerable), and throw the water as nearly in the direction of the fire as possible, keeping the
door shut while more water is being collected. The police of London understand shutting up kept fires two or thre miles distant from the engine stations shut up till the firemen arrived
in time to extinguish then,

## comosuls

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## Saturday, May 4, 1878.

table of contents.
GENERAL EDITOORIALS WOrk of the Cavree















##  <br> 

## The Week.


 tion can yet be said io be too great. Bravely
and vigorously the cereals advance from blade
 tenaciously tho blossoms "set" beneath a frost-
free foliliage. Thickly, far too thickly; iu many instancest the trees are elustering their fruit
arould the twigs. Finch bud seems ankious to assert its power. Lhxuriant are the gardens;
ponderous will be their weights of produce and the coin bags which coutaiig returns oforit. In
the city, business is oul its feet and casting

 Such are we at home. To learn how great
our btessings are, call up a thought of Europe,
 an eusauguined struggle . Think of two mighty
nations rushing with hot haste to expend their
mat mailons rushing wht hot haste to expend herr
million, on pon the pronotion of rosplorous
industry, but in dread competition to outstri) each other in the posscssion of materials and
engines of murderous war. See the zeal of ad. jaeent nations arnuiug to the teeth to prepare
for any neessity which may cone. But thus it is. Thile European nations are rushing to
seize the liorns of the dilemma, we utlift out
 things, wham war surp mas shan give bread to
tendent npon us.

## Notes on Barley.

It is probable that we shall have a largely in creased amount of barley to markct this season,
and any indication of demaud for it will be and any indication of demaud for it will be
interest to growers. Reports from the prair States show that there has been a general decrease of acrcage sown to barley this year. The decreases in the different states are as follows
Wisconsin, $35 \%$; Minucsota, $3 \% \%$; Iowa, $26 \%$
, Wisconsin, $35 \%$; Minucsota, $37 \%$; Iowa, $26 \%$
Vebraska, $51 \%$; Kausas, $27 \%$; Illinois, $15 \%$ The averages of all these States shows a de
crease of $3 \overline{5} \%$ or rather more than one-third the acreage sown to barley last ycar. Inasmueh as we shipped barley to the St. Louis market last year, by sail to New York and then by rail to St. Louis, the avcnue for our crops to the
markets of the Central States is not untried. There were also shipments direct to Chicago but if we remember rightly there was uo moncy
in the shipments last year. It is, however, posin the shipments last year. it is, however, pos
sible that with a prospective decrease of proluction in those $S$ tates, there may he a field for
our barley this year at profitable rates. The our barley this year at p
matter is worth watching.
Warley, the characteristics of some of them ing fixed by the atnosyheric coulitions under which they are grown; as, for instance, the barley grown in the fogs of the eoast, which is always of dark color. We also produce in the
interior some of the finest, brightest brewiug liarley in the world. In the regions adapted
fur the production of bright barley nuch of the fur the production of bright barley nuch of the
quality depeuds upon the seed used, as is the case with other grains. There is reason to fea that our growers do not al ways take as much
pains in this direetiou as they should. As a seneral thing there could be more first-elass
Chevalier barley brought to market, with a notable increase of receipts to the producers. Chev
licr barley always nuakes a grade for itself. nay be of interest to mentiou something which all barley growers do not kinow, and that is the
method of the origin of the Chevalier barley. It is not a chance pioduct, nor a distinct vari-
ety, botanically consideren. It is simply the ety, botanically consideren. It is simply the
levelopment of the possibilities of the grain b
propagating the choicest seed by extra culture ropagating the choicest seed by extra culture tion, and endowed with the power of repro nd animals, it continues to give the grower yield of nnusually fine grain, if the soil and the
conditions are favorable to its growth. We conditions are faroral) to its growth. We
have spoken several times of the production o extra yields of wheat by a sort of breeding and Leveloping process in the seed, and the same
remarks apply to barley. This was the process hopted hy M. Chevaluer, and the resut is tha the grain he procuced has carried his name into
all
the markets of the world. 11. Chevaher
olserved an ear of barley of unusually tine size and quality growing in a tield, and he picked it He sowed the seed in his garden and then re sowed it, giving it garden culture nntil he hai
enough to sow a field. The superior quality o M. Chevalier's grain was at once recognized and the result is that it has become a favorits,
in all barley growing regions. As early as $\$ 832$, in all Larley growing regions. As early as 1832 , a fied, a part of which was seeded with the
best common barley which could be found. The result was that the Chevalier weighed 57 pound pundl, which showed the Chevalier to possess an advautage of about $10 \%$ iu the formation of
phump, heavy kernels. 'this early experieuce phunp, heay kernels. This early experieuce siuce that time, and the result as we now see
is the differeuce crystalized into a market pric is the differeuce crystalized into a market price
which leals all other larleys. The London Ayriculturist, speaking of this grain, says
"There can be uo doubt uow of the geueral su periority of the Chevalier as a malting barley.
It is now grown where formerly no such a thing as a tine brown where warmery no such thought of. it is one as a ine barley was innumerable improvements of moder
thase in whing
date, wrich, though but seldom thonght of date, which, though but seldom thought of,
have produced great effects. In this case the price of barley, owing to improved quality, has
been increased over wide districts by 2 s , aud 3s. per çuarter." This is an interesting subjeet to all larles growers, and we trust the lesson from the facts we have stated will lead to a more gencral care in the selection of seed, and to original efforts toobtained. The field for improvemeat is open, and we know no reason why a little practice of
the scientitce method should not evolve a barley which shall eclipse the fame of the Chevalier.
Dr. Lewis' Camping Party.-The starting of Dr. Lewis' camping party was celebrated near Melrose on Wednesday by an opening din
ner in camp. Sixty or more tourists, who have ner in camp. Sixty or more tourists, who have
placed themselves under Dr. Lewis' guidauce placed themselves under Dr. Lewis' guidauce,
and quite a company of united guests made up a very enjoyable dinner party, and the campers
started out under bright skies for their four aud a half months of fresh air and exercise, suu shine and beautiful scenery. Dr. Lewis has inaugurated this new departure in camp, life, in an earnest desire to bring before the public the advantagcs of oint-door life in the mouutains,
and he feels convinced that the campling party's year to brijg of this year will enable to year to briug 500 people from the East to enjoy
a seasou of camp life in our mountains. The idea is a good one.

Open Market for Farm Produce in Oakland.
There is a good prospeet that the enterprise for open and free marketing of produce, by pro-
ducers, will be successfully begun in Oakland ducers, will be successfully begun in Oakland
on Saturday May 25th. We are glad of it, because it promises well both for producers and consumers. We have often pointed out the enlpable waste of time and money which is oecasioued by earrying fruit and vegetables growu in Alameda county, across the ferry to this city, causing them to run the gauntlet of draymen, them bomssion merchants, and then packing ress is all gone, an and the profits on their produc tion and commissions. We have often thought that many Oakland people must get a poor idea of the vegctalle kingdom from the stale stuff which is dualt out to them by the large squad
of Chinamen who furnish them with food which has lain from one to three nights in the city This system should all be swept away. The Oakland people should have their food fresh from the gardens and orchards, and they should have much wider variety to select from than the hasket of the Chinamnan, or the counters of the corncr store. Fruit and vegetables can be gath
ered after sundown, and be brought into Oakland in the early morning, even froe the lower hat the price which and it would seent prolable aving of frcights and comnissions, aud the saving of freights and commissions,
make the cflort profitable to the producer.
The idea is gatuing approval amoug the $p$ lucers of the county. At the last meeting of the Executive committee in Oakland, Mr. A. D. Pryal, the traveling member, was present,
and madc an inforinal report. He las been wer a portion of Alameda eounty only, and was ou the point of starting for Contra Costa
county. He displayed as the result of lis work ied thi it over 100 farmers who her sid ied their iutention to lee present at the opening
lay of the market, Mlay 25 th, with their wag ons ladened with the various, produets of their farms, orchards and vineyards. Wach signer sct opposite his name a list of the articles he proposed to bring in. 1 these lists are fruits
aud regetables of all kiuds. Butter and regetables of all kiuds. Butter, eggs,
cheese, milk, cream, buttermilk, poultry, pigs, ambs and calves; honey, domestic wines, hay, rain and straw, flowering plants, rustic bas kets, chairs and tabes, etc. Mr. Pryal says
that the list at present represents from ten to fifteen million dollars in property, the siguers being the most substantial farmers of the connty.
The s
The success of the market promises to be far ors anticinted most sangune of its projee days to convince the Oakland people the ad vantage of buying fresh produce direct from the producer's wagon. The shall doubtless soon open markets at the East, a throng of frugal housewives in neat morning dresses, selecting heir dinners from erisp, dew-laden vegetal,les he sweet, new butter, eggs but a day's jour ponltry unstained by travel.
The plan to be pursued is qnite gencrally known throughout the interested connties by the wide distribution of handlhills, , hut it is so applicable to a score of our other larye town nid cities that we give a brief cicscription of
The market is to lie located Broad way, south of Seventh street, and he held on Wednesilay and Saturday of each week not continued longer than 2 o' cockek P. M. Bach vehicle occupying a stand in the market must be backed to or uear the curb, and placed as he strect, and a space of not less than two feet must remain unobstructed between each stand. A spacc of $6 \times 20$ feet must be allotted for each stand during markel hours, the short measure and the stand to include three feet of the wilt of the sidewalk next to and including the eurb The allotnent of a stand in the market will en itle the recipient to a priority of riglt theretin but such right will he forfeited by his failure to occupy the stand with marketable products for three successive market days, or by a violation of the provisions of this ordmance, or the rules or the government of the market; or forfited for the lay of che mithet by his ailure to or apy Thc ume prior tho the nust be exhibited in conspicuous letters, an occupancy, and no longer.
Orange Blossoms. - We acknowledge with thanks the receipt of a bouquet of orange blosoins from N. C. Carter, of San Gallricl, Los y stickiug the stcins into a potato. The fact may be of value to those who have never thought of this method of keeping up moisture during transit. the blossoms were densely and de ciously fragrant
On File.-"A Talk about Manure," U. Notes," H. W. H.; "Notes from Santa Barbara
County," M.; "The Corbet Method," B. D. H.

Queries and Replies.
Blight on Rose Bushes.

## Entons Prgss:-Will you please Inform me why the Oose bushos thith and what remed wrild be goud for



If weot, suisin City, Cal. grower, known as mildew. If so, it is the work a fungus, to the attacks of which the rose is sulject. The best remedy we know of is sul phur. should be freely throwu or blown
bushes with a sulphur-bellows, such as is used in the vineyards. If this is not at hand, it may be pretty well distributed by put ting a little in a.hag of loonely woven cloth, tyiug the bag to the cud of a stick aud shaking
it over the bushes or jarring it through the eloth by quick raps on the handide with a stou stick. The time to apply is early in the morn ing, while the dew is on the leaves, It gives
the bushes a forlorn appearance, lut that is better thau losing thcm. If we have mistaken a remedy.

Bisulphid of Carbon for Gophers.
Emtons Press - Plase inform us through the Press
how Prof Ilikkard operates with bisullylid of carton for gophers The ar perery destry
West Point, Calaveras county:
Prof. Hilgarl's instructions for the use of bisulphid of carbon as a poison for ground squir rels, which were published in the PrRss, are phlet, by the University, and will be seut free to any one who applies for it. The University investigation forward for general advautage Concerning the use of the bisulphid for gophers, the Professor says: 'In dealing with gophers care should be takcu to inade it possible for the it at the 'neari cud of the ammal, hy using pher has goue into the ground, and not 40 or 50 feet of. Any person kuowion the habits of the gopher will readily manage ths, but it is quit oue, by a few drops of the bisulplid, placed in the rum at intervals of two or three yards When thus 'driven home' the gopher promptly surrenders to a thimbleful of the liquid dropped into its hole; and whencver one is scen at work, its operations may b
in the same manncr.

When to Cut Willows.
Eurtors Press:-In your valuable paper of April 20th, some one says he will give any man
S20 who will tell him when to zut willows so that they will never sprout again. I do no want his $\$ 20$. but want to give a brother farmer the desircll information. 1 think if he will
cut them any time in August that they wil never sprout again. A few years ago oome friends asked the privilege to cut some willow ing. It was in the latter part of Angust. The entirely camp meeting killeil them.-Dasi. Wood Visalia, Cal., April $22 d, 1878$.

Black St. Peter's Grape
EDrons Press:- Will you please to inform me through
 Black St. Peter's is a synonym for Alicante, Black spanish, Black Lislon, Black Palestine,
Black Portugal, Black Valentia, and several other names, according to Downing. It is de seribed as an excellent late variety, large and somctimes shouldered. Berrics large, oval. Skin tough, rather thick, jet black, with a blue bloom. Flesh tender, juicy. We presume
has been iutroducd on this coast, but we do not kuow who has it. Any one who has will do a favor by informing us.

## Grass Nuts

Entons Prpse:-
Are they related
1 gend yout th



The specimens sent are not related to chufas. ily Liliacea, while the chufa is of the family Cyperacere. They are wholly uulike the ehufas
in appearance, leing a perfect bulb, like that of a tulip or lily, but smaller. The chufa is a corm produccd from points on the ro
like potato tubers are produccd.

## Cyclobothra Pulchella.

EDiTors Prass:- -1 send you enelosed a hright yellow
fower that grows wild here.
think so much of it that It would like to kow what it is. Please inforni a number
of your readers, and ohlige.-CossTANT READER, Cliery Mr. Ilarforl, director of the nusenm of the Aeademy of Sciences, identifiell she ilosson as
that of the Cyclobothra pulchella. It is of the lily family, and is sometime entled wild tulip. chartus. There has been an issue between the
names (yclobothri and Calochortus, and the
latter will probably be deelared the vietor when the next volume of the "Rotany of California" the next
appears.

Land Tenure Here and Elsewhere. We have just been reading, in one of our English exchanges, another letter by Joseph Kay, from whose writings we lately quoted, to show the extent to which the title to land of the United Kingdom is centered in the hands of a few holders. Mr. Kay now writes con cerning the great difficulty and expense of get ting a title even when seller and buyer agree upon a transaction. The facts, as stated by Mr. Kay, we have known before in a general way, but we own they never impressed us so deeply as they do by his presentation. Take, for example, the British law which gives land owners power to direct not only the succession to, but the management of the land for a great number of years after their death. Thus the land may be fettered both by deeds and wills, and even when a purchaser finds a small plot o is worth to find out whether it is not so bound up in the system of deeds, long leases and mort gazes that his purchase of it would give him no title. The fact is it is well nigh impossible to find out in what way the land may be affected by liens and post-mortem regulations, because there is no provision for the registry of deeds,
mortgages, etc., as in this country. Here our mortgages, etc., as in this country. Here our
county records show the instruments which affect any parcel of land, and for a few dollars of title, which shows just how the an abstract affected. In England, because there are no affected. In England, because there are no such public records, the steps to consummate a
transaction are very different, and Mr. Kay mentions a case in which the man who parchased three acres of agricultural land, had t pay nearly $\$ 600$ for title and the draw ing of the deed As deeds are per-
misted to contain such binding reg
ulations for the clarions for the tu complicated an ambiguous that
even a lawyer can not understand them and suits at
law as to their meaning are netessary. Nor are
these a very sati factory recourse, he knows "one tire value the en estate having been costs of litigation the only struggle which remanded was which firm of titled to the estate in repayment o heir costs. Sher are traditions o things corpulent lawyers enjoyed by
country, and yet the occurrence

## contemplate. We have

tons have referred to the barriers to acquisi tons of freeholds and homes in the agricul-
tural districts of England, chiefly to show that our laborers are more fortunate than their Eng lish brethren in the chances for advancement which they enjoy. Let the contrast appear. Mr. Kay says: "Take the case of a young
Norfolk peasant. He leaves his school at nine or ten years of age to add to the small earning of the family. He lives in the small crowded cottage of his parents. At 21 years of age he may earn 12 or 14 shillings a week; to hire a
cottage for himself is most difficult, for the cottage for himself is most difficult, number of cottages is kept as spinal as possible by the landowners, so as to avoid any surplus poor population settling on their estates or near number of years' prudence, saving, or self-denial any chance of buying or building a cottage, or
of buying a small plot of garden ground, or the smallest farm? The very supposition is ridiculows, from the utter impossibility of his doing anything of the sort. Cau he obtain a cottage and garden on lease? Certainly not. Must he, then, remain a poor peasant all his days? He person to enable him to emigrate, and unless he can tear himself away from his relations and alt his old associations for ever."
dition always to remember that such a con try. Many of our best farmers started out in life with no better advantages than this Norfolk peasant, but their frugality and industry was not made of no avail through embargo non making, perhaps, but a small payment at first, them masters, not only of this, but of many adjoining acres. Their experience cannot bc too frequently described. There are hundreds
of young men, who are now squandering their of young men, who are now squandering their
courage which has brought many of our sur-
cessful men to their present their own to their present condition to secure pleasant ho cess, and gain for themselves ty. In this country there is a freehold and home for every young man who will show him self worthy of it.
We have often alluded to the great drawback to the advancement of this coast in widespread home-making, through the holding of large nothing in this country which locks up land for generations as in Great Britain. In fact, it is plain to see that there is a tendency toward disintegration in our large holdings of land,
which more than balances the tendency toward accumulation. Some hint of this tendency may be seen from time to time in our advertising columns in the frequent announcements of farm ing lands for sale, in small parcels, on most ac cominodating terms.
Perhaps a more striking contrast between land teuure here and in England cannot b in Tehama county intention of a recent occurrence grant for years impeding the settlement of the county, and influencing its development in ser oral ways. The owner has recently died, and instead of locking np his large estate of 24,000 acres, according to the English method, he has divided it up, and instructed his executors This brings a considerable tract of private sale. has hitherto been held en masse, into open sale and the former owner has done his county and the State good service in the wise provisions of of events, be repeated in different parts of our unload the han cotton which many ion large land heavy burdens which many of our large land-holders are carrying, will each year
bring more and more desirable land within the

## The Winchester Repeating Rifle.

The Winchester rifle is too well known to the public to require any detailed description at our hands, but we give illustrations herewith of the new models of 1876 of this arm. The success attending the sale and use of Model 1873 and the constant calls from many sources, and particularly from the regions in which the grizzly bear and other large game are found, as well as rom the plains where the absence of cover and the shyness of the game require the hunter to make his shots at long range, made it desirable for the company to build a still more powerful gun. Retaining all the essential mechanical elements of the former model, and adding such been a capable of reloading, caliber $45-100$, with 75 grains of powder and 350 grains of lead, being early double the charge used in the model o the U. S. Government
The materials used in
The materials used in the construction of the gun are the same in kind and quality as in the
model of 1873. Sporting rifles are made either with round or octagon barrels, and also with either plain or set triggers. All guns
with plain trigger are provided with an attachwith plain trigger are provided with an attach mont which readers premature explosion of the cartridge, even from carelessness, absolutely
impossible. In both infantry, musket and carbine the magazine is covered by the forearm it entire length. Riffles and carbines are finished in various styles, the Standard arms having shed arms have fancy checked The extra fin stocks, and case-hardened steel mountings.

## Wool Prices and Qualities.

A correspondent, in another column, pleads or sales of wool in which the price shall be regulated by the quality of the lot sold, and not affected by any general ill-coudition or prejudice which may exist. This is a correct plea. Every article should sell upon its own real merits, and the price should be high or low, according thereto.
Now, the fact is that this method of sale arerails in this market to a far greater extent than our correspondent seems to imagine. He overdraws the pioture when he speaks of all "southerr" wools as lumped together and sold for the "miserable 12c. or 13c. per pound," etc. Rather is it true, as stated in our "Market Review" last week, some short San Joaquin wool, because of its especial excellence, sold at 23c. per pound; higher than any price gained for the
12 mos. clip on the same day. This was be12 mos. clip on the same day. This was beThis is one case in which there is discrimina This is one case in which there is discrimina.
ion exercised and the price rose with the quadty. Another instance that there is a sale of wool according to quality, may be seen in the wool according to quality, may be seen in the
fact that some Los Angeles wool has sold for 23c. in this market. This was doubtless because the wool was produced under more favorable conditions, such as are afforded by irrigaton, and was more desirable than the ordinary run of the lower counties' wool. In the local sales this spring at Los Angeles, wool has been sold as high as 2 tc ., and although the present market does not warrant such a price, it shows that discrimination is practiced, because in the at 14@16c.
is drawing a little on his fancy when produced with the surroundings he
describes would be describes would he branded as south-
erne, and sold the same as southern
burry wool. According to the best of our knowledge nd observation,
this would not be his would not be
the case. There is a sharpcompetition among buyers, and among buyers, and
they know the value of $\left.\begin{array}{l}\text { hotting } \\ \text { holding of }\end{array}\right)$ wool with as little ole. They examine all lots carefully before making We bids upon it. be that there may be a linking of good and pour lots sometimes, to get a better price all
around, but this does not enter the issue between southern and northern which our
CENTENNIAL WINCHESTER, MODEL 1876, STANDARD RIFLE.
reach of those who prepare themselves to pur reach of
chase it.

## Inquiries About Flax Growing.

Editors Press :- Will you or some of the readers of your paper inform ne the number of acres of flax grow.
ing this year in california, the names of the krowers an their postoffice
San Francisco.
Our querist has had experience in the linen manufacture of Great Britain, and he thinks he sees a field for the upbuilding of a large linen factory in this State. He thinks the necessary capital to launch the business can be enlisted and is now endeavoring to ascertain what amount of flax will be grown this year, so that some idea may be gained of the amount of avail able raw material should inducements be out see the enterprise, which Mr. Humphries has in mind, become established, and there seems ever reason to think that it would be profitable. In order to promote the idea we ask our readers to send us statements of the acreage of flax in the i townships or counties. It must be understood as yet, but if it can be shown that there is good amount of raw material it may advance measures for utilization
We may remark in this connection, that our last notes on the subject of flax fiber, something machinery which was set up here for the manafacture of shoe-thread, twine, etc. This enter prise did not receive the encouragement it asked and the machinery was taken to Oregon. We
trust the proposition for a linen factory may trust the
avail more.

The shooting match between Carver, of Cali Carver, who broke 487 glass balls out of 500 using a rifle, while Petty broke 478 out of 500 using a shotgun.
finish, beautifully engraved. Sporting rifles may be had with pistol grip, stocks, Vernier and wind gauge sights, if ordered. For long range target
shooting a cartridge is made using 85 to 90 shooting a cartridge is made using 85 to 90 450 to 500 grains; as these cartridges are neces sarily made longer than the regular cartridge, they cannot be used through the magazine, but must be used singly, using through the top of the carrier block mortise.
A great variety of these Winchester repeat 15 arms may be examined at John Sinker's 115 Pine street, sole agent for the Pacific coast The new model shown in the engravings specially adapted for use on this coast, and
-

Meteorological Summary for April.The report of the U. S. Signal Service officer of San Francisco, for the month of April i barometer for the month was 29.93 ; mean term perature, 55.3 ; mean humidity, 70.4 ; prevailing winds, west; highest barometer, 30.215 ; lowest 29.589 ; highest temperature, $70^{\circ}$; lowest, $44^{\circ}$, monthly range, 26; greatest velocity of wind 28 miles per hour; total number of miles
traveled by wind, 6,113 ; total rainfall, 1.00 traveled by wind, 6,113; total rainfall, 1.06
inches. Rainfall in April during former years niches. Rainfall in April during former years
1872,. 75 inches; $1873, .43$ inches; $1874, .90$ inches; 1875, .10 inches; 1876, 1.29 inches 1877, . 26 inches.

Two-Headed Snakes in Columbia. - A friend rings us information of a double-licaded snake Colombia, South Ainerica, close to the village of Santa Ana. The natives call this snake the Calla Aykiss, and it is said to be one of the grows to the length of 15 feet. A specimen wa brought to California by C. R. Clark, late Sher ff of Nevada county. It is now in possession
of Miss Mary Glass, Oakland. Mr. Clark put in th
bia.
scribes. Receivers of wool are good judges also, and they know that it is to their interest often to hold a desirable lot of wool, so as to get a
good price for it.
There is one point which our correspondent
There is one point which our correspondent mentions, and it may be from this that he takes
his position. It is a fact that at present it will not pay to wash sheep) if the wool is to be sent to this market. Eastern buyers will pay something more for wool this washed, but they will not pay enough to compensate for the loss of weight which the grower sustains. This is wrong in theory. It is good doctrine that we should produce the cleanest possible wool, and get a profit on the extra effort. But the amount of washed wool which comes to this market is so small that the trade can hardly take cognithat the produce does not get what he really that the product does not get what he really
deserves. We should like to see this otherwise, but so long as all California wool is looked upon as unwashed, and traded in accordingly, it will not pay to wash sheep before shearing. We know there are hardships and wrongs in the wool market. If discussion can right them, let us have it.

Deposits of Nitrate of Soda.-The govern. meat of Chile have just issued documents set. ting forth the recent discovery of large deposits of nitrate of soda and of guano in the vast desert of Atacama, which lies between the 23 d
and the 27 th parallels of latitude, and extends along from the coast line to the base of the Andoes. The nitrate of soda is described as of great richness, and the deposits of guano will bear comparison with those of Perm both in their quality and quantity. At present these sources of wealth can be turned to little practical account, owing to the want of means of communication, but the government lave determined to set about the construction of roads and the preparation of a port upon the coast, settlements in different parts of the desert.

## Mining $\&$ Scientific Press

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cause of practical knowledge and science, by assisting
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Anents in their labors of eanvassing ly lending their
intuence and enceuraging favors. We intend to send

A. C. K.Nox-Paciflc Coast.
C. N. Wrst-Sauta Cruz, Mouterey and San Benito
A. C. CHAMPIos-Tularo, Fresno and Inyo counties.
E.EWARD. BAKRR-Australian Colot ies and sandwlet. Islands. witr-San Bernardino and Los Anselos coun-
W. D. Whes. ties.
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E.



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 we obllged to delay writing at any time for want of an $\in x$
tra stanup.

Every new subscriber who does not receive the paper and every old subscriber not credited on the label within two weeks after paying for this paper, should write personally to th pubishers without delay, to secure proper credit. This is necessary to protect us and subscribers against the acts and mistakes of others.

Sasple Corigs. - Occasionally we send coppies of this paper to persons who we believe would be lenefited by
subscribing for it, wr willing to assis us in extending its
circulation fo cal the ationtion of such circulation. We call the atiention of such to our pros-
pectus and terus of qubscription, and request that they

BYRON JACKSON, Woodland, Cal., manufacturer of
Feeders \& Elevators for Threshing Machines, Horse Forks \& Derricks,


The above Diagram slows the proper position for the Derrick, Separahor and Englino, and the best size
Two BYRON JACKSON, Woodland, or BAKER \& HAMILTON, San Francisco or Sacramento, Cal.


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The largest and best Business Collcge in America. Its
teachers are conppetnt and experienced. Its pupils are
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Business Education a specialty; yet its instruction is not conflined to lsook-kecping and Arithmetie mercly, but gives
suth broad culture as the times demand. Thorough insuth broal culture as the times demand. Thorough in-
siruction is is iven in all the branches of an English eduea-
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Ladiss' Departikyt. - Ladies will be admitted for in-
struntion in all the Departnentes of the College.
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men and young ladies are practically and thoroughly fitten for operators, hoth by sound and lapyer.
For further particulars call at the College, 24 Pos: street, or address for eirculars,
Presideut Business Colleve, San Francisco, Cal.

## H. H. H.

HORSE MEIICINE, D. D. T. -1868


 a small quantity so as not to blister. Saddle Sorce, cuts,
and anl oher sores where the skin is broken, mix the lin.
mint half and half with any kind of oil, and apply in

WILLIAMS \& MOORE, Proprietors, STOCETON, CAL
GRAIN THRESHING.
The undersigued, an experienced thresher and owner of
a first-class stcain threshin, riy, desires before selecting a first-class steain threshing, rig, desires before selecting
his territury for this seasin's Work, to correspond with
grain growers in any section whicre the grain crup will he
 that l y thus inviting correspondence, he nay take bi
naachinery where it is nost needed, and is ready to make contracts with partieg who have grain wo thresh.
I have to rent or for sile, a Hoadley Wood-burning
Ensine. J. W. RILET,
Care Dewey \& Co., 202 Sansonne Street, S .

PILES! PILES!! PILES!!!
HEMORRHOIDS or PILLES


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Italian Bees and Queens, Hives and other supplies used iu moderu manarcinent. Seeds of honey-producing plants and trees. Bee Keepers Text Book, 40 eents.
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publishers' prices for sale. Bee-Keepers' Magazine. \$1.50 per anmum. Sumple copy on applieation. Fw particulars, addrcs

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The new poison, Tophetine, is fount
and warranted superiur to all others ns a
and warranted superiur to all others as a
Squirre and Gophicr Exterminatur. Sold at less than onecthird the priec of strychlnine, it is equally
effective. Devoid of taste, it has a peculiar odor, atract. ive to the squirrel, gopher or rat pheculiar odor, atiract
food. One quart of hot water will dissolve with their of 50 celit box, which effectually poisons two quarts o
grain.
LANGLEX \& CO., Agents,
Wholesale Druygista, No. 100 and 102 Front St, S. F. Crops, are referred to Mr. Edward Frisbie, of Anderson, Shasta County, Cal., who has some 15,000 acres for sale in
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peary from tine to time in tbis paper.

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No. 105 Kearny Street, San Francisco
following piece will be mailed, post-paid
POOR LITTLE CIILOE, (Ballsd;....... by Luther, 35 ets hiss tile little ones good nigit for he, by Ruttledge, 35 ct .
GOOD NIGHT, FAREWELL....... by Ruttledge, 35 ets. my dear little home o'er the sea, by Lavannie, 35 cts. help tile neeny when you can, by Rutledge, 35 ets. AMERICUS GRAND MARCH, .... by Ballenberg, 30 cts. TIIE LITTLE TORMENT, (Schotische). . Far West, 35 ets. the republic orand gallop,

$$
\text { by A. II. Woods, } 75 \text { cts. }
$$

Send for our complete Catalogue of Songs, Duets and Choruses.

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aur Wanted, 2 comfortably funnished house in the ountry for three months, commencing June lut, for
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San Francisco, Cal.

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 AT LOWEST RATES,on first-Class country real estate an OTHER APIROVED SECL RITIES,
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Grangers' Bank of California, 42 California Street,

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Authorized Capital - \$2,500,000. officers:

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The Bank was opened on the first of August, 1874, for the transaction of a general banking business.
Ilaving made arrangements with the Importers' and Traders' Natlonal Bank of N. Y., we are now prepared to buy and sell Exchange on the Atlantic States a he bost market rates.
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OF LONDON, ENGLAND. Established $\ln 1720$.
Cash Assets - - $\$ 14,993,466$
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All Kinds of Country Produce. 404 \& 406 Davis Street, San Francisco. AKF Consignments Solielted

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MILLINERY, FANCY GGODS,
Men's and Boys' Clothing.
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## SHEEP AND GOATS.

L. U. SHIPPEE, Stockton, Cal. Importcr and sex and Berkshire Swine.
M. EYRE, Jr., Napa, Cal. Thoroughbred Southdow Lambs, \$15 each.
LANDRUM \& RODGERS, Watsonville, Cal.
porters and breeders of I'ure Brecd Angora Goats.

## POULTRY.

M. FALLON, corner Seventh and Oak streets, Oak land Bronze Turkey
T. A FREEMAN, San Jose, C

| WILLIAM NILES, Los Angeles, Cal |
| :---: |
| and Breeders of | MRS. L. J. WATKINS, San Jose, Cal. Premium Pckin Ducks. ete A O RIX, Washington, Alameda County, Cal Breeder of Thoroughbred Poultry. Scnd for circular. Cal.

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ALFRED PARKER, Bellota, San Joaquin Co, Cal, Importer, Breeder and shipper of Purc Berkslire Swine Agent for Dana's Cattle, Hog and Sheep Labels. A. J. TWOGOOD, Riverside, Cal, Importer and J. M. KERRLINGER, Ellis, San Joaquin Co, Impor
ter and Breeder of Berkshire Pigs and fine Poultry.

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OAKLAND POULTRY YARDS.
Cor. Sixteenth and Castro Streets, Oakland Constantly on hand and for sale, choice speci Dark and Light Brahmas, Buf White and Partridge CoLeghorns, Dorkings, Polish Hamburgs, Plymouth Rocks, Game and Sebright Banams, Bronze Turkeys, Pekin Aylesbury and Rouen Ducks. EgGS FOR SALE AF'TER JANUARY FIRST No Inferior Fowls Sold at any Price. Satisfaction Guaranteed. et For further information send stamp for Illustrate GEO. B. BAYLEY,

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Unlimited Range. Healthy Stock Largest Yards on the Coast.
Brahmas, Leghorns, Plymonth Rocks, Be
keys, Geese, Pckin Ducks, Guinea Pigs, Etc.
47 Safe arrival of Fowls and Eggs Guaranteed. 宀ei ATS Pamphlet on the care of fowls--hatching, feeding,
diseascs and their cure, etc, ADAPTED RePRCIALHY To TIM ${ }_{\text {PacIFio coast. Sent for }} 15$ cents.
M. EYRE, Napa, Ca

WHITE LEGHORN EGGS
$\$ 3$ Per Dozen. From 3 pens of 20 IIcnss and Leghorn Fowls ever seen in one collection on the Pacific
Cost, selccted from nupwards of 600 bred during the seasons of 1896 -77, packed to arrive safely and hatch. Sen
or circular. 35 Mission Market, San Francisc

## EVERYBODY KNOWS

That Mrs. C. H. Sprague, at the California Poultr
Yards, at Woodland, Yolo County, keeps the choicest lo Ynd the greatest and best variety of Thoroughbred Fowls of july one west of the Mississippin wher, is wanted by sonding orders to her.

CARBOLIC POWDER
Is the best thing in the world to kill veruln on fowls an
chickens, eent by mail, post-pali, at 25 cents pcr packag


PALACE These large fine, new dining RESTAURAN $\Gamma$, of ourerstinn on the the thates NO. 218 SANSOME ST., S.

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AMOS ADAMS, (SECRETART) w. w. gray. c. ${ }^{\text {c. }}$ c. STELELE: thos. flint

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Consiggments of Grain, Wool, Dairy Products, Fruit, Vegetables, and other Produce solicited, and
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We do a Strictly Commission Business, and place our rates of Commission upon n fair legitimate basis that will

Consignments to be mark DANIEL INMAN, Manager IF YOU WANT A

## Wind Mill,

the most powerful and the nearest perfection of any in use- one that protects itself in a gale, will keep your tank fillei with Water Without Waste and Without Attenlion EXAMINE THE RECENT Improvements of Mr. Bachelder,

As now Manufactured ty the
Bachelder Manufacturing Co.
NAPA, CAL.
ENRIGHT'S STRAW-BURNING ENGINE.

I respectfully beg leave to inform the public and parties intending to purchase Portable Straw-Burning Engines for Threshing purposes for 1878 , that 1 offer for sale this season, Straw-Burning Engines superior to any I have heretofore made at reasonable prices, and that I will give a satisfactory bond to any party buying an Engine from me or my agents, and that I will protect them in the use and right of using, and against all Patent Law Suit.

## JOSEPEI ENEIGEIT,

SAN JOSE,
CALIFORNIA

## IRA MARDEN \& CO.'S BRANDS OF

## Coffee and Spices Have no Superior.

## Twenty-Five Years Experience

in the bitsiness on this coast enables theis to place on the market the very best coods at the lowest possible prices.
Ask Your Grocer for Marden's Coffee and Spices.


## Stock Notices.

## HEREFORD



## SUCCESS.

Thic best Beef Bull in America. The Herefords the st cattlc in the world. For particulars write to T. L. Liller, Beecher, Will County, Hlinoms.
For Cotswold Sheep and Berkshire Pigs I. L. MILLe of

Beecher, Will County, Illinois: BERKSHIRES.


Brecder and "inporter of the "Crown Prince,"
"Sambo," and "Bob Lee" fannilies of Berkshires. Also, pure Sutuolk hogs and piys. Short Horn and Jersey, or Alderney cattle. Merito and Cotswold
sheep. Prices always reasonable. All aniuals sold are yuaranted as represented and pedigreed. PETER SAXE, Russ House, San Franciscu, and Los Angeles City, Cal
$\$ 25$ EVERY DAY In wirmated will DRILLS. Took the first premium at the Great Exposi-
tion, They bore any dameter and depth; 100 fect a day,
through earth, band or rock Pictorial auger book free. Address Col PETER SAXE, Los Angeles, Cal., Agent for
Pacific States.

THOROUGHBRED BERKSHIRES.

Toffer for sale a lot of choice Spring Pigs, farrowed February $22 d$ and March 1st, ready to slip about

Three Fine Young Boars, Seven to Eight Months' Ola.
FOUR BOARS AND FIVE SOWS, Four and a Half Months' Old.

Can furnish pairs not related of the younger pigs. Stock well boxcd im light strong crates, with feed for journey, and delivered at Car or Boat, in Stockton, free N. B - -No poor, unthrifty pigs cver leave my pen ALFRED FARKER, Bellota,
Latimer Farm. San Joaquin Co., Cal

## THOROUGHBRED BULLS.

Ten head of Red Durhams from 12 to 15 months Id, Also, 12 head of large work horscs and inares will be sold this spring at private sale on my ranch, six minile Oroville, Butte County

M. WICK.
W. \& J. ROBINSON, Hanford, Tulare County, California importrre and brekdrrs of THOROUGHBRED BERKSHIRE SWINE

Pure Brown Leghorn Fowls
Imperial Egg Food


Will Malie Vouv IMellis Iaty.



O. C. SWAIN \& CO. Agt's for Pacific Coast - 5 To whom all orders should be addressed.

50 bist cards, no two alike, printed in Crimson or

# Patentsand dinventions 

List of U. S. Patents Issued to Pacific Coast Inventors.
 By Special Dispatch from Washington, D. C

Week Ending, April 16til.
Governor for Steam Engines.-Warten H. Craig, F. F. Cuttiva Screw Threads. Michael Minahan, Portland, Oregon.
HAMEs. - Alvert 1'. Rose, Beowewe, Nevada. Hases.-Albert P. Rose, Beowewe, Nevada.
Ditcuer and Cultivator Combined.-Owe T. Davis, Brighton, Cal.
Tiumb Rests for Suere Suears. - John Richardion, Jr., Pomona, Cal.
SuAfr Couplive.-Curtis $G$. Rowell, Dallas, Oregon.
Pruxing sheas.-John Wiilz, Santa Cruz.
Featinehing Padide Wherl.-Tionas Cul Manceactire of Shipts. - William D. Lawton, Ore Amalgamators, - Walter S. Sbotwell, S.F.

A Good Windmill Record.-The Perkins windmill, sold by Horton \& Kennedy, of Liver more, Alamerla county, is making a fine record C. E. Chubbuck, Agent Pacitic Coast Land Company, who selected the Perkins mills, years November, 27 th, $187 \%$, he writes: "I don't
think lever wrote you of a mill; you will recollect, I put up in Los Angcles, two years ago. It was a la-foot mill, on a pump to work 109
feet. I have never scen it since I gave it its final adjustment the day it was turned to the wind from the carpenter's hands; but the
owner, Col. Freeman, told me, a few weeks ago, that it was the finest that, he ever saw, working earlier and later by an hour eaeh mornview (three other kinds) and supplies fron view (three other kinds) and supplies from
10,000 to 15,000 gallons of water daily, and,
further, that it has not cost him a dime, except further, that it has not cost him a dime, except without it, his entire bands of sheep, numbering over 20,000 , would have been watered by mail
power." power."
Ice.- Ice did not become an article of commerce until the present century; but already in ed in the business of gathering and selling it. There has been a renarkable increase in the 1845 , when only 50,000 tons of it were used. In the year 18,6 the consumers bought 2,500 , 000 tons, and probably $5,000,000$ tons were cut.
Beer lrewers are the best customers of the Beer lrewers are the best customers of the
ice companies, several using 30,000 tons of ice ice compan

Signal Service Meteorological Report. Week Ending April 30, 1878.


$\qquad$

 Toun in andifist tor. Popelar Mestc. - Make your homes merry and popucan recommend this large, first-class, standard and popular establislment. Examine hls advertisement, appear-
ing from time to time in this paper. 3r. Gray deals in
$\qquad$

## Press can offer to introduce you there

Farmers! Farmers!!
Throughout California arc requested to send their orders for any kind of lahor to the "Free San Francisco. All hands carefully selected free of charges to employers and employees.
"Casil Paid Promptly."-May Bros., GalesLurg, III., want to hire agents for their late im-
proved 1 indmills, the cheapest, strongest and proved 1 indmills, the cheapest, strongest and
Lest in use. Retail price, $\$ 50$. Write for

Woodward's Gardens were never more attract.
ive than at present. A line lion and two lionesses, ali ive than at present. A Alne lion and two lionesses, all
younz and not fully grow, have just been added. Bal.
loon ascensions by Prot. Martin are now being mate.
The popularity of the wardens continucs to increase.
Rates of admission unchanged. SEE advertisement for furnished house in
the country.

## S. F. MARKET REPORT.

 and

Weekly Market Review.
DOMESTIC PRODOCE. ETC.
The weather has been generally favorable th for growing crops and for the transaction of business. Interest still centers in affairs
abroad, and upon the events of the next few weeks the season's investnents and ventures will greatly depond. The Wheat market holds firm, though liut little i
reduced stocks on hand.

Range of Cable Prices of Wheat The course of the Liverpool quotation for
Wheat to the Produce Exchange during the days of last week has been as recorded in the following table

## Thurslay Friday. Saturay Monday Thenday. <br> Tuesday Wednesd <br> To-day's calle quotations to the Produce

 years as follow
## 

 The Forelen Review
London, April 30th. - The Mark Lane Express says: The general tenor of agricultural reports
is distinctly satisfactory as regards the Wheat and spring Corn crops, and it is very seldom work and erops record so fewts as to weather, resent. Business has been nccessarily re trieted in Mark Lane, owing to the baste holidays. The supplies of linglish Wheat have bange, either in Londou or the provinces, an quiet but steady tone prevailed. With ${ }^{\text {no }}$ have been content to satisfy the retail demand Exports for the past week amounted to 2,500 respectively in two preceding weeks, from which it may be seen that the requirements of the
coutinent are for the present supplied. This mportant element of strength being wanting hnlders had the ordinary consumptive wants o
the country to fall back upon, which do no the country to falt back upon, which do no
appear to le large, although there has been sufficient business to prevent prices receding to any notable extent. Nillers, generally speaking, have fair stocks. America has furnished the hulk of imports of Wheat into London, which, arrivals, hat poris of call the floating cargo trad for Wheat ruled firm, and prices advancel full 1s, apparently owing to continued political un-
easiness, but business was restricted, owing to easiness, but business was restricted, owing to
the holidays. Maize adranced 6d. Barley is steady.

Freignts and Charters.
Wheat freights, says the Commercial Newes,
were at a standstill during the past weck Nere at a standstill during the past week until the new crop nuves. The crop prospect
are attracting this way an immense fleet of ships the total tonnage on the way and loading for this port, in Monday last, aggregating nearly $180,-$
000 tons. We remark that additional facilities are making at the various wharves for loading vessels during the coming season. There ha been very lit
side business. of tomage secured for Wheat and 5,560 tons miscellaneous. The list of discngaged tonnage couta, now at l'ortland, has been chartered to
load Wheat and Salnon to liverpool direct at f:3-an cxtreme rate.

## Eastern Girain Markets.

New lowk, April 27 th. - The price of solely by the scarcity of the article, the first spring growths on the spg but just come in Sl. $20 @ 1.3 \mathrm{~J}$, but for Nlay delivery sales have been made at fully five cents per bushel less.
The export demand has been goorl, and largely for the Continent, fully 70 vessels having been chartered to load grain cargoes here, and at Philadelphia and Baltimore during the week,
to say nothing of engacements by sbips on the to say nothing of engagements by sbips on the
berth. Rates of freght have scarcely varied, thongh for all Nay loading, about three pence days. The possilility or probalility of war in
Europe has induced farmers to hold on to their Wheat with unusual tenacity for some time back, but, with the canals unlocked, and agricultural prospects in the Northwest favorable will, without doult, soon show a large inerease. It is said that most of the English speculators
have lost heavily, and, leing well stocked, they are now operating with extreme caution. Russian supplies are coming out freely, but the as poor, while the surplus is said to have been over-estimated. It is reasonably certain, tak-
ing all things into consideration, that there will
be a market, both in the United Kingdom and on the Continent, during the summer, at fair
prices, for all the Wheat we can give them, Cilteago, Aprit
Cilicago, April 27 th. - The markets this week have been generally strong and higher, but scttled and higher each day, with active, unscttled and higher each day, with a good speculative range, and active demand, which deSales of May were made at $\$ 1.10 @ 31.14$-the lowest price Monday; the highest to-day. Corn was pretty steady. Sales at $41 \frac{1}{3} @ 42 \mathrm{c}$. Oats closing a trifle of best prices. Day sold at $263 \times 27 \mathrm{z}$ c. Rye was steadily held under a good demaud and considerably better priees. Cash ing rather strong for cash at also firmer, closcash prices are: Wheat, $\$ 1.133^{\circ}$; Coru, $41{ }^{3}(\AA$
 Eastern Wool Markets.
New York, April 27th.-The improved deool has entirely buyers have been scarce, and the few here have supplied their wants with very small selections. Sales were effected with the greatest difficulty,
and only such lines as are considered cheap hy and only sueh lines as are considered cheap hy fairs is traceable to the lack of life shown in the wholly by the way goods sell, no improvement can be looked for until the increascd movement graphic advices from San Francisco continue very discouraging to dealers here, and alrearly a number of buyers have been ordered back. The fcw parcels of spring California thus far received and sold, have not realized sufficient to
cover first cost in San Francisco. The transactions for the week include 25 bales new Spring $20 ; 8,500$ tts l'all do, $13 \times 20 ; 8,000$ tbs Cole rado, 16. 5,000 ths Eastern Oregon, 25 . 150,000 tbs Western 'Texas, 14@18 $\frac{1}{2} ; 2$, vo0 Eastern Fall do, 19; 20 hags super pulled, $32 ; 90,000 \mathrm{Its}$ A and above Olio and IVest Virginia tleece, 3s@ $40 ; 10,000 \mathrm{ths}$ medium unwashed Western do,
$26 ; 2,000 \mathrm{tbs}$ unwashed Western Delaine, 30 , $26 ; 2,000$ tos unwashed combing, 40 . Bostos, April 27 th. - In Wool there is no material change in the market. Fine Fleeces are a shade lower, but prices have now settled
down to a point where buyers are disposed to operate more freely, and desirable Fleeces are os Ohio, Pennsylvania and West Vome 309,000 ing been taken during the past week. A fair quotation for Ohio and Pennsylvania Fleeces is and it is understood most of the sales this week were at $37 \frac{1}{2} @ 38 \mathrm{c}$, although reports are current that a lower price was accepted. Sales of Fo. 1 and $\boldsymbol{X}$, but it would now be dutticult to lace any Michigan at 36 c . Delaine and combing sold at 40@48c. Transactions in Califoruia uring the past week comprise $311,000 \mathrm{lts}$ at
21019 c for Fall and $18 @ 25!\mathrm{c}$ for Spring atter for a lot of Humboldt county. Pulled Wools are in moderate demand. Sales of choice supers at $40 @ 4 \bar{c}$, but the principal sales were
i $30 @ 40 \mathrm{c}$ for sujuer and X . Total sales of lomestic for the week, $1,189,6001 \mathrm{tbs}$

> Domestic Produce.

The following table shows the S . F. receipts of Domestic Produce for the week ending at
noon to-day, as compared with the receipts of previous weeks:

| kTic | $\left\lvert\, \begin{gathered} \text { Wger, } \\ \text { April } 10 . \end{gathered}\right.$ | Wegr. April17. | $\begin{gathered} \text { WrRK. } \\ A_{1} \text { ril } 24 . \end{gathered}$ | $\begin{aligned} & \text { Wexk. } \\ & \text { May } 1 . \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| , | 15,2.9.9 | 67, | 31, |  |
| Wheat, cental | 94,050 | 109,522 | 28,710 | 36,1 |
| Barley, cental | 10,306 | 14,255 | 10,241 | 10,6 |
| Beans, sncks | 1.118 |  |  |  |
| Corn, cental | 3,540 | 3,352 | 4,000 | , 82 |
| Oats, centals | 186 | 9,912 |  | 2,92 |
| Potatoes, sa | 11,029 |  |  | 0,41 |
| Onions |  | 1,033 | ${ }^{718}$ |  |
| Woul, ba | 1,575 | 4,523 | 4,373 | 6,616 |
| Hops, bal Hay, bal |  | 64 |  |  |
| Hay, b | 1.430 | 1,505 | 1,370 | 1,72 |

BA(iS-Prices for hand-sewed grain Bags are
till $11 \frac{1}{4}$ @ $11 \frac{1}{2}$ c, and 11 @ $11 \frac{1}{2}$ e for machine-sewed. still 11 @ $11 \frac{1}{2} \mathrm{c}$, and 11@11 $\frac{1}{2} \mathrm{f}$ for machine-sewed.
The week has not seen any change in price, al the week transactions have been considerable here are rumors of the a
BARLEI - Feed Barley continues to droop a ittle. Sales 750 sks Feed at $\$ 1 @ \$ 1.05 ; 600$
ks Brewing at $\$ 1.15 ; 500$ fair Feed at $\$ 1.02 \frac{1}{2}$ nd buo at yoc per ctl.
BEANS-The Bean market still tends up ward, and small Whites share in the excitemen Which has elevated the other kinds. We note
sale of 350 slis small White at $84.37 \frac{1}{2}$ and smaller sales at 8450
CORN-There is still a sharp demand for We note sales $3=0$ sks large Yellow at $\$ 2.05$ 60 do do at $\$ 2.10 ; 800$ etls do do sold at $\$ 1.85 @ 1$ $81.87 \frac{1}{2} ; 260$ do large White
DAIRY PRODUCL-Butter is unchanged. Receipts are ample, rather more than last week, unchanged and rather dull.
EGGS-Eges are improving Fresh Califor nia are now firm at $2 \tilde{\mathrm{c}}$, and some Eastern have
been sold at 22@23c
Corn, Corn Neal sympathizes with the rise
unchanged, and slow of sale. We note sale
of Stock at $\$ 9$; cargo mixed Barley and Wheat
at $\$ 11$, and one of Stock at $\$ 8.50$; 200 bales poor
FRUIT-Cherries are coming in at the rate of 500 ths per day, and have sold thus far at 30 e $40 \mathrm{c}, 16$. Strawberries are all taken at las Tahiti, pre still Orauges, both California and The receipts of California Limes are greatly reduced.
HOPS-There is no change in IIops. Emmet week ending April 19th, as follows: "The transactions have been very small and are
likely to continue of a retail character until revival of the export trade. Just now there is nothing to give hope of a better inquiry from shippers, and we must therefore conteut our along. There is no change in prices. Little or nothing is doing in the country markets, Grow ers have finished pole-setting and in nany dis tricts the vine has already made considerable progress."
OATS-Oats have slown a better tendency and sales have been at a range above that of last week. We note sales: 300 bags fair Feed a \&1.40; 100 do light at $\$ 1.30 ; 150$ sks good Ore gon Fecd at $\$ 1.50$; and 100 at $\$ 1.45 ; 3,400$ good Washiugton Territory at $\$ 1.45$; and 100 fair Feed at $81.37 \frac{1}{2}$ per ctl .

ONlO
tion \$3. 00 per ctl is to day sorts generally from $\$ 3.25$ to $\$ 3.50$.
hat weaker and the Beef market is some What weaker and the supply is larger than on large supply and quality generally fine. Pork packing light. The market for Cured leat products is moderately active and prices remain so low as to greatly iucrease the consumptiv demand, especially on Sugar Cured Meats.

VEGETABLES - Asparagus now sells at \$1.00 per box of 50 tts . String Beans have de elined to $10 @ 30 \mathrm{c}$ according to brightness of
color. Green Peas are selling at $1 \frac{1}{2} c(2 c$ per 1 b Marrowfat Squash declines to 120 per to 1 and Tomatoes to lv@18c jet to.
WHEAT - Wheat quotations are rather nominal because of the few transactions in on Monday a cargo of 24,000 is reported that Wheat was purchased at Stockton livered here, supposed to be for Cat $\$ 2.20$, de Callao; 320 ctls ehoice Milling at $\$ 2.121 ; 250$ do do at the same, and 350 do poor at $\$ 1.90 ; 200$ ctls. choice $M i l l i n g ~ a t ~$
$\$ 2.12 \frac{1}{2} ; 100$ good do at
$\$ 2.07$, and 1,400 poor at $\$ 1.85$ per ctl. \$2.071, and 1,400 poor at $\$ 1.85$ per cti.
WOOL-Dealers report the marke duller than a week ro, owing to the wants of the Eastern buyers being well supplied. Or ders arc only for the amounts which manufac invest on the future. These instructious from the East make our market dull and sales smaller than last weck. We note sales of 110 , 000 Ibs San Jo
ing to quality.


RETAIL GROCERIES, ETC


Gold, Legal Tenders, Exchange, Etc
[Corrected Weekly by Strino \& Co. 1

##  <br> 

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Tus Best FiLhiolder.-After having used Dewey patent clastie hinge fileholder for over a year past, the
News checrfully indorses it as the best newspaper file
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any and all others in use. The holders are neat, liglt and convenient, and the newspapers are plaeed in thems witl Thyy are the simplest, handiest and cheapest of exll Any. body keepiny files of papers in reading rooms of alficps or at
home, should send at once to the proprie Dewey, Saul Franciseo, and get the the propry propertor, A. T. T. Samples by mail fifty eents. - Gold Hill News.

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A5 Wanted, a comfortable house, furnished or unfur nished, in a country town or on a farm, for three months, paid. Address with particulars,
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Thero is a fine chance to open a country store at Henlyville, Tehama County.
The location is 16 miles from Tehana and 20 miles
from Red Bluff, on the main road from these two places to Paskenta, Newville, Round Valley, ete. The location is surrounded by a very thrifty and prosperous farming
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fiilure of erops and this year everything looks better
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and It dries the fruit in the most perfect manncr in from $3 \frac{1}{2}$ to 48 hours, viz: Apples in 33 hours, grapes in 48 hours, and other frnits in proportion, intervening hetween
hose extremes. It will also dry all kinds of fish, grain, vegetalles, ete. The price of the dryer is low, say from $\$ 350$ to $\$ 700$, according to the capacity, which ranges from 500 to ,.5sirous of brinking this Drier and Preserver into general use, terms satisfactory to purchasers will be made, and all parties are invited to call at our Faetory,
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three culve fect of water ler secend belongs with the
thace and three cinve fect of water per second belongs with the
place, and t2 wnall fruit trees and two to three hundred
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oung Patriot:Admeal's dam is by Lady Pierson; she by (Neavis) Cassius M. Clay, Jr., her dam was by Diamond, son Young Patriot; ADMiRals dam is by Lady Pierson; she by (Neavis) Cassius M. Clay, Jr., her dam was by Diamond, son
of Ameriean Eelipse; grandam said to be thoroughbred. (Neavis,) Cassius M. Clay, Jr., by C. M Clay, a son of Henry Clay, by Andrew Jackson, dam by Clancellor, a son of Mambrimo; grandam by Engineer Second, (rire of Lady Suffolk, who was the son of Engineer, by imported Messenger. It will be seen that ADsMrat's pedigree combines
our best trotting blood, as shown by tbe Hambletonians and Clay's. Ife is 10 years old, $16 \pm$ hands high, bay, hind feet white, small star, strong back, goorl neck, large bone, excellent feet, good pasterns, pow crful stifle, big gaited,
and level in his action; can speed $2: 30$ gait, and is quite as promising as his hrothers and sisters, who have a record as follows: Gloster, $2: 17$, Bodine, $2: 19$, Sister, $2: 25$, Powers, $2: 211$, Any, $2: 224$, St. Julian, 2222, Trio, $2: 232$, W. W. H.

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Over Two Hundred First－Class Prizes Were Awarded These Machines in 1877，Notwithstanding Reports to the Contrary．
A Full Line of Extras are CONSTANTLY ON HAND．
Furst \＆Bradley Hand－Lever and Self－Dump Sulky Hay Rakes． G巴O．A．DAVIS，

# 丞 5 

Volume XV.]
SAN FRANCISCO, SATURDAY, MAY II, 1878.
Number 19.

The Anatomy of the Hen.
Familiar as many of us are with the outward appearance of our fowls, and familiar as well with their internal structure as discovered by kitchen dissections, we doubt not many will gain from the engraving on this page a clearer idea than they had before of the anatomical arThe knowledge which can be gained by study of the engraving will not only increase our general information, but affords all an opportuuity to become acquainted with the nanes and rela-
tions of the different parts, and this will prove tions of the dufferent parts, and this will prove
of practical value to the poultry grower in of practical value
many obvious ways.
Our illustration is from a drawing for th Boston Scientific Farmer, by C. J. May. nard, and is the first of a series of
papers on the anatomical structure of papers on the anatomical structure of
birds, which he is preparing for that valuable journal. It represents a sec tion of a common fowl, such as would be shown in nature by removing the onter covering of Hesh and fcathers until the interior organs were all brought
to view in their natural positions. The to view in their natural positions. The
following is the explanation of the letfollowing is the explanatid:
$C$ A, nasal cavity; $B$, salivary glauds ; or gullet; $E$, crop; $F$, lower gullet; $I I$ or gulet; $E$, crop; $F$, lower gullet; $I I$
proventriculus ; $G$, stomach or gizzard $M$, pancreas; $N$, duordenum; $U$, intestine; $d$, cœea; $i$, comb; $l$, spleen; $b$, ova
ries; $c$, ovaduct; $P$, eggs in "uterus;" $Q$, urogenital passage; $R$, vent; $e$, ster num; $U$, furcular; $V$, lungs; $S$, kid neys; $X$, vertebre of neek; $L$, heart
$K$, bones of toes; $W$, bronchial tubes $K$, bones of toes; $W$, bronch
$J$, gall; $T$, keel of slernum.
Iu order that the relations of some
of the leading organs to each othermay be seen, we shall, at this time, quote from Mr. Mayuard's writings a descripfowl. We may hereafter make further allusion to the drawing iu description of other operations of the animal econ

All extant birds differ from most maminals in having no true teeth. The elongated bones which form the jaws or mandibles, are simply furnished with a horny sheath haviug straight, sharp ened edges, but in the exanple before
us no adequate means are provided by us no adequate means are provided by
which the food can be masticated. Which the food can be masticated. pecking at animal and soft vegetabl pieces, yet it must swallow these as well as hard grains, without further change when they are once taken into the mouth.
Upon examining the interior of the
month, we find that the upper portion month, we find that the upper portion divided near the center by a longitudinal slit, having scalloped edges. Thi
is the nasal opening, and is so narrow that thare is little or uo chance for any substance
taken iuto the mouth entering the cavity ahove. taken iuto the mouth entcring the cavity ahove.
(Letter A.) It is notable that the roof of the which all point backwards. Thesc papille are arranged iu transverse rows and groups, and in abseuce of any well developed inuscular apparafood to take a downward course
The tongue is a horny, sheathed organ in this case. Although the hyoid bones which support
the tongue are encased iu muscle, it is capable of but little extension, At its base is the superior larynx, also providel with reversed
papillie, some of which guard the entrance papilie, some of which guard the entrance to gus, becomes innmed with a kind of resophasecreted by two glauds, the position of which may be seen iu letter $B$. These arc the sole representatives of the salivary glands of nammals. The gullet (letter $D$ ) is provided with a
slimy lining, the inucous membrane, which is only an accessory to the aet of swallowing,
 here submitted portion of the chyme is ic juices, which enter directly into the intestine through a duct. The bile also enters the intestine at about the same place. From this fold, the chime enters the small intestine, where the lacteal vessels abstract the nutritious portion, known as chyle, and convey it to the
arteries. The residue, passing downward through the larger intestine, is
further submitted to a system of lac teals, situated on the accessory intes tine, (letter $d$ ). These are simple sacks, (coeca), having blind ends, where the process of absorption is prolonged to passes into the large intestine (letter o) to be discharged at the vent.
There yet remains to be mentioned a prominent organ; the function of which is only partly understood by anatomists. This is the spleen (letter furnished with an artery, it is probable furnished with an artery, it is probable
that the blood here undergoes some that the blood here undergoes some
change. I cannot help associating the function of the spleen, in some way, with the growth of the eggs in the ovaries; as when the breeding season approaches, I have always found then is greatly enlarged; often becoming three or four times its normal size. Still this may be accounted for by the requisite supply of blood at such times; but I am inclined to at tribute some special egg-producing must be supplied somewhat indirectly must be suppli
to the ovaries. Phosphatic and Nithogenous Fer-
rilizers.-We hear of the starting of an enterprise to manufacture fertilizers coal and Fertilizer Company," which promises to turn a large amonnt of refuse matter iuto valuable and available manures. The works are loeated at the corner of Bay and Buchanan streets, San Francisco, and they are supplied with the best machinery for
making fertilizers from boue and dried meat, and for grinding bone for chicken fcel. $\left\lvert\, \begin{aligned} & \text { meat, and for grinding bone for chicken feed. } \\ & \text { There is abundant material for making these sup- }\end{aligned}\right.$ plies, and the company promise to produce the best commercial fertilizer which can be made, and teration. The capital invested is abont $\$ 50,000$, and all interested are determined to make their busincss a success, and a value to the State. We have often urged the advantage which our orchardists and farmers generally can derive from a judicions application of pure fertilizers, and we trust that the starting of a new factory will lead inany to experment non then, so waning fertility in our soils restored.

[^21]
## 鱼ORRESPONDENOE.

## Agriculture in Los Angeles County.

## Editors Press:- We are having a very fine

 season. The rainfall in this county varies fron 17 inches in the valley to 24 inches on the table lauds. some 20,000 acres have heen sown towheat, and an immense breadth in barley and wheat, and an immense breadth in barley and
eorn. As 10 to 11 inches of rain is all that is required for our valley lands, it will be seen that we have a superabundanee this year; in
fact much of our wet land near the coast eannot fact much of our wet land near the coast eannot nntil Juse. These are the lands that produced so heavily last year in corn and barley. Th farmers there have flowing wells, and when the rains came the ground was already saturated.
In consequence inncl of the land is a swamp, and will require draining before a crop can be raised. It is difficult to make some men under
stand that ditehes are required for drainage as sell as irrigation. Mnch of the early grain has
ween knoeked down Ly our late heavy yains, but been knoeked down Ly our late heary rains,
it is rising, and most of it can be headed. it is rising, and most of it can be headed.
Our valleys and hills are eovered by an oe of grass, bur clover and alfilerilla are already
two feet high, and are abont half ripe, three to four tons of hay ean be raked up per acre, for as soon as they, become ripe the
root breaks loose from the soil, and they make
better hay than if ent green.
If our renting farmers and dairymen in the
northern part of the State knew what a counnothern part of the State knew what a coun-
try we lhave here, they would come and buy land convenient to rail and steamer, at prices
ranging from $\$ 25$ to $\$ 50$ per acre, on easy terms, ranging from $\$ 2.5$ to $\$ 50$ per acre, on easy terms,
that are better and more certainly 1 rodnctive than the lands they are paying annually 810 to
$\$ 12$ per acre rent for; lands that will, withont S12 per acre rent for, lands that will, withont irrigation, sustain a cow to the acre the entire
year on the natural green feed; or if sown to
alfalfa will sustain three or four to the acre. These lands will produee from 25 to 50 centalal
of barley, or 40 to 70 centals of corn. They of barley, or 40 to 70 centals of corn. They
can pay their entire cost in oue or two erops, and in the hands of yood farreers are doing it.
One man bought land four years ago, and has One man bonght land four years ago, and has
rade enongh from it to pay for it it five times.
Another bonght in the spring of 'r7, aud last year's corn crop pays for it. No land in the
State ean equal it for dairying and hogs, and no part of the sitate has better facilities for trans-
portation. Wee can ehoose between railroad portation. We can ehoose between railroad
and steamer, and pay prices reduced by competition. We have a cool, mild climate, rich soil The low price of butte
dueed some of our baiter this spring has in dueed some of our darrymen to organize for a
eheese factory. What they should do is to mer, when butter is low, and make butter in the fall and early winter, when butter is highl.
In this way they can lave the best of the marIn this way they can lave the best of the mar-
ket for thcir products, and avoid the time of low prices. With an abundant supply of green feed for the entire year, the enteryrise s.
hare the best results if properly managel. Raising grain for sale is alpays managencl.
business, but I think that if the business, but 1 think that if the products of
the soil, both natural and cultivatel, are sent to market in the shape of beeff, mutton, pork,
butter and echeese, the results will be nucl more sitisfactory. During the summer ali parts of the state can furnish abundance of fat
beef and mutton; but in the fall, aud more particularly in the winter, stock in the northern part of the state can only be kept fat by stall.
feeding. The weather is colld and frosty, and alfalfa and other grasses make but little growth,
whilst in this valley alfalfa and other grasses grow lnxuriautly all winter. Stock can be kept fat and growing without extran expense, and
when the prices suit ean be put on the cars and sent to San Franciseo in two days.
I say nothing of our capabilities in the fruit
line-for them we are famous lout wished to line-for them we are famous lot wished to
show that for dairying and stock our facilities
are unsurpassed are unsurpassed.
Anaheim, Los

## Santa Cruz County.

Editome Prgss:- Since the publication in your interesting and widely eirculating paper of
my briei account of the advantages that Cruz eounty afforls for making pleasaut homes, I am in almost daily receipt of letters from lifferent parts of the country, asking further information on the subjeet, similar to that asked
for in the followisg letter:


 Loudon County, $\mathrm{V}_{2}$
With
With regard to health I will say that my ob-
servation and experience in a residence of five years has led the to believe that sinita Cruz county is not surpassed in the United States.
I have tried difierent parts of six different

States, and I have found no place equal to this
for health. It can't he otherwise, for we have the bay on one side and the monntains on the
other, which afford us pure air and plenty o other, which afford us pure air and I I 1 enty o
pure water. The gentle breezes off the bay ter, so we have no liot weather, nor any year in open air. I speak of yentle breezes,
we have no torixadoes, no thumder storms, haii stornus, and but very little strong wind
With remard to the effeet the clinate would have on inflammatory rheurnatism, I can't say,
I have not known a ease of it since I have as 1 have
been here.
In answer to the query about combining frnit culture with sheep liusbandry, 1 will say that
arge portion of the eerninty is well adapted to harge portion of the ecounty is well adapted to
jnst suel business; for the open lill land is naturally adapted to sheep grazing, and it is nearly
all good fruit land, and especially the small ralleys between, is not excelled anywhere. As for society-well, we have a fair propor
ion of politieians, lawyers, doctors, divines tion of politieians, lawyers, doctors, divines,
school teachers (with lots of ehildren to teael, and grood houses to teach in), and saloon keep.
ers. As these all go to make np modern eivili zatiou, we reekon we are about pary. Bnt we
have no aristocraey, without they have gone to the laryer towns. A person's social standing is aceording to his or her goor beliavior.
In the right place the best farming lands
range from $\leqslant 100$ to range from $\$ 100$ to 8250 per aere, aceording to
the quantity, while the more broken lands, betthe quantity, while the more broken lands, ret.
ter adapted to fruit culture and grazing, rang from $\$ 20$ to $\$ 50$ per acre. We have a home
market for all we produce, in conseruenee of market for all we produce, in consequenee of
the grcat infux of visitors on the coast in summer, and becanse the great proportion of our
population are engaged in lumbering and manufacturing
In order that your numerous readers may
know that Santa Cruz county not only possesses vast forests of redwood, live and tan-bark oak, and inexhaustible quarries of first quality
limestone, a climate and soil peenliarly adapted limestone, a climate and soil peculiarly adapted
to the growth of a great many kinds of choice to the growth of a great many kinds of choice
fruits, but also a soil that will produce a heavy growth of grain, 1 send a sannple of some grown 5 feet 8 inches in length. One larley head contains 86 grains, and one ont stalk measures one
and one-half iuches in circumference; and these are not exceptional stalks, either. Again, last
year I planted yearling peach and two-year-old year I planted yearling peach and two-year-old
cherry trees that are now full of frnit. How is that for fruit?
Soquel, Cal.

## A Word About the "Malva."

Editors Press:-The plant under diseussion being, I Presume, the Malua corealis of Wallmann, a common weed of the old world, and
closely resembling our Malla rotundifolia of the Atlantie and Western States. The latter is certainly not liked by stock, though they will nibble at it when short of other green feed. find the matva borealis growing linxuriantly
both on thie Univcrsity ground and outside where stock is constantly staked out. . The fact that it is generally left munolested ly the cows
and lorses even when restrietcd by the stake rope, is here patent to auyone who
chooses to see. They will niblle at it as they Wonld other plants whon they are very hungry,
or eager for a change of diet, but no longer. Ir record this experience with sorrow, for $I$ at prove useful, lout the fact that it has not becu put to any such use in the old world, where it
has becen known for a thousand years, creates a damaging presumption against it
Let, however, the search for
Let, howeve, the search for a "browsing" forage plant, suitable to our clinate be con
tinued until one is found, as I have no doubt it can be. I have heretof, re suggested the ramie, which has becn protitally used in this way in
Lonisiana. It may not stand drouth in dry adobe, but on light soils 1 am sure
it would lee found useful.
University of Cal., Berkeley.

## Ceanothus from Seed.

The genial author of that able article on the varieties of Cernothus, in a recent Rupal, fails to tell your numerous readers how diflicult it is
to sprout the seed, ordinarily. I think nine out of ten persons will usually fail. To get a clue we mnst study Nature's method. The
plants grow in thickets on rocky slopes, and the plants grow in thickets on rock slopes, and the
seeds, being round and heavy, roll downward in great multitudes. The larger portion fail to fiud proper eonditions, bnt some slip into little
warm creviees, where they are sheltered from the sun and find sutficient earth bencath them they grow late in the next spring, hid under the moss; and in sucli locations all thie young plants in the mountains will be found. slight coveringo of earth and a handful of moss,
and a fnud of patience, besides. Old seed and a fnud of patience, besides. Old seed
ought to be soaked in warm, camphorated ought to be soaked
watcr, before planting.
Wre have

trimming and training into unusual shapes so well; nor is anything more lhandsome whilist in | Uloom. $\begin{array}{l}\text { Niles, Cal. } \\ \text { C'HAs. H. Shins. }\end{array}$ |
| :--- |

## The Stable.

Breeding Horses in Califormia. - No. 3.
[Writen for the Press by Josbriu Cair.: Smirson.]
The domestication of the horse, the variou uses to which he is made subservient, the se.
lection of those the bost fitted for a particular purpose, and the effects of locality and climate have eaused a wonderful variation of form and

## size.

The range is so wide that it is ineasured by differences which are so great that it appear impossible that all could have deseended fron
the same horse, and from the fine-toed equalu of an age so far baek that there is little use in chronology, to the last winuer of the Derby, and from the shetland pony, which a strong man could earry on his back, to the draft horse of upwards of a ton in weight, there are disparities wh.
mon origin.
There is little use in pursming abstract theo ries, or "harking back," further than generations sufficient to show how peeuliarities have be
come fixed and valuable characteristics estabished. This mueh study is absolutely neees sary to the breeder who expects to be suceessful in producing the best animals, as he will thus
avail limself of the experience of others, get he benetit of what they found to be right, and avoid the
procedre.
It is over 200 years sinee the breeders of race and a wrong method, and in the days when Rome flonrished and when that enpire ruled
the world, the necessity of thouglits was recthe world, the necessity of thoughts was rec
guized. Anterior to that era there are tradi ognized. Anterior to that era there are trati
tions of families of horses which were celebrated or speed, but the modern thoroughbred is the resint or comparatively modern cliorts. Raeing reading of tur
But the racing of that day was scarcely Worthy of the uame, when eompared to what it
has become through the efforts of breeders and the stimulus of rieh rewards. When the first importations of Turks, Arabians and Barbs
were made there was a class of horses which had been used for running; but little, if auy effort had been made to breed horses especially
for that purpose. The get of the foreign horses that whieh lad followed hap-hazard experiThongh raeing was caceerly pursued, the at tention of the wealthy was more given to the
proiluction of horses for the maneeg, yet, as these required to have many of the charaeteris tics of the race-horse, the breeding of them
aided in establishing the othcr. The foremost castle, and he gives fuller descriptions of the earing and manaring and was consilerably far in advance of his eontemporaries in all pertainng to the subject.
Divested of the
the period, his works are full of practical in structions, whieh are applicable at present, and order to show what the state of horse affairs
were in the days when the l,reeding of race were in the days when the lireeding of race
horses began to be gystematie, I shall quote fre quently from his works.
the distinguished position he helli in to show I copy the title pagc of his English work. He hat previously written one in Freuch, and at be the foremost horseman of the time.

> A New
Methol,
extraordinary invention
work them according to naiters:
To Perfeet Nature by the Subtiity of $A r t$
Whic'1 was never found out, bitt by






Printed by Tho. Milbourn, in the year 1667 .
Here are titles enough to suit the most fas
tidious stickler for "blue lilood," and the printer of that day in order to give them ful emphasis,
and italics. him the best opportunity to observe, and to traveled and sojourned in, as he was the guest and companion of those who took the nost in terest in the subject whieh was uppermost in be borne in mind that he was more partial to than all the others, and his preferenees are continually cropping out. Yet even in the short is plainly to be seen that the ehar which distinguished them in the time of the Stuarts is papable in the thoroughbred of
to-day, and the axiom in brecding that "like Especially it is evident that the bad qualities are propacgated, as the California horse proves,
for aecording to all accounts they are as difieult turies aro, and that about the same tactics to hreak them were then followed. The Duke "horrible," and the prevailing idea was then, as among the descendants of the spaniards now, that the ouly method was scverity. Newcastle
in remarking that "they observe too much with their eyes, aud their memories are too good," with their judgments too soon, withont the they should follow and obey his hand and heel, is a habit got by many lessons methodicall their eapacity a different estimate heen phit on organization, the good memories been governen more cruel spurs, and the cinches drawn until was to cut him in two, the horses of Andalusia and California might have borne a better name for docility and gentleness.
his mind, he availed himscli of these advantages
and was a nost eompetent eritic.
The thorontlibred of The thoroughbred of to-day is descended
from the Spanish, Aratian, Barb, Turkish and Iroun the Spanish, Aratian, Barb, Turkish and
Engishl horses. Though a few mares were im. ported duriug the reign of Charles II. by that
king and callec " "the Royal mares," in which some of the best peeiigicces end, the great
majority were stallions, which were first bred to the English mares, and subsequently to the after, when eonsidering the valne of pedigrees, illustrations will be given to elucidate the commingling of strains, and to show the origin
the blood horse from the somrces designatell. In copying the descriptions and remarks of orthocraphy will be changed, but in everything else the transfer will be literal.
He commences with the spanish horse: "Tou what nation soever they be, Spanish horses are the wisest, far the wisest, and strangely wise,
beyond any man's imagination; but I must tell beyond any man's imagination; but I nust tell
you they are not the easlier drest (trained) for that, because they observe too nuch with their eyes, and their memories are too gool. * *"
If he be well chosen, 1 assure you he is the noblest horse in the world. First there is no ronpo cninonsy shaped, ano otiful that can b or he is not so thin and lady-like as the Barb; not so gross as the Neapolitan, but between
both. He is of great spirit, and of great courge, and docile; hath the prondest walk, the loftiest gallop, the swiftest careers, and is the king in a day of triumph to show himself to his people, or in
in the world.
"Therctore no horse so fit to breed on, as panish horse, either for the mannage, the ambling for the pad, hunting or for running Shotten-Herring' was of a spanish horse was of Suanish horse, apd 'Teacock' horses in their time, so much, as beat all the ran near them.
"I say he is absolntely the best stallion in the amed; if you do wisely appropriate such you wonld have your breed, and so he is fit for you wonld have your breed, and so
all breeds, but to breed eart harses.
This encomium from a master hand, at the period when the clcments were first mixed to sutheient of the value of the race, which were the progenitors of the California horse, and Io great feats they were capable of performing, bred and treated in the mamer prevalent, corroborates the julgment of this autho
Of the Barb he writes: "The Barb is next to the Spanish horse for wisdom, but not near 60 Irest. Besides he is of a gentle nature, docile, ervous and light. He is as tine as a horse ea and is so lazy and negligent in his walk, as in stumble in a bowling greeu; he trots of those and gallops low, and no action in any and nervons, and hath a elean strength, is exgreat travel, and very apt to learn, and easy to be drest, being (for the most part) of a goon disposition, excellent apprehension, judgment
and memory; and when he is searehed and waken no horsc in the world goes better in pon the ground in all kinds.
The Barb is not so fit a horse for a stallion for the mannage as for rumning horses, for he gets In the next paper I will give the duke's opinion of the other eomponents of the blood
horse. But in the consideration, it will have to

## THE $\mathrm{D}_{\text {KIRY }}$

Alfalfa and Dairies in Southern Cali nia.-No. 2.

Editors Press:-There are not less than 200, 000 acres of first class alfalfa land in souther California, exclusive of land now devoted t fruit and corn culture.
In southern California alfalfa grows rapidly summer and winter. Seven mowings may be made during the warmer, and two during the $r$ months of the year. One ton and on half of dry hay per acre per mowing, is a low acre per annum, and to $2,700,000$ tous per an num on the 200,000 acres.

Domestic hay-eating animals at rest consume daily of dry hay $3 \%$ of their live weight. The two and seven-tenths millious of tons of dry alfalfa hay, or its equivalent in a green state, will maintain for one year $4,000,000$ of Spanish Merino sheep; or $4,000,000$ of Angora goats; or $4,000,000$ of stock hogs; or two-fifths of a mil eattle.
Bnt sheep do not pay on alfalfa at the present price of sonthern California wool. Moreover sheep are health
most alfalfa land.
Angora goats do well on alfalfa to the extent ted to sanction generalizations on the snb!ect I leave this to those whose sufficient expericuce sucb come to the front? Our public spirited newspaper people would honor their cnlighten ing articles.

## Figured into Hogs.

Four millions of alfalfa-fed stock hogs would reqnire $10,000,000$ of centals of grain to finish grain. To produce this amount of corn would eqnire two-fifths of one million acres of corn
and. There is not that much eorn land here exclnsive of the apportionments already made nce the eqnivalent in barley would require 1,000,000 acres of mesa land. This area can nstituted apportionments. There are fon men whose crops of small grain in Los Angeles
county tbis year wonld finish off 200,000 hogs curately estimating the aggregate surplus of mall grain tbat wil ornia this year by smaller farmers. It would alone, wonld finish off $1,000,000$ hogs. Hogs so brongbt up and finished off, wonld average 200 pounds live weight, and at the present mar California oould produce alfalfa enough to prepare $4,000,000$ hogs for the bar ready for thei the barley fields could be made ready for then of hogs from the alfalfa pastures to the barley fields. An exodus of many stock hogs often
occurs from the blue grass pastnres of Kenoccurs from the blue grass pastnres of Ken-
tncky, to the corn fields of Tennessee, a distance of nearly 200 miles. But here the alfalfa pas ures and barley tields are in jnxtaposition. Tbe ame farmers might own the pasture and the to rnn barley and alfalfa in severalty. and rigorons classification is essential to sucUpon the dnplex, severalty and exodus systern
above forecastel, southern California conld narket $4,000,000$ of hogs ammally, worth, at present prices, $\$ 40,000,000$. With our present commnnications, such a prodnction of hogs
would be in ruinous ratio to demaud. There-

Figured into Horses or Cattle
Two-fifths of a million of horses would rednce the price to fonr bits a head, buyers' option
to retnrin second-class animals to seller. The re-enaetment of the horse tragedy of the preci-
pice by the sea, would again assemble the Two-fifths of a million of eat
rednce the price to the value of the bide not tallow, the price on the Sandwich Islanils, bnt it wonld not pay.
The stated nmmbers of hogs, or horses, or catanount to the equivalent of the whole number of either kind, would at present, be in unprofitable ratio to demand. Therefore the question
remains: "What profitable use can be made of the alfalfa prodnced and producible in sonthern
The Dairies.

Last autnmn I re-opened the agitation of the subject of dairies by way of ncwspapers he y way of interviews with such persons as mani isos. Theoe efforts have disclosed convictions that must eventuate in important results.
Sixty days ago, Messrs. Bnllis \& Walker started the pioneer co-operative cheese factory
of Los Angeles county, and, for anght I know actory is situated on the Wilmington railroad near Florence. Cheese-making eommenced

| about the middle of Febrnary. Success acorned | not pull up the alfalfa roots of the previous |
| :--- | :--- | :--- |
| to the inaugural trial. Tbe outcome was snpe- | planting, all of which will sprout, come up and | rior merchantable cheese. Failure is the rule cient seemingly may have been the experience and success of the operator elsewhere, to war coyest secret of success could not hide away in strange feed and nnfamiliar meteorology, In been going on now to ity only In all that time and $q$

curd has becu spoiled.
An aggressive jet of artesian water is deliver able eight feet above the floor, in to every room of the factory. This artesian fountain main Fah. This gurantees uniform, perennial, snc cessiul cheese making.
Germain \& Co., of Los Angeles, buy the en
tire cheese product of the Bullis \& W alker tire cheese product of the Bullis \& Walker fac tory, at the San Francisco price of first-class California cheese. There is
Bullis \& WValker lay are.
Bullis \& Walker lay great store by their fa the winter. San Francisco always lids high for such cheese. So does New York aud so does London. They also lay great store by erruplities to run their factory of dronth as 1877. Six acres of the 400 -acre tract npon which the factory stauds, was sown to alfalfa in was only partial, and yet the yield was eight tons per acre for a single mowing. There is
reason to believe that a perfect stand on the whole six acres would have given 12 tons per year was the one of greatest dronth for about 30 years. Only one crop was mown last year the others being pastnred. Bnt this one crop a good stand had been on the three aeres of half a stand the single mowing dry would have weighed in the same proportion, as the amoun of the nine annnal crops of six acres. Judge same number of acres, obtained, in 1877, yield abont
snm total
Mr. Cadwell, less than a mile from the cheese factory, sowed alfalfa secd in Fehruary, 1877
the last year of drouth, and before Decembe th of the same ycar had cut five crops, averag ing two tons per acre per mowing. vanced in growth from the last mowing and ing fully up to the average of the five preceding a sowing in 1877 and mowing in 1877 , the self ame year of almost unprecedented dronth. vestigated on the spot by Mr. Josepb D. Lyuch, Angeles Merall, the details of which were pub in the Los Angeles Erpress of the same date, of ourse nnder the approval of Col. Ayres, the prominent among the leading editors of the published in the Rural Press of Pecember $22 d$, with the habitual liberality aud fairness of the PREss toward southern Califomi
Near the Cadwell place, on the San Gabriel
niver ranch, 1 weighed dry the June, 1877 , mowing of one quarter of an acre of a fifty acre
alfalfa field. It weighed 1,000 pounds or at the ate of two tons per acre. This was above an average quarter acre. The field was mown
seven times, and yielded two crops not mown. The field was irrigated one time only in all the ear the year of drouth
orolific ranch of Mr. Fisher of the Santa Monico rohinc ranch of Mr. Fisher of the Santa Monic outlook. congratulate Mr. Fegrndge Mr. Fisher his fertile acres. He has worked in season and out of sea son to develop tbe conntry

## Figures on Fields

The square mile in alfalfa around the factory maintain 640 cows, that will average three gal lons of milk per day for eight months in the year. Bullis \& Walker are pajing their neighof land, 640 cows, three gallons of milk per cow per day, 1,920 gallons per day at nine cents per gallon, $\$ 172.80$ income per day. of one square months per square mile.
So again, 1,920 gallons of milk per day, eight
pounds per gallon, 10 ponnds milk making pounds per gallon, 10 ponnds milk making one pound of eheese, at 15 cents per ponnd, gives
$\$ 230$ per day, $\$ 6,900$ per month, $\$ 55,200$ per ight months for the square mile around the Bullis \& Walker's cheese factory. In this esti the refuse are not connted
These results are different from thosc deduced elsewhere, because I thonght well of using lower verages for the whole alfalfa area witb which, quare mile aronnd the factory of Bullis \& Walker.

## Cultivation of Alfalfa

A perfect stand of alfalfa may be obtained on first efforts fail by replanting. This is one single snlky plow, fonr horses, and plow eight
inches deep. At this deptli the harrow will
grow with the replantcd crop. I have four
acres replanted in this manner, the old and new alfalfa coming on together. When small portions of the fifty acres before referred to are re-
planted in this manner, it will all average with planted in this manner, it will
Sow quarter acre mentioned.
Sow alfalfa seed any day, winter or snmmer, if water is plenty, or can be made plenty near April.
One
Ifa land industration of the reliability of al alfa land in a year of drouth. One day, near
he close of the drouth year of $187 \%$ at the depot at Downey City, of this county, I delivered to Mr. Morton a carload of hogs for San Franlay for the same destination. Trains of country wagons were teamiug in, loaded with corn, by
tbe carload, for San Francisco. Over $\$ 1,500$ in coin was paid to the farmers around Downey on hat day for a siugle day's shipment of corn an more like a smart little hog and hominy Ken tncky railroad town. I said to Mr. Smith, a prominent citizen of the county: "Why, smith, year times". "No," replied he, "there is more Downey than was ever before known." The
secret is this, Downey is surronnded by alfalfa

It is an interesting fact as reported to me,
that Mr. Lehman, of Gospcl Swamp, has senred lnxuriant alfalfa on strong alkaline soil In my next letter I will take up some points of dairy practice in this county.
Florence, Los Angeles county, Cal.
Analysis of Adulterated Butter.-The The
City Chemist of Cleveland, Dr. Claassen, in a recent report on butter, adulterated by mixture with lard, gives a simple method of testing for
his fraud. The snspected bntter is melted, and about fifty grains of it poured into a test
tube. When this is cooled to the temperature tube. When this is cooled to the temperature slowly by agitation, 120 grains pure snlphnric
acid. If the bntter is pnre, the mixtnre will ance become yellow, and afterwards a bright will pass from the color last named to a brownish red, brown, and brownish black. Turmeric terated butter. To detect either of these dyes twice the quantity of alcohol. The butter having snbsided, the dye, if any is preesnt,
will appear above, in solution, in the alcohol,
and tint it yellow; but from pare buttcr no

## Poultry Yaro.

The Corbet Method of Hatching and Raising Chickens.
Editrors Press:- - Trof. Corbet says in his most feasible and began to practice it, and still continues to practice it. He has, thereforc, adopted Reanmur's plan, which is more than a century old by the Professor's statement. He
hatched chickens loy the hundred, in barrels and casks, bnt conld not raise them until h placed them in boxes in horse manure. Trefessor's rules for hatching: The mannre used for hatching eggs or raising chick-
ens must be taken from horses fed on grain, and it ought to be several days, or even a month, in the mannre yard. The manure ought to be and the manne well mixed. The building best snited to place tbe apparatus in is one in
which the air circulates freely, and should be withont a board floor. The temperatnre should be as near equable as possible. The reader who wishes to try my system can place in the middle
of snch a building a heap of manure, six feet square, being carefnl not to tread on the ma nure. It onght to be packed closely, but not
trodden down. When the heap is 18 inehes deep, the hatching apparatus is placed in the will A barrel or box of any description thick. A flour l)arrel is as good as anything entilation arranged to regulate the heat. After this is done it mnst be carefully covered with ays one ought to have about $120^{\circ}$ of heat, but it would be imprudent to place the eggs in the receptacle or box with which he wishes to make the experiment, and care must be taken to
diminish the heat to $100^{\circ}$ or $102^{\circ}$. Then the eggs may be placed in it and kept at $102^{\circ}$ to lay to cool and turn them."
I have now given all of the Professor's in tructions contained in his look. Will Mr above rnles? Also, how did the thermomete range dnring tbe day while making his exper ments? I have not tried the process as an boen for some time. 1 may write somethin有
Pajaro, Monterey Co., Cal.
B. D. H.

FLopicalt TURE.

## Roses.

Editors Press:-The time of year being a hand when gardeners usually begin to observe
and label the plants which prove nnworthy of cnlture, with a view to remodeling their garden and ordering plants for fall planting, I though ject might be of interest to some of your readers Tany fardens here in spring, form, perhaps, one the most striking and pleasing class of ob jects that command the strangers' attention The amateur or professional florist sojonrning here from colder and more unfavorable re-
gions, where skill and cxperience are required to bring tbis plant to a high state of perfection often wonder that this show is not perfaintaine through the long dry snmmer, and even nntil tion it becomes very apparent. With conven iently arranged irrigation, California has a climat highly adapted for the growth and perfection of this queen of flowers. While this is true, there is mnch that is reqnired on our part to place tnre can perform her part
It bas been stated that
ple when understood," and I think it will be conceded that a thorough knowledge of any snbject ver simple, requires stndy, care and experinee. In this congenial climate, however, a lit
tle knowledgc and attention is snfficient to lead any lover of flowers to a very high point of ex
eellence in this particnlar branch of Horiculture In Europe, the growth of the rose has be come a science of itself, and it is to that conn try that we are indebted for the origin of most
of our choice varieties. To see the rose in its perfection, one has to go there. Every year
witnesses in the market from 50 to 200 new varieties, for which superiority is claimed over the older sorts. Florists and nurserymen
who congregate there from this conntry as well as others in the latter part of the snmmer when so many floral and horticnltural exhibi
tions are made, for the purpose of selectin tions are made, for the purpose of selecting
stock, arc often indnced to bny largely of roses stock, arc often indnced to bny largely of roses, hight of perfection, of the kinds offered fo fonrths of them prove a total failure-looking very different from what they did in Europe The nurserymen pnt these new kinds in their lists and sell them for about ten times the value througbout s. Many mexperienced person thing extra good, are often induced, from thei glowing descriptions, to select these new varie-
ties, which as yet, have not been tested in this conntry. This is one reason why there are so
manry worthless roses in the country. Many
of the tea, Noisette, and other tender kinds of the tea,
thrive poorly ont of the hand of the skillful
European florist. While some of the strong growing sorts run most altogether to wood. long sinoe, the most prominent feature that at tracted my attention was that three.fourths of
the varieties were wholly unworthy of cultiva tion, when cousidering the choice variety of
every class now in the conntry. Many of them had never lloomed at all, while some were no
better than the common wild rose, only disfig uriug the plaoe as so many weeds, some by
their rank, others by their sickly growth This was owing partly to their treatment, bu Having
and the varions purposes for which ther to plan and the various purposes for which they are inchoose at first some of the older varieties that havc been tested, bearing in mind that no poor ones. Among the very best bedding sorts
are Hermosa, Agrippina, Comp. de la Bath cour, de la Malmaison, Safrano, etc., which Gen. Jacquiminot, Baron Prevost and Lor Raglan stand among the first in the perpetua
class, which is by far the fincest and nost showy class in cultivation, being larger, more fragrant and blooming more profusly than any
By proper treatment many varicties of the last named class will have a continuous displa mate, while a periodical blossoming of about three times is all that can be expected of a per petual. For many purposes, how fact some o every class should be in every large collection
The Noisctte, a elimbing monthly, embrace many choice varieties of the tea rose and is admirably adapted for this climate. The well fine specimens of which lave leen grown herc It gencrally does better, hiowever, budided on another choice varicty of this class, and with a little knowledge and attention some magnifi The mammotl rose bush of this phee is of thi sort, and bears evidence of what might be produced with the Noisette in this climate, as well their enlture may be classed nuder four heads pruning, soil, culture and irrigation, which wil of themselves form a snbject and will therefor left to be treated of in a future number
Z. Eas
Santa Rosa, April 17tlı, 1878.

## Patrqus or Hilisharary

Ture Otice of the Secretary of the state Grange es in tha
ranyers' Building, No. 106 Davis street, cornuer of Cal

Worthy Lecturer's Visits.
Editors Press:--Our last notes were writtel from Antelope valley, in Colnsa county, from where we were taken by Bro. A. D. Logan Here we found the Grange dead, and no pro vision for a meeting; but our live (iranger, Bro.
Logan, would not listen to any failure. At onee he started ont couriers to Plaza Grangers an the unaffiliated Willows Cirangers to meet the
State Lecturer jointly at the Willows on Tues date the 23 d , in a private meeting at $10 \mathrm{~A} . \mathrm{M}$. and in a public mceting at 2 . . . .1. He the took us back as his gucst to his nost comfort
ble farm home, some 10 miles distant, wher we (13ro. Garduce being also in our con,upany),
were most hospitably entertained. And here permit ne a digression to say a wo
Bro. Logan's Farm.
It contains some 16,000 acres of land, about one-third being the very best quality of grain
land, the balance good for pasturage. Here is now growiug such wheat crops as I have ut
seen before this year -certainly an average 5 sen before this year-certainy an anverage ture sheep aloound as il the days of the patri-
archs. Bro. Logan has so thoroughly stocked archs. Bro. Logan has so thoroughy stocked
and systematized his vast estate that all goos on and systematized his vast estate enat all goes on
like clock-work without the real neessity of
his presence. He has upon this large estate ner 50 miles of feneing, and barns and farmin
ouses to suit all the wants of the farm. Here houses to suit all the waints of the farm. Here
Grangers may learn what it is to be not a mere clodhopper or a mudsill, as charged by the cap-
italistic world, but a (iranger and a true farmer, italistic world, but a Giranger and a true
According to the new arrangennents wo
again at the Willows in time for the again at the
meeting, where we weld our private meeting mat at $2 P$. M. .our public ineeting, and diss
and
coursed to farmers and citizens for than an hour on the subject of the Grange,
and the dutics of the farmers aud eitizens and the dutics of the farmers aud eitizens tional Convention, when the meeting was fur
ther addressed by Bro. Gardner, Manager of ther addressed My Bran Fire Insurance Company in the interest of that institntion, Association. Heri a subscription list was opened for the new
Here
semi-monthly P'atron, and left to lo conpleted and sent on to the Necrectary of the state taken in eharge by Bro. Keudriek, Worth Master of Plaza Grange, and taken that nigh part way tewards his home, The next day was
spent tin reaching his well-appointed farm home, spent in reachuyg his well-appointed farm home,
and visitigy near neighbors aud Grangers, and
by 4 oclock next morning we had breakfasted, and were on our way to

Onr next place of appointment. Here we ar rived (ealing on mro. Cony, an his residence,
on the way, and making him one of our com-
pany), at 10 A. M., aud were introduced to the good Grangers and eitizeus of this much favored
farm locality, and met our appointments as at farm locality, and met our appointments as at
the Willows, only that in addition to our own leeture and the aldress of Bro. Ciariner, the meeting was also addrcssed by Bro. Collhy at
considerable length. Wheu taking our departnre by the night train, we all, in compauy with Red Bluff, where we were to meet Bro. Blossom, Worthy Master of Ieed Blnffet (irange, and lly
him were taken out to Blossom grove. There at a pienie gotten up expressly lor the ocea-
sion, we me met jointly the Grangers and citi-
 and seeondy of hed grauty, diseomfited, and all former arrangements defeated by heavy rains,
so that we tailed to meet the members of Farmington Grange altogether, uad held forth to the
Grangers, farmers and eitizens of Red Bluff on Graugers, farmers and eitizens of Red Bhuff on being ad vertised ahead of us, to , wit: "The
Coming Coustitutional Convention." This we discoursed from a (irange stand point for ahout
50 mivutes. A more attentive and intelligent 50 mivutes. A more attentive antl intelligent
audience of both gentlemen and ladies it has audience been our fortine to address, and a more yenial and extensive introduction to (irangers, farmers and citizens has not in any former
to any place been given us. All tried to make
our short stay amoly them pleasant. Bro. Blosour short stay among them pleasant. Bro. Blos.
som espeeially devoted to us his entire time for som espeeia
three days.
We eannot leave Red Blnff till we give it as our opiminn that it is the most live town if its
size in the Sacranlento valley; with a futurc be. fore it to make of it, at 110 distant day, a large
city. The Sierra Flnne Company city. The sierra flunne Company gives to it a
prominenee, and together with its rich valleys of waving, grain, nakes it a point where not
only already has capital to a large amount been mvested, but where capital inust continue to seek a profitable investment. Here we have
coneluded on aecount of the bad roads and unconctain way of reachiug our future aplpoint-
ments for the eounties of plunas meats for the counties of Plumas, Lassen and
Modoc, to defer filling those ayppointments till

3uly next, of which we will give timely notic
both in the California Patron and Meral Press Red Bluff, April $2 s t h, 18 \%$ s.

Grange Life and Work.
The press upon our columns of late has inportant Grange topics, but we expect now ave in store of this ki Address delivered before the members
 Fellowe Patrons: The enemies of the (irange, several years ago, predicted that ours would be
a short-lived organization. The wish in this case was doubtless father to the thought. The Grange hives on notwithstand-agy the opposition at the expense of the industrial interests of the conntry. It lives notwithstanding the feeble supplyort of some of its friends, whose artlor
dampened because the (irange is not able to accomptish impossibilities-or rather becanse
the reform-work of a decade could not be doue in the coarse of a few regniar meethgs, an that too without personal effort on the part
members. The (irange lives on in stanislinis county notwithstanding the severe ordeal of Iry season just passed. If its membership inination and couraye is unabated. In periol of its infancy when its path throug uutried fields was beset by the suares of it cuemies anll when for lack of the tough sinew
of organization it met witl frequent falls, it h
wisdon sained by a long experience shan the able it to exert its herculean power effictually against injustice and in behalf of the best in But whether the (irange prospers in our
midst, in the immediate future, will depeud on the collective wisdom brought to bear in your
deliberations. It will depcnd as well on what deliberations. It will depchad as well oll what
you forbear to do as on what you actually per govern the motions of the engine of reform and hhen we will not be ashamed of the work per-
iormed. There are some things venerable with age, which are worth preserving.
Let us bear in mind that one of the essential to the success of an orgauization is harmony
Let us never undertake to force a vote on any measure against the earnest protests of measure against the carnest protests of
minority and especially ou any measure of
political economy. The safe way would be $t$ t adopt or endorse only those measures of poli ical ceonomy on which we inay agree almost
quite unanimously. Wein then caution should ur reconmendation of a certain line political parties, for, in the latter case, we
would inake ourselves lialle to the clarge of taking partisan political action and of intro
duciug into the C rrance a repellent force. It may le asked what ean we do in order farmere some of the hardens imposed on the farmers, if
spection? answer we can aecomplish mueh in a legitimate way. There are burdens inposed by a class that lives by the sweat of othe
men's faces. This class of eitizens dues not belong exclusively to one of the political par
ties, neither will you find a party so devoid of sagaeity as to endorse all its schemes of plunder. We ean endeavor to remove the burdens
imposed by this olnotious elass, and in this enleavor we thay he sure of the the lhest elements of soceety.
The perricious system
armers pene whieh Californ share of taxes can be and will be complated and overthrown; for all farners, indiseriunin ately, have fetlings akin to those of hekless
travelers who lave felt the hand of the high wayman in their poekets. The (irange can, in
its organized capacity, take aetiou agaiust this manifest injustice.
What principle, then, shall enalle us to dis of political econony which are proper to dis-
cuss in the Grange aud those which are improper. the evils inflicted by clans legistlation-snch a no party has the hardihood to advoeate. On
the other hand, we slould let alone whateve measures are made distinctive issues by any
the political parties, for sueh measures are left Grange-the Anerienn geople. If any of the political parties of far forget
their duty as to alvocate measnres projudicial to the inturests of farmers, each one of us may, if he wishes, lend his influenice to defent suleh
parties: but the firnage caunot, under its ent Constitution, array itself in onder its pres. any politieal organization, nor can it endorse
any portion of the platform of any political
pardon me for saying so munch on the subject of politienl economy. I make this allusion a the minds of some Patrons on this very important sulject.
I trust that the sane prudenee whieh has charaeterized the menhers of the eounty Cirange
in times past, will cuable you, in your marel in times past, will cuahle y you, in your marel
of progress, to advanee ony upon inm ground, such as may tirin.
and Moderation.

Grangers of San Bernardino County. Ebitors Press:-A public mecting of the alove was hekl at San Bernardino on April th, at 10 A . M. Bro. Brown, of Tiverside n Bernardino, Secretary
Bro. Taylor, of Rincon, delivered an earnest address ou the objects and aims of the Grange, stating that, among other things, one legitimate nject was the rotuction of our extravagant public expeuditure in the form of ligh salanes
of public officers, and urging npon the Grangers of public officers, and urging npon the Grangers amance
agance. Hathaway, of the same place, touched
Bro. on the desirability of our prodncing more for export, and of our buying less of imported ar-
ticles, as a means of attaining more independ-
ence. Frager, of San Bernardino, gave an ad-
Bras dress on political and domestic economy.
A bounteons harvest feast was then partaken A after whicll, Bro. Hall, of Riversicle, deliv. ered an essay on co-operation, followed by
Brown, of same place, on the same sulject.
Thanks having been tendered to the ladies of San Beruardino for the liberal repast furnished, the Crangers went into private quarterly being represented. Resolutions were passed iudors ing the principles of the Southern California l'rotective League just organizel, and providing
a register of articles for sale and wanted by Grangers, to facilitate direet trading among themselve
The next quarterly couvention meets at hiv-

## J. Hall, Sec'y Riverside Cirange.

## Grangers and Farmers.

Open (irange meetinge will be held at th following points in this statc, ve

Speaking will commence at 1 oclock F.
These meetings will be addressed by Hon. I These meetings will be addressed by Hon.
C. Steele, Master of the State Grange; Hon. (r) IV. Colly, I'rusident of the (irangers' Bank Pilkington, Lecturer of the state Carange; Farmers' Mutual Fire Insurance Company, and perlaps others.
others, interested in the prosperity of cultiva tors of the soil, to attend these meetings. There never has been a time in the history of
California when it was as neeessary for farmers to meet and consult, in regard to both thei politieal and fiuaneial welfare, as at this time.
Anos Adams, Seec'y state (irange. Amos ADAMs, Sec'y
aneisco, May 6 th, $18 ; 8$.

## In Memoriam.

Eden` Grinctif, No. 106, Alameda county April 17 th, $18 i s$.
Wifmeas, It hath pleased our Divine Master o again break our cirele by removing our most
respeeted brother, Jours MAliLN, from this respeeted brother, Joiry Mal:LI, from this
earthly Grange, to raise him to a place of rest in a earthly Grange, to raise him to a place of rest in a
higher degree. Therefore be it Rexolverl, That in the death of John Marlin ful and attentive Treasurer, the Order a devoted Patron, and his wife a kind-hearted and affec tionate hushand.
Resolvel, That we extend our most heartfel sympathies to our berenved sister Marin all family, who have thus been separated for a time from the husband and father, as also to their
inourruing friends. nouruing friends.
members of the Crage he wher of the recorls, a copy thereof lee sent to our hereaver Press and the Patron for publication. -J. Russell, Wm. Pearce, W. H. Niller, Committee.

## Election of Officers


 Mitchie, $\in$ K.: Niss B. A. Chalmers, Ceress Mrs. I' I'. Ward, Pomona; Mrs. NeLntosh,
Flora: Irs. W. H. Snow, L. A.
 1. Yishan, C; J. N. Sanders, T.; J. IV. Bar
rette, Mec'y; J. T. McO verel, (I, K.; Mrs. T K. Nneath, Ceres; Mrs. A. Adams, Pomona
Mrs. W. R. Whittemar, Flora: Mliss Ida Ilol naughy, F. K. Smith, Trustees,
Sonora Grange.-Eurrors Prass:-Ou
Grange is to pienie on the last Saturday of Grange is to pienie out the last saturday of
Mlay, at the homestead of fur Worthy Master, George Soulsby. If the Worthy Lecturer could
only make it convenient to attend, it would

Agricultural Notes.

## California.

Alameda
Crors in II asmsetor.-Indopendent, May 4 and some varts of Eden Township lately we liave heen agreeably surprised at the uni The rccent rains that seemed likely to injure them more or less, have had far less surious effect than was at first anticipated. Acmos in excellent condition and promise the best o
crops. The same can be said with truth of the orehards and the abundant varieties of fruit with which they are filled. The promise is as growers now have a chance to make up, th coming season, for the losses sustained last year, There is rom for congratulation upon th cheerful outlook.
FRESNO.
Tue Wool Clir.- Republican, April 27 finished-one more week will probably end it The weather has been changeable, stormy and satisfied, and there ha been no serious disaffection among the work men. In the two shearing establishments here about 80,000 shecp have been sheared and dip ped np to date, and not more than 10,000 are
encraged for the next week. Mr. Dusy ha eared a little over 42,000 , and has not mor than 4,000 more engaged. He has employe and has paid from 6 to 7 cents a head fo shearing, the men boarding themselves. His ip has beeu lime and sulphur, and he charge lambs. Mr. Foster has sheared over $4 \overline{5}, 000$ sheep, and has between 6,000 and 8,00 shear. Mr. Ilclm and Mr. Morrow have had employed white men, paid the same wages, and has charged $1 \frac{1}{2}$ cents for dipping sheep, and io "Australian Sheep Dip," prepared by William Moore of Stockton, and speaks favorably of number of sheep iu the county has been greate than we had estimated, and, owing to the fac that large numbers of lambs are leing sold and hipped out of the connty, the number of shee to be sheared next fall will be less than th natural increase would indicate. Lambs have wil The next fall eli
probally be the hest ever seut from freno the sparin e; the slurin
ry is not over tocked and the abundance of feed will preven the dust blowing in a measure. The s1, ring clave generally been satisfactory-rangin rom 16 to 22 cents a pound. Considerabl Franciseo houses. Execpt to the lutehers, rery few sheep are sclling in Fresno county ambs ewes have been offered at s. higher. Mntton sheep are selling or from silin to $\$ 3.00$ a head. We see no reason for selling or there is every reason to believe the shee business hereafter will be profitable
LAKE.
Agricolthral Outlook.-Bee, Dlay 2: The have been of material benetit to the farmors and utlook Wheat on the valley lands that was kept back and looked badly from the great amount of rain fall in January, Fehruary and the first week o wake in areh, has improved of hay, if desire or that purpose, and mueh of it will make fine grain, though we hear eomplaints that some is has been sownsince the heavy rains, and thoug it will yield, the probabilities are it will do ver well. We have known wheat sown in April to make as large a yield as that sown earlier, and reason why it may not do so this season. Very being prepared and a large crop will he put in Owing to the thorough saturation of the ear predict a me corn crop this year. Manyaeres wh evprience of the past two or three years show State. We know of severa farmers who raised from three to eight tons per The and this is quite a to be a large one fo The fruit erop promises to be a large has bee no frost so far to iujure it, and we have non silered as past. LOS ANGELES
Those of our farmers who had the good judgcrop of last year, are now realizing the fruits


Agricultcral Prospects.- Democrat, April notes fine crops and plenty of them; fruit, grain, neighboring markets however, for there's home consumption here generally that gets
away with all we raise, at fair prices. Then, again, the farmers do not look to raising grain,
for an ontside market, as the eost of transportafor an ontside market, as the eost of transporta-
tion is too expensive. By and by, this may be different.

## MONTEREY.

Chance for a Creamery. - Watsonville Transcript, May 3: In and around Springfield,
Monterey county, there are now between 300 Monterey county, there are now between 100 cows, divided up in dairies of from 10 to 80 zows. Each of these dairies las to separately do the work of setting, skimming, churning, washing, salting, packing and marketing, making five or six times the labor from the time market that would be required were the work
all doue in one large creamery. Were a ereamall doue in one large creamery. Were a cream-
ery (bntter factory) started in that soction there would within a year probably be 500 cows or
more whose milk would be sent to the faetory. more whose milk would be sent to the faetory. produced aud the best advantage secured marketing. We hope ere long to see a factory
built therc. If it is it will soon be followed by others in other parts of the valley, for there is not a place in the State better adapted to dairyplacer.
Roseville,-Cor. Argus, May 4: We are now upon the eve of our harvest, whielt cer-
tainly from all indications, will be a bountiful one. Everything in the way of hay and grain
islooking exceedingly well. I have heard no word of complaint from anyone; on the eontrary, all
the farmers secm to be perfectly satisfied with the situation, thongh possibly prices may rule a little low. The late rains have enabled farm-
ers to snmmer-fallow all they wished to, oonsequently there is an nnussal amount of land
made ready for another year. This season not a day will intervene between running the plow and the mower. The shearing season is now
in fnll operation, and I learn that the clip will in nil operation, and learn that the clip will
he very heary, and of good staple. The prioe
of wool beiug good, our wool-growers are also in good spirits. In short, all our indnstries in
and aronnd Roseville are in an unusually flourishing eondition.
SANTA BARbara.
bettrors Prkss:-The crops never looked acreage is nearly double that of any other ycar.
At a nceeting of the rairood people and the
farmers of Sont City lately, the farmers assnred the railroad
poople that Santa Maria valley would furnish

80,000 tons of grain for transportation this
year. The railroad company assured the year. The railroad company assured the farm-
ers that they would build the road this summer and transport their grain to the San Lnis Obispo lauding, at the rate of two dollors po lauding, at the rate of two dollars per ton,
or to the eity of San Franciseo for five dollars per ton. This is a narrow-gauge road and can I think the road will be built this summer. This road will be the making of this part of the State. They ean extend it so as to make an ontlet for the Lompoe eolony. H. MI. Newhall
has on his ranch in this valley
3,500 grain, and it looks first-rate and will make a big yield.-Charles Burr.
santa clara.
The Crops.-Mercury, May 4: Never was the prospect at the corresponding time of past
years more flattering than now; the grain is strong, vigorous and healthy in every particular, strong, vigorous and healny and balmy, is just such as the most perfect development of the
sureals requires. Careful inquiry enables ns to
cen cereals requires. Careful inquiry enables ns to
state that the aggregate acreage of this county state that the aggregate acreage of this eounty
has not inereased, though the plant of certain
俍 products has somewhat varied, the principal
grains, however, are planted iu about the same proportion and upon the some number of acres
as in 1876. It is true that a considerable quantity of new land has been seeded, but it will be fonnd that a piece of old laud corre sponding in size has been rested or possibly de-
voted to other nses. The acreage in tobacco we have been unable to estimate, though it is proboats raised in this county the greater portion is grown in the foothills west of Mountain View,
where the crop is at present looking fine. The erop is small because of the little attention paid
to the cultivation of this cereal, aud does not nearly supply the demand of consumers. The rye of this county is raised principally near
Saratoga, and it too promises well this year. used at the paper nulls located at that place Of the fruit crop of this valley it is suffieieut
say that its prospects are quite unimpaired and she yield of every kind promises to be immeuse. have during the past winter beeu largely increasing their facilities and mauufacturing an
immense supply of eans. They expect to pack
$100 \%$ more fruit this year than last.
siskiyou.
Edirors Press:- On the morniugs of the 15th aud lith instant the ground was white with
suow. How's that comparcd to the Sacramento and San Joaquin and southern valleys? Oh,
well, it makes the water cold, and that is nice of a warm day. I have been plowing and planting potatoes to-day. I have plauted 20 pound of artichokes this week, and received a sample of
Egyptian eoru of Messrs. W. \& C. liobinson
yesterday Will yesterday. Will report in future. Our trees
are all doing well.
Only one died last seasou. My berries are also doing well. Potatoes have sold at from two to four cents per pound, and
very scarce at that.-R. D. Nu Creek.
A Proposed Sugar Factory.-Healdslurg
Flay, May 2: Sonte of our readers will perhaps Flay, May 2: Sone of our readers will perhaps
remember our mentioning some months since
the remember our nentioning some months since
the decided success which Mr. Callahan had met with in the eultivation of the sugar beet on Dry ereek. We have now to report that a gen-
tleman connected with the celebrated Sacramento Sugar factory, beeoming aware of the
perfeet adaptability of our soil to the eulture o the beet has visited this city for the purpose making further iuvestigations, whiel have re-
sulted to his entire satisfaction, and proposes in company with San Francisco capitalists, sufficient eneonragement is given, to locate an
extensive factory here. It is proposed to erect works with a capaeity of about 40 tons of sugar per diem, which will require the planting of the design that the farmers who desire to raise beets for this purpose should hold stoek in the Compauy (somewhat on the plan of the United Vineyard Compauy), and as the profits from we have no doubt bnt that many will be glad to engage in it. We shall shortly be able to lay more of the particulars before our readers;
meantime any of onr friends who may wish t experiment witl) the beets can be supplied with small quantities of excellent imported seed, by calling at the Flag office. Althongh it is someleast prove the adaptability of various locations and soils, and will not be without great intcrest.

## tUOLUMNE.

Editors Prbss:-We have grand weather for erops and gardens. Harvest is almost eommendrug. What wonld have brought $\$ 35$ a ton at Oakdale a few months ago is now offered at $\$ 10$, and few purchasers at that. It is sold in this muel less. Some speculators are suffering by holding on for $\$ 40$, and are glad now to take what is offered. Peace and pleaty will rule the
farm element this year of expectant warfare in Europe. Notes of industry are heard amongst of man show his gratitnde for manifest blessings by aets of good samaritanism to those who dwell in the sphere of misfortune, and they will
find that "bread lestowed to the necdy will return in spirit goorl. Joun Taywor.

## News in Brief.

Miss Jennie La Forrest has opened a Chi nese night school at Oregon City.
REv. T. V. Rox, the reformed Brahmin, ha been found guilty of bigamy in Montreal. EICht thousand soldiers will leave Spain for Drutueru is pr
Drphtheria is prevalent to an alarmin
tent in the southern portiou of Oakland. Tue President has approved the Act prohil iting the coinage of 20 -ent silver pieces. that the whole city is full of tramps. THE British frigate, the
dered back to Esquimalt, V. A verin of eoal has been discovered on the Uridias place, a short distance east of Milpitas.
THERE are 13 vessels earrying coal from SeatTherk are 13 yesse
te to San Francisco.
Eichity-Five Chinamen have been set to work n the Olympia and Tenino railroad.
GEorge WHTBECK, an old reside
gan Bar, California, was found dead in his bed at his home last week.
The recent frost has probably ruined all the peaches. cherries and grapes in the vicinity of The March bullion product of the Eureka Con. Wa
$\$ 40,000$.
Grace, the only daughter of C. W. Clark, of Visalia, was almost instantly
thrown from a horse last week. thrown from a horse last week.
There is a rumor that S .
Here is a rumor that S. J. Tilden will live iaut entertainmeuts.
In view of the recent disturbances in Monprevent the carrying of arms.
IT is estimated that the collieries of Pieton county, Nova Scotia, would produce $1,000,000$ tous of coal per annum
Tue San Jose Herald
10,000 orange trees have been planted in the vi
Tine Helena, Montaua, Herchld claims that receut experiments prove that Montaua is an
admirable eorn-growng country. Thirty-rocr convicts were discharged from Quentin last month uuder the Goodwin
There are 1,560 still left.
is now estimatel that there will be 250 ,IT is now estimated that there will be 250,-
000 head of eattlc driven from Texas to Kansas FARMERS on the west side of the San Joaquin river are, in places, estiuating a yield of 50
bushels of wheat per acre. The average there was not five lushelels to the acre last year.
Cart. CiRAI, formerly master of the Mary Belle Rioberts, has been brought back to
The city in an insane condition.
JIMES McClatchy, editor of the Saerameuto Bee, has announced himself as a eandidate for
delegate to the Constitutional Convention from Truento connty.
Therre are ahout $1,000,000$ operators engaged
in the iron industries of the United States. The eutire value of manufactured iron for one year is $\$ 900,000,000$.
ward over a reperformer, while walking back ward over a rope at Catasauqua, Pa, missed
his footing and fell 50 feet to the ground. He
will die
SEVERAL of the canneries along the Lower
Columbia are in operation, but as get the salmo are rumning rather sparsely.
er rent question is oue of serious discussion viork. Landlords are expeeted to come
TIIE eolored people of Augusta, Ga., are
working hard to make their eoton factory working hard to make their eotton factory
project a suceess. But the money eomes slowly as yet.
THe Cheyeune Sun says that the loss of cattle ior the entire winter will not exceed the average estimate.
Tue Canadian Siamese twins, girls, are now over two months old, and thus far in perfect
health. They are nnited by their backs above the hips, and have bnt one leg each. matcl poliee have discovered extensive ilicit this eity. They work at night, and never nse any stamps.
A family named Robbins eamper at the
Dalles on their way to Palouse last week, which consisted of father, mother and 19 children, the oldest 21 years old ; six pair of twins.
Tue salaries at the county hospital are as fol
lows: Porter, $\$ 30$ per month; waiter, $\$ 30$;
gardener, $\$ 3.5$; dishwasher, $\$ 30$; and the waiter on the women's nurses, $\$ 35$,
Colonel Bee has received a letter from the Dairymen's Association, in New York, in whic a proposition was made for 150 ,
work at making butter and clieese.
Tue Lieense Collector is abont to wage war upon elairvoyants and itinerant medieine which requires them to pay a lieense of $\$ 100$ eaeh a month.
Forty pounds of honey and two swarms o church. The eupola of the Masonic hall, in Anahneim, which has been the abiding p
mense crop.
Mark Hopins, Major Snyder, Julius Wetz lar, George O. Howard, W. S. O'Brien, all Cal-
ifornia pioneers and prominent among tho ifornia pioneers and promine
wealthy, business men of the
witlin the past

THE shipments of grain from Omaha
Thir months amounted to $2,3,0,345$
Trinvty church to Central park in 20 minutes
was the time made by the first train over the vas the time made by the first train over the ailbert elevated road, in New York. on the Ren Rolds Cahifornia Chemical Works days ago. Loss, $\$ 37,242 ;$ insurance, $\$ 12,500$. The number of Roman Catholie missionaries and teachers among the Indian tribes in the The nomination
cetor of Customs at New Orleans, has been as orably reported to the Seuate.
Miss Isabella McManvs, sister of the de-
ceased Irish exile T. B. McManus, died in this city last week,
${ }_{\text {Prof. }}$
Hill
Pror. Hill is abont removing his extensive smelting works from Black Hawk to Denver,
to secure greater variety and better supply of PARKS, on trial for stage robbery at San Anmonth and sentenced to 18 years in the State
The Meat Shipping Association at Reno is in full blast. An addition to the dry-house has been put on; other
also leeing provided.
There is a rumor that the Irish Fenians will collect in great force at Buffalo, for a raid on
Canala, in the event of a war between Eng. Canada, in the event of a war between EngTHE product of Hurst, Haggin \& Co.'s Ou 800. The mine is better now apparently than

The Reno Gazette reports that great quautities of trout are being caught by unlawful appliances at Camp 20, and calls upon the people to turn Gen. Stoneman, of Los Angeles, California has sold his oranges for $\$ 18$ a thousand on the ble of picking and slipping. SEveral Indians recently passed through
Chino valley, on their way from California to large land of horses. TuE telephoue established between San Franpersons speaking at one end being distinctly It is said that steam as a motor will be discontinued on the Philadelphia street railroads after nearly a year's trial, on account of the
wear it causes the rails, necessitating their frequent relayiug. Otherwise it gives entire sat isfaction.
There
There is a standing reward of $\$ 1,500$ for the arrest and conviction of the inccudiary who
fired the Santa Rosa Wine Manufacturing Confired the Santa losa Wine Manufacturing Con-
pany's building, on the night of the 9th of On Sa
ON Salmon bay (W. T.) there lives a hermit uamed Frost, who subsists entirely on dried
salmon and cow's milk. He las a fine tract of trying to jump
The Sacramento Savings Bank has issued notice that it will no longer receive interest
paying deposits beeanse of the accunnulation of money in its vaults faster than it can be lent on first-class real estate seeurity.
THE Preseott (Arizonal) Enterpmise says: Hun-
dreds of Mormons are eoming into northern dreds of Mormons are eoming into northern
Arizona, from Utah, and settling up the mounArizona, from Utah, and settling up the moun-
tainous ocuntry to the north and east of Pres cott, likewise the Tonto Basin.
SINCE Jannary 28th the
256 Chinameu for gampling, 113 for visiting 256 Chinameu for gamlling, 113 for visiting
honses of ill-fame, 230 for eubie-air violation, 8 for carrying eoncealed weapons and 16 for ob-
strueting sidewalks. The fines imposed and strueting sidewalks. The fines imposed and Ir now appears that the death of W. E. Bid-
Uleman, who eommitted suicide at Virginia City not long since, was not caused by domestic troubles nor anything or the kind. He was
nndonbtedly iusane, and left an estate valued at $\$ 30,000$, free of debt
Not disheartened at the failnre of their first reverberatory furnace at Truckee, and are experimenting upon base metal ores, having ready made a partial suceess.
The high wind prevented the great balloon oing np from Woodward's Gardens, May 5th, as, aud Prof. Martin with 25,000 leet o Post, were ready to ascend as announeed, but the gale put it out of the question.
Mr. Bennetr, who owns a raueh near Resting Springs, in southwestern Nevada, became
involved in a quarrel with the Indians, who attacked him, and in the row that ensued he shot and killed four of them
Cubar refugees contime to flock back to the issland. Over 100 have returned from Key
West. The rumbor of the surrender of Thest. The rumorn of the surrendcr of Maeeo feoling prevails among merchants and planters eveng prevails among merchants and pant Joirn Morriser, the uoted phgilist and gambler, and later in life Member of Congress fron week. It is said hat ill-notten, assets will not roalize over $\$ 30,000$, and that the estate will not settle up the indebtedness. last week to walk the distance of the circum-
ference of the earth. He proposes to walk 40 miles each working day for two yoars, which will give hin a day over what he requires to ae-
complish the foat. If he sucoeeds he is to roceive $\$ 10,000$.

# anam  en 

The Pomegranate.
-
=

 . . ? . And never on earth before
:ist she a minn so fair
As the man that net her there
Hetamaty ho in in thase
visu mean
Ramethin anati, sereni



miximeximix
Thimenime int inaw
andeximex
minnine xitim
The Remedy for Hard Times.
"What's your remedy forhard times?" was an enquiry put by your correspondent yesterday t in intelligent neighbor
"Fconomize !" was the lacouie reply. Every ne of course has some pet panacea for surquestion," lut I incline to agree with my neigh bor, that the true remcily is the old remedy "(io to the ant," thou laborer, "eonsider her
ways and be wise, who, having no gnide, over ways and be wise, who, having no guide
scer or ruler, gathereth her food in the s.
and layeth up her stores in the harvest." ud lay eth up her stores in the harvest."
By the bye, let ine protest, leefore proeedin colusivcly of the title "workation to thenselve day laborers and hireel hands. men out of every thirtcen working men? Does
it follow beeause a man has brains enough to find employment for himself, without looking to a "boss" to direct
to be a working man
There are inen totally untit to follow the plow or earry the hou, all day, that work just an
hard, and as honestly, as hod-carriers or plow

One of your eorrespondents appears to think that machinery is making work sacare. I I am
bold to affirm that there is no supertlinity of abor in the world. All that is needed is $t$ wreet labor into the proper ehanuel. Machines rees. So long as oue there is no need to thl f working half time
owus, let them betake themselvesies in the hills, as you suggest. An acre in garden stufi will almost keep a fanily, and a cow well man-
aged will yield 8.50 per annnm. Of course many will feel like fish ont of water, hard put outset mueh failure and much privation, but oes and greens, with a few ewgs coud a little milk, and butter, with the prospeet of fruit
ahead, he onght to lee able to woar throngh some years oi close living.
some live of busiuess for himself, finds in out apitalist the very friend he needs. The labor the eapitalist is gone. ravagance, whieh continually demands "thush times," and lavishes, on superthinties and vicess
the money that should be prudently hoarde the money that should be prudently hoarded
for "harl times."

## A Model Wife

Zachary Hodgson was not naturally an ill teinpered inan. It was want of reficction, more him to consider his wife in the light of an infe ior being, and to treat her more like a slav to rutle his temper, his wifc was surc to sulfe ill-cooked, and whatever the poor woman did to please hin, was sure to have a contrary effect
she bore his ill-humor in silence for a long time but tinding it to increase slie adopted a methoo of reproving him for his uureasonable conduct
which had the happiest effect. One day, as Zachary was going to his usnal avocation after seakfast, he purchased a large col--ish, and it eooked for dinuer ds no particular mode of cooking was prescribed, the good woman wel made it into a stew, her husband would scold
her when he came home. Bnt she resolved to please him for once, if possible, and therefore cooked portions of it in several different ways.
She also, with some little dilliculty, procured an anmphinios ami, baek of the house, and put it into the pot. In
due time her husband eane home, some cov-
cred dishes wele placed on the table, and with a frowing, fault-finding look, the moody man "IVell, sally, did you get the fish 1 bought?" Yes, my dear
I should like I will bet anything you have spoiled it for eating. (Taking off the cover) I thought
Why, iu the name of commenn sense, did iry it ? I would as soon eat a boiled fro,"
Why, 1 thought you liked it best fried." You did not think any such thing. You
w better. I never liked fried fish-why didn't you boil it""
"My dear, the last time we had fresh fish you kuow I boileni it, nad you said you liked it
better fried. I did it merely to please you, but better fried. I did it merely to please you, but
I have boiled some also." So saying she lifted a cover, and lo! the shoulders of the cool, mitely
boiled, were neatly deposited on - a dish; a sight boiled, were neatly deposited on-a dish; a sight
which would have maich an epicnre rejoice, but
which whieh, alia
husbaud.
"A pretty dish, this ! Boiled fish? Chips
and porridge? If you had not been the noost silly of wonain kind you would have made it into a stew.
His patient wife, with a smile, immeliately
daeed a turcen before him containing an cxeelplaeed a tureen before him containing an exed
lent stew.
"MIy dear," said she, "I have resolved "My dear," said she, "I have resolve
please your There is your favorite dish.",
"Favorite dish, indeed" "runbled the contented husband, "I daresay it is an unpualatable wishy-washy mess. I woul,
loiled frog than the whole of it.
This was a common expression of his, and had been anticipated by his wife, who as soon as
the preferenee was expressed, uneovered a large dish at her husband's right arm and there was a Lull-frog of portentous dimensions, and pugna
cious aspeet, stretched out at full lenglt Zaehary sprang from his ehair, not a little frighteued at the unexpected apparation. ing tone, "I hope you will at length be able to Zachary eould not stand this. His surly mood was overeome, and he burst into au in1-
moderate fit of laughter. He then acknowledged that his wife was right, and deelared sh shald not again have reason to complain o
hinis and he faithfully kept his word. - Anec

Marrader,-Never marry a man who has
uly his love for you to reeommend him. It is very fascinating, but it does not nake the man. If he is not otherwise what he should be, you
will never be happy. The most perfect man, who did not love you, should never be your
husband. But though narriage without love is terrible, love only will not do. If the man 18 dishonorable to other men, or mean, or given t either loathe him or sink to his level. It is hard to remember, amidst kisses and praises, that there is anything else in the world to be lays of life are nany, and the husband must be a guide to be trusted, a companiou, a friend as
well as a lover. Mlany a girl has married a "beeanse he loved her so"" And th but good died out on the hearthstone of home before long and hesile it she has lieeu sitting with one that xarl, or who, if she followed him, as a wif
hould should, would guide her steps to perdition.
Harriage is a solemn thing-a ehoice for life; Narriage is a solemn thing-a ehoice for life; be
careful in the choosing.- Belyrarica.
A Dos with a Long Menory.- Youatt says or their long memory, and, as an instanee mentions that one recoguized him after a lapse of five years and left his new master to follow
him. Mr. Jesse also furnishes another instane whieh oecurred at a village in Cumberland. man in passing struck a sleeping Newfoundland
a blow with his whip. The animal pursued him for some distanee, and, alhongh he was unable to get his revenige, he did not forget the
nndignity, for, 12 mouths after, he reeognized his assailant of the previous year and savagcly
attaeked him:

Wild Animals During Drouth.
The sufferings endiured on account
routh were at. times almost territic. drouth were at. immes almost territic.
throats of the oxen were so parched that could not low. The dogs suffered even mo empt from the plague of the land.
plains, the whole of the wild animals that in habit them congregate around any pool tha nay be left, for with very few exceptions al whieh follow the game, thus are led to thei drinking places not only
but to satisfy their hung

## ut to satisfy their hunger

To watch one of these pools at night, as $I$ dic ight, and one never to le forgotten. Gran sight, and one never to he forgotten. The that will astonish then, and cause then to he animal kingdon.
At such watering places the small antelope invariably drink first, the larger later on, and With them the zebras and buffaloes. After
these come the giraffes, closely followed by th hinoeeros, and next the elephant, who never ttempts to hide his approach-conscious of his whon it may concern that he is about to satisfy his thirst. The only animal that does not give place to the elephant is the rhinoceros; obsti nate, headstrong, and piglike, he may not court
danger, but assuredly he does not avoid it. The elephant may drink by his side, but must no interfere with him, for he is quick to resent an
insult, and 1 am assured that when one of these insult, and 1 am assured that when one of these the victor. The elephant is large, of giganti the formidable horn that terminates lis nose a dreadful weapon when used with the force that he has the power to apply to it. I have noceros in one of those blind fits of fury to which they are so subject, attacked a large
wagon, inserted his horn between the spokes of wagon, inserted his horn bctween the spokes of ng the contentard der it useless.
The lion
The it not tied to time in driuking would dare to interfere with the rhinoceros o the elephant. Where the buffalo exists in num bers it is the principal prey of the lion: in
other localities antelope and chiefly the zebra are its food. - The Creat Thirate Lamel.
What Editors have done for California General Shields, of Los Angeles, in writing his brilliant article on alfalfa !iu Southern Cali fornia, which we are now printing, stopped to throw into the alfalfa field a stirring tribute to the labor of C'alifornia editors. We have pieked it out of the clover and brought it into the "Home ("irele," as it is too good to leave ought to begrudge any faithful and honest Cal fornian editor a share in the suil of our goodly land. They have been essentially iustrumental in begiming and sustaining the progress of the State. But for printers' ink California would be thought about to day as it was of yore, as a westerly extension of the great American are here to-day would now be ou the cotton belt 'ehopping cotton' at the ammun per man, or raising two bit eorn and anmum per man, or raising two eent pork, and sweltering on the eotton belt or freezing on the eorn belt. conducted and partielpated in snis the ond now in California. I frcely give up my old home, and ain thankful to the quills of California for thicir literature, beeanse it lrought ine ae
Iocky mountains to this pleasant land.

Roval. Jewels at the Paris Exposition. the laris Exposition, and are valued at $\$ 8.000$ 000 . They are in a strong iron chest and are guarded by eight sentinels day and night. A diadem of 56 hamonds of varions sizes has 000 . There is also a eollar of 108 diamonds, in the pnrest and most beautiful known sal diadem is a blending of diamonds and emerald In the center is the large Kiaudavessy dia mond, valued at $\$ 60,000$. It would be rated at a higher sum only for a slight defect. These, and many other jewels of the kind, belong to Princess of Wales on special occasions; the
others are reserved for the Queen. The Kaudavassy was formerly the eye of a one-eyed Hiudoo deity, and has been only lately added to the collection. The French Commission are enn Aceording to the Journal des Debats, it is about 12 feet deep and 10 feet or 11 feet square. The has a donble iron floor, with pipes, by means of which it can be flooded in case of fre. The beautiful workmanship, a casket worthy of the gems; this will be let down into the space
below imnediately the Exhibition doors are upon which two especial guardians will place

## Men's Part in Home-Making

Most of the preachments we have scen from the text of happy homes have been aimed at the women. This is natural enough, for they are the home-makers of the world; but just
now we desire to nudge the hcads of the houscholds, and ask them how they are perorming their responsible part the realm of ing the atmosphere after somcbody else has made it-and not a few ean't get along and make in it. Hen are too busy, too much pre-oecupied, too impatient and thoughtless, alld - it must be fair share of that pre-enincutly millennial work, he ereating of a happy home, wherein love
reigns supreme, and aniability, affection, cheer fulness, joy and peace are the natural condi tions of family life.
Now in eertain things man has been a con scientitic down to this day. Men will fight for thei busin, and make slaves of themselves to their bial man who would die for but like the prover never bring up a scuttle of coal, they can't tell What their children are studying at school, who or evil, nor hardly auything else that a father ought to know concerning his offspring. It is said that many a father tiuds his Sundays and uainay too few to ellable him to "Jecome ac man who hasn't time to be a father to hain that all thme be a Jater lo his chat
He wrongs them, rols himself, puts an urjust responsibility upon the mother, aud neg There are so many ways in which a father may contribute to happy home life that it seem eed the homes. It takes so little to make children happy at home, that it is a wondrons pity so many little inasy, or discontented. If for an hour afte the evening meal the father should give himsel to his children, would the mother wear out so
fast, or the children be so lawless, troublesome and uncomfortable? What a ministry for good both parties is a papa's frolic with the rawings, the games, or even the studies if the father enters into them.
Aside from the childran, and in homes where haply there are none, men still have a more wreet part than most of them are ready to bcar in making the daily life pleasant. We hardly ueed say that a man should set the example for forbearance, and all the amiable moods and graces that are the soul of home happincss The sort of men who display all their suavit places, on the street or at their busines sourness and all the evil brood of develish dispositions that they characterize by the couvel lent euphemism of "mood"-well, we have our phat mind expressing it privately ut we are afraid it wonldn't look well in print. The wholc trile of home tyrants-ment who s the eenter; whose tougnes are chronicall furred" in the morning, and nerves so upeal the cuening that the family must kecusilence while they read and smoke; who "can't bear the noise of innocent and natural mirthfulness who have to be toalled and tended and humored they ought all of them to be coomed to pas without sight of wife or children-with hasl for breakfast, warmed-over pancakes for luneh, supper, with the lodger overhead always lcarning the trombone and servant girls that stea the hair-oil They don't deserve a home and no man docs who will do nothing to make it the man's rights do not include the right to a work, or worry, or solf sacrifice, or thoughtful ness and well-doing incident to its creation and A good many men think they havo done their full duty if they pay the bills, more or less grudgingly. But one might as well try to
warm a room with a fire-place and a pair of silver-plated andirons, and $n 10$ fuel or fire, a
to make a home with money. The plete it the man mnst put in himself, and the best part of himself at that.-Golden Rule.

## The Newspaper.

The Press.-Its Power.--A newspaper ean drop the same thought into a thousand
minds at the same moment. A newspaper is an adviser, who does not require to be tracting your private affairs. Newspapers, , become more necessary in proportion as men l,come more equal individuals, and
more to be feared by tyrants.--De T'ocquerille.
The Press.-Its Use and Abuse.-Of suchifa he all anxious to cxtend the bencficent and eheck the bauefnl intluence. If, thereforc, honestly support it.-Archkishop McHale.

The Bible and the Drunkard. In a recent temperance sermon, the Rev.
E. . Rey, of Elizzabeth, New Jersey, made the
the the following allusion: What is the relation of intoxicants to piety? Let us take a hasty glance at the Bible. Noah discovers the intoxicating principle of wine, is himself disgraced, and curses hily soems it necessary to offer sacra fices and pray for then, "lest they offer sacrathe name of the Lord." They are all slain wine, is led to commit horrible crimes. Jacob, intending to steal his brother's birthright, gives In the desert some drunken priests offer unholy fire; they are consumed, and a strict law endrink while ministering. Samson's mother is forbidden to drink; so is Samson; the reason, servant of the Lord. Nabal, the fool, endangers his property, his life and the lives of his family, by his tolly in his cups; he awakes from the drunken stupor only to die from its effects.
David, with 400 men, slays the drunken host David, with 400 men, slays the drunken host
of the Amalites. Amnon is slain by Absa. lom's command, while he is drunk. Elah, king of Israel, has but three verses in the Bible; they pictnre him a drunkard, and slain in a drunken fit by his servants. Ben-Hadad and helves drunk are routel while drinking themselves drunk. But, worst of all, the Lord tells
ns that the fall of the king Judah was due largely to their of Israel and Kings, priests largely to their drunkenness. through wine and strows drink. What a presed ture 1 God's own choseu, favored people destroyed! And it was through idolatry and stroug drink.

Interest.-"An Aneriean Almanac and Treasury of Facts," by A. R. Spofford, Librarian of Congress, contains much that is valuable express very forcibly the accumulation of interof bankruptcy is that so few persons properly of bankruptcy is the difference between a high and low rate of interest, and therefore monatimate business can stand. Very few have figured out the
difference between $6 \%$ and $8 \%$ One dollar difference between $6 \%$ and $8 \%$. One dollar
loaned for 100 years, at $6 \%$, with the interest collected annually and added to the principal, will amount to $\$ 340$. At $8 \%$ it amounts to
$\$ 2,203$, or nearly seven times as much. At $3 \%$, $\$ 2,203$, or nearly seven times as much. At $3 \%$, to $\$ 19.25$; whereas at $10 \%$, which has been a very common rate in the United States, it is
$\$ 13,809$, or about 700 times as much. At $12 \%$ it anounts to $\$ 8+, 0 \%$, or more than $\$ 15,145,00 \%$. as much. At $18 \%$ it amounts to $\$ 15,145,007$.
At $24 \%$, which we sometimes hear talked of it reaches the enormous sum of $\$ 2,551,799,404$.
One hundred dollars borrowed at $6 \%$ with the interest compounded annually, will amount to $\$ 1,842$ in 50 years, while the same $\$ 100$ borrowed at $8 \%$ will amount to $\$ 1,690$ in 50 years.
One thousand dollars at $10 \%$, compounded, will run up to $\$ 117,390$ in 50 years.

Cleaning Old Engravings.-An admirer of old engravings adopts the following plan for
cleaning them: "I place them, one or two at a cleaning them: "I place them, one or two at a then until they are completely soaked or saturated with it. I then carefully pour off the
water and pour on to the prints a solution of water and pour on to the prints a solution of B. P., to 39 parts of water). As a general rule
the stains disappear as if by magic, but occathe stains disappear as if by magic, but occa-
sionally they are obstinate. When that is the case, I pour on the spot pure liq. calcis chlorate, nitro-hydrochlor. dil. I have never had a print which has not succumbed to this treatinent-in fact, as a rule, they become too white. As soon as they are clean, they mnst be carefully washed
with successive portions of water, nntil the whole of the chlorine is got rid of. They shonld then be placed in a very weak solntion of isinglass or glue, and many collectors color this solution with coffee grounds, etc., to give a
yellow to the print. They should be dried between folds of blotting paper, either in a press an ordinary flat iron to restore the gloss, etc., (place clean paper between the iron and the print).
Influence of Climate on Race.-Attention has been called to a curious instance of climatic influence on race. In 1816 , several hundred Wurtemberg families emigrated to TransCaucasia, and took up their abode in the neigh-
borhood of Tifis. They were remarkable for a borhood of Tiflis. They were remarkable for a broad, square built, fair or red hair and blue
eyes. The next generation changed somewhat, and brown hair and black eyes were seen. In the third generation the type of the original and hair were the rule, the round face Iength-
ened, the form gained slenderness and elegance. ened, the form gained slenderness and elegance.
Inasmuch as they never inter-married with another race, it is contended th
must have effected the change.
Longrellow.-Mr. Longfellow celebrated his 71 st birthday recently, and may now be said to rank among America's old men. His hair and
beard are white, but his eye is keen, his step light, and the grip of his hand firm. There is


A Miscalculation.

## Young Folks' Column.

Lame and Lazy-A Fable.
Two beggars, Lame and Lazy, were in want
of bread. One leaned on his crutch sat, rubbing his red eyes, and staring in the gutter.
Lame
Lame called on Charity, who was standing at her door, and humbly asked f.
stead of this he received a loaf.
Lazy, seeing the gift of Charity, exclaimed Well, I will ask the old lady for a loaf; perhaps shall get a cake
Lazy now applied to Charity and loudly
"Your demanding a loaf" said Daine Charity, proves that you are of that class and charac-
ter who ask and receive not; so be off directly and get some work to do.
Lazy, who always foun whine than work, complained of ill treatment and even accused Charity of a breach of an ex cecding great and
you shall receive.,
Charity pointcd to a paiuting in her room, which represented three beautifnl figures-
Faith, Hope and Charity. Charity appeared larger and fairer than her sisters. He noticed
that her right hand held a pot of honey, which that her right hand held a pot of honey, which
fed a bee disabled, having lost its wings. Her
left hand left hand was armed with a whip to keep off the "Don't understand it," said Lazy yawning Clarity replied, "It means, that Charity feeds
the lame and flogs the lazy," Lazy, gathered up his rags, and turned to go shambling off.
"Stop," said Charity; "instead of coin I will poor mother, for I will send you to a rich ant.

Vhere shall I Lay ones.
Yon will find her in Hroverbse to know? and 6 th verse." But that is where Lazybones did not look; so he sat dowu by
rubbed his eyes and grumbled.

How One Mother Trained her Little Girl.
"Maybe I am foolish, Mrs.-_, but ever
since my little one was given me I have loved
to kiss the little baby hands as well as the baby lips. I used to lay the soft littlc pink palms
upon my mouth and kiss thenl till my baly pon my mouth and kiss them tin my bally
laughel. tom, and when night came and nudressing her that it to kiss the little hands, Amy knev from nanghtiness. If they had been lifted in at nursie or a little playmate, manma could not kiss them because they were not clean. Aud to miss the kiss was very hard for my baby,
I assure you. It was the same with the little lips. If a naughty word had escaped themmean wilfully naughty word,-or my little
girl had not spoken quite the truth during the day, I could not kiss the lips; although I always ing her to go unkissed to bed. Bnt she cared more for kisses on the hands and lips than for anything else in the world, I believe; my loving were done away with, and each night my baby would say, 'Tean hannies to-night, mamma Tean hannies for 'oo to tiss !
old-I kecp up a custom which she lias known old kecp pap a custom which she has known
from her birth, because I think it helps her try to be good. You will laugh, maybe, Mrs.- but I $d$, but I do want my little girl to grow up pure
and sweet; and if the love of mamma's kisses can keep, by God's help, the little lands lins can keep, by Gods help, the little hands, lips, custom until Amy is old enough to uuderstand fully things too hard for her as yet."
My owu eyes were tearful when Mrs. HorAmy her beautiful young mother's companionship. Did I think it a foolish idea? Ah, no
indeed! But the truest, sweetest custom in the world-keeping the small hands clean for mamma's good-night kiss; and that is why
Sallic Jones was not "paid in her own coin," as the saying is. That is why the sweet lips mare no angry reply. Mamma's kiss was too
precious a thing to be given up for the gratif. cation of one moment of evil speaking.
little little A.

Gooo Health.

## Lecture on Corns.

In a lecture at the St. Louis Hospital, Paris, on hypertrophy of the epidermis, M. Guibout observed that, while in callosities the hyperthypertrophied part becomes . pyramidal, and takes the form of a nail, with its point directed toward the deeper seated parts. This sharp
point, lodged in a kind of cupola, which exactly point, lodged in a kind of cupola, which exactly
boxes it in, has a tendency to penetrate into the substance of the dermis whenever the base of the corn is compressci. The portion of the
dermis which is in permanent contact with the epidermic induration becomes inflamed and aptered in character, its papillir disappearing,
ao that at last it becones a rue matrix, destined to form dee proportion as the more superficial layers are eliminated.
Changcs of the weather often give rise to
great pain in corns, which has been supposed great pain in corns, which has been supposed
to be due to their hygrometric nature, which, by causing their enlargement, adds to the suffering. But, in fact, the exacerbations are
less severe during the time that it rains than they are for some days preceding; and they are change from wet to dry. These painful exacerbations of the pain of corns are quite as remark able and as inexplicable as are those of rheumatic pains. The sole efficacious treatment is excision, but care must be taken that this is
complete. The summit of the cone mnist be cut down to, so as to entirely empty the dermic
cupola. And then it is quite necessary to de. stroy, by cauterization, the inner surface of thi cnpola, namely the matrix of the corn, which
will otherwise be reproduced. The best caustic is sulphuric acid, of which we may deposit a drop, by a match or glass
rod, on the excised part. If the corn recurs, the same processes of excision and cauterization
must again be resorted to

Infleexce of Exercise on the Luxgs.-One
of the sonditions of perfect health is physical
exercise. In its absence the whole system exercise. In its alsence the whole system
suffers deterioration and falls short of that
developent action of the different organs. More than any not difficult to explain why. In order that an organ should be well nourishcd, it is necessary
that it should be abundantly supplied with
blood, and one of the agencies which plays an blood, and one of the agencies which plays an
important part in propelling the blood through arteries and veins is muscular contraction.
The alternate contraction and dilation of the muscles forces the blond along the vessels.
When a person is exercising rigorously, the respiratory morson is exercising rigorously, the creased, the air vesicles become dilated, the
blood is propelled'throun blood is propelled through the minute capil-
laries which constitute a large portion of their
structure and the lung tissue receives the sourishment which it requires, and which is necessary to its integrity and efficient action.
From insufficient bodily exercise, then, the lungs suffer in 'two ways-viz, for want of
sufficient blood to nourish them and for want of necessary expansion. The result is that the
lung, more ireqnently than any other organ,
become affected in those who lead inaetive lives. This fact makes it incumbent on all and especially on those who have weak lungs, physical exercise. We mean by this exercise Which calls into vigorous action all the muscles glow, the perspiration to start. Two hours of
this kind of exercise each day is not too much. and it should be performed, when possible, in says that a person, to be healthy and strong should exercise to the point of perspiring every

Remedy for Obesity.-According to Dr Philbcrt, the waters of Brides in Savoy, which useful in the treatment of obesity. The purgative salts contained in these waters are sul magnesiun, sulphate of magnesia, and sulphate
of lime. To increase tlie effect, from 15 to 80 grains of sulphate of soda are added to eac glass of mineral water. The quantity taken daily is four-fifths of a quart, divided into three
doses, and the purgative effect is produced in doses, and the purgative effect is produced in
two or three days. The course may last from two or three days. The course may last from
four to six weeks. As an adjuvant to the waters, a vapor bath may be taken every day or every second day. Ferinaceous and saccharine liqueurs, and coffee are interdicted; but the quantity of food is not limited, and a moderate mount of wine may be taken without harm Muscular exercise is considered indispensable, and the mountains in the vicinity of Brides afford every facility for walking, where, in ad-
dition, this trcatment may be followed by the grape cure.
For Smootil Ilands.-After washing and drying the hands, pour into one hand a few drops of good cider vinegar; rub the hands
together, wetting the whole surface, both sides together, wetting the whole surface, both sides,
and dry it. Practice this and your hands will

## Domestic Economy

## Sundry Recipes.

Corn Bread.-Colonel Edwin Henry of quainted with the sulbject of "I am well ac live in a country where corn bread and pork are among the principal staples for food. A very few peoplc know how corn should be ground to a mill on my place and grind my own meal, and also for my neighbors. The meal should be ground coarse, like that you use iu the North bread than the corn our corn makes better bread than the corn raised at the North; it
eontains more saccharine. Corn bread is contains more sacclarine. Corn bread is
cooked by the steam generated in the bread in the oven. If the meal is ground fine the passes around and through it and makes a fin article. Corn meal can be made into a numbler o healthy articles of food, and I hope our repre-
sentatives at the Paris Exposition will see that they have a restaurant in which this article is served in all manner of ways, so that the peo-
ple visiting the Exposition may have an opporple visiting the Exposition may have an oppor-
tunity of tasting the various preparatious made from our Indian corn
Blanc-Mange,--Set on one quart of rich
cream with five ounces of fine white sugar and cream with five ounces of fine white sugar and
$a$ few. drops of extract of vanilla or any other lavoring preferred. Whip it to a stiff froth. in one pint of cold water for half or gelatine simmer on embers until perfectly dissolved, stirring from time to time to prevent the gelatine from sticking to the bottom of the stewpan lowly in, beating it all the time until stiff enough to drop from a spoon, then put it in molds pre-
viously dipped in cold water.
Gratiam Biscett.- Three cupfuls Graham flour, one cupful white flour, one teaspoonful
soda, two of cream of tartar; rub the soda and cream of tartar into the flour, and sift altogether before they are wet; then add one salt spoonful into the prepared tlour quickly and lightly lastly, three cupfuls sweet milk, containing one
tablespoonful of white sugar. Work the dough rapidly, as handling too much in jures the biscuit. The dough should have a rough surface, and the
biscuit be flaky. Roll out lightly, cut into cake about half an inch thick, aud bake in a quick
and a a spoon, scald this.-Take a quart pitcher full of booiling water, cool to the temperature of
food hot dish water stip in for er, as dishwater, stir in flour to make a bat ful of salt and as mnuch soda, cover closely, set Where it will keep quite warm, stirring occa-
sionally; it will rise in five or six hours. Some prefer this to hop or brewers yeast.
LADY Fivgers. - Six eggs, two cups of sugar,
half a cup of butter, half a cup milk, two
spoonfuls baking powder. tered paper drop on batter about the length and size of your finger. When suficiently
baked, remove from the paper, and join the baked, remove from the paper, and join the
smooth sides together with a very little good jelly, or the white of an egg.
Lioht Pudding.--Put two tablespoonfuls of
sage, tapioca or rice in a pie dish, pour over a sage, tapioca or rice in a pie dish, pour over a
pint and a hall of milk; add one and a half
tinl if liked; bake two hours in a slow oven; if rice is used, bake three hours.

To Fry Apples and Pork Chops.-Season the chops with salt and pepper and a little pow-
dered sage or sweet marjoram; dip them into beaten eggs and then into beaten bread crumbs; fry about 20 minutes, or until they are done put them on a hot dish; pour off a part of the gravy into another pan to make gravy to serve which you have sliced about two-thirds of an inch thick, cutting them around the apple so that the core is in the center of each piece.
When they are browned on each side and partly cooked, turn them carefully with a pancake turner, and let them finish cooking
Irish Cabbage. - Chop fine a medium-sized head of cabbage and season with butter, pepper
and salt; add water enough to cook until very and salt; add water enough to cook until very
tender; then when almost dry add a cup of thender; then when and simnner a few minutes longer. For those who prefer cabbage with vinegar, a good way is to use half cream and half vinegar, or for those whio do not have
crcam, use milk and thicken with a little flour.

Home and Farm Apple Pie.-Stew apples解 aste, flavor with lemon; make crust as or tart; bake, and when the pie is cold beat the white of one egg with sugar as for frosting; cover the pie and put in the oven to brown,
frosting slightly; eat cold. We stake our repntation that it will tiekle the palate of all who eat it.
Custard Pie.-One quart of milk, four egge, weetcin to your taste, fiavor with lemon or what-
ver is liked best, line the pie-plate with crust and pour the mixture in, grating a little nut.
ancg out the to

## PAC FIC RURAL extrito ind

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A. T. DEWEY.






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## Saturday, May <br> 1878.

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 THEn STABLE. - Breeding Horses in California No. 3 ,





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 axazexa

## NEW ADVERTISE MENTS <br> 

The Week.
Events are coursing along evenly and finely under clear skies and tempered breezes. Hay-
ing is being pushed vigorously in all parts where the grain las reached the requisite coudition, when it comes. Trade is awake and sharp
traders are reported alboad in the valleys, endeavoring to make a good turn by contracting be $\$ 1.50$ per ctl., but they get but little, most growers preferring to do their own speculating at
least until the grain is sacked. The times are full of chances and uo oue can tell what a week
may bring forth Those who can hold until the grain ripens will prolually not miss it much; at
least they are in condition to profit ly any inleast they are in conch affirirs nay produce. Just
creasel value whict
at this sument leastern dispositions seem to be melting a little and incliuing to conpromise
rather thau to conflict, but the ground apon they stand in oot stable and the war spirit may The last few wceks are notable because of the protitable traffic which our lcorn-growiug sonth-
ern counties have carried on with Mexico. One ern counties have carried on with Mexico. One
Los Ancles firm has shipped six cargoes thence,
znd all farincrs who have held corn from lack seasons because the price has becn low have
found bonanzas in their cribs. It will be well if this trade with Mexico should a waken all our developing the coastiug trade with Mexico and
Central Amerisa.

## United Efforts for Homes.

If our unemployed workingmen would devote one-half the effort in uuiting to secure thempied lands whill but forth in ap lauding men with communistic ideas, the coast would be the better for it. If our large capitalists, tion worth making if it wonld foster the pres ent discords among the workingnen, so that al
their schemes would collapse, would but lay their schemes would collapse, would but lay
dowu half the money to help these landless hey woull gain a surcr aud quicker freedon from the seditions which hazard all their enter prises and endanger all their property. Ther comnunism in this Statc, Which was tele
graphed a few days ago, to the effect that there was little danger of scrious communistic outngmen own their own homes.
Wrought iu a man by the owning a change is Nothing we have ever read in praise of the
wholesome effect upon a manls ainis and ambitions of the possession of a piece of land which is all his own, fron zenith to antipodes, ha derful balance to place upon humau inequali bility of hone ovning. It engenders a feeling of actual oneness with the cause of law and or scnds a flush of independence through the hear and life. It awakeus the nind to thoughts o overnment. It lrings ideas of political and social economy, crude though they may be, di
rect to the brain. It makes hiin as scker fo questions of property and its protection. Nlis rude his life, but when he plants his foot upou the warm surface of his dooryarl, or turns the fertile soil of his farm, he is true on his
tion to it and strong in his hatred of any com
and thunistic fallacy which would endanger his
clain to his own. It is plain that one of the surest ways
to
draw from the ranks of the malcontents, is to bring men under the influence of ownership. yet the saying is worth the while, lecause the proposition is not altogether implracticalle
Sonething is being done each day. Nen ar continually furcing their owa way to the right which present themselves to our mind. One i that they might do this far more generally of
their own effort and accorl. Anotier is that there night be a better cffort made to holp them to it by systcmatic action among those whose
interests demauds sucl action and its influence. lirst, what can landless men do for thenselves? By co-operation, by united effort they
can lo what each, single handed, could, per-
lat haps, never accomplish. By uniting iu the the work of a hundred in secking ont a place
where, perhaps, a hundred families could, by working together, build up a prosperous neigh.
borhood. They might have to nove lundreds borhool. They might have to move hundreds
of miles to find good land to take from the Government. That is nothing; the last yener-
ation moved thousands of niles in the saule pursnit, and were successful. Hardships, ceon. omies and self-denials lie iu the path? Yes but the last, yes, anil many of the present gen-
cration have triumphed over them. The pio
 they sought, just beyond their eastern garden
walls. No; they had गlains to cross, or oceans walls. No; they had plains to cross, or oceans
to navigate. Should their successors, then, expect to pre empt farms or locate mining. claims
on Kearny strect? If the old will to succeed on Kearny strect?' If the old whil to surceeed
still exists in men's minds, what is there that shai heny hems
one-half the effort were madc by have said, one-hal the eflort were matc
to seek out places where they can deess ine
hopes, which is now given to draining their purses, and slouting themselves hoarse in anl herence to demagogyes, the reselt would be ac
complislied. Let them combine their small re sompces. Let them save the dines as many man saved thenn 25, years ago to pay his way to
California. Let them then thus creatc a smallf und which will pay all the expenses of prelimiuary may be found, and then let them make thci way to this pronising land and develop it. It hard. It has been done. It can le done again. men of neeans to sinsure the might be done by men of means to insure the popular safety, by
turning ide misclisef-ready hands to productive, self-supporting home making. The Government
sets the examplo sets he examplo aud does its part. Wealthy
ctizens could nnite and make efforts to make
this Government this Government generosity available to the
poorest men, by aiding then self-sustaining. TVe have just heard of an
Eastern movement to secure this desirable resnlt. An important benevolent enterprise has been inaugurated at Bosten in the formation of a board of aid to land ownership, an object
of which is to colonize worthy laboring-men, who are out of employment, in order that they
may earn a living by tilling the soil. The There will be an advisory board of 200. The association proposes to purchase land in large
tracks, and to soll it in alternate seationa to
colonists at cost, supportingithose who have no
money until they are able to pay for their fields by the labor of their hands. These land
are to be settled under the supervision of compeare to be settled under the supervision of compe in agriculture how to get their living from the
soil, and anti-liquor and gambling laws are to be rigidly enforcel. Tenders of co-opcration have been received from various railread and land companies, and a committee has starten
for the West and South to examine various racts to which their notice has been called Thish is, apparently, a practical cnterprise rege Thus could they transform into responsible now a dan erer to itself aud to the general pros perity. Thus could our holders of surplus
wealth serve themselves and the State. 1 s not wealth serve themselves and the sta
the propositiou worth consideratiou?
An Ornamentrd Orange.-Hor, William orange growth in which the pecnliarity consists in a condition of the epidernis which at first gives the impression that a quarter of a lennon orange. As one looks closer it apprears that the
skin is that of an orange throughout, but one skin is that of an orange throughout, but one nainder is the truc orange hue. We are no which the offect is produced, but we imagin that is done by simply removing a portion the outer covering of the fruit while it is still upon the tree, and that nature sets at work at once to restore another layer of epidermal cells
to replace those that are removel. This seems be perfectly nuch lighter and the effect of the change is striking. The result is analogous to that of the growing of new lightcr colored bark upon the
1ranch of a tree when the old bark is rcnewcd, but not deeply enough to strike the wood and the true analysis of the manner in which the qucer orangc is producell, it opens the way to
produce a fancy dish of oranges, each one dceorated in two colors iu any way the grower fancy may dictate. A grow cr of exceptionally
fine fruit may alvertise liis fruit by cutting the name of his grove upon a few of the orange and these, displayed upou our fruit stands, wil
excite the interest of purchasers as 10 ordinary advertising will do.
Mepford System of Frut Preserving:We learn that the enlistment of interest in the Mencrlsystem of fruit preserving on this coas (ruia Raisin and Fruit company, of whicl Jackson. Sceretary. This Mefford system has some points of value which are not enjoyed ly is evinced by the product which has been
orought forward iu an experimental way. One of the main points in the process is the intro duction of a chemical antiseptic agent which
wholly prevents the discoloration produced by the exposure of ent fruit to the air. As this action of the oxygen in the air is prevented, so
aro other chemical changes which, in our driel fruits, destroy the flavor which the fruit pos.
sesses in its fresh statc. The result is an climination of the water from the fruit without deteriorating effects upon color and flavor, and the specimens of the Mefford fruit and vege-
talles which are shown, exhibit these desirable (1nalities in a marked degree. We suppose that the organization of a conpany with a
working capital may be taken as assurance that the Meftord system is to be reduced to actual practice in this state, and that our frnit grow the results attained with it. We are glad o this, for our orchardists will be found ready to give attention to any well approved claim for
superiority in fruit ises to make profitalle use of their surplus product. We hope that the California liaisin
and Fruit Company will lring forwarl their process freely so that all may unlerstand its clains and the practical results attaiued with
it, and avail themselves of it if their judgment alproves its promises.
Illwess of Dro Lewis, - We learn with deep
concern of the illness of Dr. Dio Lewis. IIe was taken with congestion of the braill and slight paralysis of the sidc (as it is described in the certificate signed by three physicians), jnst as his camping expedition was in starting. The
illness was probably the result of over-excrtion in the promotion of the canping enterprisc, equipped. The camp, as we saw it last Satur day, presentel a picturesque appearance, and with its may a appoint ments, gave oue the im-
pression of extent and conplcteness. The expedition qoes forward with Mr. Hopkins as couductor of the train, and Mr. Ayres as teamstcr.
Professor Leminon supcrintends the seholastic element, research being mainly directed to his
specialty of botany. specialty of botany
On File.-"San Diego," A. F. P;; "Fresno
 Olispo Notes," H. E. H.: "Molstein Bull," Motes," B.
stitutional
tion" G. C. P.; "Brnno' hambra Grange," M. B. L.; "Wheatland Grange

Queqies and Reples.

## A Depraved Member of the Mint Family

##  



Edtors Press:-In the absence of flowers and of a previous acquaintance with the plant
sent by Mr. Carter, I am unahle to identify it farther than to say that it is one of the mint family, with a good deal of the habit of pepper
mint and spearnint iu forming subtcranean mint and spearnint iu forming subtcrranean
cunuers or "rootstocks," from which stens ar runuers or "rootstocks," from which stelns are
sent up at every joint; tlus producing the sent up at every joint; thus producing the
"mat" and rapil spread, as well as tenacity of ife complained of. I hope tlowers will be sent identified
As to its eradication, it is quite improbable
 marle effective. But from the character and length of the stems, I should think that the
same method whicl so effectually does away with Bermuda grass on any light soil, could with Bermula grass on any light soll,
ardly fail of efticacy in this case. Probably he plowing done by Mr. Carter in July las stocks, or too deep to allow of their being fully dricd up during the sunmer; or, perhaps, the ously, and were realy for any amount of drouth.
I shonld advise plowing just prior to bloom.
iny, and just to the depth, and no more, to which he stema rearth which seens to le four or fiv inches. Then harrow thoruuglly so as to pulverize the soil as much as possible, exlosing the
stems to the suu while in full sap. Repeat this, and perhaps also the plowing, as may be need depth of the stems. I do not thing that any cerbaceous member of the mint tannly wil less harily than Bermula in quitch grass. At the same time the land will get a thorough sum-
mer fallow, and will be ready for planting next season, preferably to corn, which can be put in
late comngh to see if any of the weed remains, hate come hestowing the lalor of planting, and at
hefore tif if necessary.-E. W. M111GARD, University of California, Berkcley, Cal.

Disease of Farotid Gland


 heard it for several days. 1 found qnite a swelling of the glands of the neck, ermmencing atout opprsite and be-
lindi the ears, and running down to the whidepipe. The
mule drinks and cats huartily, works frecly, and the
 hard and swollen. Conn you advise me what to do with
Entrors l'riss:-Althonch I will in this case give an answer to the letter you send me. The description is very deficient in important details. The trouble in the mule suelling every day some mercurial ointment, vacuate the mouter a soft point lance it, and o not plunge the knife very deep, to save the land as much as possible. There is no glander in this case.-A. De Tavel, V.. S. S., 811 How ard strect, S .

## Artichokes, Etc.

Emitors Prins:-In answer to one of your uantities of artichokes, tansy and spearmint -John S. Bartruff, Mlodel Garden, Virginia Uity, Montana Territory.

California Wool in New York.-Tele graphic advices from New York speak of the unusually fine quality of this spring's clip of California wool. One dispatch says: The firs lot of new Spring California of any couse by nce sold this week at 20@2bc. Parcels shown here, the staple beiug long and the condition all that could be desirch. Even the Economist has becn compelled to "acknowledge the corn," as will be seen by the following extract from to day's edition:
ucl Thompson, the same housc, have returned from San Fran cisco, and have brought invoices of the new
clip which are exceedingly handsome, being superior to anything which has heretofore been nia will give a good account of hersclf yet in the wool growing business, as she has other
wise. And again: The new clip of Califor nia is now coming forward more frcely, and some of it is in excellent condition. What we sound, of improver bls

Destructive Explosion of Flouring Mills.
The whole country was startled on Friday of last week by the telegraphed announcement that six large flouring mills standing near each other in Minneapolis, Minnesota, had been quickly destroyed by explosion and conflagration. The explosion is described as one of
successive shocks, and the effect therefrom was so great that buildings throughout the city were shaken as if by an earthquake. In a short space of time these mills, aggregating 87 runs of stone, and valued at about $\$ 1,000,000$, were wholly destroyed. Seventeen persons were killed, either by the explosion or by fire. Nearly all buildings in the neighborhood were injured by the shaking, aud the shock and the conflagration were felt and seen for many miles. It was one of the most

There is a feature of peculiar interest in connection with the disaster we have mentioned, and that is the theory of the cause of the ex-
plosion. In many respects it is like the mysterious explosion in a candy factory in New York city a few months ago, in which mauy lives were lost. It was so sudden and violent that nothing short of an explosion must have material which is commonly regarded as explosive, and it enrolls itself as proof of the observsive, and it enrolls itself as proof of the obsentific men, that in the process of flour making there may be produced a conof flour making there may be produced a con-
dition of atmosphere which needs but iguition
to cause ruinous to cause ruinous explosions. Such being the its mere connection with any single disaster but should be understood by all and guarded against by all who have in charge conditio uuder which the effects may be prodnced. Explosions of flouring mills in Scotland and on the continent of Europe have lead to scien-
tific investigation to determine causes which were wholly unseen by the casual A report was made by Profs. Macadam and Rankin, and their conclusions have heen published at length in foreign journals. The Miller gives an outlinie of these conclusions with some simple experiments by which their truth may he tested. We quote as follows: The chemistry of grain and Hour may assist us in arriving at au understanding regarding these fire explosions. The chemical components are principally starch and gluten, with small proportions
of gum, sugar, oil, woody fiber, and ash. The of gum, sugar, oil, woody fiber, and ash. The
starch and woody fiber are composed of carbon, starch and woody fiber are composed of carbon,
hydrogen and oxygen (carbon 6, hylrogeu 10, hydrogen and oxygen (carbon 6, hydrogeu 10,
oxygen 5); so are also the gum, sugar and oil. and the gluten contains these elements, accom and the giuten contains these elements, accompanied by nitrogen, sulphur and phosphorus. ible when burned in ordinary way, and are oonsumed with great rapidity when diffused as a cloud througli the air.
When the flour is showered from a sieve placed some distance above a gas flame, rapid with explosive rapidity, and the flame licks up the flour shower somewhat in the same way that it flashes through a mixture of gas and air, or that it travels along a train of gunpowder. pimilarly, the flour, blown into a cloud by a pair of bellows, at once takes fire, and burns
with a sudden and vivid flash. The smut taken with a sidden and vivid flash. The smut taken
from the grain, during cleansing, and the shorts separated from the flour, burn with equal readiness.
Probably the best way of showing the explosive combustibility of flour particles is to
place some flour iu a box lying inverted on its lid, introduce a light, and blow the flour into a cloud by bellows, when instantly the box is lifted from its lid, and much flame rushes out. The fine division of the flour has necessarily much to do with the rapid combustion; and, indeed, coarse gunpowder can be passed
through a Harae without burning, while iron through a flarne without burning, while iron filings cannot fall th
gases. Thised, the flour resolves itself into gases. The carbon, by uniting with the oxy-
geu of the air, becomes carbonic oxide geu of the air, becomes carbonic oxide, or careome water, vapor or steam. The volume of
these gases is much increased loy their high temperatures at the moment of combustion. The conditions required to bring about a flour explosion are somewhat similar to those which cause a gas explosion. Coal gas is combustible and not explosive when nnmixed with air, and it only bevomes explosive when is mixed with sufficient air to burn it. This proportiou one volume of air. A lesser or larger proportion of air lessens to burn less quickly, and consequently with less explosive force, and thus tending more to ordiIn order to bring about the explosion it is necessary also that the flour-air mixture be confined within a given space; hence, if the
flour be incased in a box with the lid fastened down, and the bellows be brought into play to produce a cloud while a light is introduced, the noise, and the side be split up, while weights noise, and the side be split up, w
placed on the box are thrown off.

The rainfall last month measured 1.06 inches, and the hig

## Harris' Fruit Drier.

We illustrate on this page a fruit drier pat ented some time since through the Mining ano Scientific Press Patent Agency, by Geo. Harris, 33 Second st., this city. The heater is contructed in a novel manner, so that a thin body of water or air is in coutact with the heatin surface, and the fuel can be utilized to the ut-
most, the hot air heing conveyed through the drying chamber in pipes to assist in the drying and the condensed water being ised to repleuish the boiler. The arrangement of the heater with the smallest amount of fuel.
The heater is filled with water, and from it shape, wheu a fire is made in the fireplace, a thin stratum of water will be rapidly heated, and a very visible circulation will take place, so that in a short time the whole body of water will be brought to a boiling point. As the
lieater tank is made of wood, it will retain the heater tank is made of wood, it will retain the
heat with little reduction for a long time, and heat with little reduction for a long time, and the radiation is so small that the heat can
eassly kept up with a small quantity of fuel.
By surrounding the fireplace with ar By surtuna irephe whe heated between it and the water, the air is also water, but is also prevented from being burnt by any amount of heat from the fireplace
kinds of fruit may be dried at the same operation without the flavor of one kind permeatiug
the other. This is accomplished by havin the other. This is accomplished by having
several compartments, in each of which several compartments, in each of which a diferent kind of fruit may be treated. This
makes really a separate drier for each kind of fruit, all in one machine. In some cases it is considered essential to cook the fruit before bles may be placed on the racks and cooked by the steam over the heater, and then be placed on the same racks inside of the drier. It is
claimed that the fruit dried by this process is claimed that the fruit dried by this process is
mach superior to that treated by any other manch superio
Premiums have been awarded to this appara tus at every fair where it has been exhibited, including that of the Mechanics' Institnte in
this city last year. After 10 years use of the this city last year. After 10 years use of the
drier, several persons who have used it say drier, several persons who have used it say
there is no fault which they can find with it whatever. Farmers who have only a small quantity of fruit to dry may prepare it with trouble. The heaters attached to it may be also used, with a slight variation, separate from the drier, for laundry purposes. From 30 to 40 gallons of water may be heated in 20 minutes. to dairy and milkmen, and lave given been sold results. It has also been applied to public private baths. These heaters cost public ant $\$ 75$ according to size and material. The expe


## Harris' patent fruit drier.

This is one of the important features of the ma- rience from purchasers having them long in use chine, because there is never auy danger of is that the saving of fuel alone in from three to buruing and spoiling the substance to be four mouths is sufficient to offset the cost o
dried by too fierce a heat or by ueglect. The air circulates freely and in such as to carry off the moisture from the dryine room with great rapidity through the pipe, which connects with the escape Hue, and it is assisted materially in this by the steam pipes
from the heater tank. The trays being filled with fruit at night a fire is built, and the whole apparatus may be safely left over night without the slightest dauger of ire or of spoling the an
tried, because the combination ren


Alexander's Self-Regulating Windmill. ders it impossible to elevate the temperature of the air much beyond that of the water in the There are open flues on both sides of the drier for the admission of the heated air, and glass doors are provided by which light is admitted to the fruit which is in the process of drying. With grapes, particularly, this is a
most important feature, as it is also with many other kinds of fruit. The trays on which the fruit is to be placed in the compartments, are made of slats, so that the hot air may cireulate freely in every direction and get at the fruit on all sides.
These
prices from $\$ 75$ to $\$ 600$, and several difforont plow,

## Sweepstake Plow Works.

On Friday of last week we took a run to San Leandro, Alameda couuty, to see what the weepstake Plow Company is doing in the home manufacture of agricultural implements. We found the works running a full force of men and turning out work as rapidly as is eonsistent with the high standard of excellence which the institution builds its success upon. Mr. F. A. Hill, who is known as a leader anong the experienced manufacturers and successful inventors of the State, is still at the head of the works and gives his constant attention to all matters of construction and geveral business. Mr. Palmer, who conducts the office branches of the establishment, has his hands well filled with important work, and the wide area which is covered by the shops is resouant with the hum of industry
Especial attention is now being paid to the building of headers. They are manufacturing the Baxter pattern, which has been found very satisfactory in its working. Inıprovements have been introduced and particular effort is made both by designing and by quality of material to turn out a header of unusual strength, solidity and durability. Such qualities will be demanded in machinery to handle this year's crops, and anything short of powerful and effec tive implements will prove a vexation and a loss to the grain grower. The finger beam of the Baxter may be adjustcd to ruu close to the
ground, and it will pick up and elevate all ground, and it will pick up and elevate all
heavy or lodged grain that can possibly be reached. It is fitted with an improved "double single gear;" that is, the sickle and reel are run
by one gear and the draper by another. Thus hy one gear and the draper by another. Thus
the draper may bc stopped while the sickle and reel are still in motion, and the loaded wagon may be driven out and an empty one driven in
without stopping the cuttiug. This arrangein his field to cut all around them, and then start the draper again after the obstruction is passed and the wagon comes into line again.
Fuller information concerning the header may be had from our advertising columns.
Auother leading branch of the company's Work at the present time is the bnilding of
spring wagons. These are being turned out in spring wagons. These are being turned out in a variety of handsome and effective styles.
There are airy and graceful buggies and phextons, and very stroug spring lagons and express wagons. One pattern we noticed was a light business wagon, with springs hung upon
jacks, so that they take up what they leugtheu out, and consequently sustain a heavier load than springs attached in the ordinary way. Another pattern is a light side spring wagon,
put up with patent equalizing rods which hold the body level when unevenly loaded and thus doing away with the tendency to tip sideways as in common side spring wagons. Another
style is a heavy road or mountain buggy, with style is a heavy road or mountain buggy, with
Hill's patent single-leaf spring connected with he equalizing rods. open or covered. Other patierns, improved spring and equalizers enter, are a family wagou and carriage, a heavy express wagon, a three-spriug long-panel bed wagon, with or without top. All these styles and varieties the best imported material, and while they do not compete in price with Eastern made wagons, they are put forward as mnch more durable because of the extra care in their construction and
the more satisfactory conditions for durability the more satisfactory conditions
The fine plows of Mr. Hill's designing are still selling in large numbers, although this is not strictly the plowing season. The Gillis hade favorable mention, is one of the specialties of the company. It is being widely introduced and is giving great satisfaction as a simle and cheap motor for raising water for irrigation and stock purposes.
We also were much interested in an iron wagon, the runuing gear being of Mr. Hill's iuvention, and the wheel of the Duval patent. It has a two-inch axle and is lighter than a woodeu wagon of the same capacity. It is built on the truss principle throughout and this
brings the weight of the load upon shoulders near the hubs, and not upon the central parts near the habs, and nooten wagous. It has other points of strength aud advantage which appear ulon inspection, but whiell we have not space ing piece of mechanism and is becing pat to the test of actual work, with good show of success. Mr. Jacob Price, of the Price Press Company,
is putting up a new lot of his well-known hay presses, to meet the increased denand for this class of machinery in view of the heavy hay crop. The Sweepstake Complany are also
making for him an extra large excavator, for making for him an extra large excavator, for ase on a 30 .foot caual in Arizona. It is to have day, with one man to manare it.
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For Cotswold Sheep and Berkshire Pigs
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Breder and Impyrter of the "Crown Prince,"
"Sambo," and "Bob Lee" fanilies of berkshires, Also, pure' Suffolk hogs and pigs. Short Horn and
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\$25 EVERY DAY Ig warranted usig JiLz
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through earth, sand or rock, Pictorial auger book free.
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Pacific states.

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I offer for sale a lot of choice Spring Pigs, farrowed February 22d and March 1st, ready to sliip ahout February 22d and Ma
middle of May. Also,
Three Fine Young Boars,
Seven to Eight Months' Old.
FOUR BOARS AND FIVE SOWS,

Four and a Half Months' Old.

Can furnish pairs not related of the younger pigs. Stock well boxed in light strong crates, with feed for Journey, and delivered at Car or Boat, in S.ockton, free
of charge. Prices reasonable and satisfaction suaranteed. of charge. Prices reasolnable and satissiction suaranteed.
N. B. -No poor, untllirity pizs ever leavo my pen. Address

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THOROUGHBRED SPANISH MERINO SHEEP! 200 Extra Rams
For sale. Yearling and tworever
olds In size quality nud condition
 Midsurpassed Also, 100 ewes at
Hrisures to suit the times The nu-
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THOROUGHBRED BULLS.
Ten head of Red Durhams from 12 to 15 month old, Also, 12 heal of large work Lorses and mares will be sold this spring at private sale on my ranch, six milos from Oroville, Butte County.
ase Bulls Sired by Golden Louan Duke.
M. WICK.
W. \& J. ROBINSON,

Hanford, Tulare County, Californta. THOROUGHBRED BERERKSHIRE SWINE, Pure Brown Leghorn Fowls $\frac{\text { Birds and mge for sale }}{\text { Calvert's Carbolic }}$ SHEEP WASH, \$2 Per Gallon.
After dipping the slieep, Is usco
ful for preserving wet lides, de-
stroying the vine pest, and for
wheat dressings and dind



Patents and ofnentions.

## List of U. S. Patents Issued to Pacific Coast Inventors.

 By Special Dispatch from Washington, D. C. Week Ending, April 23 th Machines for Drives Slimes, - James W.
Dillon, of Virginia City, Nevada. Car Trecks.- Vinoch J. Marsters, of Stockton,
and Robert A. Fisher, of Sacramento, Cal. Desticis. abinet Jewelky,-William A. L. Miller, Trade-Mlaks

## Coben. 1 Ilxt Joses Calt

 Franeisco, Cal: Lanzls.

## 

## That Paint of Ours.

Editors Press:- Your spicy article, written under the inspiring Tufluences of new carpets
and Averill paint, inspires a few thoughts in and Averill paint, inspires a few thoughts in godliness." So says the good book, and 1 fully believe in the statement. A man's surroundings governs his every thought and many of his aets.
The pure and the beautifal is elevating. Filth is depressing, anl. iuluees a state of mind antagonistic to the ereation of high thoaghts or
nomble deels. We eungratulate you on your alterell cundition, showiug that you are lilessed
with wide-awake goveruors; may the e-fitorials with wide-awake goveruors; may the e-htorials
prove the eirtue of paint and crystal skylights.
No excuse now for dingy dishes being served up to the many readers of the Rran. 1 ,

 Not like many patent pustrnnns, it requires
ouly to be usel and scen to bring it into favor. Mt. Plcasant, Tuolumne

The Youths' Directory.
This institution is located at 1417 Howard
it., and is maintained by the citizens of San St., and is maintrined by the citizens of san
Francisco as a frec home and in telligence bureau for friendless boys seeking work. No charges
are made to enyloyer or employee. Its mana-
gers are Jas. gers are Jas. R. Kelly, 'res't, 'instave Tour-
chard, Trens., liichari, Tolin. leter H. Bur
net, lichael J, Ow nett, Michael J. OConnor, Heury Parroilhet,
John Sulivan, C. D. Osullivan, Jos. A. Donahue, and A. P. Dietz, sup't. We copy the fol-
lowing from the third annual report of the Superintendent, dated $s$. F., Jan. 1st, 187 s ,
Ten thousand three humlrel and sixty five boys, aged from 10 to 21 , of all races and creeds, have becup paced in service-that is to say,
4,130 in town and 6,233 in the country, sined
Nov. Ist, IS7t, when you and other citizeus of Nan Franciseo, organized the louths' Ditectory. and 731 young girls, have incidentally been of 11,935 persons who have obtained einployment through the ageney of this burezu. From
factories, shops, stores, farms, and other plaees factories, shops, stores, farms, and other places
of industry throughout the state, we often hear of letters conmendidatory of the youthful toiler
gent out from this officc. Lieturns for the year 1877: Income-liegular snlbseriptions,
100.30; donatious, $\$ 315.95$; total, $\$ 1,419$.
Expend \$9fio; collectors commassion, \$141,90; bills settled, si20.9n: cash in hauds of Treasurer
$\$ 21 ; .40 ;$ total $\$ 1,419.25$. Number of lads all sorts and couditions, provided with work in
town, $1, \mathrm{~S} .50 ;$ in comintry, $2,2-\mathrm{S} ;$; total, $4,12 \mathrm{~S} ;$ heds furnishcll, 2,$433 ;$ meals servel, $\overline{5}, 594$ $18-\overline{7}, 20 ;$ a pplicients for relicf, dismissel with

## Woodward's Gardens were never mure attract ive than at at Irceint. $A$ fine lion and two lionicssers,



## Farmers 1 Farmers 1

Throughout California are requested to send Labor lixchange," 33 aull 35 O'Farrell Street an Franeisco. All handa carefully selected fre of charges to enployers and cmploy ees.

SEE advertisement for furnished house in
he country. the country.
S. F. MARKET Report.



Weekly Market Review
DOMESTIC PRODUCE. ETC Francisco, May Sth, 18 /s. General trade is unchanged. In spccial products there are some

Range of Cable Prices of Wheat The course of the Liverpool ynotation for
Wheat to the Produce Exchange during the Wheat to the Produce Exchange during the
days of last wcek has beeu as recorded in the days of last wce
following table:

large lots. In Miehigan fleeces, sales were
made of 120,000 ths at $37 \frac{1}{2} e$, but mostly of good,
 was doing in Oregou Wool, sales embracing
173, ,000 ths at 23@ 30 for Easteru and Valley.
Best Best Texas Wool cannot be quoted at over ${ }^{25(\text { en (en }}$
2ec. Combing and delaiue Wool is dull at 37 26c. Combing and California Wool were noder ate, comprising $24 ., 000 \mathrm{lts}$ for the week, at 20
O20 for Spring, $16 @ 19 \mathrm{c}$ for Fall. In pulled Wools there was fair business; sales of 166,000
1 ths at $20 @ 45 \mathrm{c}$. principally at $33 @ 40 \mathrm{c} ; 80 \mathrm{some}$ small lots of choice marine and Eastern super
sold at $42 \frac{1}{2} @ 45 \mathrm{c}$. The total sales of domestic for the week were $1,095,200$ ths. presents no features that are new or interesting The staple has become a hard article to dispose of, and although the supply of all kinds is lim-
ited, it is to be feared that lower ranges of valncs will range wheu several clips are brought forward that deter both mauufacturers and
speculators from operating. The Texas clip is slow to come forward. Owing to the extrem prices it is expected that the clip of the whole une about the same time, consequently a cau tious feeling pervades the buying community
The sales for the week include 150 bales Montevideo, at about $31 \mathrm{c} ; 90.000 \mathrm{tbs}$ Spring Cali
fornia, $20 @ 26 \mathrm{c} ; 20,000 \mathrm{tbs}$ fall do, $15(a 16 \mathrm{c}$ 105,000 Ths Colorado, $15 @ 1 \mathrm{c} ; 6,700$ ths West Ohio, 35@40c; 3,000 ths unwashed do, 26c; 11, mestic Noils, 18@33c

## Domestic Produce.

## The following table shows the S. F. receipt noon to day, as compared with the receipts of

| Articles. | $\begin{aligned} & \text { Wegk. } \\ & \text { April } 1 \% . \end{aligned}$ | $\begin{aligned} & \text { WeEk. } \\ & \text { April } 24 . \end{aligned}$ | $\begin{aligned} & \text { Werh. } \\ & \text { Slay } 1 . \end{aligned}$ | Wrкк. Nay 8. |
| :---: | :---: | :---: | :---: | :---: |
| Flour, quarter sac | 67,010 | 31,101 | 35,136 |  |
| Wheat, centals. | 109,522 | 22s,710 | 36,153 | 1, |
| Barlcy, centals | 14,235 | 10,241 | 10,687 | 9,0 |
| Beans, sacks. | 843 | 1.862 | 2,158 |  |
| Corn, centals. | 3,352 | 4,000 | $2, \infty 0$ | 0,5 |
| Oats, ecritale. | 9,912 | 86 | 2,924 |  |
| Potatoes, saeks | 12,667 | 6,239 | 10,414 | 0,6 |
| Onions, sacks | 1,033 | 718 | 876 |  |
| Wioul, lazes. | 4,528 | 4,373 | 6,6il 6 | 6,5 |
|  | 1,545 | 1,370 | 1,726 |  |

## and sales larg

BAliLEY-There is apparently an effort $t$ crowd down prices in view of a large erop a
hand, but holders do not concede the point Prices are very much the same as last week. We note sales: 240 sks poor Feed, $92 \frac{1}{2} \mathrm{c}$; 100
sks lay Feed, $\$ 1.00 ; 2,300$ sks cominon Brew ing, \$1.15. Some Brewing is sold up to $\$ 1.35$

13HANS-Last week's advance is firmly held COLN - The brisk Mexiean demand is note in items elsewhere, co-day, owing to the en there is less disposition to buy, and reports of slight reactiou in priccs. $\$ 1.50$ yer ctl has been
freely paid in the southern counties. Sales 130 sks large Ycllow, at $\$ 2.02 \frac{1}{2} ; 50 \mathrm{do}$, at $\$ 2$ and $\because 00$
cental.
DAIRI PROINUCE-The Fairy market is overstoeked, aud prices are nominal for butter
Dealers say they are receiving much more than they can sell, and are packing it at a low figure LGe iS-Eg reduced.
dozen during the week
FEED-Bran and Nliddlings are a little FRUUTT-liuling prianged.
in our
HOl's-There is absolutely nothing nev either here or at the East.
UATS-Uats are quiet and sales within runcr range
ONIONS Union City Onions are
lower per ctl. Oregon are nuchanged.
I'OAATOFS-Old and now l'otatoe POTATOFS-Old and now Potatoes ar gencrally lower than last week and there $i$ receipts. $\quad$ IOULTR AND GAME-Hens are a dol ar better on the dozen. Other Poultry is Inchanged. ant and cloice grades a little lower. Mutto is low and very abundant. Pork, dairy fed, is arriving in exccss of demand and lower. Sof
Pork is almost unsalable. Cured Meats ar moderately active and prices rule very low.
VidiETABLES-Our list below shows cheapening of alnost all kinds of cardeu stuff Wh1HAT - alhe market still hardcu stum eign events and little is doing. We note sales 3,000 centals choice Club at $\$ 2.10$ aud 6,000 do at $\$ 2.12 \frac{1}{2}$ per ctl for shipment.
WOOL-Dealers report the outside price for
choicc lots 1 ct . lower than last week. W choicc lots 1 ct . lower than last we
uote sales of $150,000 \mathrm{tbs}$ at $15(a 23 \mathrm{cts}$.

Gold, Legal Tenders, Exchange, Etc.
Eastern Wool Markets.
Bostos, May 4th.-Wool is in fair demand, but prices remaiu low aud without improve-
ment. Holders are still anxions to elose up old stocks, lut the low prices cause less pressure to the past weck include 143,000 liss at $38 @ 40 \mathrm{c}$, that can be obtained for the best lots of $\mathbf{X} \mathbf{X}$ in


FRUITS AND VEGETABLES.


RETAIL GROCERIES, ETC.


Signal Service Meteorological Report. Week Ending May 7, 1878






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My long experience and connection with the California My long experience and comnection with the California
labor market, and its lahor exchanges (for over ten years, has given ine an estahlished reputation for the right se lection of suitable employees.
Plcase send orders, with full particulars, to my new
wit employment arellcy, 627 Sacramento Street, P. O. Box,
No. 1468 , San Francisco.
A. ZEEHANDELAAR.
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| give him a chance. <br> A strong youth, 18 years old, wants to go on a raneh where he can learn to be a farmer and be trcated as one of the family. Address GILibert Wilson, rural Press office. Prase orce |  |
| :---: | :---: |
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Most Durable and Powerful of SELF-regulating mills.

Has Given Perfect Satisfaction Under Severe Tests.

Six-Foot Mill.
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cations for frames. Frames, Tanks, Pumps, Fipe, etc, supplicd at
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stops, $\$ 72.50$ church Orrans is stops, $\$ 72.50$ Charch Organs, 16 stops, cost $\$ 390$, 10 .legant $\$ 375$ Mliror top Organs, finly
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cutting, where grain is lodged or trinkles down. Price \$40. Also, Grain Belts, Hoader Sticks, etc. Manufactured
for
Ean Francisco and Sacramento, Sole Arcents, Pacific Coast

## MATTESON \& WILLIAMSON'S

 have been is thoroughly made by practical men who n the construction of Gang Plows. It is quickly adjusted. cradle knolls witliout changling the working position of the govern the action of; he Plow correctly. It has various points of supcriority, and can be relied upon as the bestand most desirable Gang Plow in the world. Send for MATTESON \& WILLIAMSON, STOCKTON, CAL.


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WALTER PATENT FRUIT DRIER AND PRESERVER,
An invention that we confidently helieve is destined to work an entire revolution in the Fruit Trade of the Pacific statcs. This Drier is the result of carcful research and ex
periment, and its production is a machine that accomplishes all that the most enthusiastic fruit-raiser cound desire. It not only dries the fruit more cheaply and rapidly than
any dricr in usc, butt it drics and preserves the fruit with all its richness and favor unimpaired. It is the only dricr in the world that can Produce Raisins Hqual to the Sun Dried Fruit of Europe
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narket to save all the fruit whicl otherwise night be left to decay and lost. hose extremes. It will also dry all kinds of fish, grain, vegetables, etc. The price of the dryer is low, say from $\$ 350$ to sion, according to the capicity, which ranges fron Front Street, and see the priractical workinger of the best Frnit Drier i.1 the world. OFFICE, 419 CALIFORNIA STREET, SAN FRANCISCO.

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ever they lave been sold ever they lave been sold
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them out) they are doing
their work puir work as well as when
put up. A careful perusal of our Circulars gives a fai
representatiou of them and


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Commend it to the attention of all who use a Rifle, either for Hunting, Defense, or Target Shooting.
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Round barrels, plain and set, 24 inch- - Hued. Octagoin barrel, plain, 24 inch-huved. Octagon barrel, sst
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Comes the nearest to being actually Fire Proof of any Paint ever madc. For Tin Roofs it has no equal, it being entirely impervions to air or monisture-rust or corrosion is inpossible, while its use on shingle
roofs not ouly fills nup the eracks and prevents the shingles from warpiug, zo as to preserve the roof and roots not ouly nins np thin cracks and prevente the shingles from warpug, a as to preserve the roof and
prevent its leaking, but its fire prof fualities are such, that a roof thoroughy coated with it is nearly
 are desired.
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 are in mintinn, cuabling a chauge of Hewler Whzon without stopling the sickle. As soon as the empty wagon drives
under the Flevator, the braper is set in motinn lyy pulliug a rod. It also enables farners to cut elose around timber and stumps; thereby snving a great deal of grail and time.
Remember that San Leandro is ensy of accesa to sul

Remember that San Leandro is easy of access to san Francisco, less than an hour hy hont and rail; on the line of
the Overlaud Railroad to Sacramente. Trains running all times of day. 13oat lenves Nurket sireet-Call nver and
 SWEEPSTAKE PLOW COMPANY, San Leandro, Cal.
FARMEES, EEAD


IEIE FOI工OWING:


[^23]Volume XV.]
SAN FRANCISCO, SATURDAY, MAY 18,1878
Number 20.

The Eucalyptus as a Honey-Producing

## Tree.

Our engraving on this page shows the leaves, twigs, blossoms and seed capsules of the Eucalyptus globulus or Australian blue gum. Therc may be seen the two styles of foliage, the wide
opposite leaves which come earliest in the growth of the tree and the long, narrow and pointed alternate leaves which appear afterward. There is also shown the bcautiful blossoms with its myriad anthers. About the cen
ter of the engraving is the seed capsule, one half cut away, so that its internal structure appcars, and lower down is one of the capsules turned toward the eye so that one can look into
its capacious cup. All these points are of inits capacious cup. All these points are of interest, because our Eastern readers who have never secn the trce which they read so much about, may gain a good idea of some of its
parts. In this State where the general appearparts. In this state where the general appearing will have a special interest, because it is made to represent the points which
We are the chted to a producer
Press, who signs himself "U. K. Lyptus," for an interesting statement of the adaptations of the tree to the apiarian, and that which follows is from his pen:
For all this climate is unsurpassel, the Heaven's sometimes, as last year, fail to supply
copious rains to insure a sufficient and lasting copious rains to insure a sufficient and lasting
crop of honey-producing plants. In the great honcy-producing connties of this State forest trees from which honey is obtained are wanting. In the Eastern and TVestern States many of
the trees growing in the forest and by the waythe trees growing in the forest and by the way-
side yield an excellent grade of honey. On this side yield an excellent grade of honey. On this
coast, and especially in California where trecs coast, and especially in California where trecs
make such rapid growth, how easy it wonld be for the apiarian to set out an artificial forest of honey-producing trees.
What will be the best tree to plant that will make a rapid growth, be useful for fuel and
building, and above all yield the most honey in building, and above all yield the most honey in
our dry climate? We know of many trees that our dry climate? We know of many trees that
furnish nectar, none of which sncceed so well furnish ncctar, none of which succed so well
in our State as the eucalyptus family. To give the history and culture of this class of trees in these columns would be unnecessary, for the
pages of the Rural for years back go over that ground sufficicntly. The sulject of the eucalyptus as a hon
The differen
such times when varieties of the gum bloom a out of season, and the more so during a dry year when the crop of honey-bearing annuals is cut off. The Eucalyptus globulus commenves to continues to do so for about five months. During that time the bees seem almost to swarm upon it. It is perfectly astonishing to hear the industrious insects in the very middle of winter merrily humming their gentle tune at a dizzy gum tree. There can be seen the beautiful yel-w-banded Italian and the dusky black, also bumble bee, with also a yellow jacket, each and all peaccfully drinking out of the same cup,
Did any one ever see such warlike "creatures" of different "castes" gatherel together so socially for the one purpose? What other plant or tree could be set out that would offer such
friendly shelter and "commercial" inducements friendly shelter and "commercial" inducements "pastures new and fresh" in this tree, but ants and butterflies participate in the grand opcis-air
banquet. Birds also find an agreeable shelter in the pendant branches of the tree. We would be their lot; but, as we lave learned from a friend in Los Angeles, the little humming bird will not venture near a tree while in bloom, for tribe on or about it. Woe to the bird that will branches. A dozen, nay, a hundred well-poi soned darts will at once be dispatched to slay plenty bees when at work are not so apt to molest birds when sceking shelter in the foliage f this tree
cred
or more commonly called ras or ciminatis, in Italy." He also mentions the peculiarities o
blooms. This
the honey as given above. blooms from the middle of Augnst to about the Australia furnishes the best illustration of th second or third week of December. It is un- great productiveness of the gum as a honey
donbtedly the most important of the lot, for it donbtedly the most important of the lot, for it
comes in at a time when other flowers are scarcc,
islands thee. In that country and adjacent if not disappeared altogether. The bee finds They constitute $99 \%$ of the forest vegetation. from starvation. The tree is of rapid growth; importcd, which have multiplied rapidly, take Howers small and numerous. Another variety of eucalypti of the iron bark
branches of the trees and gather large quanti
ties of delicious year, is sought after by the honey bee. It A swarm never dies there for the want of pro blooms in June and a second time near the end visions; there is an unlimited supply alway of December. A fourth variety blooms from ready to be collected.
July to September, and November to January; $\left\lvert\, \begin{gathered}\text { We know of no tree that yields nectar in } \\ \text { lut as the tree is slow in making any headway }\end{gathered}\right.$
greater guantities. Hives that were most

an opportunity to be busy, rain or shine.
A very interesting incident illustrative of the A very interesting incident illustrative of the noticed by us. Prior to the time of the blooming of the gums, under and around the dwelling congregated under everything Fints. The in side of the house was infested with this' trouble some pest. Just then the E. rostrata opened its Howers, and when this tree was found by the little ants to be in bloom they deserted the house and everything ahout it and transported themselves to the base of the various red gum trees about the place. There they took up their harbor in the cracks in the ground. From that the side of each tree in Hower. Ants were climb the side of each tree in flower. Ants were climb-
ing up unloaded, while, going in the opposite irection, they ware coming down weighted with nectar taken from the greatest honey chal ice known among the bee-flora
In addition to the honey yield of the blos a wind break ; it will furnish him fuel and lum ber for hives, stands, boxes and buildings. The dried leaves furnish excellent fumes to the moker
We have satisfied onrselves that the eucalyp tus is indispensable around an apiary, and we
hope others will investigate the matter to their own satisfaction
A New Yariety of Potaro.-We have ex amined with pleasure a specimen of a variety of potato which has been produced on this coast Vright, of Reno, Nevada, and is called "Wright's Centennial." The samples were sent us by Messrs. Strong \& Co., whose ad Vright produced this potato by crossing the Early (roodrich with an Early Blue potato from Oregon, the name of which Mr. Wright does spots, in some samples the white predominates but as a rule they are mainly blue. They average very large and uniform in size. They are
10 days earlier than the Early Iose, as Mr. Wright has grown them, and he assures us that he gets a yield one-third greater. In cooking
qualities they are noticeably good, bcing dry qualities they are noticeably good, liought out in 1875 and has taken the highest premiums for From what we see and what we hear from those who have grown the "Centennial" we expect our list of good kinds.

California Militaix Acadeny.-We have received a copy of the programme of the amnua nation of the California Military Academy (Rev. David McClure, Ph. D., Principal), at day, May 17th, 18th, 20 th and 21 st. The proreaching in their scope, and should be attended hy all friends and patrons of the institution. On Tuesday afternoon, May 21 st, will occur the graduating exercises, at which four young men
will receive diplomas. The next term will open will receive diplomas. The next term will open
July 17 th. This will be the begimning of the 15 th year of an institution, which stands very high in public regard for the good educational work which it is doing.

Montana Fair.- We have received a ncat pamphlet containing the premium list, etc., of the Mincral and Mechanical Association, which will be held at Melena, begimming Monday, scp tember 23d, and continue six days. The officers of the association are: Presiclent, W. A.
Chessman; Vire-President, s. II. Crounse; Chessman; Viec-President, S. 11. Cronnsc, Treasurer, 'T. H. Klemschmidt; , Secretary, Chessman, S. C. Ashby, I.. G. Prcuitt, T. H. Kleinschmidt, Timothy Nilcox, A. N. Niran son, S. H. Crounsc, rrancis opc. The premithe fair will doubtless be a successful one.

Mre, L. Sanulas, publisher of the West Shore, at Portland, Oregon, lately spent several days in San Francisco in the interest of his cuterprising illustrated monthly. He intends soon
to issue it weekly.

## Gorrespondence.

San Luis Obisp0 County Notes.-No. 3 .
Edrtons Press :-Every onc has heard of the great Stecle ranch of 45,000 acres, owned by
Steele Bros, the same who own that fiue body of 15,000 acres at Pcseadero, San Nateo county, and the fanous Knights valley raneh of 7,000 , Napa county. It was our pleasant fortune to spend a few days in the enjoyment of the genial
hospitality of the resident proprietor, Hon. fieorge Steelc. His place is situated about five miles from town, the way leading thither over
a good gravel road traversing a rolling section, sowed to grain or remaining in its original wild sowed to grain or remaining in its original wila
pasture state. The dwelling honse, which is large and comfortable, stands a quarter of a
mile west from the road, on a slight eminenee near a handsome grove of live oak trees. Se-
hind the honse is a ridge of high hills, wcthind the hoise is a ridge of high hils, wcst-
ward. The vicw, looking over the valley of
the Corral de Piedra to the Santa Lucia range beyond, is a lovely one; on the summit at one
point are shagey pines reared against the sky, and along the line a few scattered oaks. Hun-
ning through the valley is the Corral de Piedra ning through the valley is the Corral de liedra
creek, bordered iu places with tall syeamores.
and here and therc on the hillside a willow. and here and
shaded spring.
On the morning of our arrival there was all
the bnstle and stir incident to dairy life the bnstle and stir incilent to dairy life on a
great ranch: vaqueros galloping up to reeeive
orders nud away again, dispatched on various orders and away again, dispathed on various
missions ; carpenters cngaged in luailding, and
laboress on all sides bnsy iu plowing and seedlaborers on all sidcs bnsy iu plowing and seed-
ing, and away in all directions ranchmen might be seen similarly occupied, the extremely wo
spell having put everyone behindhand wit spell laving put everyone bechindhand with
work; and the mischicf wronght by the wire
worm necessitating reseeding in some instanees. worm necessitating reseeding in some instanees.
On the southern slope of the hill is a fine
orchard of temperate clinate fruits, and a row orchard of temperate ccimate fruits, and a row
of the Diospyros Kacki recently set, all of which
are doing well. Back of the dwelling is a large of the Diospyros hack recently set, all of which
are doing well. Back of the dwelling is a large
house occupied by the ranclimien, and lack of this numerous other buildings, barns, sheds, pigpens, a slauchter-house, etc. Near the
house a neat office is built with a storeroom attached, and here Mr. Mason, rauch Superin-
tendent and book-keeper, cxereises a despotie tendent and book-keperer, cxereises a despotie
sway through his satelties, facts and figures.
s. Many of the vaqueros employed speak wretehed
English, or none at all. A residence of several years in M1Nexico has marle Mr. Mason thorongh-
ly familiar with the languare, and when a slow comprehension requires an energetic logieal
demonstration in the setting forth of premises demonstration in the setting forth of premises
and enforeing conclusions he is fonnd cqual to the oceasion. A long experience on the raneh
and a life spent in varied pursuits has given and a life spent in varied pursuits has given
him a large experience, for which he find sibundant requircment in the discharge of his multi-
farious duties arious duties.
The office is and furnished with a secretary, book-raek, desk, safe, chairs and an organ. Huge vol-
umes, day-books, journals and ledgers are piled
up, ranged in rows, the, ranged in rows, or stowed away in the safe. kept with great ninutroncss, Mr. E. W. Steele
is a proficicnt in book-keeping, lending his assistan
raneh.
ranch.
Mr. Geo. Steelo is one of those gentlemanly
unassuming men whom it is a pleasnrct to tinow. unassuming men whom it is a pleasurc to know;
a keen observer, schooled in practical life, and
skilled in human uature skilled in human uature, his sraypathiese leau-
ing toward humanity, he is a valuable friend and a sagacious counselor.
Beef cattlc, sheep
Beef cattlc, sheep and swine are daily slaugh-
tered ou the ranch to supply Fulton market in tered ou the ranch to supply Fulton market in
San Luis, owned and managed by Steele Bros. Some 400 head of horned cattle are killed and
sold through the market yearly, besides 500 sold through the market yearly, besices soo
head sold to outside parties, making 900 head,
all of which are raised on all of which are raised on the ranch. Peside this there are numbers
About 1,000 heall of hogs are annually fattcd
and killed, the hams, bacon and shoutders and killed, the hams, bacon and shoulders
mmoked and shipped to san Fraucisco. The
hogs are fatted on mast, hogs are fatted on mast, in barley stubble, and
lest on steamed barley. A large home-made apparatus, cousisting of. a large upright wooden
apor, with boiler underneath, is nised for steam. ing; 3,000 pounds are steamed at a time. steanSixtecn hundred cows are kept on the ranch
nsually, but nearly soo of the best ones were
driven uorth to the Kigights valley rauel last driven north to the Knights valley rauch last
year, and will not be retnrned until fall.
On the ranel are 11 Durham bulls, purchased On the raneh are 11 Durham bulls, purchased
from John Boggs and others, and one black and from John Boggs and others, and one black and
whitc Jersey, Also one thoroughbred I Iurham
cow. Sixteen hundred grade sheep pretty well cow sixten hundred grade sheep pretty well
bred up (spanish Merino, and I, 200 head of
common shep, conprise the uumber at present
kept. Your thousand were bought last pear kept. Four thousand were bounght last year at
10 cents to 15 cents apiecc, 3,000 of which were boiled up with qrain for hog feed, the pelts
paying the outlay. paying the outlay.
Onc hundred he
Onc hundred head of horses are kept for sad
dle aud harucss, and 40 broncos. die aud harucss, and 40 broncos.
Eighty men are employed on the ranch, be-
sides an additional force in harvest. sides an additional force en harvest. The raneh was parchased by steele Bros. in
the elater part of 164 , and consists of three
traets. It lies in an irregular shape, and is
$\left\lvert\, \begin{aligned} & \text { some } 20 \text { miles in length with an average of } 3 \frac{1}{2} \\ & \text { in width, having an area of } 70 \text { square miles, }\end{aligned}\right.$ The northern1 part of the ranch is known as the
Corral do liedra (eorral of stone), and contained Corral do Piedra (eorral of stone), and containe
originally $: 30,911$ acres, the greater part of originally $: 30,911$ acres, the greater part of
which is ineluded in their purchase. The southeasteru part is (litle ranch), containing 4,437 aeres. The southwestern portion of the ranch is kinown as
the Balsa de Chemisal (pocket of timber) which contains 14,33.5 acres This portion borders on
the oeean, and cousists of rich sand gravelly the oeean, and cousists of rieh sand gravelly claimed, and of the richest deseription. A portion of the rich Oso Flaco district, near the these gentlemen, and the whole foot up to 45 , these genticmen, of this, 12,500 acres have been sold off, leaving a balanee of 32,500 acres nusold.
The remainder is suldividel into tracts of from 50 ares upwards, and is offcred for sale on easy terms at from sj to sia per acre, terms, $20 \%$
purchase price down and the halance in ten $y$ cars with interest at 10 per annum.
The ranch is magnificeutly watcred by fine
streams and never-failing springs, and is well timhercd iu all parts by sycamore, cottonwood, wil
low and oak. No part of the ranch is more than one half mile distant fron runniug water in any
season of the year. The ranch is subdivided iu such a way that each tract shall contain an househotd purposes; the surrcy having leen ruu so the limes iucluce some of each of the three
grades into which land is dividel. First grade able for the proluction of wegetalles onde, suit for dairy cows. The second grade is foothills, not to be excelled as grain land or foraging.
The third is of the higher or rougher land, covered sparsely with sage brush and chemisal -and affording some feed. The value of this gradic
eanuot be detcrmiued at present. Wile appre
hend that when burr clover and alfierilla seed hend that when burr clover and alfikerilla seed
is sold eleaply, that this class will be enltirated, secded and made as valuable for grazing
purposes as other laud. On Ciovernment land purposes as other laud. On (iovernment land
we have scen this laud cleared and nuder a fine erop of growing grain, and see no reason why
clocrer and alfilerilla shonld not do equally as Not to occupy too much space we will briefly
record the facts cleancd, and the results of our ohservation on the various portions of this ranch. The western part of the Corral de liedra joins
the Yismo ranch, and is leeter adapted for dairying than for extensive farming, It is well
watered and with plenty of timber for fuel. Much of the soil is adobe, the balance a gravelly loam prodncing largely when cropped. On this por
tion is the asphaltum leds, owned by the 'lacific Asphaltum Company of San Franciseo. W paratory to refining at that works ou the prop.
erty of H. M. Newell, who purehased it of Steele Bros. The asphaltum crops out a black and
stieky exeresence on the surface of the rocks Through the
nns a valley ender of the Corral de Piedra in a southerly directiou, intcrsecting the valley loan, streaked with adobe in places, and excedingly fertile, producing wheat at from 40 to that figure. In the center of this valley is a
little place called Steelton, consisting of several dwelling houses, two hotels, and a black-
sinith shop. A smith shop. A quarter of a mile distance is
the residence of E . W. Stcele, built of cou-
Dairy No. 4 is located just below this place, day, averaging 6 p pounds apieee. A Portuguese,
Frank Jose, makcs the checsc here conmene ing January lst with 40 cows and two cheese per day. 30 chalves, have sold 1200 eheese and
feeding 30
have 200 on hand. Those sold conninanded 20 cents per pound. The nsual number of cheese
annually made at this dairy is from 1,500 to 1,600 ; cheese is made the ycar aronnd. In
making the milk is hented up to 86 , the rennet addin, after which it is gradually heated up to
$T^{\circ}$, the process occupviny four four half he process occupying fonr, four and one putting under the press. Two pounds of salt weather the cheese makecs in thrce hours. The
caws run over a large range, and to prolong the cows run over a large range, and to prolong the
season $2 . \overline{7}$ aercs of corn is raised, five acres of pumpkins, and three acres of beets. Earch
cheeve is branded "Steele Bros., S. $I$. Dairy." Piedra ranch is dairy lart of the Corraler, thrce, or the Lawson dairy, rentel by a dairyman of that
naine, who las bcen with Stcele Bros, for 20 hundred and fifty cows are usually nitked in
his dairy, theng the this dairy, though lthe number will fall much
short of that this season. They had not commenced cheesemaking at the time of our visit.
About two miles southeast of dairy four is the Finney dairy, or dairy number two in charge of Henry Bosse, checsemaker, turn ing out March sth, 12 cheese per day, avera-
ging 23 pounds apiecc. They were milking 110
cows out of 13.5 . the this rant
this maki
3i, man 3d, makiug three cheese per day; usually run
to July 15th; 'have sold 200 cheesc up to date, and have 300 in the curing roonl. Are
making in two vats holding respectively 300 mand 1 go gallons. The euring roonn is furnishled
aith a stove and the
with with astove, and the temperature is kelp up to
$10^{\circ}$ and $75^{\circ}$ at this season. Iu warn weather,

## June up to $106^{\circ}$. Considerable oat hay is cut

 most of which the cattle range. Thirty acres
## of sowed con eaeh season.

## Los Angeles County.

Wirfors Press :-At length the sky has
cleared, the sun rises now daily, and seems to have the brightness and warmth that cheers all nature, animate as well as inanimate; lifting up mueh of the bowed down barley and wheat, and pntting a smile on the face of the farmer as he hastens to plant his Indian corn. The heavy and oft repeated rains have kept lack the low
land farmers from tilling, while those on the mesa or higher sand lands now have corn up
and are cultivating it. The acreage this year in corn will be iumense, as the present price
is good, nearly doulle the price of barley, the cost of seed almost nothing, aui harvesting less expensive than barlcy.

> Dorn Planting Completely sum

Is spoiled, yes, completely spoiled, all the fnn kuocked ont of it. All gone the merry laugh
of sisters and lorothers, eaelh with a buckct, of sisters and hrothers, eaelh with a buckct,
basket, pan or old hat, with lively step making
fand fully conuted grains, exactly where the furrows to a gang plow, and as the whecls attached ust so many grains as is desired, and the nex Massage of the plow covers the corn. Near
Orange l saw a farmer with ouly one arm riding his gang plow and droplying by hand as the
phow went along, thas enabling hin to carefully deposit on the edge or higher portion of the
furrow and thus not bury it too deep. After this kind of planting they pass over the field with a harrow or a llattening drag which leave
the whole field free from any foot marks on furrows. There are varions patent hand plantplanter one man can plant as high as 15 to 20 acres per day. He has but to press the two
feet down into the earth and lift them out, and the two hills are dropped and covered.
After an alsenee of four years I revisit the
Westminster Colony Westminster Colony
This colony, situated on the Abel Stearns ranchos, fonr miles from the Anaheim steamer
landing, and seven miles sonth west of Anaheim landing, and seven miles son th west of Anaheim
town, was projected ly Rev. L. P. Webber, of the l'reshyterian church, and his first prospee pose is best expressed by quoting from that purpose of the projector of this colony to estab lish a ssettlement of persons whose religious
faith, notions of morals and education, should be so nearly alike that they might cordially oo-rperate from thie first in the maintenance o a christian church and a superior school.
has seemed to hiin that if, instead of scatteri about without definite purlose, persons of like upon the bible and sustained by a broad educa tion, would settle together in a proper locality,
they miglit at once sceure the blessings of well they might at once sceure the blessings of wel
resulated soeiety and enjoy the most permanen prosperity. That their children instead of
growing up in ignoranee and irreligion, so sadly growing ip in ignorance and irreligion, so sadi opportunitics that would go quite as far toward rendering them goon, usenim lyought up in older
day and generation, as if lor portions of our country. Indolenee, indeeision
and folly will not secure.
great benclits in life anywhere. Industry, cnergy and cconomy may be expectad to secure a competcncy for they
possessors if the proper conditions for their
exereise be furnished. This is all that shonld exereise be furnished. This is all that shonly
be cxpected by emigrating to a new country be expected by emigrating to a new country.
In the choiee of the eirenmstances and conditions of life each individnal should use his own
judgment, and then assumiug the entire responjudgment, and then assuming the entire resporl is not proposed to share this responsibility wit any the colony was not restricted to any raligious Purchases were made vithout the question being asked as to the religions preference of the
purchaser. None conld purchase within the eolony limizs withont the consent of the super intendent. One distinguishing fcature of the
colony was its unity on the temperanec plank, and that plank is yet as sound as ever: "Fach colonist slaill solemnly pledge hinself not to
manufaeture, buy or sell intoxicating beverages or lignors, except for sanitary or scientific purmanufacture and trattic."
The starting of this colony out on the open
sandy plains without a tree or honse within the sandy plains without a tree or honse within the
reaeh of the eye (cxcelt when the mirage would clevate the ealin at the landing and cause it to applear a fine two-story edifice), was an under
taking that required some nerve. To continne throngh the two dry seasons, before the dis trying, and some left and declared after they was worth more than the whole county of Los Angelcs. The colony yet continucd and in the fall of 154t they had on that desert waste over
50 flowing wells, sendiug through seven-inch pipes clear and prure drinking water from a depth
of 70 to 200 fect. In September, 1874 , the colony

pounds; eggs, 20,000 dozen; barley, $2,5,53$ bushels; corn, 30,606 bushels; potatoes, $1 \overline{5}, 250$
bushels; hay, 750 tons; hogs, 1,107 head; poultry, arge quantity. January lst, 187, population, The report of January, $1 S \% \mathrm{~s}$, I hove not in
reach. The town of Westminster now contains two general merchandise stores, two smith and
wagon shops, and, iudcing from the fanily carrage just finished at one of these for the colon Superintendent, they are eapable of doing good
work in that line millincry medicing beef work in that line, milhncry, medicine, beef,
hoe and lharness shops, and last and least, the abiqnitous sing Lee puts forth his sign j
The town contains about 20 fanilics. It has ueat doulle school luilding with two teachers present occupied by the Presbyterian society we targe, well-kept hotel ly Giberson, add if ailing the sanitarium of 1) Me. Me coy will deoinc. This has been a colony where nearly all tarted poor and by persevering industry hav carned, and, in a peculiar sense, have ereated
the cosy homes they now occupy. The twigs of willow and pollar set ont for hedge or wind
brake is now yielding them wood. The gum iameter. They eat some fruit from their trees and vines.

Alkali,
Owiug to the large amonnt of water evaporating on the surface, renders some portion
of the lower lands unmroductive. But after they shall have properly draiued the surplus ypsum, they will probally utibe all phats hcir lands. It have deen told since leaving the colony that " Prof. Hilgard has not overstated the lenefits of the gylpsum, as expcriments in
the colouy are now showing it to le $a$ success beyond expectation." "Tell those Uuivcrsity men to go on, and assure them we appreciate
their efforts in our lehalf." The rainfall has been about 22 inches. Owing to ground being saturated the plowing had to be deferred on all could be workcd immediately after rain.
About three milcs east is

## Garden Grove

Also on the artesian belt, and S . L. King there may be said to have the king well, as it how furnish valuable water power for driving mach inery and yet be used for irrigating purposcs.
Garden Grove is yet in its infancy, bnt has a romising future. The leading one projecting his settlement was Mr. Cook, of Oakland, who now has associated with
prise, Messrs. Webster, Conn \& Ilowc. The illage is yet small. Arrangeneuts are nearl comp to be owncd by one or two persons. The The community starts also on sober principles, What One Man Can Do
In this new community since January 1 st , the ground and sowed 56 aeres barley, 32 ar res corn planted all the corn land twice plowed,
two acres each of potatoes, alfalfa and beets, ix aeres pauplins, accomplished ly one ina and two cheap horscs. He did all his own chores, milking two eows. Hc also planted 300
vines, 240 gum trees along the road, and filled vines, out vancies in his orchard with frnit trees, planted some vegetables, etc. This old gentlenan las secn better days, and is taking these steady steps after his plow, hoping to see even the neeessarics of life.
The next day after leaving the Grove, I cucountcred several young men, who were appa-
rently paraly\%ed ly the thought that John stood rently paralyzed by the thought that John stoon
scuare aeross their vath, and since he erossed square aeross their lath, and since he erossed
the Pacifie they could not earn a livelihood. For the encouragement of such inve given what
an old man is doing, and is cheerfnl, hopeful an old man is doing, and is cheernl, hopeful
and happy in the field and in the cottage hone. The immediate future of all this great valley, now proving to be a great artesian belt, is not
casy to prelict, but its immense capabilities,
were wealth and knowledge properly used, were wealth and knowledge properly used,
would soon show a developinent of resources for bountiful productions of all clines hot
oxcelled elsewhere. Time will gradually solve what wealth could do more quickly.
Five miles to the cast, across the Santa Ana

City of Santa Ana,
towu of no small pretense. There are nearly
dozen stores and alt the various slops, twn

| in good style. The character of the public buildings and the business edifices intimate that the people consider themselves in the midst of a rich and growing community; with Tustin City one and one-half miles east, and Orange settlement two miles to the north, and the great Egyptian corn field, called Gospel swamp, off to the southwest, they may well be assured of a place. Being at preseut the termims of the S . P. R. R., all business centers therc. All is now bustle and stir in the swamp to get the 10 -horse power shellers stationed at the corn cribs, and the teams hauling away corn as fast as sacked to the depot. It seems mich like a Colusa harvest season. Santa Ana, Orange and Tustin are a little off from the grand artesian belt, but are now engaging all the good music of the county to join them about the first of May in celebrating the opening of the great <br> Santa Ana Canal. <br> This as an enterprise of real importance stands among the first in the county. [A description of it may be seen in our "Agricultural Notes" in this issue.-Editors Press.] <br> This undertaking is large, considering the age and condition of the settlement, all new, and last year by drouth an entire blank in crops. It calls for a large amount of cash, requiring great exertions on the part of many to raise it, yet all feel that with that ample supply of water for all, theirs is a goodly land. <br> Orange, of course, alouuds in orange groves; so does Tustin and Santa Ana. The man that cannot mention the trees by thousands keeps quiet, or perhaps says he will plant them out in May. Though last year was very dry, many trecs lived through it without irrigation. These sinall fruit ranches all have some very nice Howers and shrubbery in their front lawns, and one of the great troubles is to be sure where the town ends or the city bogins. The Santa Ana valley settlements now feel assured that they have the full share of favorable circumstances of climate, soil and irrigation, and only lack the ability to force their orange orchards by telegraphic speed to mature trees. |
| :---: |

## The Stock Yard.

Prickly Comfrey.


 Kef the best tstock countries on the coast.--Alukros Far,
Editors Press :- In answer to the inquiry which you send me about prickly comfrey, I
would say that I have only been disappointed with it in onc respect, viz : that it did not make as early a growth as I expectell it would in our nild winter climate. It hardly made so quick
an early growth as the natural grasses by which an early growth as the natural grasses by which it was surrounded-ill a most the exact spot
where you yourseli pulled up alfilerilla some
two feet in length in the month of February of two feet in, length in the month of February of last year, not a bad growth perhaps for any
plant to havc made at that season of the year.
The comfrey having beeu grown in a climate The comfrey having bceu grown in a climate
nore rigorons thau ours wouk, per force of
habit, as it were, naturally coume later than our natural grasses, which always start with the
nirst rains of the scason. Last year being so extremely dry, one could not expect a ve large growth to be produced from cuttings of
roots, many of which were uot more than half the size of one's little finger, yet I suppose that
at two cuttiugs I took at least 15 ponnds of leaves from each plant. Heckoning foom basis of one plaut to a square yard (which
think too close), or 4,810 plants per acre, seven and one-half pounds per plant would give
36 tous of green fodder per acre for the two
cuttings. 1 have not the least doubt but that cuttings. 1 have not the least doubt but that or five- crops a year of 20 tons each can be grown, and I think that even that might be
exceeded. But as it is so much easier to multiply tons of anything on paper than on the
ground, 1 would respectfully remind those who expect to raise extraordinary crops of any kind
that it is albsolutely necessary to "subdue the eartl,", and, I will add, feeed the plant.
Whit the comfrey will do for me the cannot tell ; so far it has not hal a very goo
chance to grow freely. The ground being so chance to grow freely. The ground being so
full of water during the spring months no work
could loe doue upou it, and the com frey was a foot high, iu the first week in March. After that it male a quick growth and would have
becn realy for a second cutting before this had it not been plowed amongst and rcceived a
thorough scarifying with a set of sharp harrow thorough scaritying with a set of sharp harrow
when working the fiell for mangolds-the com
frey being in one corner Your correspondent speaks of cutting four
crops of affalfa-he couldn't have anything much bettcr - and goes on to say that something
is needed that will fourrish/ where the sage hrushi grows. If he wants sonething to grow as the
sage brush grows, perhaps he can't find anything
better.

## ThE $\mathrm{D}_{\text {AIRY. }}$

Alfalfa and Dairies in Southern Cali fornia.-No. 3.

Emtrors Press:-In my last letter I alluded to the cheese factory started by Bullis \& Walker near Florence. While they ean, if they prefer it, run their dairy all tbe year, it is their intention to have cows come in about the
first of October, milk eight months and rest four months. They will therefore rest while cheese is down and work while it is high.

Magnitude of Possible Production.
Bullis \& Walker believe in the entire sufficiency of alfalfa as a producer of a superior
cheese-yielding milk. Mr. Quimby, of the Green Meadows dairy, secures a copious flow o rich milk by soiling alfalfa.
Bullis \& Walker believc that the ordinary dairy cows of California will average two
pounds of cheese per day for eight months, or pounds ond cheese per day for eight inonths, or
500 pounds per cow per season. The alfalfa o for one year, in good flesh, and in full millkyielding capacity for eight montlis out of 12 . Therefore one-fifth of a million acres, one cow per acre, amounts to one-fifth of a million cows produce 50,000 tons of cheese, and this at 15 cents per pound would amount to $\$ 15,000,000$. The same cows would yield, instead of cheese, 20,000 tons of butter, worth, at 30 eents a
pound, $\$ 12,000,000$. The residium after butter is more valuable than that after cheese. Butte making is a broarl, old and yonng success in southern California. Wc again reach au outcome, though demon.
strably true, that is in uuprotitable ratio to demand. The question still remains, "What profitable use ean be made of the alfalfa pro
duced and producille in southern California? While the question remains it infor to know that the land also remains. Although not as profitable to any other regular farm crop other ways. It would be well to walk patiently and diligently in these ways for the present,
and gradually depart from them, to walk iu and gra
the wa
pands.

Demand for Dairy Products.
Demand for dairy products is increasing both the East expect a steady expansion. Millions enacted allegiance to Amerocan cheese. Many English dealers sell more American than Eng a great extent the primitive method of every
man his own cheese and butter maker. In been invented and applied. In England the dairy interest stands still. In America it pro-
gresses. Event tho famous Cheshire cheese has has beell sent away from the front, in compar-
is $n$ with American. The qualities of Cheshire cheese vary; those of the American chese
which is exported are quite uniform. It would which is exported are quite uniform. It woul,
seem tbat Cheshire cheese is made to some ex tent of guess. Fifty tons of Cheshire checse $g$ g congruons guesses of a hundred Cheshire count farmers, , English market very much unified iu qualoperative factory system.
All California ought to
o foreign demand. Southern California ough to utilize the semi-tropical climate by inventing one or more varieties of cheese, characteristic
of the climate, and, at the same time, imbned with qualities calculated to appeal singularly, ulty of mankind everywhere. Italy bas invented in her Parmesan cheese one character
istic of Italy. It is said to be the world's faliar to the River Po. Parmesan is a skim-milk cheese, and yet Stilton, a double cream cheese,
is enhanced in popularity by being called the Parnesan of England. Our super-Italian cli.-
mate ought to secure indigenous or naturalized mate ouglt to secure indigenous or naturalized cessive foreign demand. Our American Italy's
white sage flavors honey into universal preference. Analogies may be expected, especially in a case of butter and honey, said to be quite
similar chemically. Southern California may yet pan a mint through the successful bid for foreign demand, made by the Parmesan flavo
and Stilton doulle cream combined in cheese We have information of the first cheese-mak ing on our planet through Hispocrates, who,
away back near the time of Herodotus, put the Scy thians on record as makers and cousumers of have rolled by since the date of that record the world has known but one Parmesan cheese,
simply lecausc in the only natural climatic simply leecausc in the only natural climatic
rival of Italy, Bullis \& Walker did not start their factory until a few days ago. Parma,
Piacenza and Lodi may grow serious about laurels, Bullis, Walker, and southern California nate kince cheese with Taofoo or pea checse Hithcrto he has sought cheese almost excluHithcrto he has sough cheese almost excines
sively among the pea vines, because pea vines
are cheaper than cows. The peas readily give
$\left\lvert\, \begin{aligned} & \text { oxygen and sulphur, in almost the same pro- } \\ & \text { portions as in the casein of the cow. For all }\end{aligned}\right.$ portions as in the casein of the cow. For all
this, it may be far inferior in gustatory qualities this, it may be far inferio
to the checse of the cow. If John as a nation could be induced to eat cow cheese, we could safely make 50,000 tons
annually. This would give them only four annually. This would give them only four olnces apiece for a year
product of the United
It should not be forgotten that there are many millions of people in the Southern States, who consume vast quantities of cheese, but make next to none. These people will seem
more like neighbors when the below-snow-line ailroad is completed.
The dairy business is composed of three making, cheese making and milk canning. Were ret or the expense, acility, from one another of the three branches, playing facile weathervane to the shifting would be faulty, but less so than morbid relations of supply and demand.
Climate.
Skepticism as to the feasibility of making
cheese in sonthern California has been notably cheese in sonthern California has been notably prevalent. The semi-tropical climate may have groves and cheese factories do not shadow each ther in many sections of the planet. But the
septic onght to have been instructed by the keptic ought that wheat and bananas nestle near each other in some of the nooks of Los Angeles, hat barley and guavas are thrifty neighbors blooming and friiting lime trees flourish in the samc orchard. Then the skeptic might have conclrees would flourish together.
The advent and success of the cheese factory
is mercly a cunulative illustration of the flowis mercly a cunnulative illustration of the flow-
ing together here of the zones, of the taboo by eaeh of asperities, of the commingling bere or the winter isotherms of Florida with less frost,
the summer isotherm of Long Branch with lower maximum, monthly mean, and of the four-sea
son isotherm of the Chesapeake bay without an approximation to extremes; a cumulative illus tration of the controlling influence of Kuro Siwo, the great Pacific ocean river flowing
along the coast of California, charged witb the balancing tempers of three zones. H. Surecos.
Johs H.
Florence, Los Angeles Co., Cal.
All readers will thauk Gen. Shiells for his
[All readers will thauk Gen. Shields for his
igorous articles. He has dealt in full grown vigorous articles. He has dealt in tull grown
figures aud yet he couples them with the admo nition to enter upon new projects cautiously. This is the true theory of progress. His articles will attract wide attention to the sirbject investigation and experiment. We trust his ad
vocacy of the dairy interest in southern Califor
nia will return him due reward and result to profitable enterprises for all who may follow his lead.-Ebitors Press.

## The Stable. $^{\text {the }}$

## Southgate Stud Farm.

Editors Press: - A laudable enterprise worthy of all encouragement and a liberal sup port, has recently been engaged in by Mr. H. establishment of the Southgate stud farm on a fertile ranch of 130 acres onc-half mile south of town. Two years ago Mr. Rembaugb was pro-
prietor of the San Luis Tribune, but perceiving that the equine stock in the county was much bclow what it should be, he interested himsel iu the problem of bettering it. Selling out his interest in the paper and fully imbued with th idea that this great county is capable of produc ing as finc horses as the world has ever known, stallions, sxid, by good judges, to be among the best ever brought to the State. It is his inten
tion soon to import 12 thoroughbred mares from tion soon to import 12 thoroughbred mares from
the same State to stock the farm. We believe this enterprise will have a superior and lasting in whin the standarl is much to lins county Visiting the ranch the first week in April we were shown a pair of stallions whose appearance
would command then to the most critical, irre spective of the excellent pedigree which each bears. We found them in the care and under trainer engared in the lousiness many years in Albany, N. Y., and more recently in Los
Angeles in this State. He is very skilful in Ais profession and has an excellent knowledge of the principles involved in raising good stock.
The first one we saw was "A. T. Stewart," a beautiful animal, standing 16 hands on the withers and 161 on the loin. He is a dar of veins show tinely through his lustrous coat, nuscular liuls, indicate game and good staying qualities, 1 ifs weight is 1,200 pounds and
oaled in 1872. He was bred by D. L. Harris,
of Fayette county, Ky. His sire was "Harris
Mambrino Patchen," the sire of Mambrino Patchen," the sire of many noted
winners. The
The other horse, "Altoona," is younger,
Caled in 1875. He is a superb horse, a bright dapple bay, heavy black mane and tail and white hind, ankles. He is heavy limbed, 15 hands three inches on the withcrs, and level
built; weighs 1,080 pounds and has been trained in harness four weeks. A spin down Higuerra street behind "Altoona" driven donble to a wagou, gave us an opportunity to observe his
style of action, which is decidedly good. His gait is square and even and the trotting instinct, running through a long line of noblc progenitors. on a strong that if he ever runs away it will be on a trot. He is not restless and tidgety, which even movement for a horse so young, his
spirited eye and the great endurance shown in is whole make-up, lead conclusively to the belief that he will surely prove "a worthy son of a worthy sire." He was bred by Gen. W. T.
Withers, of Fairlawn stock farm, Lexington, Y. He was sired by "Almont," the great sire "Prophet Jr." by "Old Prophet," son of Hill's
Vermont "Black Hawk," sire of "Ethan Allen
Scrub stock in San Luis Obispo county is on as wane atter the introduction of such stock speedily replaced by something considerably above par. The full pedigrces of these stal. he show that both are largely endowed with ing further need be said to prove their value
II. E. HALLETT.

## Arooriculture.

## Acacia Trees in Los Angeles.

Editors Press:-I find in reading your valuable paper, much said and written about plantfres, and would seem that the blue tree grows very fast, but what is it good for? which I hope may prove true. We are cultivating another kind of tree in hat for three yany, whonting it will grow faster than the blue gum and it makes better
fand
fire wood. I have two acres that are now two fire wood. I have two acres that are now two
years old from the seed. Nany of the trees are five and six inches in diameter and 25 feet high, and will yicld 20 cords. of stove wood to the
acre. Tbe name of the tree is the acacia; I will scnd you a section of one tree cut at the
age of 18 nouths from the seed, it grew on Mr. Ceorge Foris' farm, adjoining my place. The nee was 25 feet high and measues about nine inches in lhameter, which you will see by the
section that I send; I will send some of the seed and leaves so you can sce what species of
the acacia it is. The time for planting the seed is any time in April to the middle of May.
Scald the seed in boiling watcr, let stand 12 hours, then plant in hills six feet apart. Culti-
vate for one year and then they will take care vate for one year and then they will take care
of themselves. Any one who may wish seeds of themselves. Any one who may wish seeds
to plant can get them, by sending to nee, at 50
cents per pound.
GFo. H. BeLL. cents per pound.
Los Angeles, Cal.
[The seed and leaf sent show the tree to be the Acacia lophuntha, which is common in this part of the State. The growth which our corespondent describes is far in advance of any thing we have ever seen. . The scction of wood
which he sends shows the timber to be firm and yood.
This tree is already more widely spreall hrough the State than we imagine our corre pondeut thinks. It is not, however, regarded us their sales of the seed are continually dereasing.
There is one disadvantage about this tree which makes it hazardons to handle on a large sale. In several localities about the bay of San Francisco it is preyed upon by a large senle insect whose shell is about as large as a small
white bean and which teems with life. They white bcan and which teems with life. They
destroy the trees utterly and then take to fruit destroy the trees utterly and then take to fruit
trees and ornamental plants. Many acacia trees hare bcen cut down simply bccause no remedy could be found to cope with these pests
on a large scale. We hope these insects will not reach our southern friends, but there is litthe prospect of their escape unless they cmploy Cleaning OiL Wells.-A description is fur.
nished in a lemensylvania paper of the latest invention for clcaning ont oil wells. It is an iron ram, 37 feet long, weighing 2,10 pounds.
The mode of working is to fill tho well with water or oil above the sandrock, then pump out the air, drop the ram into the well. The ram will have a drop of 800 feet and a pressure of 77,000 pounds to the square inch, which will force the and in this manuer open up the rock and let the oil enter the well. in fact, it will
same effect as steaming or torpedoing.

Pamgers oi flosisumar.
$=5$

## Our New Constitution.

Editors Press:--The formation of a new Constitution engrosses the attention of all inter ested in the welfare of our State. The necessity for changing mauy of the existing laws, as apparent. It is questionable, however, if the changes required could not have been secured action, and amendments made to the present excellent Constitution of our State, than by forming one de noro. It must not be supposed at once, or that it would be advisable; provided they eould be made. This is indicated by the
law of nature which is that of gradation and progression.
Before considering the proposed amendments, at least such as come to mind, would it not be
well to understand the political significance of the word "Constitution" in a govermment where the supreme power is vested in the people? The peoplc, who (to use the language
of the Constitution of the Unitcd States) "in order to form a more perfect union, establish justice, iusure domestio tranquility, provide for common defense, promote the general wel-
fare and secure the blcssings of liberty to themselves and their posterity, do form and estab-
lish a Constitution." A Constitution which lish a Constitution." A Constitution which second, the exccutive; third, the judicial
powers, which are the mediums or instruments by which the purposes desircd are plan of action; to secure harmony and a more perfect understanding of matters in framing an by a Constitution for the government of a State,
it is necessary for the people at large to unite it is necessary for the people at large to unit
in selecting men whom they delegate with plenary powers for that purpose, by virtue of
elcetion. These dclegates, if wisely chosen, ensure to theire provisions, carefully com prehensive in their provisions, carefully guard favoring any. The following suggestions are offered with a full understanding that provis ions in, or amendments to, Constitutions are o
no effect or value provided the people them selves do not maintain by proper legislation,
and enforce, what has been declared by their and enforce, what has been declared by their
acceptance, to be the fundamcutal law of the and.
For example, Art. I., Sec. 9, of the present
Constitution of California, says: "Every citizen Constitution of California, says: Every citizen
may frecly spcak, write and publish his senti-
ments on all subjects, being responsible for the busc of that right, and no law shall be passed to restrain or abridge the liberty of speech or of the press," etc.
Art. IV.,'Sec. 37, says: "It shall be the duty of the Legislature to provide for the organiza tion of cities and incorporated villages; and re
strict their power of taxation, assessments borrowing moncy, contracting debts and loaning their credits; so
assessments and in co
municipal corporations Again, in Art. XI., Sec. 17 , it persons shall be disqualitied from holding any
office of profit in this State, who shall have been convieted of having given or offered
bribe to procure his election or appointment." seetion ISoof the same Article says: "Law shall be made to exclude from office, serving perjury, forgery or other high erimes. The privilege of free suffrage shall be supported by adequate penalties all undue influence thereon from power, bribery, tumult, or other improper

## practice.

Section 13 of the same Article says: "Taxation shall be equal and uniform throughout the
State. All property in this State shall be taxed in proportion to its value-to be ascertained a We inight continu whole ground of complaint had which gave rise to this agitation and demaud
for a new Constitution. An investigation wil prove to a majority of your readers that the trouble has not been so much with the
present Constitution as that of its abnse by demagogues who have beeu placed in position the part of the people, who have brought what never hope for emancipation until their individ uality is restored; which no law can effect so long as they are slaves to party.
is beliered would prove beneticial
Surround the elective franchise with safe-
guards which will render its exercise possible
to those only who are directly interested
what they are called upon to determine. En What they are ealled upon to determine. En- En
larring itit sheres so as to inelude both sexes Provide for an apportionment for represeuta tion iu the Assembly every ten years; divid
the population of the State as ascertained b Felleral and Stat
State if necessary.
Elect State Scriators for six years; Representoues for four years; three Asscmblymen for tion. lrovide that cuery bill coning before the Legislature shall be read at large on three
different days in each house, and the bill and all amendments thereto must be priuted before
the vote is taken on its final passage; and that the vote is taken on its final passage; and that
the vote on all bills at that time shall be by yeas and nays, upon each bill separately,
recorded upon the journals of both houses. Reducc the salaries of officials of every grade making then wholly salaried gents or perguisitcs.
Prohibit special legislation iu all and every
case. Also that no state officer shall be intercase. Alse, that no state ofther shall otherwise in any coutract for
est supplies furnished or work done for the state.
Nor shall any official's term of office be extended or his salary inereased.
Grant the Legislature privilege (under restrictions), of passing laws prermitting owners across the lands of others for agricultural sanitary purposes.
Provide for a State Board of Equalization; define property, making everything subject to
taxation, exempting nothing but the Fcderal government and state property.
Limit the ability to
Limit the ability to contract or create debts by the State or municipalities. Taxation to be
for revenue solely and to be levied by valuation only, so that every person and corporation shal pay a tax in proportion to the value of the
property. This co ers the right and compel he taxation of franchises, privileges, etc,
enjoyed ly corporations or individuals; the application to be geueral and uniform iu it operations.
No public moneys shall be appropiated aid or support any school, college, church, ho
pital or institution under the coutrol of an pital or institution under the coutrol ono fimy which the State, counties, citics and school dis

Limit the aggregate of taxes for which asses ments can be madc iu a year; allowing them to e paid at any time anter assessment, reliating
interest to date when they would have bcom increst to
delinquent.
Irovide
Provide for the right of redemption of raal estate sold for taxes, and that the State shal hold in trust all lands upo
have been or are delinquent.
No corporation shall be created by special law, main under control of the State. In all elec tious for directors or managers of corporations each stockholder to have the right to vote in
crsson or by proxy the number of shares owned by him for as many persons as there are direct-
ors or managers to be elected; or to cunulate ors or managers to be elected; or to cunnulate
his shares and give one candidate as many vote as the number of directors multiphed by the
number of lis shares of stock shall equal; or to distribute them on the same principle amoug as many candidates as he chooses. Fiender heir stock for all indebtedness contracted during the time of thcir holding stock, limiting
uch liahility, say to one year after they had ceased to own, or be stockholders.
Compel all banks, or individuals
Compel all banks, or individuals receiving de posits, and purporting to do a banking or ex
change busincss, to render quarterly exhibits o their condition and liabilities, which report guseral circulation in the neighborhood of their location.
Make judgeships elective-tcrms of office to contimue during good belhavior. Establish ap.
pellate courts in districts as may be required, o which courts such appeals and writs of erro anon circuit and district courts may be decided,
and alty, that decisions shall be rendered or cascs dis say six months), upon all eases submitted be say six months, upon all eases surt

## Make the state Prison seli-sustaining. Settl

 the text book question by placing it iu the hands restrictions.)Provide that no private property shall be taken for public use without just compensation.
If not made by the sitate, the valuation shall be ascertained by a jury, as proposed by law.
Irovide tliat the right of emineut don shall not be alridged so as to prevent legislativ ction in referenee to property and franehises of
orporations or individuals. Irovide that rail ways shall be declared public highways; the poople having the right by legislative action to
regulate fares, freights, etc., the same as with Thll roads, ferrics, etc
Those suggestions are anong those most de hoped may lee offered through the columns nowledred exponent knowlegiged exponent of principles benetitiny
the agricultural classes, whieh it is hoped wil have a voice in the proposed Constitution, aud
not suffer themselves to go unrepresented for want of interest or understanding how to pro
tect themselves.
fi, C. Pearson. South Vallejo.

## Open Grange Talk at Oakland.

Last Saturlay several able speakers addressed open meeting of Temescal Grange. We re addresses were earnest and prolific with good sentiments relatiug to in portant subjects. J. V. Webster, Master of Temescal Grange, pre-
sided. 1. C. Steete, Master of the State Grange, spoke of the important results of the (irange work all over the United States, and gave real
encoura gement to both men and woinen to carry out broader and hicher the work of the Grange. His words were eloquent and foreible. Prof.
Eugene Hilgard, of the State University, being present, was called upon, and gave some ex-
tended renarks. He emphasized the importauce tended renarks. He emphasized the imporaue
of farmers throughout the State assisting the ork of the University by explerimenting in lif-
worme
tereut sections of the sultius with the faculty and encouraging yound men to enter the University for the agricultural course. There is only one student in the senior two and three in the class which graduates Au effort is being made to make the department more useful by experiments, analyses, reports, etc., to farmers, gardeuers and fruit growcrs
ontside of the walls of the University. Men have been forward enough to say frankly that
they wish to be educated themselves as well as their sons and daughters. The Professor is hopefinl for appropriations by the next Legislagreater sphere of usefulness to agrienturists at largc. Hc stated some substantial facts fessioual work through the influence of the Grange. Before the Order existed farmors in
the older states were very indiferent agricultural improvement and intelligence. It was up-hill work to create any intcrest ins scien-
tific investigations and iinproved methods farming. The few ycars of Grango education has changed all this, and farmers now seek improvements individually and collectively in
connection with their hand and head work B. Pilkington, state Lecturer, spoke with great
zeal and pertincnce. He was in favor of indepondent agricultural schools, believing they rould prosper lest. We want more legisia-
tion iu favor of farmers. He mentioned some necessary changes in the Constitution, and was well with a vory short crop of lawyers in the
whet coming Constitutional Convention. Anos Adhimself by urgiug forward Geo W. Colby,
Presideut of the Granyers' iarlner, Manager of the California Farners
Hutual Fire Insurance Mutual Fire Insurance Compauy, hoth of whom
made some very good and well received remade son
marks.

Union Grange Meeting at Martinez.
Edirors Press:-Again do I chronicle the workings of the Contra Costa Grangers, and if
in their cause I trespass too often upon your in their cause I trespass too often upon your
orrespondents' space remember the old adlage "forbearance may cease to be a virtuc," and when your patience has reached this culminating pothe freedon of your pages.
During the centennial year Contra Costa
made one grand entry in her commercial columus, nanely, the completion of our Grange warehouse and wharf ; another no less cncouraging item of this year was the loading at this
wharf of the St. Charles with our own golden grain, and in fulfillment of the prophecies of The crcdit of these entries must be given the Grangers' Warchousing and Busincss Association of Contra Costa, and the scribblings you its officers, said election taking place on the lirst day, of May. Alhambra Grange invited
other firangers and stockholders of the county to help in a picnie feast as well as to cnjoy the
flow of soul that characterizes all (irange inovements. Danville and Walnut Creek responded tives. Vallejo Crange lirothers and sisters, a cross the waters of our beautiful lay showing antive sympathy and extending heart folt grect-
angs to those working in aecord with themselves in those priuciples that are revolutionizing the Brothers steele and Pilkington of the State Grange were with us early in the day, brothcr
and sister Garduer eoming at a later hour, ous friends around our festal board and enjoy some of the very perceptible fruits of Grange
labor, sociability and good cleer. If one there should be to conplain of the disappearance
good things minctlinks it must be Bro. Colloy, who came in late, though our matrons true to
their callingand "on hospitable thoughts intent," found the wherewith, I wecn, to tempt even a
cood (irange appetite. Toues of Alhambra rass band, clatter of gishes, merry laughing dressed in Nay day style a gala appearance, and know not which was the most joyous
lauylh, that of fathers and mothers or happy
children who were wild in their sport and dance.
After a long, as you may imaginc, lunch sea-
introduced Bros. Steele, Pilkington, Colby and Gardner, eaeh in turn demonst rating the differ-
ent Grange principles to a large, interested and mixed audience, this being an open meeting. ing the more sober real and prat interspersing the more sober, real and practical thoughts shadows erept over us and imaginary farn-bells the dance adjourned below stairs to make merry the few moments left them of Hay day, 1878. California Mlay day, coming as she did in all the gorgeousness of spring's green robe, with hues of the rainbow, with grand hills around spangled with floral gems whose highly tinted chalices reflected the gems what highly tinte drop. As the bright sun rode higher in the were a vauory line of tiny buckets reaching formin softened the glaring gaze of the Master of Light ach days of pleasure are int to be stored the dark days that "into each life must fall," a the summer and winter of humanity roll rapid the harvest eternal shores where are gathere Mrs. Mlaria B. Lander,
Martinez, May 6th, 1878 . Alhambra Grange.
The State Master Nominated.-We notice that the joint nomination of the Republicans and Democrats of San Mateo county for the Con the sional Convention is I. C. Steele, Master of is regarded at home among those who know him best, and it will be gratifying to the Order to have among their represcntatives in the Con
vention a man who they have themselves exalted to the highest place in their gift. Steele-pointed principles will pierce inany fallacics and oppres

## Agaicultural Notes.

## California.

Butte. Not so Moch Wheat.-Riggs Regiater: are 60,000 acres or No. I adobe land in Hamil ton township, which, a few weeks ago, we thought might produce a half crop, that w grain, all told. In Oregon and Dayton town ships, upon the lands of similar character, ag gregating probably 20,000 acres (as we are re conditiou. In Chico crops are in nearly as bad same kind of lands, owing to better natura The crops upon the sandy or loam lands of the county, while suffering to a limited extent from a surplus of rain, will, nevertheless, be short through thamilton township nearly one-hal foul seed, incident to sandy lands in wet win ters. This is our opinion of the condition of river, dast.

## CALAVERAS

Planting Trees on Iava Crest.-Stockton Mokelume, May 9: On the banks of the Mrs. Hill She has 400 acres of upland and lowland, combining all grades of soil. Her on a bench above the bottom, is one of the finest two-story stone structures in th white lava, hewn out of a quarry hard by and is absolutcly fire and earthquake proof. The cellar is cut out of solid lava, and the founda. easily chopped out with an ax, but hardens on exposure. It seems to be but a crnst overlaying an ancient river bed, for a thick stratum of
gravel is found nnderneath it. Her method of planting orange trees about the house in this elsewhere with goorl results. The holes for the the gravel beneath, and filled up with light ma-
terial. The water from beneath rises to within a few fcet of the surface, and by filling in loose will keep them coonstantly supplied with moistccssfully, boring a small angur hole through the tem of self-irrigation. for the plantation of buhach growing upon it, Buhaeh is a plaut from which the I'crsian insect
powder, so deadly to all manner of insects, is powder, so deadly to all manner of insects, is made. The powder is prepared from the dried rate of $\$ 5$ to $\$ 15$ a pound. This plantation is
the only one of the kind in tho l'nited Statcs with the exccption of a patch in Amador 63,000 healthy plants, cach of which, when full pounds of bhossons. The plant, Pyrethrum car-
neum, is of the eompositc family, botanically, and looks mueh like the flower of the pungent
has already begun, and will continue until
October. It is expected to be very profitable,
as it is easily raised, when the proper locality is
found, and there is a limitless demand for the powder.
Alfalfa.-Californian: The great crop of
alfalfa will oblige the farmers of Kern county to buy stock to feed, or hire their fields for pasturage. They could overstock the market five crops can be cut from the fields. The second crop will be allowed to go to seed by many, thought will pay better than hay.

## LAKE.

Editors Press:-For variety of scenery and
real beauty Lake county may be found to possess more than any county in the State. To attempt to describe the many handsome lakes
surrounded by their hills, mountains, valleys and plains, covered with a growth of trees, garb of leaves and flowers, then try to pive garb of leaves and flowers, then try to give a grandeur, would be simply a failure a and who can ride over this country and not enjoy it should be shat up in some dreary, dismal, dark
doleful place and there be allowed to see nothin but squash vines. This county is not only a paradise of beauty, but it is justly claimed to add to these qualities pleasant climate, rich,
productive valleys, with deep loamy soil, where every variety of grain, vegetable and fruit are raised to the greatest perfection, and then add
her valuable forests of timber and her immense wealth in minerals, we have a county which we may proudly boast of. Clear lake is actually
running over with fish. The shores are covered with millions of dead ones and schools of live kish come rolling in, so that they are readily long sticks. The streams and tributaries are also alive with fish, and the mountain brooks
abound in small trout. The pleasure in catching them is not eclipsed by the enjoyment of the evening meal made of delicious morsel, who gets them fresh and eats them with an way than by the health-giving exercise of catching them. Lakeport is one of the towns which and Scott's valley, a few miles westward, is loaded with co many blessings that it is hard celled, which is proven by its fine fields of growing grain and its orchards of fruit trees.
Massive oaks grow on these rich bottoms, and ash timber is so abundant that the trees are
mauled into rails to fence the gardeus and fields. In traveling through Lake county one is as
tonished at the amount of work there is to b tonished at the amount of work there is to be
done, yet in all the towns we see crowds stalwart men, who do nothing day after day
but sit in the shady porches of the saloons, and but sit in the shady porches of the saloons, and
the oldest people living there tell us that they never were known to do a day's work. "Still their faces are "like the ruddy clover," and ever a place where it is so little trouble to live as in Lake county? -

## LOS ANGELES

New Ditch at Santa Ana.-Cor. Anaheim Gazette, April 27: The ditch is 15 miles long,
and 10 feet wide on the bottoin throughout its and 10 feet wide on the bottoin throughout its
entire length. The grade is 45 inches to the mile, and the water will have a velocity of $3 \frac{1}{2}$
feet per second. It is intended that the ditch feet per second. It is intended that the ditch water, miners' measuremeut, filling it to a
depth of 3 feet, which is within 6 inches of its depth of 3 feet, which is within 6 inches of its
full capacity. Wherever a wash from the hills comes in contact with the ditch, a culvert has
been substantially constructed, either of stone been substantially constructed, either of stone
or indestructible redwood. Altogether there are 8 wooded culverts, 7 stone culverts, 7
bridges, 2 sand-gates and 2 waste-gates. The ditch has beeu made as straight as possible, and in several instances has been blasted through
solid rock. Some of this rock was so tenacious solid rock. Some of this rock was so tenacious
that it required 25 lbs . of powder at one blast to force it asunder. The tunnels are splendid pieces of workmanship, and extort praises from feet in length, and the long one 697 , making
909 feet of tunneling altogether. The tunnels are heavily timbered overhead with redwood lumber, the walls are lined with 2 -inch plank-
ing, and the bottom covered with flooring an inch in thickness. Across the bottom stretchers are placed every 3 feet, and every precau-
tion taken to ensure strength and durability. tion taken to ensure strength and durability. comes down the hills, from which the ditch is
protected by a stone culvert 80 feet in length protected by a stone culvert 80 feet in length. the old reservoir belonging to the former ditch
company. Here there is a tract of land consisting of 27 acres, which the Santa Ana company of manufactories. And indeed, I know of no
place in all southern California so well adapted for manufacturing purposes as this. From the of 56 fcet, and 6,000 inches of water, let down by means of "drops," will afford a splendid ditch on the 19th of last October. When com.
pleted, the entire ditch, including the tunnels, will cost something over $\$ 40,000$, and be capa.
ble of irrigating 20,000 acres of land. The
company building this ditch is known as the Santa Ana Valley Irrigation Compauy.

## SAN BERNARDINO.

Ratnfall on San Gorgonio Foothills.-
Editors Press:-It has EdITORS PRESS:-It has long been my inten-
tion to furnish you with a table of our rainfall for this season, but every time I have commenced a letter for that purpose, another had finally ceased. It really does seem now a if that time had arrived, although we had nearly four inches of rain in May last, and may be equally favored this year. A preliminary description, however, of our location is necessary in order that our climate may not be confounded
with that of the district commonly known as San Gorgonio. We are about 26 miles due east from San Bernardino, seven miles due north about 12 northwest from Banning sta Pass, and is our railroad station and post-office. Our el vation is by estimation about 4,000 feet, rath over than under. As I have carefully receive the rain in a gauge made after a pattern furnished me by the Signal Service office, the reliable:

| 1877 |
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November
Necember

## 

This is double the rainfall of the town of San Bernardino and the adjacent country, and con Our lowest temperature during the past winter was $20^{\circ}$, and we have had altogether 44 inche of snow, some in each month in the table e and the heaviest we have had in cur four vears experience, with one exception, that of Janu-
ary, 1876, commenced on April 14th, and lasted ary, 1876 , commenced on April 14th, and lasted
during three days, and then before the snow was all gone it began again on the 19th, and
snowed for two days more. We have had flurries in April before, but never anything like the two storms was 21 inches. There have been so many statements of rainfall in the contribute mine, being quite certain that for heavy, and I believe almost unprecedented The weather at present is delightful, and our summer climate though sometimes very hot,
never so hot as in the plains. The mercury never yet reached $100^{\circ}$, and $I$ do not remember a night wheu I did not lequire a blank SAN DIEGO.
other parts of the - Editors Press: - While out" by the too abundant rains, San Diego has low for working on all pleasant days; also to insure good crops and an abundance of feed for grazing purposes. The Cajou valley is one per-
fect mass of color. The grain fields, wild flowcrs, and the background of mountains softened a lovely landscape. This is destined to be one of the best improved valleys in the county being settled as it is by men of ineans and culare too many large grain ranches, which should planted. Permanent roads are being laid out ing improvements, thankful for the bountiful harvest which will allow them to gain a foothold once more and free themsel ves from the
burden of debt, which our past years of drouth has forced so many to assume.-A. E. P., Cajon Mountains, April 29th.
The Fine Sheep.
The Fine Sheep.-News, May 11: We
noticed day-before yesterday, the arrival of two noticed day-before yesterday, the arrival of two
fine French Merino bucks for Mr. Kcheverry, of the Santa Maria ranch, and stated that it from 30 to 40 pounds. Yesterday morning, Carlos, said to be the boss sheepshearer of the county, with an assistant, proceeded in a very scientibucks to remove the fleece from these two two-year-old buck gave a weight of fleece of 41 pounds, and the three year old 43 pounds.
The fleeces are now in the window of Mr. Vcrlaque's store, and may be examined by any-
one. As said before, the wool is the finest in the world, and will run from three to six iuches in length. Mr. Echeverry purchased these bucks Californ and dam and paid $\$ 1,000$ for them. The sire and dam were direct from France, and picked
from the best flocks. The flock of Mr. E. has already some fifteen hundred of these elegant sheep, and at no distant day, Santa Maria will equal if not excel, any ranch in the State for the prop and beauty of its sheep stock, and people for introducing the better stock of sheep. After passing out of the han
los, the bucks did not look so large.

## SAN MATEO

Potato Blicitr.--Times and Gazette, May
The blight has appeared upon a few fields of potatoes on the coast side of the county. It does not appear to be confined to any partic-
ular variety or to any special kind of soil or location, but early planted fields are those first
attacked as has always been the case. Whether the ruin is to be general or not remains to be
will suffer more or less. From the observations that have thus far been made in the workings difference between a dry year and a wet one. SONOMA.
Rossian River.--Editors Press:-Wheat will be light on Russian river this year on ac-
count of too much rain. Some fields are half or more chess and are being cut for hay. Pas turage is excellent, I never saw it better. Sheep shearing has commenced and the fleece is very pring than is more corn being planted will be very plentiful, as considerable grain is bein cut for hay.-T. J. Barnes.
STANISLAUS.
Champion Rye.-News, May 3: Mr. E. D biddings brought to our office last Tuesday, a
bunch of rye, grown near Turlock, that measures eight feet in hight. Many of the is in the whole field of 500 acres, but little of sample wain less than six feet in hight. The farmed by Henry Osborne. The soil on which this magnificent growth is maturing, is of
light and very sandy nature. In fact, it i considered almost too poor to cultivate to any
other cereal. With rye, however, it can be

News in Brief.
There were 89 deaths in the city last week
J. G. Fatr, of the boдanza firm, is again sick

Los Angeles is making large exportations of rn to Mexico.
Eighty thousand persons visited the Paris
Exposition on Sunday.
THe "bell punch" liquor bill is likely to be-
Tobacco smoking has doubled in Great Brit
in during the last 30 years.
DiphTheria has been prevalent at Middle
Diphicheria has been prevalent at Midale
Since the settlement of Lake county ther
As the prospects for peace improve the price
As the prospects for peace improve the price
on the 12 th of May it snowed steadily all On the 12th of May it snowed steadily all
day in the Black Hills region. Joseph F. Demans, 12 years old, was dr
in Bear creek, Merced county, May 9th.
in Bear creek, Merced county, May 9th.
Prof. Joseph Henry, for many years head
of the Smithsonian Institute, is dead.
the smithsonian Institute, is dead.
As the game laws of this State are now in
full force, the sporting fraternity should beware full force, the sporting fraternity should beware.
Governor Emory of Utah predicts that female extravagance will eventually kill Mor monism.
The e
earthquake at Maniziles, South America,
nsiderable damage to houses, but no lives
were lost. ings made to Pius IX. amounted to no less than $\$ 95,000,000$ in all.
Eight car loads of wine have just been shipped from King's cellar, in St. Helena, Napa
county, to St. Louis. A national convention will meet in London
and protest should the English government determine to go to war.
Charles. E. Lee, who had just arrived in the Black Hills, was found murdered and robbed THE wages of operatives in the
The wages of operatives in the New England four per cent., on account of the hard times. mit arms from the United States for the Rus sian government to be lauded.
D. Shepardson, tried last week for the murder of Arnold, City Marshal of Colusa, has been acquitted.
LUX AND MILLER are said to own about 700 , 000 acres of land in this State, on which the pasture 80,000 head of cattle.
siding near Truckee, was run over and killed by a Central Pacific train the other day. H was drunk at the time
laid out at the whaling station on Carmello bay near Monterey. A glass factory is the first The members of the San Francisco Police force have been notified that from this time pipes, cigars, or cigarettes while on duty. OUr army of 25,000 men costs nearly $\$ 26,000$,
000 a year, the English army of 133,720 cos but a year, the English army of $133,219,500$; the latter beiug a yearly cost of $\$ 473$ per man and ours $\$ 1,050$
Ar a walking match in New York the othe made 160 miles in 34 hours, 29 minutes, and was awarded the first prize.
Tre Free Labor Exchange last week fur nished employment to 114 persons, of whom
91 were men, and 23 women and girls. Of the men, nearly half went into the country. Ат Victoria, B. C., no public house is allowed to remain open on election days, neither can
liquor be sold or given away, under hcavy penalties.
. Henry Ward Beecher will arrive in this city about the 10 th of August, his object being to lecture here and in other cities on this
coast.
Charles Morgan, owner of a steamship line
between New York and New Orleans, with between Nuw York and New Orleans, with
steamers in the Texas trade- 21 in all-died
last week, worth $\$ 13,000,000$.

Gen. Grant, wife and son are in Paris
Gortchakofr is weaker in consequence of THE 342,595 gout.
The 342,595 pensioners on the pension lists More parties, claiming to be relatives of the le A. T. Stewart, are suing for a portion of Thomas Drew, a native of England aged 69, ropped dead while raking hay on his ranch Stanley, the African explorer, was, it is
said, born a little over 30 years ago in a Welsh poorhouse.
There was a heavy snow-storm at Muscatine, Iowa on the 11 th of May, with frosts in Ohio and Indiana, but no serious harm done.
ExTENSIVE strikes followed by lockouts, riots and suffering have oceurred among the spinners nd weavers in England and Scotland.
Frank Dusy has sheared this
Frank DUSy has sheared this spring at his corrals at Fresuo 43,000 head of
Foster \& Morrow about 50,000 head.
China and Peru has under the auspices of kong and Callao to facilitate Chinese emigration O Peru.
a. McDonald, who has been a member of the Legislature, of a State convention,
Presidential Elector, etc., is now at work in Raleigh, N. C., as a common laborer, equally respected as when he held office.
Heary failures have
Heavy failures have occurred in Liverpool, owing to the great depression in most branches The
county, is factory at Forestville, Sonoma mostly, of the old-fashioned style with rawhide On the llth inst. Emperor William, while returning from a drive, was fired upon but after firing two shots, both balls lodging in the IT is is announce
IT is announced that all white men who desire work may obtain it by applying to the need of workmen
California Pacific.
Prof. Martin made another balloon ascen After being up wards Gardens last Sunday After being up an hour and a quarter, and THE rainfall the present season has been at Shasta 95 inches, while at Bakersfield it has
been but eight inches, the former being about the wettest and the latter the driest locality in The Supreme Court of Massachusetts has decided that a note given for a church subscrip
tion does not carry with it an obligation to pay, tion does not carry with it an obligation
since it is given without consideration.
No trouble with Sitting Bull is anticipated within the limits of the department, but Gen expeditions north and northwest of the Black Reports from 29 States and one Territory in dicate the largest crops of all kinds this season increased acreage of wheat in the Western State is very large.
Ir is believe have triumphed at the Vatican, which party said, has resolved on a policy of resistence, al negotiations with Prussia and the other power
having failed. having failed.
There is a
THERE is a rumor that secret negotiation ment of a corps of five or six thousand Irish soldiers to be sent to Russia for service against
England. Cooper, of New York, was first a oach maker, then a cabinet maker, then
rocer, and failed in all. In his fortieth year $h$ began making glue, and made the foundation of his fortune, now estimated at $\$ 10,000,000$
In his report on the proper terminus for the Canada Overland Railway, Admiral De Horsey,
of British Columbia condemns Burrard Inlet nd Skeena river as harbors, and strongly favor the adoption of the Bute Inlet route, with Wsquimatt as the terminus
Haukin, county, not long since. Hankin's wife left lim shortly after being married and returned to her tather's, which caused bad blood between the parties.
The California Pacific railroad, between Val lejo and Sacramento, upon which through
travel has been iuterrupted for several months in consequence of the washout, will soon be in running order again, a large force of Chines having been set to work repairing
ng department being erected in the navy ing department being erected in the navy yard a tons, obtained by melting down counterfeit plates and dies captured by the detectives of the Treasury Department.
The Alaska waters contain more salmon than all the other waters in the known world Within a few years salmon canneries will be the Pioneer cannery of Alaska has been locate at Klawank, on Prince of Wales Island
Tue fuueral of John Morrissey took place from St. Pcter's Catholic Church, at Troy, N.
Y., and was attended by an inmeuse concourse. The entire Statc Seuate, with Lieutenant-Gov meu, were present. Bishop McNierny, of meu, were present. Bishop McNierny,

# 250 s or and  

Song.
For a Temperance Dinner to Which Ladies




 Then health and a weleome to woman one more!


## Ferns.

 Thase lew green buathe, what shanly griee,


 1 neet itss stanowy in erend dirves



## "The Innocents."

"Oh, dear me suz," said Mrs. Dascom, impatiently. "I never did see such work as I do have
to-day. Everything has gone wrong, and now
that kettle of tallow has boiled over!" that kettle of tallow has boiled over!",
"Perhalss you got out o' the foot o' the bed This morning," piped a queer little voice, that
sonnded as much like a cricket's as any thing. Mrs. Dascom lifted the heavy kettle from the stove, and then turned around wearily, to see
standing in the pleasant May sunshine that standing in the pleasant May sunshine that
streamed across the shining, yellow painted lloor, through the open doorway, a little, old, funny little calico sun-bonnet on her head, and with her knitting work in her hand. "I wouldn't fret ef I was you," she went on, wondering if her fairy goimother had appeared
to her. "l would save my breath. You may want it some time; there's no knowin'." lieach-
ing Mrs. Dascom's side now, she held out her hand, saying: "Shake hands, and I give ye a
welcome to the neighborhood. I'm Tildy Dresser, and my husband is Dicky Dresser, and they call us 'the Inuoeents. 1 e live down
here by the bridge, at the foot o' the hill in a
little red house. I heerd ycsterday that youd little red house. I heerd ycsterday that you'd
moved in, an' I thought I'd just drop in an' tell
ye I was glad to hev a ncighbor. I've brought my knittin', because I've no time to waste, but ef yer busy and don't waut me here, I'll go
straight back hum, and take no offence, and come again some other day. I believe in telling
the truth, an' bein' blunt, so ter shame father the truth, an ${ }^{\text {o les }}$, that's my way.'
" Iou are not goiug lome now, by any
means," said Mrs. Mascom, pleasantly, moving
a low roekiug chair to her favorite window, a low roekiug chair to her favorite window,
near which a lilac tree laden with purple buds
looked in, nodding a welcome to the new mislooked in, nodding a welcome to the new mis-
tress of the cheery kitchcn. "I am very glad
to sce you. You scem to be a very old person to sce you.
to walk so far
"Yes, bless the Lord, I shall be ninety if I
live till next fourth o' July day. And how it
happens that I've lived so long, is-I've saved happens that I've lived so long, is - I've saved
my breath. I never fret, scold, or talk scandal
stnff, an' it's a great savin'. Every person stnff, an' it's a great savin'. Every person names, au' they kin be 'stravagant or savin' on yon a-talkin' to yerself as I come in jest now,
I thought perhaps you'd never heerd 'There's a good many folks that never did till told em. Bnt it's in the Bible; I've read it
there myself; not in jest the words I tell it, but
I give the senso on't.

all the Whiples. I was a Whipple, an' ef 1
dou't get talked out, I guess 1 shall live arter

 thither and thind her, 1 allus made it my home
hate theere till 1 was ner, marricil. They call the Whip-
ples tral estate.' Till tell you how it wat ples 'rcal estate.' Yint tell you how it was.
"When I was a , gal, 1 had the real small-pox, "When was anal, hat the reat smani-pox,


 jest went unt there, an' went in, an' went ter
work. An' Idid well. They all said I saved
Then theie lives. An', arter they'd got well, , kept
stayin', workin' round OHic day the Squire
 boly coine, and cheren his town allus, an' he
towil whod been on his talked to me, an' I minded my manners, an' he he
asked
and
 Squire ou't, an' he said, "He don' thuow much,
does he?'
He knows enough, to eat doughnuts, and checose,' says I, 'an' 'that's enongh for me,
and
"'icky come over the next day.
Inembers wells kin lee lind a new calicico dress that the old squire's sife gave me, , whas was good
deal lighter col ored than whitite, an' tuwas good deal too short for me. So I cut a piece of the bottom and sewed it on to the top, anl I was
doin' that when he come. He askeri me again
to marry lim, an' the Aquire said we never to marry lim, an' the Squire said we never
could do wus, either on ns. The Squire, he married us, an' I wore my new dress, lnt I
couldn't see's 'twas a bit longer'n 'twas before 1 couldn't see's 'twas a bit longer nh twas before
fixed it. The old Squire said I'd did well for his folks when I had the chance, and now that he'd a life leaso of the red house and the garden spoot, a eow out an out, and a right ho his baru win-
his lot sumers an' keep her in his had cake at the weddiu' and cracked
ters. ters. We had cake at the weddiu and cracked, put the meats in oue basket an' the shells in
'nother. I had a good scttin' out, I tell ye. 'nother. I had a good scttin' out, I tell ye.
I had two dozeu liuen pocket handkerchiefs made out o' black bunberbine-au' we had
cake, an' everyborly came an' bronght things cake, an' everyborly came
for us to keep house with. "As I was a-sayiu', they allus called the Whipples real estate because they belonycl to
the town, ani stayed as clus as the land did. Dicky was born on the town's well's 1 , an' we
lidnt either of us nsed to take care of our-


 says
sown.
"I am sure I thauk you kindly," said Mrss Dascom, when, after an early tea, her ridilitht
tle old visitor was taking her departure, with a
 bundles for the comfort of berself and Dieky. for teaching me to save my breath Youl Must
come aud see me often, audd bring Dicky with Toil", little old body never aceepted the invita.
 abont uned un so she could go with heim-any
way she meant to nse it up. She talkel without
 and when she was told of it her arms and head
fell
simultaneously, and a few hours later the litle old couple lay side by side e the the bit of a
parlor, scantily though tidiliy furnislect, clothed
 uneral rites, which were attenten by all the
kind-hearted country folk, whose
corerous
 spot." The tiny red house fell to decay, and now a perfect thicket of roses, lilacs, daisies
and floweripg alinounds marks the resting place and Aowering alinonds marks ther resting place
of "Ther
onnocuns." ,
M.ariank. - In the marriage relations there
s an erroneous notion of liberty it ane erroneous notion of liberty Men do not
take into consideratiou sutficientily the stren stli of the marriage tie. It is looked upon as a convenient mutual arrangement, to be main-
tained as loog as there is nothing pleasannter attainable; but when there is, then it is blown are such as should startle and humiliate us Ministers called upon to marry parties should

 forming that solemna cercmonial they are not
aiding and abeting a crime. - Rev. John Hatl. "OIL insturks."-They have "oil smellers" in the oil regions who protess to be able to de
tect the existence of petroleunn 1,000 or 1,500 tect the existence of petroleun, ,on or 1 , lior
feet below the surface, by suspending anl her. metieally sealed batle from a striug elose to to
the erround. One wealthy operator, referred to
 year by this species of hocus pocus, to the ex.
tent of 100, coo worth of dry tent of $\$ 100,000$ worth of dry holes.
 der. A Apeciaty made of Religious Publica.
tions," is she sign over the door of a Willians.
birg firm.

## Window Decorations.

Many persons have an admiration for trans parcut shades, and some of these are so lovely that one call scarcely wonder at this taste. To such we would say-yon cannot do better than
to obtain what is called architeets' or artists tracing cloth, which is a cheap transparent cloth, producing that mellow light seen through the whitc ground-glass lamp-shades, and upon it to trauster some of the exquisite designs in
Diaphanie aud Vitromania work. These are of all varieties, from the Mlellieval and lienaissance period, with its gorgeously-robed knights, the lovely landscapes and Oriental groupls or many wiudows, shates of this deseription impart a woudcrfully imposing effect. For dull, checrless apartments, we shonld strongly recom mend this variety of window covering, as it
imparts a rich, bright glow to an othcrwis imparts a rich, bright glow to an otherwise
gloomy room. And what, too, can be more gloomy room. And what, too, can be more
beautiful than the blue-white tints of the Swiss curtains, with their exqisite puns and neatly Hottinuhes, lace hangings, with lambrequins of feathery ferus and gorgcous autumn lcaves As regards swiss musliu, the coarser the texture the more shecr and light the appearance, and they are equally easy to "do up,."
For persons of limited means, the Tycoon reps, which may he purchased at 25 cents
yard, or less, are really very valualle. This material comes in rich colors and many really beautiful pattcris, some of which present truly Orieutal character in design, richness of afford a most charming embellishment for curtains of white siwiss, and will continue fresh and bright for a whole season. They can be fastened on with gun araluc.
A tasteful cornice for such eurtains is made of pieces of slender treo branches, ornamented
with the delicate little spruse twigs, forming the most exqnisite (iothic designs imacinalle, aud which, from the hloor, appear like some
old and curions workmanship of medieval times complicated in form and rich in color as to make these cornices is an abundance of smal pins, by which the numerous little arches aud varnish gives a fine tinish to this work, and delicate fern frouds with tiny sprays of pressed autumn leaves, arranged as vines over them,
add to the artistic effect.-Beantifill Homes.

How ro Wis Him.-"Eliza," said a fond was about going forth in tow of a young man was about gong erery sidewalk she walks upon,
who to the bread-box and cat a good big crust
of brcad before you go out." "Why, maw," replicd the blushing gir, "I it, bnt you will be hungry before I get back, and when Aclolplus takes you into a restaurant you'll eat ice-cream, and spongo cake, and han out of a year's growth. You silly girls don't I was once young and giddy myself, and but for I have ever since entertained the most profound coutempt-yur paw wonld have becn a Congressman with an aquiline nose and Ityperion's
curls. Beware how you sit down on the bnd ding flame of Cupid. Of course Adolphus will spend the money you save him on billiards and
things; but that makes no difference. When even if you are lhungry, don't. Say you do not approve ture linsbauds ou trifles when it uiuht be ap plied towards furuishing a house. Point ont that for the price of au oyster stew yoll might is so cheap, and that a Saddle lock roast is the equivaleut of a silver fork -plated, of eourse, but not easily distinguished from solid silver-or a
glass sugar bowl. This always takes the yonug men; it sets them to thinking of honsekeeping and matrimony; it makes them believe you are an excellent wife; and so they ofteu say things which give you a hold over them, and are effectsagacious counsels, and acted upon them with such earnestness and effect that when she came home she was an ellgayed woman.
Urasts, -The planet Uranus is now very
favorably situated for observation, though, except with a powerful telescope, there is very little to observe. It is at present easily de-
tected by the naked eye on a dark night, being the eastern of two faint stars, whieh lie about the telescope it presents a pale blnish disc, about one-fourth as large as that of Saturn, scopers less than eight inches in diameter would have no chance to show any of its satellites,
With instruments of niue to 10 inches aperture, a fairly gool eye can, nuder favorable circum, stances, see the two outer ones, Oberon and
Titania, though, to make measurements of their Thesition, wonld reqnire a still larger alperture beyond the rach of all but the most powerful telescopes. Even with the great Washington
Equatorial they cannot always be seen.

## Evolution and Materialism.

We of to-day hear so much about evolution nd materialism that it is well for us to fully nderstand their mean. But many they ar of the University of California, in the current number of the Popular Ncience Monthly, very clearly shows the distinction between the two Howledge that I am myself an frankly
may not agree with most that crolution ad anees always rum arguo perle. On the contrary, and periods of rapid, almost paroxysmal, evolu tion. I may not agree with most that we al ready have in Durwinam the fiual form and sur On of the ntlest, the prime factor of evolution On the coutrary, I bclieve that the most im portant factors of evolutiou are still unknown that there are more and greater factors in evo
lution than are dreamed of in the Darwinian philosophy. Nevertheless, evolution is a grand ture; and more cspecially evolution of the o ganic kingdom, and th erition, must be regarded as an estallishe truth of science. But, remember, evolution is one thing, and materialism another and quite diffcrent thing. The one is a sure resule of 8 ci phy. Let no one whous lal step by step throso the paths of evolution, from the mineral to th rom the animate to the rational, until ho and ogieally, as he sup - ersal materialism let no such one, 1 say, imall the way in the domain of science. Walking stepped across the boundary of science into the domain of philosophy. let the step seems so distin, so anh po and the inference of philosophy, aud thins the whole is unjustly aecredited to science.

Tue Uabrell.t.-From time immemorial the umbrella bas been in use. At every poiut mbrella in literature and art. In the fiftl incarnation of lishnu, wheu the god goes down into hell, he bears in his hand a sunshade.
In like manuer old bas reliefs represent Dion sius bearing a parasol when he is descending ast has from the reurotest antiquity implid fight to bear an umbrella; and to be precelal by umbrellas has siguified royal quality in the persons following them. Iudeed, the Nastern title with which we are more familiar that am. iguifying Lord of the Umbrella. No English fox hunter would care to ride to the coverside
at the tail of a company of walking or mounted umbrella bearers; luat when the Fimperor of China goes forth to hunt he is precerled by $2-$ asymbel in the Greeks used the festivals, and put it in tho hands of gentlewomen. Bestowcomans also elevated it in their halls of justic as a symbol of authority. the symbolical canopy under which the loman judge sat in the basilikon. The Cardinal's
scarlet hat is but a modified umbrclla. That our English nmbrella has the same magnificent escent is shown by its name, which significs hademaker. Although tbe kinglish did no develop and bring it into perfection. Between 292 improvements on the ordinary walking ome few of thed in liggland, and undraje batons, some 270 of them are for portable canopies. With so many fertile brains at work on
its construction, the umbrella of the future its construction, the
must reach perfection

A Nrw Explosive.-It was stated at the
last meeting of the Royal Dublin Society that a ncw explosive agent has beeu discovered by rinity of chlorate of potassium with $25 \%$ of a body ery easily prepared by the mixture of the mate rals in the above uamed proportions. The new luwer than ordinary gunpowder, while the effects it produces are even more remarkable than those states that his powder leaves only $4.5 \%$ of solic residue, whereas common gunpowter leave
about $57 \%$. It has been used with success in small cannon, but its discoverer considered that its chief use would be for blasting, for shells, for torpedoes, and for similar purposes. Dr.
Reynolds pointed out that one of the advantages this powder possesses, is that ito can be pro rouch mixture of the materials, which can b stored and carried without risk so long as they are separate. The sulphurca, the chies compo Dr. Reynolds about 10 years ago, and could be easily procured in large quantities from a prod
uct of gas manufacture which is at present
wasted.

Lif Salve.-Oil of sweet alnonds, eight three ounccs ; rhodium, fifty drops, and white sugar candy forms an excellent lip salve.

## Chaff.

Young men should pattern after pianos-h
square, upright, and grand. "Tris older the tree the thicker the bark; Dr. Amos Clarke says that "strong drin, is not only the d."
way to the devil."
A race-horse can go fast and a war-horse
looks well in poetry; but, if yon want to hear ofter tones in the kitchen, furnish it with good clothes horse
A Yankee was giving an account of hi
experience as a hotel-keeper. "Did yon clear experience as a hotel-keeper. "Did yon clear a six-rail fence, getting
A Lowell man, who lost his good character some time ago, was severely hauled over the
coals by some of his former friends. "I know coals by some of his former riends.
it boys. I know my- character's gone; lost
entirely. And," he added rather pointedly, entirely. And," he added rather pointedly,
"it's too confonnded bad, for it was the only one in the place worth saving.
A bevy of children were telling what they and definitions. "And what did you get, little one?"' asked the father, to a rosy-cheeked little penny nail into the door-panel.,
A MAN saw a ghost while walking along lonely highway at midnight. The ghost stood farer, deciding to investigate, poked at it with his nmbrella. The next instant he was knocked 20 feet, into a mud-hole. Moral.-Never poke
an umbrella at a large white mule, when its an umbrella at
You need not be afraid of giving too mnch. The old darkey said: "If any ob yon know ob any chnrch what died ob liberality, jes' tell me
whar it is, an' I will take a pilgrimage to it, and by the soft light ob the pale moon, I will npon the topmost shingle. 'Blessed am de dead
An exqnisite, leading a dog by a string,
onnged np to the ticket office window of a railroad company and inquired: "Must I-awtake a ticket for a puppy?", He was naturally seller answered, in a slightly bewildered tone, can travel as an ordinary passenger, at the regular rate
A WELL-DRESSED, ladylike looking woman
entered a street car, the other day, with he little boy, of about six years of age. On the
condnctor's coming to collect the fares, the lady handed her little son a half-dollar, he be ing nearer the door. The little fellow examined the coin carefully, and then gave it to the con-
ductor. Scarcely had tho man returned the change than the yonngster clapped his hands, and, looking at his mother, exclaimed dollar

## An Expert on Mad Dogs.

We have had abnndant testimony concerning the natnre and remedies for hydrophobia from
scientific men. It is interesting, if nothing more, to read what a practical "dog catcher"
thinks on the subject: "I do not believe in hydrophobia," said Special Detective Downs, of
the Philadelphia police, who has charge of the the Philadelphia police, "Who has charge of the
dog-catchers' squad. "In half the cases reported as mad dogs the animals are not inad Because a dog froths at the month it is not a
sign that he has the rabies, and I do not believe sign that he has the rabies, and 1 do not believe
that the cases reported in Port Richmond and
down town within the last week, down town within the last week, where so many persons were
people who are bitten fre frighten themselves into
the hydrophobia the hydrophobia. If a man's system is in zood
order, he will not feel the bite so much as one whose system is disordered. I'd sooner be bitten by a dog than I would by a man. It is
my opiniou tliat there is more danger in the latter than the former. I've been bitten two or three times and have not gone mad yet. After who were standing around the wagon would say: 'Why don't you kill that dog? Well now
that would be foolish, to kill the dog after I've been bitten. The harm is done and nothing could prevent it then. I always make a poul-
tice of salt and onions to draw the poison out right wounds, and in a short time it is all with the wagon, we canght a little skye poodle and placed him in the box. He bit every dog
and frothed at the month, and we thought for certain that he was mad. One of the darkies he was lct loose in the yard at the pound he bit clarge of the place, killed him and had him dis-gnm-boil and a decayed touth, which accounted for his strange actions. When dogs are cutting shun water, have convulsions, frothse and par,
sons who do not know what ails them, believe

## know how to manage dogs. A scare is raised

about hydrophobia, the animals are put out of
tho way, and they gloat over the satisfaction of

## Youna Folks' Column.

## Bruno's Visitor.

[Written for the Press by Faith Fremont.]
One fine morning old Bruno walked ont rather earlier than nsnal, and cane very nnexpectedly upon a fox, who, like himself, was inclined to early rising
Good morning, my dear Mr. Bruno; how well."
"Quite well, I thank you, Mrs. Fox," an wered he, a little stiffly I fear, for he had al ways had grave distrust of the lady, and wished
to have as few words as possible with her. The to have as few words as possible with her. The and did not intend to let this opportnnity es cape of testing Brıno's sagacity
"My dear friend," began she in a very bland tone, and with the most innocent air imagina ble, "I hear your master has purchased some
very fine Brahmas; now I pride myself some very fine Brahmas; now I pride myself some
what on being an excellent judge of good fowls what on being an excellent judge of goonld like very mnch to see them. terested in poultry?" qneried Bruno, with een glance, that dir ape the fox. reat admiration for poultry, and Brahmas ar especially my favorites, and, with your permis sion, I shonld be most happy to see your mas ter's." Now, Bruno was naturally a very cour and he could do no less than invite her to call Mrs. Fox thanked him very politely, and prom
ised to be at the ponltry honse at early twilight sed to be at
Accordingly, after sunset, Brnno walked lei surely over to the place appointed, and stretched
himself npon the ground to await his visitor He waited quietly, thinking every moment t shades of night gathered thickly, and still no fox appeared. At length, thinking she had for gotten her promise of the morning, he was ris ight to return to his kennel, when he heard his visitor creeping slyly toward the door of the poultry honse.
"II beg a thousand pardons, my dear friend," assnre you I hurried hore as so " " "Smoothly spoken," interrupted Bruno, "but of course, seeing the Brahmas to-night is im yossible, and still it is a pity yon should have" at the same time ad Mr. Bruno" exclaimed she. Fox. tone, "F cannot permit such familiarity from omparative stranger." And before he could ollect his wits
"This bed is not so comfortable as my kennel but I think I will pass the night here," wisely
decided Bruno, and he quietly laid down a little nearer to the poultry honse.

## An Examplo for Girls.

Our boys are continually incited to persevering effort to succeed by the example of men many disconragements. Onr girls can find sim of Jenny Lind, who led the world oi song Perhaps some of onr younger readers may im and sung as easily as the birds, which she so success Jenny Lind to the manager of the Royal Opera, that potentate saw before him a pale shrinking, nnder-sized child, between nine and in a dress of black bombazine. The Connt, w are told, gazed npon her with astonishment and contempt.
"Yon ask a foolish thing," said he. "What shall we do with that ngly creature? See wha feet she has; and then her face. She will never
be presentable. No, we caunot take her-cerbe presentable. No, we caunot take her-cer-
tainly not." He afterward admitted her to the training school attached to the royal opera After years of toil, when I3 years of age, he scheme of edncating her for the opera was abandoned, although she continued for four years longer to be an assidnons member
the school, studying instrumental music an the therry of composition. We are indebted
to Mr. Parton for the acconnt of snbseqnent trials endured previous to her final success.
Attainiug a temporary snccess in her 17 t year, in her efforts to improve her voice she over-strained it. She felt the necessity of bet ter instruction than her native city afforded
Garcia was then living at Paris, at the hight of his reputation as a trainer of vocalists. She de was nnable to affrrd the cxpense of a residence in Paris. To raise the money she gave con pal towns of Sweden and Norway. Her conof Sweden, Nevertheless she was compelled
to make the journey alone, while her parents to make the journey alone, while her parents
pursued her ordinary labors at home. Iler

| first interriew with Garcia was disheartening |
| :--- |
| in the extrew | the extreme

"My good g sing, you have no voice; or, should rather say, that you had a voice, but now on the point note for three months. At the end of that
no time, come to me." Think of the dejection and tedinm of those three months! "I lived," said,
she, "on my tears and my thoughts of home." At the appointed time she stood again in the master's presence placed herself nude his instrnction, and profited by it; but, strang cess. He used to say that if she had as suc voice as she had intelligence she would as mnct the greatest singer in Enrope, and that she wonld have to sing second to many who had ot half her ability
How few wonld have had the conrage to press
We believe in the existence of special bents, aptitndes, or faculties in individuals, which are
to them as so mnch capital in those directions. to them as so mnch capital in those directions.
Yet not many who have genius carve out suclit
It generally comes to such as to ordinary patient, honest, earnest effort, bearing the

## Good Health.

Use and Misuse of Carbolic Acid.
In San Buenaventura there was recently a case of the misnse of carbolic acid by the injec-
tion of it into a wound. This fact has led a correspondent of the Signal to lay down the
authorities or the nse aud misuse of this snbstance, and to call attention to a fact, which
every good physician knows, that carbolic acid every good physician knows, that carbolic acid he greatest care and by skillfnl hands. I Therapeutics in the Pennsylvania University, says: "The free external nse of carbolic aci
is by no means devoid of danger. Indeed, in
more than one case, it has cansed death. Two yonng men snffering from scabie, [itch] applied extcrnally each abont one-half an ounce of car bolic acid in a watery solution, one of whom was
soon found dead." Dr. Wood recommends as an extcrnal antiseptic 100 parts of water to 1 part of carbolic acid. The county physician,
judging from the effects and from the statement $f$ a physician present soon after the injection parts, and water or olive oil 50 parts. Dr.
John I. Recse, in his Mannal of Toxicology, page 342 , says a man was nearly killed by hav ing an ointment applied to his body consistiug Dr. D. Gross, the best authority on snrgery in operations in opening absccsses, and durius the removal of dressings, carbolic acid may be used as a spray, olle part of the acid to 100 o
water, the necessary manipnlations being con
dncted in carbolic acid atmosphere, which doe dncted in carbolic acid atmosphere, which does From the above anthorities it will be seen when
nsed externally, carbolic acid, in comparatively When injected, as it was, in a strong solntion, When injected, as it was, in a strong solntion, that case of Mr. Maddox, we can only wonder effect of carbolic acid is to arrest circnlation and to destroy the life principle in the blood. Indeed, there is no greater and more effective carbolic acid and 499 of water, makes a solut
strong enongh to instantly kill plant lice.

What to do for Croup.-Hall's Journal of
Health says: Croup is so common a disease Health says: Croup is so common a disease affects the windpipe. As it attacks sud,
denly, most often in the night, and as an hour' time may be all the difference between life and death, it is proper to state the most reliable atained. 1st. Keep the feet warm by having also be well wrapped ap in woolen flannel. the hand can bear. Have two pieces of woolen fannel of several thicknesses, one being on the throat while the other is in the hot water, rc-
new every two or three miuntes, nntil relief is iven or the physician arrives. The water in the bucket mnst be kept hot by the constant addition of boiling water.
Coal Tar for Flesh Wounds.-Mr. F. D. Curtis informs the New York Tribune of what he considers the best application for any and which may be had at any gas-works where gas has been in use at the Kirby Honcstcad for ell years and is not half gonc yet. Coal tar, and thus stops the smarting; it will also keep off the flics ; it is very healiug and it is antiseptic, that is, cleansing, and will prevent the
rowth of prond-flesh. It is the cheapest, mos healing and best application we have over nsed 11 sorts of cnts and sores with the most gratify ing and successfnl results. It was an experi
ment at first, but now it is a necessity.

## Domestic Economy.

## Sundry Recipes

For Starching Linen- Use one teaspoon
ful of borax to one qnart of boiling starch, it ful of borax to one qnart of boiling
will improve the stiffening and gloss.
To Keep Juice of a Pie from Bolling Over - Wet edges of both crusts; press tightly together; stick a fork several times throug
npper crust to allow the steam to escape.
To Polisil Furniture.-Take of good alcoho one-half pint, quarter of an onnce pulverized one-half pint, quarter of an onnce pnlverized
resin, the same of gnm shellac; after this has dissolved add one-half pint of linseed oil; shake well.
Sour Sauce.-Half a cup of bntter and sti water, nearly one cupful of sugar, two spoonfuls good vinegar, spice to taste.
Choice Cookies.-Two eggs, two cupful ful sweet milk, two tal butter, one-third cup one teaspoonful soda, one-half nutmeg.
Dressina for Cold Slaw.-To the well beaten yolk of one egg add a little milk, two o butter; stir it over the fire nntil it comes to butter
boil.
Fried Cakes.-Three and a half cups of su gar, fonr cggs, ten tablespoonfuls melted lard qnart good sour milk, one teaspoonful saleratus mix stiff as bread.
cups corn Steamed Corn Bread.-Three swect milk, one of sour milk, half enp sugar one teaspoonfnl soda; steam three hours, then
bake in an oven until brown. Potato Pie.-Boil or wash common or sweet potatoes and strain through a fine sieve; to each
pint add one and a half piuts of milk, a little melted butter, two hatmeg to th taste; bake in one crust, like cnstard pie.
rately; one cup of sugar; one cnp eggs beaten sepa one-hal cup of bntter; one teaspoonful of lemo in the butter and sugar; two teaspoonfuls low por mixel in the corch.
New Way of Cooking Oysters.-Take
mashed potatoes, mix a canful of oysters with the potatoes, and with a knife cut the mass np
fine; add one-half pond of powdercd crackers; ine; add one-half ponnd of powdercd crackers; 1

 very easily made: Two and a half pounds
brown'flour, $i$. $e$, the wheat is ground, no bran being taken out, quarter pound white flour, lump of ammonia the size of a nnt, one aud half-pints of milk and water, or pure water

For Preparing Lard to Keep Tilrough f sal soda, disselyedlon of lard put one ounce not fill your kettle more than half full, for it will foam and perhaps boil over. No other
water is required than what the soda is dis. solved in. When it is done it is very clear and will keep two years. Strain throngh a

> gete

Fruit Stains.-To remove fruit stains, let the spotted part of the cloth imbibc a little water, without dipping it, and hold the part
over two or three lighted brimstone matches at a proper distance. The sulphurous gas which is discharged soon causes the spots to disappear. moved by scalding in clear boiliug water, be fore any soap is applied.
Bread Crumb Pudding.-Make a quantity of bread crumbs by rubbing the crumb of a stalc loaf through a fiue wire sieve; pnt a pint of
nilk and one onnce of fresh butter into a saucepan on the fire, with sugar to taste, and tho piece; when the milk boils throw bread crumbs into it nntil a thick porridge is obtaincd; tnrn out into a basin; whell cold remove tho lemon eggs, mix well, then stir in the whites of two eggs beaten up to a stiff froth, and a small Have tity of candied citron pecl cut very thin. very carefully all over pour the composition into it, and bakc it about half an hour Servo cold, with a compote of any fruit around it.
neal yecook hoast Beef. - Mince some of tho mashed potatoes about an inch thick in a dish; spread over it a thiek layer of meat and cover
it with another layer of potatocs; with a knife orm squares on your potatocs, spread a littlo meat in inch square pieces, takc abont half as nuch raw potatoes, cut the samo size and one he beef grayy, and water cnough to cover it, a little salt; cover tightly, and when it comes to a boil set it where it will simmer until the gravy
is reduced to quite onc-half, then add Wlack pepper and a little enrry powder and a teaspoontul of ilour; serve in this way, or you can
lino tho sidesiof a pic dish, put in the meat,
ctc., cover with a nice paste and bakc.

## PAC IC RURAL oxpritosalas

## DEWEY \& CO., Publishers

A. T. Dewey.
I. B. Ewer.







Our lutext forms go :o press Hednesday evenng
The Scientific Press Patent Agency DEWEY \& C0., Patent Solicitors.

## Saturday, May 18, 1878

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tics of Chitornia, 308-9



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Gieese, 312.

## NEW ADVERTISEMENTS



The Week.
Nothing las occurred to ruffle the tranquility of the passiug days save slight winds bringiug
rather low temperatures. Not yet have the "hay rains" come, although they are due according to the experience of former years. Hay
is falling fast in the wake of the mower, and many a man who sits the maehine, wonders
whether in the great abundance of hay he will yain price enough to pay hin for his seed and his
labor. Doubtless the price will be low, but many will gain euough in greater weight to
compensate for smaller price. The abundant naterial too will enable a mann to produce ehear
animals, and the effort to turn the liay into flesh will of ten pay bettcr than turning it into geold As the haryest approaelies it appears that
facts arc being observel wliich tend to reduce the aggregate of the wheat erop some ewhat.
How nucl allowance must be made for lessened production in counties which havo received an
excess of rain cannot now be told, but it is a excess of rain cannot now be told, but it is a
certain quantity. Several of the northern coun-
ties report rediced prosjects and sickly grain, ties report redisecd prosplects and sickly grain, merely to put men on their guand againstrs fartort,
of an overwhelming surplus of grain which are being industriously eirculated in order that
some one unay gain the srain at a lower figure some one nay gain the grain at a lower figure
than the outlook warrants. We shall have a magnificent harrest of eourss, and some parts
of the state will roll pa a surlus beyond all
precedent precedent, perhaps, hat it is too soon to ery
down priecs on the claim that the supply will give thought to seeuring all the grain ins good
condition, and then we shall see better how the market stands affected by the amount overliang

## Doing and Over-doing.

that the words are true. The time is just upo us when the farmer is most apt to overstep the harvest labor, heavy in its gifts, is apt to be as well heavy in its drain upon the vital force both in brain and musele. The mind is clarged with
with excitement. It is working at its highest speed. It is off its guard. It puts the whip and spur to plyssical power and enduanance until they too are acting at their utmost tension.
harvest operations are iu many cases carried on upon so large a seale that he who commands the
field has enough ou his mind and liands to kee half a dozen men well employed. And yet, a a general rhing, the wore for fit ones to sllare and the grain grower must assume the whole task, with it great responsibilities and its thou-
sand details, and conquer, or be conquered Although there is but a step between doing
and over-doing, it is a step which ean only b takcn at the cost of months of discounfort, sometimes, at the uriee of a life's strength and
health. If the luiried, worried man could would but stop to think of the small ratio whic exists between getting the work sharply
sueeessfuly prosecuted and preserving his The rule is physical power, he would be safe there is but a single thought upon the mimd and that is the quickest route to the accon-
plishment of the task. Thus the man is drive before the wind of detcrmination, and, like
ship without a rudder, his strength, rollhed ship without a rudder, hes strengtr, rol, hed
the guidance of its mental guardian, rushe wildly on its course,
from lurking dangers. Iu the hope that, speaking thus early, ${ }^{W}$ may gaill possession of minds which sonn will
pases beyond the reach of elitorial preaching phos, beyond the reach of editorial preaching,
we are lel to mention a few points which are
generally regariled as fonndataion stones in the generally regariled as fonludation stones in the
structure of well aceomplished tasks. First, we would note that, generally, it is not work which
weakens the frame and unseats the mind Rather is it anxiety and its fretful handmai leads it and hazards its success. Caln, and ye spright tly and vigorous, effort does not injure
man, but is rather salutary in its effect. Th mind gains strength, the unuscles grow, under such exereise. The appetite is sharpencd and
sleep is promoted by healthful exertion. 1 lia
metrically metrically "pposite is the effect of anxions, ner
vons effort. A man's strength is lashed by it until it undertakes the impossible, and it falls back weakened if not brokell. The mind is
spurred into a tremulous excitenent which robs spurred into a tremulous excitnent Alich robs
it of its power. Appetite departs. Sleey, be-
comes a mockery, and the tossing victin yearns for the faintest light which shall return him to the labor of the day which wearics him even
less than the dreans of the night. Sueh is the contrast letween the two conditions of doing
and over-doing. It may bc seen in all occupa tions of men which call for supreme effort. The
way to secure a condition of effective doing way to secure a condition of elfective doing,
with certain limitations of natural disposition and temperament, is to begin with the determiwhich may arise, a man shall caluly master it and not lee niastered by it. liesolve beforehand whom the coming weeks sliall briug nanual labors decide now that he shall rule his own
mind and strength, and no contingency shall mind and strength, and no contingency shal
be too difficult or vexing for his triumpl ove

In addition to storage of will to meet the duty of the days, there is also a matter of dail habit. It is, we believe, the general dictum o meet unusual labors is not liy artificial stimu lants which are transitory in their effects, but lasting. Therefore let the taking of sufficient and nutritious food be a matter of religious reg larity. Do uot alternate between a famished and a surfeited condition, for weakuess is sure
to follow. Above, all be as regular as possible who eats well and sleeps well, arises eech. It ing a tower of nental andl physical strength and he who endangers his hold upon these re cruiting agencies, renders himself liable to all and more besides.
We have spoken especially of the rulcs strength and weakness as relating to the lord o the manor, , Jut they apply with certain rele unsettle the whole householl. Upont the house wife fall numusually heavy buriens and cares
She too unust be ", mistress of herself thugli China fall." She must not worry herself with too much serving. She must have no miduight
tasks of preparation, nor midnight dreams runaway servauts and laborers clamerous for their rations. Let her too prepare for whatever
extra cares the days may bring, by the cultiva tuith of a quiet determination to serenity of her no disposition, nor disturb
ruit the eveu balance of her thouyht. It is doubt-
less true that in this State our farmers' wives viding and lodging than their Eastern sisters and yet the tammilt in the field is sure to invale
the quiet of the home unless its mistress meet
it at the threshold, with the tranquility of her
disposition and the firmness of her resolve. disposition and the firmness of her resolve,
Let but the wife with her sentle influcnce and Let but the wife with her gentle influcnce an
peculiar tact undertake to rule the trouble peculiar tact undertake to rule the troubled
harvest host from lier quiet throne in the hounc, and she can often rescue her lord from the con-
aequence of a thoughtless over-doing, and thus sequences of a thoughtess over-doing, and thu
ensure a glad and suceessful harvest home.

## Abnormal Secretion of Milk

Eotrons Prksk: 1 have a Jersey heifer at my place
which is thought to be sonethivy of n curiosity. slie



This is a somewhat uuusual ease, hut not
withont piecedent. There are numerous in withont piecdent There are numerous in-
stances on record where heifers have given milk ome time before parturition and the milk has beeu of good quality. In this case, as we learn
from conversation with the writer, tlee milk the male. This, too, has preceleuts. Dr.
turtever case in England where a two-year-old heifer which had never receivel the bull, was milked
and yielded eream and luatter of good quillity, and yielded eream and butter of good qu:lity,
and another virgin heifer, also two years old, in Ayrshire, whieh yielded milk as abundautly as if she had burue a calf. Young ealves also
have frequently been notieed to yield a fer have frequently been notieed to yield a few
drops of milk. Virgin milk has also been secreted in foals and bitches.
It has long been known that irritation of the (ierman chemist proluced milk in this wa in a heifer to secmre an analysis of it, and foumu
it unusually rich in solids. We learn from our corresponlent that sonie weeks ago lie noticed calf Legging a lunch from this precocious glands induced the secretion, although it was ward.
It may be also remarked in this connection
hat in a race of animals like the cow whicl continually bred and handled so as to develo the milking function, the secretion should cro out at unseasonable times, although, as we have animals.

Twig Blight on Apple Trees.
Enrons PREss: = When convenient please give in the
Ruxp Press the cause and cure of "wiys bight, in the


The cause of this blight aud the several kinds has been a mootel question for years and caunot now be demonstrated. Theories lave leen insects it has been charged to "frozen sap" on
the cue hand anul "scalled sap", on the other. The theory of "frozenn sap", would be pretty well thrown ont of the question ly the occurrenee of the hilight in this state were there no
other arguments against such a cause for the tronlle. There are insects whiel pierce twigs and kill then, but nost diligent seareh has never found themn in cases of "twiy blight" in
he eommon Eastern siguificance of the term The judgnent of iuvestigators is now turuing in
favor to the fungoid nature of the clisease, and favor to the fungoid nature of the disease, and
fungi, have been found and described on the diseased twigs and leaves. As these fungi plainly are injurious in causing a curling and the leaf, they naay, nutil the matter is nearer a denloustration than at present, he considered as the cause of the general evil; the more so a
allied fungi are also found in the inner bark o the twigs destroying its structure. These fungi in all probability undergo a resting period and survive by means of "resting spores, which
are deposited upon the bark of the brancles and in erevices in it. Sucl, being the case there
is a clance of destroying them by the applicaion of a wash of strong lye during the winter becomes well nigh impracticable when one has large orchard to treat and aims to dreneh all spores. The most available safeguard against the spread of the disease lies in eutting oif the bighted twigs as soon as they are seen to be
afleeted and burning them. This will prevent the fruiting of the fungi and in a measure cut
off its power to spreal. This should be done off its power to sprrayl. This should be done
as soon as the slightest appearance of the disease is detected at any season of tho year.
If any of our readers lave observatio the occurrence of the twig blight int this state or have succeeded in any cflorts they have made to suldne it we should be
their experienee for publication.

Ox File. - "Mendocino Co." R.; "Drainin | an |
| :--- |
| M |

Queries and Replies.

## Diseased Turkeys.

Enroks Press: 1 have ahout 100 young turkeys all
doing well until now, when their feet have beegun to dry
 once in a white, and a hit of red pepplper occasionally. Can
you give me the cause of this foot complaint, and the
remedy as sonn as possible. 31 Rs. F. B. N., Red Bluff.
Fin ease is too meager. I never knew of feet "drying up." Sometimes the feet curl up, ficulty. This is rheumatism, and is cansed by roosting ou damp ground and by other things,
already described in the Press. If this corre. spondent will write fully the symptoms and effects, 1 shall probably recognize the discase and
will give the cure.- Ml. Eyre., Jr. will give the cure.-M. Eyre., Jr.
Onhealthy Rose Bushes.
EDicors l'ress:-I notice that one of your correspondents in Ropal of May th is troubled W:th that old pest of gardeners, the rose blight. scrid, the best present remedy. But 1 would hausted of the proper rose elements, and this weakness manifests itself in the disease de. scribed by your correspondent. To remedy dig a trench close to the old loush and put in fine hen mannre, alld, if it be obtainable, a little Thenal or the filings from a naehine shop. rcely. The new growth will be vigorous and Sume varieties of roses are constitutionally weak as regards mildew, and should not be plantcd. The old "Geant des Battailes" has Homer, Madam St. Josesh. Pauhne, Nafrano, Isabella, Sprunt and Cardinal l'atrizzi are at
the very head of the healthy list.-C'uAliLes H. the very head of the healthy list.-Cinaises H.
Simsin, Niles, Alameda Co.

> Turpentine for Scab.

EnTORS Press:- 1 ha e e heard it said that spirits of tur
pentine is good for sheep aftlicted witl seab. Can your or pentine is good for sheep afficted with seab. Can you or
any of your subscriberg lifform me if such is the case,
and if so how to ure it:- 1 . O. DA0okTT, Brown's Salley, spirits of turpentine was one ingredient of
the mixture which was proposed ly Chancellor livingston, many years ago. He used a mixadiled one-third by measure of the ly ashes, as much hog's lard as will be dissolved in the lye, a small quantity of tar, and about one-
eighth of the whole, by measure, of spirits of eighth of the whole, by measure, of spirits of
turpentine. This liquor is rulbed apon the parts alfected, and spread a little distanee round it, in three washings, with an interval of three also been tried as an ingredicut for a mixture for dipping, but it is dangerous for this purpose.
Mr. liandall says he found it necessary to nse it sparingly, because it does not mix with the iquor, but foats on the surface; hence it comes into contact with the sheep in full strength. Not attending to this at first t'vo or three sheep
were thrown into extreme agony, and appeared to be on the point of dying.
Holstein Bull.
EDitors Press: Will you please inform me if there are
any thoroughbred "Illolstien" catlo bred in wour Stato If thre are any we would be plleased to know hy whom.
We have amall herd of very fire catcle of this breed, We bave a small herd of very file cattle of this breed,
oriyinallyy fronin the herd of W. W. Chener, Boston, , STas-
saclusetis. We are unable to breell thein longer satissachusetls. We are unable to breed thein longer satis-
factorily withut a clange of bulls, and would like to
know if a bull can be lad without the heavy expense that wollld have to be incurred to procure one fremt the East.
errin states. If you callot give us he desired informa-
tion, will you piease eirculate this throurli Our inquiries for the Yamhill, Yamhill Co., Ogn. heretofore elicited no response. We believe there are Holsteins here, and only wonder thero
are not more of them. They are a fine breed are not more of them. They are a fine breed
of milkiug cattle; thcy are constantly gaining ground at the East, and could be prontaby in-
troduced liere. If any of our readers can supply Messrs. Stewart, will they so inform them? Hillside Vineyards.
EDrors PrRs:- What kind of implements are the most
hanly and successul to cultivate a vineyarro on a steep
hillside; that means where the hillside is too steep to
 do not know much about it, and ns i have not the neans
to travel around and see how they do it in other locali-
ties, I send yout this questlon in the liope to learn sonie-
Whing Wa. Preprra, Saratoga, Cal.
have applied for information to several thought were most set up on edge, but they tell us our querist's slope is steeper than any they
have to deal with. We print the question in the hope that some one working under condidescription of his tools and methods.

Cure for Clover Bloat
Epitors Press:-I will send you a receipe for bloat in eattle from eating wet clover, that is
new to me at least. I tried it on a ealf that I most of rubber hose five or six feet down the throat. They will readily take it after getting it once to escape.

Toulouse Geese
EDirors Press:-Canl you tell me of any reliable person
Hho has the Toulonse greese.-Mrs. M. Driont, Fulton,
Somma Co., Caa.
We do not at present know who has thenn.
We have had several inquiries for them of late, and anyone who has the birds for sale shonld
inform readers through our advertising columns.

## Wheat and Chess.

## 


chess?-C. Alexandre, Alexander valey, cal.
EdTrors Press - A lecture on this often-discussed subject need not be long. Wheat does not turn into chess any more than a sheep turns into a goat, although very many intended whea
fields turn into cheat fields every year, hields turn into cheat fields every year, some
where in the world. It is simply a case of the "survival of the fittest" under trying circumstances; these being, iu the present case, a we winter, especially in heavy soils.
Chess or cheat (Bromus secalinus) is a hardy
weed, whose seeds it is extremely difficult to separate from whcat grain completely, by any means ordinarily available on the farm, unless it be the header, which nevertheless, of course, leaves the cheat seed to be shed on the ground,
ready to sprout simultaneously with whatever eady to sprout simu On oicly whatl grail, aud with an ordinary favorable season, the grain usually gets the start of the cheat, and of several feet in hight, and broad, flat, manyseeded spikelets easily seen and distinguished $t$ remains entirely below the general surface of pikelets, bears only a few, rathcr roundish and is commonly neither observed nor recog, nized. In such seasons the farmer's wheat has not "turned into cheat;" but the latter has nevertheless ripened and shed its seeds, and
stands ready to avail itself of any opportunity stands ready to avail itself
offered for taking the lead.
Such opportunity is afforded by a wet season, which retards, or even drowns out completely, while it favors the development of the hardy chess. While the grain lies low, awaiting it chauce to "stool," the chess sends up its erect chauce to stool, the chess sends up its erect,
tufted blades without delay, overshadows the
, grain, and either stunts or entircly overcomes
This is the simple, natural, and matter-ofhas held its place among agricultural superstitions with surprising tenacity. Any one can verify the facts or himself by a little close and nprejil be surprised to find how universally th ng will be surprised to find hov universally the enemy lurks beneath the surface of even the
most promisiug grain field, ready to avail itsel most promisiug grain fietd, ready to avail itsel from the stress of seasons, or from neglect on possible conditions for the development of his crop. Like typhoid fever and diphtheria, the
hess disease of wheat fields is in 99 ases preventible, and recognized, and noot relegated like is know lar quotum of railroad disasters, among providential dispensations, against which it is useles to keep our powder dry,
University of California.

## Best's Improved Washing Machine.

The accompanying engravings illustrate a improved washing machine, patented through Ae Mining avd Scievtific Press Paten county, Oregon. Fig. 1 shows the machine in operation. There are two horizontal rollers placed in a frame, as far apart as the width of the side-boards. Aronnd these rollers runs an endless slat-belt. A crank applied to one of the rollers. A series of small rollers ar mounted parailel with each other above th slat-belt, each having a spiral spring, so that it wirface of the moving belt. The on the upper washed are taken singly and introduced between he endless belt and the rollers, when, by applying the brake shown on top of the maehne, the rotation of the rollers is retarded and the end less slat-belt travels on, thus holding and rubbing the clothes very similar to the process o washing by hand. The clothes are also squeezed water is expressed, thus preparing thein t receive a fresh saturation after they drop int the tub again.
Figs. 2 and 3 speak for themselves, as show
ing the difference between washing with chine and by hand, and the influence it exerts Fif 4 shows amy aud comfort.
Mr. Best for utilizing a eommon wash-board and taking the friction off the knuckles. or guide is attacled to the side of the board, and a rubber connected to it by means of arms be moved up and down. The rubber way is tipped back and the clothes placed on the board. hold of the handle and working the bybber the clothes are quickly scrubbed. The hard rubber has corrugations formed by smail rollers insteal of grooves, said rollers being free to revolve as them. These devices are both of yreat utility, them. These devices are both of great utility,
and of simple construction. Mr. Best may be addressed as above for further iniormation.
Prof. Becker, of the University of California, will leave for Paris on the 18 th inst. He
will remain during the continuance of the ex position, and will then return to this State

An Improved Unloading and Stacking Derrick
An engraving on this page represents an im proved unloading and stacking derrick, recently patented through the Mining and Scientific Press Pateut Agency, by John D. Winters, of Grand Island, Colusa county. The device may be used in the process of headiug and threshing and for stacking hay and straw. With it wag ons may be unloaded at the rate of one per minute. The derrick can be taken down and oad and stack from two 16 -foot headers at the same time.
The netting is made in two parts. On one of the parts the ropes of which the netting is made extend beyond the ral which is nearest the
point where the two parts of the retting are to e connected. Each two adjoining rope cxten ring attached at their point of friction. This the derrick being conveniently carried on


BEST'S IMPROVED WASHING MACHINE.
gives a number of rope extensious outside of the having a riug attached to it.
The rail of one part of the netting is provided with an equal uumber of straight pins, which project at right angles from the face of the rail.
This rail is also provided with a short arm at This rail is also provided with a short arm at
its midde, which also projects at right angles, its middle, which also projects at right angles,
and to the end of this arm is attached a link, chain or rope. In the middle of the nex adjoining rail is a detaching apparatus, oper
ated by a cord. To counect the two parts the netting together in order to receive a load,


WINTERS' IMPROVED DERRICK.
order. The rail is then turned around, so that the rings will draw against the face of the rail. The link or chain is then connected with the detaching devico and the netting is ready for
use. The pins will then hold the rings against ny strain that the parts will withstand. To insconnect the two parts aud dump the load, a slight jerk upon the string or cord attached
to the detaching apparatus will allow the parts to separate and drop the load. This arrangethe necessity of using a spring or other devic doubtful strength or action.
vertical position when desired.
By combining the two in ventions of Mr. Wi ters a very useful arraugement for unloading wagons, ete., is formed, as any farmer cali see
at a glance. John Morgan, Davisville, Yolo at a glance. John Morgan, Davisville, Yolo
county, is manufacturer, and may be addressed for further information.
Fresh Grapes for the London Market.
We are under the impression that fresh California grapes were shipped across the Atlantic from New York last fall, but we are not sure. At all events, we never heard of the results of the venture, either to the grapes or the ship-
pers. The snbject is called to miud by the an. nouncement in au exchange from South Australia, that grape growers there are thinking of laying down their Muscatels in Loudon fresh from the vines, and are urged to make the ex perimeut by the fact that such grapes sold in the London market last December for 20 c to $\$ 1.50$ per lb. The undertaking is somewhat
startling, as we believe the tine required for starthing, as we believe the tinne required for
the journey by steamer is about 45 days via the Suez canal, and about 60 days by ocean. It is
rather curious that, if Londoners will pay such prices for foreigu grapes, the supplies are not prices for foreigu grapes, the supplies are not
abundantly furnished irom the vines along the Mediterranean. But if they have to draw upon antipodean supplies, it seems to us that
our chauces for a market are better than that of the South Australians. It would be easy enough to deliver our grapes iu London in 21 days from
the vines, and in a fresli conditiou, by usiug rethe vines, and in a freslı conditiou, by usiug re-
frigerating cars, and the steamers which are ready fitted up to carry fresh meat from New York. Nhefther the shinpmeut conld be mave at a profi, would probably be a harder ques-
tion to solve in the atfirmative, although the tion to solve in the anirmative, although the growers are loading for, would be well Withim
good shooting distance from this coast. Howgood shooting distance from this coast. How. South sea friends are making smacks of enterprise, and will be of interest to our grape-grow-
ers. We read in the Adelaide
Observer, of latest received dates, as follows:
often said that the calling of the fast steamers of the Orient line at a South Australian port
would among other thinss be the means of
couraging the export to England of var
ticles that at present are over-produced
ticles that at present are over-produced 111 the
colony, and of compartively little value on ac count of their abundance here. A reference to the exports of the Lusitaria will show that Mr. G. F. Ind, of Paradise, the well-know. fruit exporter and wine-grower, whel that steamer to London about half a ton o grapes, principally of the Muscatel and Dora as hinds. These varieties have been selected as he considers they will best stand the
voyage. Mr. Ind has adopted a different mode of packing to that followed by Dr Serent burgh iu sending fruit to the Paris exhibition and some interest will be excited to learn which process best stands the test of a sea voyage the next steamer of the line, and by that time he expects to hear by telegraph some news as to the arrival of the Lusitania and the sale of his fruit. If the experiment proves suceessful he will probably export inost of his grapes to the London market. Mr. Ind has packed a box in all respects similar to the cases he has sent he hears of the arrival in London of the susi tania. He will thas be able to of the Lusi effect time has had upon the fruit, and what may be the probable state of his shipment. We shall a wait the result of this experiment with interest, as, if successful, a new market will be opened for an article that can be produced here
without limit thit, and which at "present scarcely We should thiuk that the South Australia of the year that find an ad vantage in the time of the year that in grapes come into market, their only competitors would be the fruit from glass.covered graperies, even if that could be brought ont in thgland at this season. We
should imagine that prices in March would be better than in December. But December prices, as givell above, would be good enough for us i
they covered considerable quantities. By the way, why do not onr southern friends strik our markets in the winter? We could certainly use a few tons of fresh Muscatels in the winter at a tine when strawberries bring $\$ 2$ per poun
and the deally cucumber scores about and the deadly cucumber scores about $\$ 1$ for each specimen of concentrated colic. We com-
mend this experiment to Adelaide along with
The Inter-Hemispherical Grape Trade since the above was written
favored by a call from Rev. J. J. Bleasdale, D. D., of Australia, who is recognized there a authority on points counected with the grape
indnstry. Dr. Bleasdale is enjoving a brie indnstry. Dr. Bieasdale is enjoying a briee
sojourn in our city, and naturally we asked
lim about him about the subjects mentioned above. H shipping fresl grapes from Australia and of an exchange of products between this state and
that country. We receive from him the following note, which explains the movement more
fully:
Eirrors Press:-I send you a copy of an
article on the shipment of fresh grapes, which I article on the shipment of fresh grapes, which
wrote before leaving Austraiia, and wlich was sent to the Adelaide newspapers. What yo kindly showed me when I called at your offic Mr. Ind has one of the vignerous, my frien ing sone ten hundred weight by the ship Lusi on . While in Sydney, New South Wales sioners for the Paris Exhibition induced me to man about two cwt. for transmission in the manner grapes usel to be packed when re e
sided in Portugai. I have no fear of thei arriving safe and sound. They were of three kinds; the names of two of which would not be
known here, the third kind was "Muscatel of known here, the third kind was "Muscatel of
Alexandria," The details of selecting, pack Alexaudria." The details of selecting, pack
ing, etc., were communicated to the Royal Com ing, etc., were communicated to the Royal Com-
missiouers, and I think published in the Sydney Morning spoke at some length on the circumstances o the northern hemisphere opposite of those of finding an excellent market in England an France for Australian grapes. 1 then specifie the sceveral advantages incidental to the thre chief grape-yielding colonies. These were in
the first place modificd or defined by thei the first place moditicd or defined by their geographical positions. South Austraia, i. e.
Adelaide would naturally ship to London, a that seaport is by far the nearest. Melbourn might ship to either London or San rrancisco, uey, while the natural outlet for Sydney would uey, while the natural outlet for Sydney woul
he San Francisco. The advantage accruing he san Francisco. The advantage accruing to ony, in some parts, she could ship grapes later in the year than either of the others.
Now our markets, during four or five months, would be open to rcceive the producc of Cali forna vineyard
As to the details of packing, etc., if this commmineation meet with any favor from those
interested here, I shall be happy to supply any interested here, I shall be happy to supply any
information I possess during the time I may re information I possess during the time I may re-
main in this city.-Joun J. Blemasdak, 609 Foolsom strect, S. F. We hope to receive Dr. Bleasdate's descrip tion of his method of packing grapes or long
shipment in time for next week's lress. It would be of general interest to our grape

The melting snow has raised all the river having their sour
pretty high stage.

THE PACIFIC RURAL PRESS.

Grangers' Bank of California, 42 California Street,
san francisco cal.
Authorized Capital - $\$ 2,500,000$.

OFFICERS:
President.
.f. W. COLBY
Manager and Cashier,
ALbERT MONTPELLIER.
SEcRRTARY. .frank A. Cressey
The Bank was opened on the first of Augnst, 1874, for the transaction of a general banklng business. IIaving made arrangeuents with the Importers' and Traders' National Bank of N. Y. Y., we are now prepared to buy and sell Exchange on the Atlantic States at
tho best market ratcs.

London Assurance Corporation, OF LONDON, ENGLAND.
Established in 1720.
Cash Assets - - $\$ 14,993,466$

Western Assurance Company, of toronto, canada. Incorporated 1851.
Cash Assets
\$1,576,307
CROSS \& CO., Gen. Agents, San Francisco

## GRAY'S MUSIC STORE,

No. 105 Kearny Street, $\quad$ San Francisco.

On reeeipt of the amount in postage stamps, any of the following pieces will bo mailed, post-paid:
POOR LITTLEE CILLOE, (Ballad).......by Luther, 35 cts kiss tie little ones gool nigit for me,

GOOD NIGIIT, FAREWELL by Rutledre, 3 ets
my dear hittle home oer the sea,
help the needy when yor cas
AMERICLS'S GRAND MARCH, .....by Ballenlerg, 30 cts.
TIIE LITTLE TORMENT, (Schotisecle)
the repcblic grand gallop,


The largest and best Business Collcge in American
teacliers are competent and explerienced. Its pupils are
 confined to Bouk-kec ping and Arithmetic merely, buit givg
such broad culture as the tines deluand Tlioroukh in

 LADurs TBLGGA Alue Derabrarsi. In this Department voung




## TOPHETINE.

The new prison, Tophetine, is found
nut warranted superior to al olthers as a
 LANGLEY \& CO, Ag Ants

## S. D. BURBANK, OPTICIAN,

 Special Attention to Fitting Eyes. OFFICE-XICHOLL BLOCK, NINTI STREET, (Bktw 50 BEST CARDS, no two alike, prlited in Criuson

## GREAT ENTERPRISE:

## -THE-

Sierra Flume\& Lumber Co.
Have over 100,000 Acres of
SUGAR PINE, YELLOW PINE, SPRU CE
Fir and Cedar Lands,
10 Saw Mills, 3 Planing Mills, 1 Sash and Door Factory,

148 Miles V Flumes,
10 Miles Tramway,
157 Miles Telegraph Line, 13 Telegraph Stations,
Employ 475 Men and 550 Oxen \& Horses.
The Surar Pine is unsurpassed in quality, and the
whole Coast can be sulpylied.

 the Fir and Cedar are as valuable for a great variety or
purposs.
Last cher thirry millions of feet were cut and the esti-
 Larree orders' can be filled on a days' notice for all
kinds of BUILDING MATERIALS,
Rongh or dresed dry, by which elegnant and substantial
work nay be eecon.plished without delay at the usual cost for greect lumber
orders for the interior filled at less than San Francisco


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Red Bluff; Chico; San Francisco-corner
Fourth and Channel Sts.

THE IMPROVED. Lamb's Family Knitting Machine.


IT IS THE ONLY MACHINE
 Karrons of the twe




J. J. PFISTER \& CO., General Agents,


the magio coin boz




12 velaz ospare, 8 H.
FARM APPRENTICE.
A stead, healthy boy, who can give good reeommsn-
dations, would like a permanient home with a tammer.

## Lands for Sale and to Let. <br> LANDS FOR SALE.

KERN COUNTY.
One hundsed and twenty aeres; 00 acres in alfalfa; 12
nilcs from Bakeraficld. One.sisth of ditul sold with miles from Bakeraficld. One-sixth of ditcll sold with
land. Price, 820 per acre. Two hundred and forty acres, 10 miles from Bakers field; unimproved, with water right.

FRESNO COUNTY.
One hundred and seventy.five acres of land, at Borden
Station; 30 acres in alfalfia. 110 neres well fenced. RailStation; 30 acres in alfalfa. 110 acres well fenced. Rail-
road station on the land. Chinatown on the land, paying road station on the land. Chinatown on the land, paying
$\$ 400$ ground rent. Price, $\$ 10,000$; hall cash, balance to suit purehaser
There is a good Public Ilonse, good Halls, Barn and Out-1louses on the land. The Publie llouse is well furnished. Address, on the premisces,

JOHN BURCHEM, Borden,
Fresno County, Cal.

## Or J. B. CARRINGTON, Grangers' Busin San Francisco, or Denverton, Solano, Cal.

## RANCH FOR SALE

A ranch for sale in liverdale, Fresno County: It com-
prises 160 acres, U. S. Patent, of rich bottom land, with house and out huildings. Grass is green the year round Alfalfa grows the year round without irrigation, as
water is but six to eight fcet bencath the surfact. There is two irrigation ditches running across the ranch and
three cubic feet of water per second belongs with the
the place, and 42 small fruit trees and two to three hundred
blackberry and strawherry plants; 30 acres of alfulfa; 20
acres of tarley acres of barley, all looking :icely and a nice veretable
garden. Sixt, acres inclosed, three plows, one two gang garden. Sixt, acres inclosed, thrce plows, one two gang
sulky, (John icere, ) and two single plows, harrow, two
number one cows, two calves, one work tcam, hamess, number one cows, two calves, ole work tcan, harness,
old bugyy and two dozen hens. The ranch is one uile
wicst of the Riverdale postuthice. We have a rood school
 Lemore, a flourishing railroad town; 9 miles due west of
lingston; 20 niles front Fresno, the county seat of
Fresmo, and 15 milcs from the Central California Colony. All the erops stock and tools mentioned qo with the
ranch if sold soon. Price, $\$ 2,500$. $\$ 1,500$ gold coin down, and one year, time on balance. For further particulars
address or call on ranch. DAVID S. ORR, Riverdale, Fresno Co., Cal.

## CHOICE

PROPERTY AT SANTA CRUZ FOR SALE.

Eleven acres of land, planted with Ornamental Trees and Slirubs. Two hard-finished Cottages and other buildings, large ellough to aceommodate about 40 per-
sons. A fine well, windmill, tank and distributing pipos. Charming as a Private Residence or Sea-Side Hotel.
Finest views of the Pacific, Monterey Bay and the Coast Mountains. Sca bathing within one minutes
JULICLS PELTON, Owner Apply to $\quad$ C. H. DWINELLE, 202 Sansome St., San Francisco.

## DEITZ'S PROCESS,

Awarded the
CALIFORNIA GOLD MEDAL
U. S. Centennial Grand Medal \& Diploma

## IT is TIIE

## BEST FRUIT DRIER,

And the only one that proves a success in making the FINEST RAISINS, FIGS, and the Choicest Fruit at the least expense.

Driers of all sizes put up and no pay asked until tosted. GEO. A. DEITZ, Manager,

Saeramento, Cal
GRAND SPRING OPENING

MILLINERY; FANCY GGODS,
Men's and Boys' Clothing.

PALMER BROTHERS,
726, 728, 730, 732 and 734 Market Street san francisco.
Fasionable Cards, no two alike, with name, 10 e.
GEO. I. REED \& CO., Nassau, N. Y.

Breeders' IIrectory. $^{\text {and }}$

 50 cents a line per month, payable quarterly.

## CATTLE.

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(or Cotate Raneh, near Petaluma, sonoma Co.), Breed(or cotate Raneh, near Petaluma, sonoma Co.), BreedR. G. SNEATH, San Bruno, Cal., breeder of Jersey
catile. Has Jersey bulls for sale-various ages -at $\$ 40$

SHEEP AND GOATS.
 sex and berkshire swine.
 $\frac{\text { Lambs, } 915 \text { each. }}{\text { LNDRUM } \& \text { RODGERS, Watsonville, Cal. Im. }}$
 POULTRY.

T. A. FREEMAN, San Jose Cal. Pekin Ducks tor
 hatching.
 Airoid RIX. Wastington, Alamedo County, Cal.,


## SWINE

ALFRED PARRERR Bellota, San Jonuln Co, Call

 J. MERLINGER Elisis, San Joaquin Co, ImporBEES.
N. S. AMES, Napa City, Cal., Importer and Brecder
of Italian Quen Bees. Quens Imported from Europe, sitainh Queen Bees, Queee
\$ested queens, $\$ 3$.

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celebrated and relable
Patterns of Garments,

EXTRA QUALITY OF
Shears and Scissors.

Patterns Sent by Mail, Post-paid, on Receipt of Number, Size and Price.

SEND STAMIP FOR
Illustrated Catalogue of Patterns.
tiri We also have the Finest Finlshed and Best Maks of Needles for all Scwing Machines, Filty Cente per dozen. Aldress letters:

## DEMING \& BARRETT,

124 Post Street, San Francisco, Cal.
West Berkeley Lumber Yard, alameda county.

Lumber, Shingles, Sash, Doors, Lime, Brick, and Builders' Hardware
Sold at the Lowest Sun Fruncisco rates. Strict atten tion given Country Orders. Boats loaded at
wharf for all points on the San Joaquin whart for all points on the osan Joaquin
and Sacramento rivers. Cars of the C. P. R. R. and Sacramento rivers. Cars of the C. P. R. R.
Co. loaded at the yard. Orlers received at 22 California street, San Francisco, or at the hardware store of C . W. Babcock, 955 Broadway, Oukland.

JOHN F. BYXBEE, Proprietor.
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CRESYLIC SHEEP DIP CURES SCAB,


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## Poultry.

OAKLAND POULTRY YARDS. Cor. Sixteenth and Castro Streete, Oaklend Constantly on hand and for sale, choice speci
of the following varieties of Fowls: Dark and Light Brahmas, Bu chins, White \& Brown Leghorns, Dorkings, Polish Ham ings, Plymouth Rocks Gargs, Plymouth Rocks, tams, Bronze Turkeys, Pekin Aylesbury and Rouen Ducks.
GS FOR SALE AFTER JANUARY FIRST
No Inferior Fowls Sold at any Price. Satisfaction Guaranteed.
Circular, to forther information send stamp for Illustrate GEO. B. BAYLEY, P. 0. Box, 659 San Francisco, Cal.

THOROUGHBRED POULTRY. 116 Acres DEVOTED To FANCY
 Unlimited Range. Healthy Stock. Largest Tards POULTRY. on the Coast. Brahmas, Leghorns, Plymouth Rocks, Bronze Turkeys, Geese, Pekin Ducks, Guinea Pigs, Etc
RTs Safe arrival of Fowls and Eggs Guaranteed. Tid ATSP Pamphlet on the care of fowls -hatching, fceding,
diseases and their cure, ctc., ADAPTED ESPECIALLY To TuE diseases and their cure, cte., ADAPTED
Paccrio Casst. Sent for 15 cents.
Send stannp for price list. Address M. EYREE, Napa, Cal.

## WHITE LEGHORN EGGS,

$\$ 3$ Per Dozen. From 3 pens of 20 Hens and a Leghorn Fowls ever seen in one collection on the Pacific Coast, selected from upwards of 600 bred during the sea-
sons of $1876-77$, packed to arrive safely and hatch. Send $\begin{array}{ll}\text { or circular. } & \text { Address, } \\ & \text { C. P. STONE, }\end{array}$ 35 Mission Market, San Francisco

## EVERYBODY KNOWS

That Mrs. C. H. Sprague, at the California Poultry
Yards, at Woodland, Yolo Cunt, keeps the choicest lot
and and the greatest and best variety, of Thoroughbred Fowls
of any one west of the Mississippi river, and that one can of any one west of the Mississippi river, and that
get just what is wanted by sending orders to her.
hERRMANN'S STYLES IN HATS.


NOW OUT!
Prices Lower Than Ever.
402 Kearny Street, - - 'Near Pine. Branch, 910 Market Stree,
Setween Stockton and Powell,
San Francisco
hOUSE WANTED.
dFWanted, a comfortable house, furnished or unfurnished, in a country town or on a farm, for three months,
commencing June 1st, for which a liberal rent will be commencing June 1st, for which
paid. Address with particulars,
C. W. R., P. O. Box 1123, San Franclsco, Cal,

PILES! PILES!! PILES!!!
 HEMORRHOIDS or PILES CAN BE C U RED D! RADICALLY,
Sperbly and WITIIOUT PAN! "Dr
Pierce's Pile Truss and Remedy" give instant relief in all cases. By means
of this new appliance the Piles have of this new appliance the Piles have
a coustant and agreeable support and will entirely disappear if the Truss is worn and the Rem
edy applied as directed. For particulars call or address
ent ramento Strect, (up stairs), San Francisco. 609 S
 M. COOKE. R. J. COOKE.

PIONEER BOX FACTORY,
Corner of Front and M Streets, Sacramento. ALL KINDS OF
Fruit \& Packing Boxes Made to Order, AND IN SHOOKS.
Communications Promptly Attended to. COOKE \& SONS, succensors to Coolm \& Gregory

## GRANGERS' BUSINESS ASSOCIATION

Incorporated Feb. 10th, 1875. Capital Stock, $\$ 1,000,000$. officers and directors.
LANIEL INMAN, (President).
A. D. LoGAN, (VICE Presiment).
AMOS ADAMS, (SECRETARY).
A. D. LOGAN,(Vice Presiden).
AMOS ADAMS, (SKCRETARY).


John lewelling, (Treastrer).
W. L. OVERHISE
A. T. HATCH. SHIPPING. flint SHIPPING AND COMMISSION HOUSE,
Grangers' Building,
106 Davis Street, S. F.
Consignments of Grain, Wool, Dairy Products, Fruit, Vegetables, and other Produce solicitcd, and
Advances made on the Bane.
Orders for Grain and Wool Sacks, Produce, Merchandiso, Advances made on the same. Orders for Grain and Wool Sacks, Produce, Merchandise,
Farm Implements, Wagons, ete., solicited and pronptly attended to. We do a Strictly Commission Business, and place our rates of Commission upon a fair legitimate basis that will
ble the country at large to transact business through us to their entire satisfaction. enable the country at large to transact business through us to their entire satisfaction.
Consignments' to be marked "Grangers' Business Association, San Francisco." Stencils for marking be
furnished free on application. furnished free on application. DANIEL INMAN, Manager.

## ENRIGHT'S STRAW-BURNING ENGINE.

I respectfully beg leave to inform the public and parties intending to purchase Portable Straw-Burning Engines for Threshing purposes for 1878 , that I offer for sale this season, Straw-Burning Engines superior to any I have heretofore made at reasonable prices, and that I will give a satisfactory bond to any party buying an Engine from me or my agents, and that I will protect them in the use and right of using, and against all Patent Law Suit.

## JOSEPE ENEIGFIT,

SAN JOSE,
CALIFORNIA.

BYRON JACKSON, Woodland, Cal., manufacturer of
Feeders \& Elevators for Threshing Machines, Horse Forks \& Derricks,


The above Diagram shows the proper position for the Derrick, Separator and Engine, and the best size two medium sized stacks with the Derrick between then is far better than one large stack, beenuse the grain
Thas only to be moved one-half the distance. Address BYRON JACKSON, Woodland, or BAKER \& HAMILTON, San Francisco or Sacramento, Cal.

## IRA MARDEN \& CO.'S <br> bRANDS OF <br> Coffee and Spices Have no Superior. <br> Twenty-Five Years Experience

in the business on this coast enables thea to place on the market the very best goods at the lowest posible prices.
Ask Your Grocer for Marden's Coffee and Spices.

DAVIS \& SUTTON,
No. 75 Warren Street, New York. Commission Merchants in Cal. Produce.
 Wanger \& Burry, Rochestor, N. Yr., C. .
mento, Cal.; L. Lusk \& Co., San Frauciseo, Cal.
C. \& F. NAUMAN \& CO. Wholesale Commission Merchants, All kinds of DAIRY PRODUCE sold on Commission 231 Poultry, ELgs, Gaine a specinty 231 WASHINGTON STREET, San Francisco (Betwoen Frout and Davis.) Frank nabuan,

DALTON \& GRAY, Commission Merchants, All Kinds of Country Produce. 404 \& 406 Davis Street, San Francisco. arab Consignments Solicited
MONEY TO LOAN at LOWEST RATES, on first class country real estate and other approved securities, McAFEE BROS, Real Estate and Loan Brokers,
202 Sansome Street, $\quad$ San Francisco.

THE PACIFIC RURAL PRESS

Patents and dinventions.
List of U. S. Patents Issued to Pacific Coast Inventors.

By Spectal Dispatch from Washington, D. C
Week Ending, April 30rh.
Washnve Machives. - William Haas, Walla Walla, Wash. Ter.
Smoking Toracco.-Girolamo Suich, S. F.
Intervational Daiky Farr.
Wickson, of the Rur. E. J Wickson, of the Rural Press, has received
notification of his apppointurent as member of notification of his apppointwent as member of
the advisory committee of the International Dairy Fair, to be held in New York city during
the fall of the present year. It is proposed to the fall of the present year. It is proposell to
present an exhisitit of dairy prodncts from all
parts of the contiuent and it would be well to parts of the contiuent and it would be well to
have fit specimens of the California prodnct
presented. We shall be pleased to promote a presented. We shall be pleased to promote a
representation of our dairy goods in any way in which we may be able, and invite corre-
spondence from all who are disposed to entcr
their manufucture for the cylibition their manufacture for the cxlibibition.
her of the Pafe Coffee Tree seeding,-A subsci in Fresuo couuty, reports that one of his coffee trees, from seed plautcd about a year ago, has
blossomed aud is setting its seed. He ouly succeeded in getting two trees from a largc number
of seed planted, and one of these las the of seed planted, and ore of these has thus
shown its disposition to reproduce itself. The little tree is only about 18 inches high, and has was grown in the open ground, but has. been
surroundcd by a box to keep off the extreme heat of the sun.

Sewivg Machines. - Several inquiries have been receivech as to whether the advertised offer
of the Wilcox \&ibles Co tol of the makers at $\$ 10$ each was a bona fide oue,
other mate and whether the machines were really in good
order. A representative of the PREsS called at their store and saw about 100 of these machines in apparent good orler. At his request several
of the machines were started up and ran well. His report is that the machines appear to be as

Petriverle's Newspaper Directory aud Advertiser's Handbook has just been received.
It is a creditable inprovement on former issues, and can le obtained of the publishers,
Pettingill \& Co., 37 Park Row, New York.

Washington Irrigated Colony,-Mr. Jas.
strattou, Superintendent of this new colony, has opened an orfice at No. 506 Seventh street,
uear Broad way depot, Oakland.

## Photographic Improvement.

 Mr. I. W. Taber, one of the best favorably known photographers in San Francisco, con-templates a new departure froun his present
 We are reliably infornied that $I$. W. Taber, the well-known photographer of this city, has
secured a three years' lease of the npper portion of the new Hibernia Bank building, oo be be
erected on the corner of Montgomery and Post streets. This building, when completed, will be one of the most imposing in this city, and we
congratulate Mr. Taber on his foresight and congratulate Mr. Taber on his foresight and
energy in securiug, in the face of a strong conpetition, what must be considered the very best
location in San Francisco for a first-class photographic gallery. The Hiberuia Bank managers intend to arrange the entire upper portion of
their new building, f0x90 feet, for the purpose naimed. From the plans shown us, this gallery will be the most complete aud best arrangel
of any in the country, and we doubt if it will have its superior in the world. The main
entrance, eight feet wide, will be on Nlontgomery, street, which, leading to a large ele-
vator, it will lift the visitor dircctly into the "Taber Photographic Parlors" on the third floor, which will consist of a large gencral
reception room, three private parlors, three retiring rooms, store room and laboratory, two
studios for artists, business office etc. studios for artists, business office, etc. From
tlis floor a broad stairway will lead to a second operating room of glass above, which
will be provided with all the latest improved perfect pictures taking the most elaborate and commuuicatiou wiil be made with. the Palace,
Graul, Lick, Cosmopolitan, Occidental, and possibly the Ballwin Hotels-all of which,
excepting the latter, are within a block of the excepting the latter, are within a block of the
proposed building-for the purpose of allowing the inmates therein to communicate directly sitting, etc. This alone will be a novelty aud their toilets at their respective can arrange secure a picture without being compelled to Wait any length of time at the gallery. Mr.
Taber is now having made in this city instruTaber is now having made in this city instru-
ments for takiug pictures by electricity. These,
in connection with Mr. Taber's great skill, taste and courteous deportment, combined with
the location and appointments of his gallery the location and appointments of his gallery,
are snre to make it the most attractive insti are snre to nuake it the most attractive instiwill be rcady far occupancy about the lst of plates a trip East and to Europe for the purpos of securing an entire new outfit for his business comprising all the latest and most improved istruments that can be obtained. It is contemplated that $\$ 15,000$ will be expended in fitting up this establishment. We believe that Mr. Taber is the ouly photographer in California that contemplates competing with the Euro-
pean galleries at the coming Paris Exposition. pean galleries at the coming Paris Exposition
IIr. Taber has introduced on this coast many new and beantiful ideas iu the photographic Pictorials, Chromatics, Spherical, Statuette Rustic, Mariue, Equestrian, etc.; and his suc cess in securing satisfactory pictures of children cannot be disputed. The rooms will be so
arranged that several can be thrown into on arranged that several can be thrown into on for large pictures iu groups, for
which Mr. Taber is justly noted.
We can speak personally in favor of the photography. He has invented and patented more improvments than any other photographer on this coast during the past ten years
Woodward's Gardens were never more attraet young and lut fully grown, have just been added. Bal
poon ascensions by Prof. Martin sre now being made loon ascensions by Prof. Mar
The 1opularity of the sarden
Rates of admission unchanged.

## Farmers! Farmers!

Throughout California are requested to send their orders tor auy Labor Exchange, 33 and 3.0 Farrell Street, of charges to employers aud employees.

Bates' Adverrisiso Aoswcy.-Mr. J. H. Bates, Lately
senior partner in the newspaper advertising frm of Bates senior partner in the newspaper advertising Arm of Bates
L Loch, st No. 34 Park Row, having succeded to the bus-
 Arer \& Sox's Maneal contains information of much
value to advertisers; sent free. Address N. W. Ayer \& value to advertisers; sent free. Address N. W. Ayer
Son, Adv ertieing Agents, Times' Building, Philadclphia
Any Photograpuer having a larige Camera Box for
See advertisement for furnished house in

## S. F. MAFKET REport.

## on Wednesday ol each week (our publication dry), and are

 not intended to represent the state of turday, the date which the paper bears.

Weekly Market Review
DOMESTIC PRODUCE. ETC
Trade is still progressing without notable Trade is still progressing without n

Range of Cable Prices of Wheat The course of the Liverpool quotation for days of last week has been as recorded in the
followiug table:
-

## Friday. Saturday Monday

vednesday...


To-day's cable quotations to the Produce years as follows:

 The Forelgn Review.
Lonvons, May 14th. - The Mark Lane E.cconnection with the pacific political news, has state of the grain trade, which remains in a of the Eastern question. English Wheat sold slowly, both at Mark Lane and in provincial markets, and last week's prices were with difticulty maintaiued, even for choicest parcels. The Week's imports of foreigu Wheat into London have beeu fair, but not excessive. America aud
Southern liussia have been the chief sources of supply. According to the latest advices from the 7th of llay was only 53 Wheat afloa against 236,664 at the corresponding time in 1877. Holders of foreign Whicat, while mauifesting little desire to force sales, have been obliged to accept a reductiou of onc shilling per quarter ou American where clearances ex-ship have been mecessary to avoid landing charges,
but the concession has not attracted buyers but the concession has not attracted buyers,
who still hold off iu hopes of lower prices should peace be assured.

Freights and Charters
Wheat freights, says the Commercial. Neves, are stagnant. The ship St. David has been but understood to be $£ 210$ s. For new crop loadiug we hear of no demand at present for
ships now in port, and none for ships to arrive
At the close we have 4,940 tons in port loadin At the close we have 4,940 tons in port loading
Wheat, and 2,720 tons for new crop loading 6,762 tons miscellaneous, and 31,314 tons dis

## ngaged.

Eastern Grain Markets.
New York, May 11th.-Peace rumors have stuffs and Provisions have consequently de clined. Standard No. 2 Milwaukee Wheat is .own to $\$ 1.20$, and in the event of peace in Europe and a continuation of the magnificen
crop prospects, many believe it will go to $\$ 1.10$ rop prospe
Chicaco, May 11 th. -Grain hás ruled lowe this week than for six weeks, and has been in Wheat was unsettled, with mostls of dullness, aud a decidedly lower tendency. The closin to-day was rather strong and active, with a lit tle rcaction from the steady downward move ment of the preceding days of the week. Sale are: Wheat, $\$ 1.111 @ \$ 1.11 \frac{1}{2}$; Corn, $40 @ 401 \mathrm{c}$ Oats, $26 . \mathrm{fc}$; Rye, $5 \mathrm{~S}_{\frac{1}{2} \mathrm{c} \text {; Barley, } 491 \mathrm{l} \text { @ } 50 \mathrm{c} ; \text { Pork }}$ $\$ 8.40$; Lard, $\$ 6.8 J$.
New York, May 11th. - Demand for Woo has been a tritle better this week, though almos Wholly for lower grades, but the market canno condition. Buyers who are really in need stock contiuue to hold aloof, taking only such quantities as their present requirements de mand. California spring continues in request Sales for the week are $180,000 \mathrm{tbs}$ new Sprin California, at $15 @ 27 \mathrm{c} ; 5,000 \mathrm{tts}$, old do.,20@22c $1,000 \mathrm{tts}$, Fall do., $15 @ 20 \mathrm{c} ; 537,000 \mathrm{Its}$ en
Oregon, 23 $@ 24 \mathrm{c} ; 50$ bags Colorado, $15 \frac{1}{2} \mathrm{c}$. was don, May 11 th. - In Wool a fair busines was done the past week in domestic, but at low movement in finc fleeces has failed to impart firmer tone to the market. In California sale were made of 428,000 ths at 18@30c for Spring brace Eastern and Valley Oregon, 22@31c; Col orado, 19@26c; scoured, 37 $\frac{1}{2}$ @ $37 \frac{7}{3} \mathrm{c}$ c.
The following table shows the S. F. receipt Domestic Produce for the week euding a noon to-day, as
previous weeks:

## Flour Whe Barl Bea Cor Oats Pot Oni Wo Ho Ho


nd prices ar
BARLEY-Prices have been well maintained on most transactious. We note sales : 500 and 400 sks good Coast Feed at $\$ 1$, and 500 weevily 3,000 do. at $\$ 1.15$; and 600 (on time), at $\$ 1.20$ BEANS-Bayo, Pea and Lima Beans have made another advance. Prices are give
below CORN-Receipts have been large and quality generally interior. Yellow Corn has sold a
shade lower. We note sales: 500 large Yel shade lower. We note sales: 500 large Yel 100 and 140 small Yellow, at $\$ 1.95$; and 70 DAIRY PRODUCE-Butter and Chees prices are unchanged. Dealers report reccipt much greatcr than pr

## EGGS-Liggs have tur

FEED-Hay is dull and dlings are reduced to $\$ 21$ per ton.
and 30 c was the top price to-day more plent the week the first of Briggs' Black Tartarian from Marysville sold at 50 c \# Ib . The firs Raspberries came from W. J. Wilson, of P'lacer county, and sold at 60 c basket. Fruit prices may be found below.
HOPS-The local
HOPS-The local situation is unchanged. Eminet Wells reports the New ork market made at concessions.
OATS-Prices are maintained and the market is very quiet. Sales : 400 ctls choice Feed sold
at $\$ 1.45 ; 250$ strictly choice, at $\$ 1.60$; and 100 light, at $\$ 1.35$ ctl.
ONIONS-Onions are unchanged
POTATOES-Sales have been chiefly at las week's prices. Therc is now much talking about bringing iu a shipment of Potatoes from Chicago or some point in lowa. Parties have Wedus had been shipped. Other parties say that there are Iowa Potatocs on the way
PROVISIONS-The trade is steady without VEGETABLES-String Beans are a trifle
WHEAT-There is nothing doing except in small lots, and no purchasers or shipment. We 600 and 600 choice at $\$ 2.05 ; 300$ and 400 choice elivered at Oakland, at $\$ 2.12 \frac{1}{2}$ per cental.


FRUITS AND VEGETABLES.


Gold, Legal Tenders, Exchange, Etc. Ban Franeisco, May 15, 3 F. M.



Signal Service Meteorological Report.
Week Ending May 15, 1878.

| HIohrst And Luwzst baromrtrR. |
| :---: |
| May 8 |



| 61 | 60 | 60 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 53 | 51 | 60 | 64 | 62 | 59 | 62 |
| 51 | 54 | 51 | 50 | 52 |  |  |

## 

## 


otal sain during the season, from July 1, 1877, 26.01 in .

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ordinary (ten-foot) with four. The machine is almost ordinary (ten-foot) with four. The machine is almost
perfection, as during all last season 1 was not delayed an
hour.

[^24] and the First Premium at the State Fair in 1877. Send for Circulars. Address, early


Volume XV.]

## Alfalfa Leaves and Blossoms.

Our illustration on this page is designed to show an average growth of alfalfa leaves and blossoms, two sprigs being plucked from the field for that purpose. We take np the subject in answer to a flood of inquiries, chiefly from our Eastern readers, the burden of which is "What is that alfalfa you write so much about?" The fact is that the fame of California is now riding as securely upon the reports of our yields of alfalfa, as it did in early days on yields of gold. The fame is firmly seated, too, for, great as the statcments are which have been made of this clover in this State, there are greater ones yct to be made known as soon a the present tendency to make the plant the basis of operation upon small, well-watered homesteads shall be fully developed. By irrigation the wealth of a few acres of alfalfa can be turned into milk and meat enough to support a fanily, and we believe this splendid plant will come to be more and more regarded as the poor man's surety of a livelihood. Such being the fact, as we conceive it, the showiug of the alfalfa plant will also have
present interest to those of our own citizens who have irrigalle land in parts of the State where it thrives. The preseut ontlook is that the seed for next year's sowing will be very chea owing to the immense crop this season, and ah
who have a patch of land commauded by ditch or even within reach of pipes from the windmill tank, can hardly do better than lay plans to reresh their cows, pigs and chickens with a ration of fresh alfalia. People do not yet know how much ralue they can draw irom a very few acres, by supplying abuudant water and cutting th course the opportunity of turniug the plant to course the opportunity of turniug the plant to in large areas, still remains, but this has been more frequeutly noted in articles on the subject, and we therefore give prominence to the value of alfalfa for the small farmer. The reports of its productiveness in the colonies in
Fresno, Los Angeles and other counties, show the possybilities of the plant on smaller areas Botauically, alfalfa is Melicago sativa. It is either identical with the lucerne of northern Europe, or closely allied thereto. Its geneology can be clearly traced to the cytisus of the Latin teresting article in the Perss of May it his in It is a plant of most noble history for its deed have been glorious wherever the climate ha given it aul opportunity to assert its true character. In its dried state, which is the level t favor, it shows its superiority app yielding fleshforming principles $24.60 \%$, fatty matters, $4.06 \%$ and heat-producing principles $33.81 \%$. This ttained of composition can, however, only be or if left cuttiug it just at the proper time, he woodpile. As we have said the historom the plant is noble, and the record of its deeds its earlier accomelishments would fill that o case. We have not space to recount a bookeither its earlier or its later deeds; bnt we must eentury and look upon a single English field The Earl of Albemarle, in Eldeu, Suffolk n 1811 england, tried it from 1803 to 1841. Board of Agriculture with a report, which we condense as follow: In 1807 a field of dry, sandy soil, lying upon a loamy subsoil of grave of 11 acres, was sown broadcast to barley and In the Spring of 1808 the field was per acre. fter the list mowing with soot, at the rate 30 bushls twice. In 1809 a part of the field was asein ed, and nowing was begun on the 23d o lay; this mowing, with a small addition of
oats, supportcd 30 horses seven weeks; the second mowing supported 20 horses seveln small addition of oats, supported 20 horses six weeks. The produce this season amounted to

SAN FRANCISCO, SATURDAY, MAY 25, 1878.
Number 21
$\$ 5$ per acre, after deducting rent and feet long. Numerous instances of the kind os per acre, after deducting rent and feet long. Numerous instances of the kind 35 horses eight weeks, with a small addition of Court-house well, in the yard of the Conrtoats; the second mowing nearly the same; the
third was less, though of great value. The $\begin{aligned} & \text { house at Woodland, Yolo county, they have } \\ & \text { been found extending down from the surface } 30\end{aligned}$ National Board of Agriculture awarded a feet. This growth is rapid as well as great, for medal, because it was the best experiment that in the Sacramento valley roots have been found had been reported relative to this forage plant. $\mid$ to penetrate the alluvial soil to a depth of six
We have no data now for determining how
feet in 11 months from seeding, and one can We have no data now for determining how feet in 11 months from seeding, and one can
much a clear profit of $\$ 55$ per acre 70 years ago only imagine how mnch farther they would


TWIGS OF ALFALFA Medicago Sativa
would be equivalent to in these later days, but have gone had they
$\$ 55$ then certainly meant mucl more than $\$ 55 \mid$ water at that depth u-day.
Or cesults gained with alfalfa in this State ess, lence lecause the plant is continually extend ing its area among us. Suffice it to say that we now recall a case in which a field of 40 acres yielded in threshed seed, hay and pasturage pwards of $\$ 80$ per acre, with but one irriga tion. So better evidence of the growth of the here, for root-growth is generally a surety of strength and durability above ground. Sone cars since the water in Feather river dug under the banks, causing them to fall into the

The success attained with alfalfa in this State has led to the trial of it in the States east of the mountaius, and tons of seed have been shipped to satisfy the demands of experimenters. None of our Eastern and Southern friends have rcached
results like our own, because their climatic results like our own, because their climatic
conditions do not seem to be so favorable, and conditions do not seenn to be so favorable, and
yet there are many satisfactory achievements yet there are many satisfactory achievements.
reported. Iu Kansas the plant has been success. ful. In Kentucky, plants two years old hav shown nearly six feet depth of root. In Pennroots thrce feet long the second season. In Missouri it has vielded satisfactory hay and green feed. In Wisconsin it seems to have green feed. in marmed by frosi, which froze the ground
to the depth of two inches when the plants were but one inch high. Even in the cold, central regions of New York, Hon. Samuel Campbell, of Oneida county, reported, at a recent fariners' club meeting, that lacerne gave him a very satisfactory growth. In Colorado, Mr. E. R. Sizer gained a splendid growth last
summer, but the winter which froze ice 11 summer, but the winter which froze ice 11 inches thick on adjoining water seemed to kill the roots to about the same depth, although there was life below. These notes of the intro
duction of the plant elsewhere and yet no one should be led by them to intro duce the plant in untried regions except in experimental way at first. As the climate becomes less congenial there is a less growth. Where the plant survives, it adapts itself to its less congenial environment.
Our engraving shows the alfalfa somewhat reduced from what is its natural size with us. The observer will note in the blossoms different stages of development. At the top there are the opening blooms, below are the full flowers and in the center, at the right of the stems, there is
of seed.

Seedling Oranges and Lemons.
Evirons PREss: - Mr. Geo. W. Marston, one of our
merchants, leaves for the East, and, in felw days will



 test, should come up t.
SWAN, San Diego, Cal.
The specinens of seedling fruit were duly received in good order and have been examined with much pleasure. privilege of fixing its name upon a seedling orange. The enumeration of its good points which our correspondent makes are all clearly
belonging to it. In the specimens the pulp lies belonging to it. In the specimens the pulp lies
less than one-eighth of an inch beneath the rich-colored cuticle and the skin is as tender as it is thin, as far removed from the thin, leathery coat of the Tahiti fruit, for instauce, as it can be. The seeds are few, one orange having but
three and another five. (The third specimen slipped out of the box in some way; perhaps sour office boy is prepared to report on it). The pulp is very tender and delicately flavored and the interior membranes are unusualy yent.
Although the fruit is rather under size, its excellence is conspicuous in the qualities specified.
The seedling Sicily lemons are also very excellent fruit. The effort to produce then is
worthy of mention among other similar endeavworthy of mention among other similar endeavors which our lemon growers are now making,
and which will ultimately rescue our lemon fruit from the opprobrium which now militates
 against
proveneut of our lemons will go on until it provemeut of our lemons
clearly appears that we needed but to introduce
one the best varieties to place our California lemons beside our oranges in distinguishing excellence.
The Thlephone in Our Office.-We propose to avail ourselves of the advantages of the
inventive triumphs which we describe in this inventive triumphs which we describe in this
issue. We shall soon have telephonic commuissue. We shall soon have telephonic commu-
nication between our busiuess office and our nication between our busiuess offlice and our
editorial and composing rooms, which are a editorial and composing rooms, which are a
number of blocks distant from each other. Any reader who may desire to inspect the actany working of the instrument, is welcome to come and try it for himself. The telephone will afford ns momentary speaking conncetion with 100 or more of the leading business firms in this city through the "central system," which is described in our article on the telephone in another column. . We have confidcuce that this "central system" establishcd by the American District Telegraph Co., at their office No. 222
Sansome street, will prove an innportant step in Sansome street, will prove an innportant step in
the advancement of the city's business interests, the advancement of the city's business interests,
and will also result in increasiug the usefulness and will also result in increa
of the Press to its patrons.

Bald Mountarn, North Carolina, was shaken as by an earthquake last week, and split in twain, leaving a chasm 300 feet in length, eight smoke or lava was thrown up, but a strong smoll of sulphur pervades the place.

## Gorrespondence.

San Luis Obispo County Notes.-No. 4 Eintors Press:-Several miles east of the Finney dairy is the beautiful Ranchito, famous for its pisturcsque scenery and its rich cheese.
WVe enter this rauch from the south, following the north fork of the Arroyo Grande, the largest stream iu this part of the county. The way leads through the loveliest of valleys stud ded with giaut sycamores, aged oaks and cottonwoods, the banks of the stream fringed
with willows, and spriugs on all sides joining their limpid waters by rivulets to the Arroyo.
In places the oaks cluster in groves and in others stand widely apart. The valley in its widest part is scarcely more than a half mine in
width, and at this point are situated the dairy huildings. Riding up about dusk, we were invited by Mr. Hasbrouck, the gentlemanly lessee
of the ranch, to stop over night. Under the genial influence of his pleasant face and the pleasant surroundings, we experienced not the slightest difficulty iu acceding to so hospitab.'e a request. To view the charming exterior no one
would dream that other than the loving care of one of the gentler sex had kept the vines,
the trim little yard with row after row of honseplants, and the sprouting seeds of balsain, pe.
tunia, verbena, phlox, teu-week stocks, and many other tlowering plants; or, that other than a sweet hitlle household angey ad called ine door, and ornameuted its sides with snowy blocks of alabaster, and enteelished the column supportpinorc great shells which gave life to its waters, over the charmed threshold, and our illusion (for it was one) vanished in smoke-a smoking
meal prepared by a masculine hand, of which We will bear witness as to its good quality in
satisfaction of appetite. Our natural look of satisfaction of appetite. Our natural hook
inquiry brought forth the remark that the prestremely rare occurrence, that when femiuine apysm of fright, have iumped the corral fence and ysm of fright, have jumped the corran
fled from this inexplicable phenomenon. The room was pervaded with a warm glow amid our bachelor surroundings we soon felt at home. Good books and a generous number ore
newspapers. were scattered about in that care-, less profusion, so dear to the average man's
heart. "Tom," who cooks, we found to be the devoted florist, the rest evincing sympathy in the result of his lal ors, and we saw some so
packets of flower seed still unsown; later we saw a marvelously fine garden of vegetables of
which he is the presiding genius. Mr. Hasbrouck, a Bostonian, is still a youug man though an "old bach," shrewu in business and devoted we found a heary rain in progress, which con-
tinued the next day and still the next. Meau-

> while we found occupation and amus viewing the erocess of cheese-naking. Ir. Snencer and wife are a recent

Mr. Spencer and wife are a recent acquisition to the ranch, having been there but a few
weeks, and we may add that under the influ-
cace of Mrs. Speucer's daily presence bovine ence of Mrs. Speucer's daily presence bovine
ill.breediug is being gradually overcome or ex-
hibited in a less marked degree. Mr. Spencer, hibited in a less marked degree. Mr. Spencer,
2 New York, Herkimer couuty man, makes the cheese this season in this dairy. Brought up
from his shildhood in a cheese dairy, and hav-
ing made cheese in Califoruia siuce an interval of throe years spent in the army, his cheose-makers in the State; he is the one of Thom Mr. I. C. Steele spoke at the last meetfrom one of the northern dairies several years
ago, and making good cheese during an extra ago, and making good cheese during an extra
hot spell when others were losiug so much and
it seemed impossible to nake any that would keep. It is under his tuition that many of thic
cheese-makers on the Steele ranch have learned the scieuoe.
Mr. Hasbrouck formerly made butter here and built a stone dairy house which forms the
contral part of the present building used for
wood additions have bee cheese-making. Wood additions have been
built on at each end, giving room for storing ulation of milk in the other addition; thisuppart aldjoins the corral; the stone part is used as the conring roon. The usual number of cows milked at the hight of the season is 1225 , but
only 27 were milked at the time we visited the
ranch, besides 15 cows npon which the calves ranch, besides 15 cows npon which the calvcs
are turned as they come; these are only milked at the eud of the season. The interior arrance.
ments were ueat and convenieut. All the mente were ueat aind convens conveyed in
water used for dairy pnrpoes is
pipes to the making room fron a living spring
on 120 gallons is used at the heginnin zon, and a larger one of 500 gallons later. To
those who have nevcr witnessed the process of cheese-making the operation is very interesting The making room here used
theng seem
$\left\lvert\, \begin{aligned} & \text { feet iu size, the floor matched stuff with a } \\ & \text { slight incline to one side sufficient to allow }\end{aligned}\right.$ slight incline to one side sufficient to and
water to run off freely in a space left open be tween the floor and side at the foot of the in cline. A flat-hottomed trough extends along another side of the ron outside the building to
cooler, and is extended
a tank near the swineyard, and which receives the a tank near the swineyard, and which receives the
whey. On the thirl side is a large fire-place with a large hoiler for heating water, and on the remaining side are the cheese presses and watcr
pile. A cloth strainer is laid over the vat, pipe. Achothen the milk is poured through a win,
npon which opens into the corral. The uight's
dow milk is left in the vat over night, and cooled in warm weather by cold water flowing around its
sides in the tank in which it sets. At half-past sides A. M. milking is finished and the process legins hy which this creamy white liquid mass
is converted into rich, delicious cheese. Door and windows are closed, the fire increased and the tem.
higher.
Hot water is then poured into the tank around he sides of the vat, the milk gradually heated up to $86^{\circ}$ and the renuet added. At the expira
tion of 30 minutcs or a little less the milk i set," or, iu other words, converted into
quivering jelly-like mass called curd. The next step is to cut the curd, which is done with gang of steel knives called a curd cutter, which
is run through the curd length wise and width
wis tical strips. The curd is yny tender at thi stage and the greatest care must be taken in this and the subsequent operation of breaking separating. Bad mauagement of curds is shown
hy the whey, which beocomes of a dull milky color, flecked with specks of cream, when rudely r carelessly broken, while under careful hand-
ing is bright, clear and thin. Hot water is constantly added, running the
emperature up to $100^{\circ}$. The cooking is con temperature up to $100^{\circ}$. The cooking ${ }^{\text {is }}$ con-
tinued from two to three hours. After cutting. the curd is hroken either with crossed hy wires at right angles, forming small
square spaces of one and one-half to two inches. The object in lreaking the curd is to separate the whey more thoroughly, facilitate $c$
and give the cheese a close, firm texture The curd is ready for the press when it feel springy or elastic in pressing the lumps in the a hot iron, and the manner in which it strings out when the picce of curd is touched to the iron and puled away denotes the proper time
to press. When sufhciently cooked the whey
is drained off and the curd diped out into a coler, where it drains and is worked over little to hasten cooling. This is the poetry of
the wlole process, the curd lying up in a loose the whole process, the curd lying up in a loose
mass of a leautiful golden color, rich and tempting enough in appearauce to please the fancy of rate of one pound of salt to to 90 pounds of curd, windows and the ventilator in the opening of the roon, the curd is dipped into the tin hoops put
under the follower and on the bench where the screw is applied, forcing the whey through the holes perforated in the side of the hoop. After standing 20 minutes the cheese is taken from the
hoop a close, cohesive mass, and bandaged, hoop a close, cohesive mass, and bandaged,
atter which it it replaced aud subjected to pres
sure until morning, when it is removed to the sure until
curing room.
$S 0^{\circ}$, Mr. Spencer believing in plenty of heat and in coring quickly. This occupies about
and
four weeks, each cheese being turned daily on the rack and rubbed on both sides. To cure
perfectly a longer time is necessary. No an perfectly a longer time is necessary No an
natto is used in any of the dairies on the ranch though the baudages are colored. There aro
soveral racks in the roon with shelves and on soveral racks in the room
these the chcese are laid.
When chcese are kcpt late in the season or until spring, each one is varnished with gum
shellac cut with alcolol, which prevents skip-
pers pers and a aso any material loss in weight, whinch
wonld otherwise result by drying. The cheese made here average 28 to 30 pounds apiece.
Brand - "Steele Bros., A. B. H." This is a late ranch, the feed on the coast be
ing much earlier. Operations usually com ing much earlier. Operations usually com-
mence here from March 1st to March 15th, and this season February 15th.
A sumnary of the dairy
1sicio rminas as follows: Average number of cows st number, the season through, and the high tire number being heifers. The number of
calves branded, 175 , some of them coming froun another ralich.
Butter was the amount of 2,500 pound and first month eriod of five months and 12 days, iu amount,
$4+1189$ pounds. Seventy eight hogs sold for The aceoging 200 pounds apicce.
The 1877 is much less, owing $t$ the dry season. The time extenled from
March Ist inta Augnst. Averate number cows milked, $99 ;$ in June, $1120 ;$ in Aumber of
number of calves raised, $40 ;$ butter made, 200 pounds; cheese made, 15,000 pounds; nnmber
of hogs sold, 333,113 averaging 200 pounds each, and 222 averaging 100 ponnds each. We
sanw ome very good cows on the ranch belong ing to Mr. Hasbrouck, and also some very poor
nes. Two Durham bulls are kept and some promising young calves we saw in the fields
Twenty acres of corn is annually raised with five of heets and three of squashes.
H. E. Halletr.

Notes from Santa Barbara County.
Editors Press:- Although encouraged by the extraordinary rainfall, our farmers have placed a large area under cultivation, it is prob ahle that the harvest will not prove as heavy as some of the more sanguine have predicted The long period of wet and foggy weather has so affected the barley on low lands as to necessitate replanting in some instances, and the poato crops have been seriously injured in lik localities from the same cause. Notwithstand.
ing the backwardness of the spring, and the consequent lateness of the harvest, the aggregat grain return from the county will be the largest ver kuown. On the higher lands and in the ioothills the yield per acre will be prolific. The ains of the past wcek, accompanied with ser ral dashes of hail, cansed considerable injury to some fields of grain, and caught a few of ou farmers in the act of hay-making. For a day
eal of damace had leen done, but, as generall happens, the injury has not been very appens, the north winds, which followed the southeast rain storms, assisted materially in straightening up the fallen barley.
The luxuriant growth of feed proved disas trous to some of our cattle, and many a promising steer and well-lired cow that passed the
dry year in safety and escaped the scylla and ry year in safety and escaped the scylla an hareli a victim to lloat a mere have 'atera found twenty head of cattle with thei "feet up," in the field oue morning in February To one familiar with the country during last casons drouth the contrast now is very
narked. Eight months ago herds aud flocks were rarely to be met with, and the few seen
werc scarcely more than animated structures of werc scarcely more than anmated structures of
leeee, hides and bones. Now a ride through the canyons or among the foothills shows thei 2 most
stock.
'Mild dayebrush green floeks, fleee-laden, browse; Here hhe aridiouss numstang seeks hisi luscious food,
Where they all come from is a mystery. lany of rach " decidedly find lastures green - a dor their stock, and now that Providence has smiled upon us the flocks
herds are on their native heath once more There is a gool deal of activity noticeabl among our agricnlturists this spring in the planting of orauge and lemon orchards. The auction of the fine stock of semi-tropical rees at his nursery in the Mentecito last sum mer gave an impetus to the general planting of
these trees, and as the season has proved propitious, the interest awakened there has iucreased and there is hardly a land-owner iu the count ut is beautifying his possessions and laying the Soundation for a fine revenue in the plantiug of of the eucalyptus is also being largel carried on this season, and soon the foothills of
our valley will be clothed in a suit of green that our valley will be clothed in a snit of green that ot even a dry year can render somber. Mr. Ellwood Cooper, at his ranch, 12 miles live trees in bearing, and has, during the past the oil. This is a very nice process, and Mr. Cooper has given it his personal attention hrough the various stages, from the fruit as
is gathered from the tree to the oil ready for use. He now has a quautity ready for bottling,
which he feels coufident will, when placed on the market, mect the approval of couissenr He thinks it will keep well and bear transporta tion. If Mir. Cooper is successful in his ven-
ture, it will be an event of importance, not only o Santa Barbara connty, but to the State, as it ful effort to make an oil on a large scale to oom pete with the imported article. MoN1ss1.
Santa Barbara, April 25 th, is7s.

## Fire! Fire!

Fidrors Press :-There is a fire in the grain felds; do you see it away off to wiudwari some two or three miles? The black smoke is
rolling upward toward the hcavens, showing that the servant has becone the master; a fiery fiend consuming all bcfore it. Get on the bousetop, and see the men and teams and plows hurrying from all directions; hear the slrill alarms of the steam threshers as they send heir crews to fight the fire, and water wagon to quench the thirst. You too must be off with
tean and plow, for yon have stacks of graiu in the path of the devourer aud his progress must be sta
result.
The
The wind freshens up and exhansted and worn out you can endure no unore ; the puay track ighters, now amounting to huindreds dghters, now amounting to hundreds, are
driven from one position to another. Olh ! for a broad road or a strip of summer fallow to starve out the destroyer! Vain wish; the
grain and stnbble extend unbroken for miles
and then sweep over your own precious stacks
of grain. You feel that you must be at home of grain. You feel that you must be at home
when the destruction comes. The anxious wife and frightened children await your coming. The fire is net far behind, and soon from your door you and your weary partner gaze upon the destruction of your share of this good year.
Fine stacks of plunp golden grain that were to atone for last year's pinchiug poverty; visions ing, with bits of finery here and there, and an occasional luxury, all turued to ashes! Santa Claus is niggard of his gifts to the little ones in
dry years, but this was to be a cliristmas of christmas trees this was to be a christimas of The sun that found you in the morning so full of hope for the futurc, leaves you deeper in the And why?
One reason, because it is an additional stroke of misfortune, and the next, that you were to thresher or the railroad: This was from the careless emptying of the old pipe by the tramp along the highway. Had the owuer of the grain adjoining the road plowed a strip between the
dry alfilerilla grass and his grain, the fire had died out alnost at its birth. Had you and your fallow in one body and your yowr in hody, alternated it in strips across the track of the prevailing summer winds, the mark of the fire would have been a short one. But here at you had placed your precious stacks in the midst of combnstible material, knee high, taken your harrow or cultivator and harrowed for 70 or 80 feet from the stacks, gathered up the rub dollar harowedigan, at a tost of avout one loomed on the blackened waste white and bright, and, if not hetter, still more procious in your sight for the perilous ordeal your good sense and industry had enabled them to pass. If there is a farmer in this state who reads these lines and heeds them not, he is unworthy of a helping hand if such misfortuue overtake him. He owes it to those who have helped him in past extremities, to his hard-working wife and to his children to see that nothing is left andone to insure the safety of his crop.

The Mint Family
If my memory serves me right, I served that depraved member of the Nint family just about bloom and the patches were on summer fallow that had been plowed twice alroady. I plowed it at various depths, as I was able to get the plow to enter from three to eight inchen, but bloomed as though nothing had happened. I will send a plant when it blooms. It shows no sign yet.

## The Corbet Method

The incubator you illustrated lately seems to e about what is needed in that line. If it is after horse inanure for hatching. In answer to where full name is given), I will say that according to his extract, I did not miss it much, hut I suspect the Professor has left something else艮 with an occasional break-lown. I should like to hear from one who has tried the Corbet apparatus.

## The Stable.

Breeding Horses in California.-No. 4
oseph Catra Stimphon.] castle wrote, the race horses traced principally to English horses. "The lByerly Turk," in the eighth generation preceding "Cade," was imported in 1689 , and the royal mares were of Method ""

Cade "was a son of the "Gololphin Barb," so that this great name in the linglish Stud Book was incorporated long after the first steps had becn taken to improve the race. Though there was a commingling of the Oriental blood from, there was little, if any, system in breeding, and spanish, Barb and Turkish horses were the prevailing element. Some of the larger dnced to give size enongh to carry the warrior clothed in a panoply of mail, while the horse had the most vulnerable points proen nearly 400 pounds.
The early importations were casual acquisi tious until after the Norman conquest, and while at that time the Spanish horse was recog nized as heing the vcry liest for spirited charg-
ers, the crosses with the heavier race were necessary to carry the immense load a man-atarms imposel
, Dome writers have crcdited King John, in ine heginning of the thirteenth centary, with
mporting 100 heavy Flemish stallions, for the bencfit of agriculture, but the spirit of the age first motive was the improvement of the cavalry.

The results of these importations will be more The object now is to get an intelligent under standing of our present race of thoroughbreds,
and in order to do so it will be necessary to give a good deal of attention to the horses o England previous to the
breeding was followed.
Perhaps it would be better to state before the records were published of breeding, for long before the time of the oldest names in the
Stud Book, racing was a favorite pastime, especially among the noble and wealthy, and
Edward III., 300 years before the Duke of Newcastle wrote, appropriated 1,000 merks to
purchase 50 Spanish horses, and to insure their safe arrival in Eugland, he made formal application to the kings of France and Spain for a tries. When all the charges werc collated, it to abo it $\$ 1,000$ at the each horse was equivalent tent that at this early period the Spanish and it is a fair presumption that the fleetest the English coursers, before the era of the
Barbs, Turks and Arabs of the Stud Book were chiefly of that blood, though called Eng-
lish. When a horse traces beyond the Bycrly Turk, the pedigree is lost, though 100 years prior there is the best evidence that animals
were valued on account of their descent from

## oted horses.

ohn Hall, Bishop of Norwich, in his satires, published in 1597, thus ridicules the prevailing
tendency to laud a horse on account of his brceding



Hall the bishop been as well posted in breeding as he was clever in satire, he would not value of good ancestry.
And now we will resume the Duke of New
castle's description of the horses of his day, commencing with the

## English Horse.

"The English horse is less wise than the Barb, fearful and skittish, for the most par
and dogged and rebellious to the manege, and not commonly so apt to learu. But those they
call English horses are so conpounded of horses of all countries, that they always participatate
something of their sires, and so that may somesomething of their sires, and so that may somewhat alter the case.
"Certainl English horses are the hest horses
in the whole world for all uses whatsoever, in the whole world for all uses whatsoeve
from the cart to the manege; and some are
beautiful beautiful horses as can be auywhcre, for they
are bred out of all the horses of all nations. But if you would bny for the manege at fairs you must go to Rowel fair, Harborow fair, and
Melton fair, to Northampton aud Leicestershire, but Northampton they say is the best.
"You must buy such horses as they sell for the cart and coach, which are the best for the manege. Do not think to buy delicate shape
horses, like the Spanish horse, Barb Turn, but thcy are handsomer horses than commonly Dutcl horses are. Choose a short trusse horse, with good feet and legs, full of spirit and
action, and lively, and if he leap of himself so much the better
"At Molten fair, for the most part, they ar
young stone-horses, and some young stone-horses, and some geldings, but
fitter for the pad and hunting them for the Mnaege. Ripponf cair monly but geldings aud Mogs, thore fairs are in Yorrshire. Lenton fair
is in Nottinghemshire, and is a great fair of all sorts of horses, but especially geldings and nags, fitter for the par and gallopping than for the
mancge; you may also find some stoue-horses ridge, but it is, for the most part, of colts and young horses, thongh sometimes, by clance,
there are also others. The other fairs in the northern parts, which are many, are not worth
"I a
"I an very ignorant of the west country, Where my Lord Paulett's ancestors had a good
breed of horses; and by chance, now and then, my Lord of Pembroke did breed, but
"In Worcestershire, and in the v
there are good strong cart horses, in Cornwal
there are good dags, and in Wales excellent the best nays of thein all.
in England, bute, before the wars, many good races the many new breedes of horses came u
presently after the wars, are, I doubt, none the best; for, I believe, their stallions were no
very pure, because the men that did govern in
those days win ords, and great gentry were heretofore, neither wauld they be at the cost, and besides, they it, yet, I assure you, there are very few that
know horses, as I have heard the king say ing gooll breels a again is very great.
'FFor English
in the world to breed, on, but then you must choose them fit for such horses as you would
the manege, the mares must have fine fore-
hands, ,ut not too long necks, fine heads and
well hung on, and their necks rightly turned,
broad breasts, good eyes, and great bodies, that
the foals may have eyore roon to lie in the foals may have more room to lie in. They must have good hoofs, short and bending pas-
terns, and are to be short from the head to th terns, and are to be short from the head to the
croup, and stuffy. This shape fits the manege croup, and stuffy. This shape fits the manege
best, and if your mares be thus chosen, it makes best, and if yonr mares be thus chosen, it makes
no matter what color they are of, nor what no matter what color they are of, nor what
marks they have, nor what tails or manes, so marks they have, nor what tails or manes,
they be fnll of strength aud supertluity spirit, and not
But must tell three fiue Dutel you that
told you, it makee mares, shaped as I formerly Spanish horse, for the manege, and a Spanish horse with such English mares as I have told you now, are not ons
manner for all uses.
"If you would have mares to breed running horses, then they must be shaped thus: As
light as possible, large and long, but well shaped; a short back, but long sides, and a
little long-legged; their breast narrow as may be, for so they will gallop lighter and nimbler and run the faster, for the lighter and thinner you breed for galloping is the better. Your somewhat of the shape I have described the get a better running horse than the best
running horse in England. As Sir John Fennick told me, who had more experience of run-
ning horses than any man in England, for he had more rare running horses than all England besides, and the most part of all the famous
running horses in Englaud that ran one against running horses in England that ran one against
another, were of his race and breed.
Some commend the Turk eery much for a
stallion to breed running horses, but they are so scarce and rare that I can give uo judgment of
them, and therefore I advise you to the Barb, which I leelieve is much the better horse to I heed running horses
not only gave a description of the English horse
of the period, but the comments and advice are well worthy of being reproduced. The descrip-
tion of the Turkish and Arahian horses will be deferred till the next paper, but enough has the Barb were the principal ingredients of the fine horses of that day. and afterwards
Barbs and Turks took the most proninent place. It will be much easier to follow the pedigrees to the latter portion of the 17 th cen-
tury and after that time, particularly from the
days of the Godolphiu Barb the clain is unhroken.
Had the Duke of Newcastle been as enthusi astic about the race horse as hc was of horses for the "mannage," beyond question he would
have given the breeding of the horses of Si
John Felnick, and that might have carried the John Feninick, and that might have carried the
ancestry back a hundred years, at least further than it caun now be given. Unfortunately these
were about the most trying days which England encontered since the Vars of the Roses, and when civil war was not raging there were plots the c untry. From the battle of Marston Moor and though this gave him the opportunity to
see much of foreign horses, it circumscribed his knowledge of those at home during the protec
torate of Cromwell.

## FLORICULTURE.

## Handsome Grafted Roses

Edirors Press:-In a late visit to Oakland, one of your correspondents met with two such lady readers especially may take some interest in a brief description of them. The uudersigned anywhere. They are in the fine nursery of
Edward Gill on 2Sth street, near San Pablo avenue. The two especially referred to here
are on Castilian stocks, the onc with five and the other with 15 of the best varieties grafted the charming array in form, and color of the richest of buds and ach-blown wises, the varie
ties and colors on each stock will be enumera ted, beginning nearest the ground. The first branches sprealing with a general diamcter of f roses. The kinds are : 1. Marechal Niel color, orange-yellow. 2. Glory of Dijon; light
saffron and crean. 3. Anna Alexieff; rose color. 4. Beauty of Wantham, bright ros
crimson. 5. Hernosa, bright rose color.
The one with 18 grafts of 15 varieties is a bout eight feet high, its branches forming a
general diameter of betwcen two and three feet. Its varieties from botion to top are: 1 . Souvenir de la Malnaison, flesh color; 2. Jules
Margottin, bright cherryy 3 . John Hopper,
rosc.-crimson; \& lesh and wax-like; 5. Eugene Appert, brilliant crimson-shaded scarlet; 6. Madam Craplet,
xenl. Jacqueminot, brilliant crimson; 9. White
Daily, pure whit; 10. Louis Phillipe, royal
Jurple, H1. Niphetos, snowy white-onc of
purple; 11. Niphetos, snowy white-onc of
creamy white; 14. Giant of Battles, bright
crimson; 15. Marechal Niel, orange yellow. Above are additional grafts of Hermosa and Above
Safrano.
Any
Any mere description can give but a fain by of the exquisitley beautiful effect prodnce were sct by Mr. Gill, by the usual mode o budding, five years ago, and most of thein dur-
ing the same spring. Flora's kingdom offers few if any more attractive sights than they pre sent this month

## The Vineyard.

Packing Ripe Grapes for Exportation
Editors Press :-The export of fresh grapes from Spain, Portugal and one or two other countries of southern Europe, to countries such as
England and the northern States of America,
etc., has been for a very long time a profitable branch of rural industry, ranking in importance honcy. I presume the vignerons of California do already export a good many tons every year
to the Eastern States. I have not, however been able to obtain any reliable statistics on the subject.
At your request, and with a few hours o
leisure at ne disposal, I willingly invite leisure at my disposal, I willingly invite atten
tion to the importance of this subject, as a source of profit to the vinegrower and the mer sumer. Supposing that your a vailable grapes at home, or absorbed by the Eastern States, yet is there room for a great increase in the produc-
tion to supply the markets of Australia and New Zealand. These wealthy and populous
countries have their seasons at exactly the site time of year to those in California. Victo-
ia, the most southern of the Anstralian colo ria, the most southern of the Aistras and size
nies, corresponds both as to latituder
very closely to (alifornia. Melbourne lies i spouth, consequently its autumn is you
pring, and vice cersa. omince the estabishment of monthly stcan ity of Auck land, in New Zealand; 25 days of tal of New South Wales; and 31 days of Mel bourne. Hence grapes shipped from hicre in
August, September and October, would catch
the Australian markets just when the demand would be most active, viz, iu September
October and November during the Christ
nas season, when the ordinary temperanas season, when the ordinary tempera-
ture in houses is from $80^{\circ}$ to over $100^{\circ}$, and out
of doors from $130^{\circ}$ to $140^{\circ}$ and over, and yet ore intensified by blasts of hot parching
winds; when no grapes can be procured for love or money. In return, (and it is part of my
pleasure in thins writiug), there is a correspond ing opening for Australian grapes during urally New South Wales will look to this country for a market, as she is nearest here, aud
arthest from Europe. I may add that while n sydney, a few months ago, I was assured, in
conversation with some of the most influential members of the Agricultural Society, that they fornia as a market for their exportable grapes.
The reason why New South Wales has an excess ver colonial demands is easily explained when I say that grapes were largely cultivated near
Syduey 50 years before a plant was matured in ictoria, and that the vast demand and high prices paid in Melbourne for fruit of all kinds,
but especially grapes, ilrecter attention to the cnttivation of exportable table varieties; and the ame was the case in South Austraina. Nerkets during all but about one month, but could oreign fruit. Hence those colonies must either find oreign markets or abandot one
profitable branches of vinticulture.
Why I, a mere stranger hcre, meddle with when I say that any advantages that may ac crue from a development of this department of merchandise, will be as profitable to the people among whom I have spent half a lifetime as to gil, I had often lent a hand during the long vacation, in packing grapes for export, and
thus I became practically acquainted with the inds uscd, and the inethods employed which xperience had proved to be reliable
he vigneron has decided on packing fore, and voyage, three points have chiefly to be attended to, vize 1. The kind of grapes suitable, and
to their condition of uniform growth and ripeness;
2. The boxes to be used; $i$. $e$. their size trength, and the care requisitc in, filling; and 3. The material to be employed in the packing in ordcr to as far as may be not only to solate the
hunches, luat the individual berries on the bunches. On each of these points I will state
clearly as I can the Portugese practice.
Varieties Shipped from Portugal
And first as to the kind of grapes. That about two more in small quantity for the Fuglish markets. The red kind was callerl "uva
feral," and sometimes "pereira" form being feral, and sometimes pereira, form being
generally cultivated on trellises. The bunches
will average from one and a-half to two pounds,
and are moderately compact. The grape is of
a fine deep purple color, of good size, firm skin a tine deep purple color, of good size, firm skin slightly sub-acid flavor, a delicious table The second kind was the well-known Muscatel of Alexandria, with its oval, golden, luscious berrics and long straggling bunches. The third was a white grape of a rather long-oval shape, lavor-usually cultivated on trellises. Often as I have seen those imported into Liverpool and London, I have hardly ever met with any
but the above three kinds. One of the other kinds was the "Muscatel Gordo Blanco,"
large round white berry, with less flavor and compact bunches than the Alexandrian.
For long journeys the grapes must be naturunbin uniformly ripe. There must be no ies left on the bunch. Each bunt, or moldy ber-
Eanch must be handled separately, and faulty berries removed with a pair of scissors. They must be alally not before midday.
These points having been attcuded to they are ready for the hoxes, Whose dimensions
utside should be about $27 \times 17 \times 12$ inches, divied in the middle transversely, by a sufficiently great pressure ou the grapes 1:ngthwise. packing, it is al ways dry sawdust Brad is the gether objectionable ; for if a berry or two hap-
pened to chances are that fermentation would be started in the bran, producing heat and spoiling that compartment of the box. Hulls of oats or barot be so easy to prevent them from shrinkage vould admit of motion among the bunches, and, of course, ruin. Experience has found nothing strong, resinous, or other smell of its own. Any trong, resinous, or other smell of its own. Any
kind will do if free from the above charactersof course, the lighter the better
Th vineyard, provided, as well as the boxes at thick of the sawdust spread equally over the bout half fill it, carefully placed so that ther may be half an inch at least clear between the
berries and the sides of the box. At this stage berries and the sides of the box. At this stage
s much sawdust is poured in as will quite fill ap level with the top of the bunches, and careully shaken in by tapping the box gently with herries and relieve them as far as possihle from squeezing one another. This being done an-
other layer is placed upon it, which, if the will complete the quantity that the box should that In other words, and for the same reason with the bottom and sides, they must be protected by half an inch of sawdyst from touch-
ing the covering boards. When the sawdust has been poured iu among the second layer,
more tapping or gentle shaking must be used. it is then best to lay the coring boards loosely on, and let them remain so for another day,
when some rougher usage may be had recourse filled up, and being made quite level at the top ice to perfect the packer.
Whilst I was in Sydney in the month of Fehruary last, the Royal Commissioners for reparing exhibits for Paris indnced me to pack eason or table weight for transmission. The advanced, and as the time at my disposal was
limited to a few days, I could only use my best limited to a few days, I could only use my best
endeavors. I selected in the vineyards four varieties that seemed the nost likely to travel aifely, one red, and three white varieties. Ex-
cept the Muscat of Alexandria, the other kinds ere new to me and known in the locality only "big white sherry grape;" the red resembled in some points the "Black st. Peter," but with a thicker skin and firmer body, all extensively to Paris via London, and if they arrive safe and sound the Australians will have nothing more to fear about shipling fresh, grapes to Europe.
They would have a 50 days' voyage to London by the Suez Canal, be reshipped to a French hoping to hear about them by the incoming Australian mail. Joun I. Bleasdale, D.I),
San Francisco, 906 Folsom Street, May l6th.

Offichal Labor Inquiry.- Secretary Evarts
has sent a circular to all United States Consuls abroad, requesting reports on the fol lowing subjects: First, the price of labor among
laborers of all classes: sccond, cost of living to laboring classes; third, comparison of the present cost of living and rates of wagcs produce and its market price; fifth, amount of paper moncy iu circulation and its relative
value to gold and siver, together with its uations during as many years as can be accurduced the fined, and the canses which have prothese inquiries cannot fail to furnish a mass of valuable information bearing on social and economic questions. The result will bc to show
that in spite of hard times and other drawbacks the American people are better off than any other in the world, with less cause for com
plaint or political agitation.

## Patrears of Hosizampr.

The Constitutional Convention.
Editors Press:-While officring suhjects for ombodying in the proposed Constitution, would be advisable to consider the provisions
of the Act calling a Convention to frame this new Coustitution for the State of California. The prominent features of this Act are the number, time and manner of electing delegates, fifty-two delegates are to he chosen, as follows: One hundred and twenty from the 29 Senatorial districts, apportioned in accordance with the present representation of each district in the be taken from the State at large.
ednesday, the 19th day of June, I878, designated as the time for elccting the delegates, who are to convene at Sacramento on Saturday,
the $2 S$ th of September, at 12 o'clock $^{\text {M., }}$ where by a riza voce vote one of their number shall be
elected Presidcut, and such Secretaries and other officers chosen as may he deemed necessary. Constitution framed by this couveution is to be subninitted to the people for their adop.
tion or rejection at a special election to be held on the first Weduesday of May, 1879. The vote upon the Constitution will be as whole-no question aside from itt acceptance or
rejection a such is to be considered. The prolar to the law regulating elections, exceptimi that portion relating to the delegates at large. The text of the bill will be given, as there interpretation: "The persons reeeiving the highest number of votes at such clection shall
be elected, except iu the case of persons voted for as delegates at large. Of the persons so
voted for as delegatcs at large, the eight per sons residents of any one Congressional District wher all other
the same Cougressional District shall be de-
clared elected such delegate at large
The compensation given to the
delegates is to be the same as that naid to the members of the Legislature, viz., $\$ 10$ per day,
and 15 cents mileage to and from Sacramento and places of residence. For neeting this and other expenses the sun of $\$ 150,000$ (or so much
as may be found neeessary) has been appropriated. This appropriation beiug oue of figures
is easily determined. The legalized distanees is easily atermined. The legaized distanees
from and to the seral county seats in the
State and Sacramento agregate 19674 miles an average of $129 \frac{1}{2}$ amiles (129.434) for eaeh
alelegate. This at 15 cents per mile miles delegate. This at 15 cents per mile makes
$\$ 2,951.54$ mileage for the 152 delegates. Ninety days per diem for delegates announts to $\$ 136$, ,
800 , and this leaves a halance of $\$ 10,248$ for

The foregoing computation is given to meet
the caviliggs of many who regard the appropriwill certainly feel grateful towards the Assembly in making the appropriation no larger, as
it would have furnished an excuse for delay and procrastination on the part of thor de who
esteem pelf above law-making. Patriotie, sincsteem pelf above law-making. Patriotie, sin-
gle minded men, those willing to do for the
State as they State as they would for themselves, ean in 90
days, with the data at command, alter, amend, or frame a Constitution well nigh perfect in its provisions.
The Aet
modus operandi of their delection ete is mane the festly legal in its coneeption, bearing the ear-
marks of those "who have taken away the keys of knowledge, entering not in themselves, yyet
hinder others from doing so." Judging from the eandidates already in the field, the profession will be fully represented iu the Conven-
tion, so that the words of the "wwise and their
derk dark sayings" will be satisfactorily translated. have embodied in the fuudamental law is not possible in a newspaper paragraph, even as not
erally
iuclined as is the Rorac Press towards its correspondents. It is to be hoped your
readers will bar in mind that their are the result of causes. Politieally considered
they hinge upon one thing -the want of apprecithey hinge upon one thing-the want of appreci-
ation of the elective frachlise. Volunes may be
written upon suppable may resound with the eall for hemp, hemp forum all will be vain, so long as the proper safeguards
are not tlirown around the right of suffraze.

## Sonth Vallejo, Cal <br> Pearsos.

For the Convertion- - Without enumerat good Grangers have nalready been placed in nomination for the Constitutional Con rention
in different parts of the state. With repre in diffirent parts of the state. With repre-
sentative men in the eonvention, and with
spirit of spirit of equal justiee to all eitizens prevailing,
there can be little danger of unwise action or the triumph of rarrow policies. UThe Sctite has high expeetations of the convention. Let them

Santa Clara and San Jose Picnic.
Editors Press:-Oa Tuesday, May 14th, sis, the San Jose and Santa Clara Granges net at Cook's grove, on the Alaucda, to cele brate the tifth anniversary of San Jose Grange by a picuic and to receive the
turer of the State Grange.
At 11 o'clock the assemblage was called rder by C. T. Settle, Worthy Master of S. Jose Grange, and Bro. I. C. Steele was intro-
duced, who spoke of Grange work and its hene fits to all farmers and the necessity of support ing this institution, than which no other Order has done so
Bro. Pilkington proceeded directly to the
uhject in haud, viz, the Constitutional Con subject in haud, viz, the Constitutional Con-
vention, and placed before his audience, in terse, forcible language, the reforms needed by
the pocple of California and the necessity of will mave clases in the new Constitution which wn the State and tax it equally; to make me the agricultural department of the State University
onent to farners' sons; to settle the text book question at once and forever; and to pun-
ish citizens guilty of brihery, directly or indireetly, by disfranchisement. His remarks were pungent, to the point and were well receved.
Hie was followed by Bro. Gardner, who explained the pur
Fire Association
Then came the banquet and in a remarkably short space of time the beautiful grove was
transformed. Merry groups of Grangers and their friends, young and old, lunching under the trees on the green grass, formed at once a
happy and pieturesque sceue. At $1: 30$ oclock dancing commenced by the young folks, while the older brothers discussed farm aud politica what they discussed, but know it must have been interesting, until the shadows began to
engtheu, when, with fraternal many good-byes, ended our annual festival.
San Jose, May 14th, 1878.

## In Memoriam

Wheatland Grange, No. 260, March 4th, Whereas, It has pleased our Heaveuly Father to remove by death fron our midst our
worthy and much respected sister, Eulza Filcher,
Resolved, That while we bow with humble此 we co the will of our Heavenly Master of an estimable lady; to our Order, a worthy and consistent member; to the family, a devoted wife and loving mother.
thy Bro. Filcher thene we tender to our wor member of the Grange, we extend to the balance of the family our deepest interest in their be reavement and aflliction.
charter be draped in mourniug for 30 her our that a copy of these resolutions be sent to the Rural press, Marysville Appeal and Wheat-
land Recorler.-Committee: R. F. Durst, l. Keyes, C. D. Schosser.
Lodi Grange, No. 92, San Joaquin county, May 13 ith, 1878 .
Winereas,
an all-wise Providence to suddenly pleased an all-wise Providence to suddenly remove
from our midst our esteened and well-beloved brother. Joseph W. Keanney, therefore Resolved, That we reeognize in the dcath of
our late brother a grievous loss, both to the
and Grange and to ourselves personally. His ling
connectiou with the Order of Patrons of IIusbandry and his large experience in its affairs, his laborous habits, his accurate and eareful
observations, his just and impartial judgment observations, his just and impartial judgment
and unswerving integrity all eombined to make his unswerving integrity all eombined to make
his services invaluable. Our personal acquaintance with him in the Order has been most by our contidenee in hims of his disposition and beyond reproach and that all in the community will grieve for him as a useful citizen and friend. The memory of his character and example as a
true and faithful brother we shall cherish as true and faithful brother we shall cherish as
sacred and the best legacy that man can leave to man.
Resolved, That we tender our heartfelt sym.
thies pathies to this sorrowing family in this their plaeed on our reeords, a copy sent to our
aftlicted sister and family and to the thrat Press, Patron and Stoekton Intependent, with A. T. Ayres, J. Hutchings, A. W. Govo. Mrs. Our deeeased brother was a charter member,
our first Worthy Master and our first Worthy Master and has since oeeupied
the positions of Overseer, Chaplain and Distriet Deputy, all of which he filled in the most faith net with , an irreparable loss.-N1 Rss. A. W.

South Sutter grave, No. 20-, P. of H.
Wuereas, It has pleaved our Divine Maste above to call away from us our sister, Mrs. E. J. LEET, and, whereas, wo do truly mourn her
loss to this Grange and noighborhood, and, in ympathy with her beraeved family, therefore,
Resolved, That we do mourn lier loss to us and
this neighborhood, and how in m
to Him who does all things best.
Resolved, That we render our heartfelt sympathy to Bro. Leet in this his great bereaveinent.
Resolved, That this preamble and resolu-
tions he placed upon our minutes, and tions he placed upon our minutes, and a copy
be sent to the relations and to the RURAL PRESS for publicatiou.-[Committee: James O. Harris, Ann E. lioberts.

Golden Gate Grasge. - The members o the regula Geetiug Tuesday, May 2sth, 7:30 P. M. A full attendauce is desired, as business of importance will be presented.
J. W. A. Wrigut, Master.

## AgpicultJral Notes.

## California.

alameda.
ctre ror Wooly Aphis.-Cor.
Alameda Co. Independent: I noticed the woody aphis on the apple trees in one of the
lots of your pleasaut town, and as very few are familiar with these destructive insects, an itcon concerning them may not be out of plaec. down, and if they arc pernitted to increase they, will soon ruin the trees, as they increase
with fearful rapidity. Fortunately they can with fearful rapidity. Fortunately they can ounce of sulphuric acid by measure and seven meaus of a stick with a cloth tied to the end. Take eare that none of the mixture touches your clothes. The treatmeut should be
thorough and the hose used to sprinkle after ward, so tho solutiou may be washed into all
crevices where a lurking germ may wait to burst int
BUTTE.
AgrictlTURAL Societr.-Thc election of of
ficers of the Upper Sacramento Agricultural Soficers of the Upper Sacramento Agrinultural so-
ciety resulted at Chico last week as follows ciety resulted at Chico last week as follows:
President, Allan Henry ; Vice-Presidents, I. R. Bennett and John Guill ; Trcasurcr, Charles Fanlkner; Secretary, J. H. Williams. The
Board of Directors are as follows: Butte county-Elisha Crouch, O. L. Clark, H. C.
Daugherty, S. L. Daniels, M. Wick, Jo. B. Clark, R. R. Fimple, J. Eddy, J. S. Crane, J. McIntosh, F. Zadick, J. F. Watkins, J. M.
IIoyl, W. T. Turner, Geo. Miller, J. W. Gilkyson. Lassen county-W. H. Crane. Plumas
county-C. C. Goodrich. Tehama county-J.

General E. J. Lewis. Colusa county
colusa.
Crors in Coluss.- - Sun, May 18: There will be an immense amount of wheat to ship from
Colusa county this year; but it is a fact that much of the wheat on the best land will be overgrown with oats and much of it has been drowncd out and turned (?) to cheat. The high
gravelly land in the upper end of the county is turning ont splendid. The gravelly hills, just
south of Stony creek, that were allinost barren south of Stony creek, that were alinost barren
before plowed, have, this year, extranordinary before plowed, have, this year, extraordinary
heavy erops. There is nothiug that can hurt their crops, except a strong north blow, after it we find some such heavy crops, it is a faet, we ble times is mueh better for crons thasona over. This season has not smutted much land in the State, and we are not looking for an extra amonnt of grain to le shipped.
Frencil settlearext.-In the year 1869, a traet of land was taken up in this county by
some French settlers, some five miles sauare, situated about six miles south of Willows,
which is known as the "Freuph There are about 60 farmers on this etricent. genuine Frenclimen. Among the number we ean at present call to mind, 1. Proulx, A. Stuix S. Ehbitt, L. Ploux, Edwin St. Lonis, Alfred St. Louis, B. Brandall, and others. These gentlemen have proved themselves very sueeess-
ful farmers. They were the first, we believe in that section, that introdueed deep plowing the results of which were of such a satisfactory character that it was adopted hy many of their neighbors. These gentlemen make good enter-
prising citizens and are much respeeted and beloved by the people of all natioualities.

## CONTRA COSTA.

Crops Prosprctive.-Rio Vista Einterprise,
May 18: The vast amount of hay whieh is be May 18: The vast amount of hay whieh is be duce; and although the quality is not so grood as ought lie raised, still it is very fair and will
answer all purpee noticeable among it, as well as in the grain The weather has been quite favorable towarls bringing the hay and grain to a ripened state,
and allowing full time for summer-fallowin and allowing full time for summer-fallowing
the grouud. Some 42 days have heen deroted the grouud. Some 42 days have heen derote
to plowing, and some are even yet following up the plow, and doing double work, bcing some
10 or 12 lays more then has beent cral years. Although the hay and for sex cral years. Although the hay and grain erop,
were supposed to be quite light, for a time, it were supposed to be quite light, for a time, it
is begining to show to better advantage, and is uite a erop will be realized. In some spote
quere the grouud has reeived too muel water the stands are not looking quito as brilliant but will nevertheless turn out comparatively

LOS ANGELES.
Entrrprise.-Republican: Mr. J. De Barth Shorb has just made a sale of wiue and hrandy amounting to $\$ 25,000$. This is a good index of
the vast resources of the San Gabriel valley whieh John Muir calls the "Sun Valley" of San Mr. Shorb this year wil thisand orange trees in bearing for the first
time. His present crop will he inmense, and making from the Mission grape, and aseertain whether it is more profitable than wine-making,
he will do an invaluable service to southern he will d
California.
MENDOCINO
Won Crop.- Ukiah Press, May 10: An ex-
cellent crop of wool will be the result of the cellent crop of wool will be the result of the
long wet season. Shearing has already hegun. long wet season. Shearing has already hegun.
Clint tilledge having finished, Garcia \& Ames rey will connmence oul the 15 th of this month. Sheep will average three and a half pounds to pounds. The quality, so far, is the best ever clipped in this county, it being long and clean,
while the amount will exceed that of any othcr season. Sheep men tell ns they will place in the narket this spriug the finest wool ever pro-
duced in this county. There are a few growers, however, who do not give quite as encouraging all agree in the eleanliness, length and fincness Editors Press:-In moing
Potter valley, the road lea from Littlo Lake 8 over ridges of varietics of timber. It is not so thickly wooded but there are fine grazing lands. Fron the highest place on this road, a large scope o uneven country is brought to view, and where
Potter valley first comes in sight, the picture is truly magnificent. Looking down upon this handsome valley as it rests in its loneliness, surwonderfully pleasing and delightful. Dotte thickly with oak trees, we see green fields and plowed lands. This varied scenery with the mountains beyond, its patches of green knolls, its clump of timber, makes a picture long to
rest in one's memory. ley a person cannot fail to notice pleasant home with gardens and fruit trees. Many of the pletely hidden by beautiful elinhing rose bushes and seem to be almost one solid so near the great well fellced, and have a very thriving appearthan in any other part of the State. The farin ers at this time are still sowing grain, and say they consider it safe to sow for some 10 or 12
day later. A person might imagino that this choice valley, so far away from any harhor or ce, but I a told that the stock rancer the neighboring lumber mills consume all tho is to be spared. There is a healthy, thrifty look about this valley which goes to show that prodwets of the soil return goouly proits to the ple nust enjoy, away from the noise and gossip
of city or village life. The follies of fashion are not a matter of such urgent necessity here nd plain clothing with eomfortable dwelling of creating envy among neighbors. - H. W. R., MERCED
Isfluence of Green Fefo.- Merced Espress Silas lowiman, of Sandy M1nsh, in this county sheared last week froin a hock of 1, tive sheep,
6,000 pounds of wool-an average of tive pouuds to the head. The sccret of this largo yield, we are informed by Mr. Bowman, lies in the fact that his sheep for the past year have by means of artesian wells on his premises,
whiels kept his sheep in good eoudition and per cetly free from seab.
NAPA.
Cutting May and Plastisg Corn.-St.
Ifelena Siar, May 18: David Cole has eut the rain on onc of his plaees for hay and planted the ground to corn. We fiud that much ground year. Owiug to the protracted rains, the ville down ha been the good of the grain, and it has been deemed advisable to cut it. There leing yet time for coru to ripen, that crop has been planted in its plaec.
SACRAMENTO
Crors.-Record-Union: We have, during the past week, traveled through some portions o the crops. Though sacramento is not a great grain raising county, it will this year produce
prettyy good quality of wheat and barley
Wheat on the red lands this year heat on the red lands this year, cxeept a verage 20 bushels to the aere. Soine fields
vill go high as 30 and may be 35 . In sone low lands the wheat has been pretty hadly
killed out, and wild oats and eless and weeds have eome in its place. We took a look at the mall fruit farins and vincyards also, especiall great small fruit section of Sacraneuto county excelled either in the quantity of small fruits raised or in the quality of the fruit in any other
section of the State. The strawberries are just
now in their glory, and tons are shipped daily
from Florin to different parts of the State and to Nevada. The berries from these red lands are counted the best raised in the State. We
did not visit the section of country along the Sacramento known now as the flooded district, work in putting their farms in order, and in re seeant late crops of potatoes and other vegetables. A large number of the dairymen from the river bottoms moved temporarily out on the higher some are making butter, and some making cheese, and others selling tilk in the city.
Some are already returning to their own farms with their cows and will have a great abundance of late suminer and fall feed. On the whole, very flourishing condition, and the farmers are cheerful and hop

## SAN JOAQUIN

tiie Floods in the San Joaquin.-Independent, May 16: A gentleman who came in from tion of terrible disasters and loss of property by flouds on Old river. The breaks in General Naglee's levee on Union island were reported some three months ago, and as we know that a
force of 400 or 500 men, with pile drivers, had peen at work there for some time, we supposed
the breaks had been successfully closed, not having heard to the contrary. The recent warm wcather has melted the snow on the up-
-per San Joaquin to the extent that old river is higher than it has ever been known before, and attempts having failed to close the breaks, the breaks below Big Tree ranch, each of which is from 100 to 600 feet wide and 20 feet deep.
Notwithstanding the relief afforded by these Notwithstanding the 10 miles is within three
brealts, the water for breates, the water top of the levee, which is so inckes of the top of the levee, which is so
washed that it is practically useless. Along Salmon slongh the levee for a mile or two has
been entirely obliterated, and between Tom Paine slough and the San Joaquin the country
is a sea of water five to ten feet deep. The wind of the past few days has lashed the to fury, beating against the levees and causing
the greatest destruction. The louse of Porter the greatest destruction. The house of Porter McLaughlan's land on Salmon slough has bcen
ruined by the waves, and 400 acres of wheat destroyed. Mr. Bronson's house island opposite, has been served the same w of grain. General Naglee has lost about 2,000 acres of grain on the island, and on Monday night a break occurred on his levee on the maiu
land, near Molr's laudiug, sweeping out a tloodgate. He has a force of men at work trying to crops on the main laud whichlhe has there. Other settlers on the island have suffered, and there has been considerable loss in cattle, sheep and
hogg. Our informant states that he had been ttold that 1,000 hogs belonging to the Kidd dead ones lying in one spot. General Williaus has 2 number of men employed in laying sack being washed away by the beating of the waves
The great flood comes from the discharge o Paradise eut, which was dammed by Genera Naglec, but the dam broke last winter. But
for the relief afforded by this break the wate in the main river would be very much higher, and it is possible, that Stockton might have
had a touch of it. As it is, District 17 is safe and Roberts Island, on the main river side, is all right. There is a piece of levee on Middle mile loug, which was not raised to the general geven to 20 inclics of the top. Mr. Fisher ha a number of men working upon it and will sav it at all hazard, as the fiuest body of grain in the county is at stake. The water is reported has been done.

## SONOMA.

Sonoma Jottinas. - Editors Priss:-The wheat aud other grain crops in this vicinity are
a pronounced failure for this seasou, and most of the land seeded last fall is now being mowed over for hay. There will be some rye, barley
and a little wheat in favored spots, but with this exception cheat reigns supreme as king of this exception cheat reigns supreme as king of least so far as the majority of farmers are con-
cerned, the wheat, after having sprouted and growu to a considerable light,, gets disgusted goes a most astomishing metamorphosis, chang
ing, in a few week's time, from one kind of grain to another of an entirely different character. If we can so easily believe this, we ought
to look with a great deal of leniency upon the changes a creature of the ape tribe into a civil ily; and aristocratic member of the human fa:iily; or, whose pedigree can, by supposition, be
traced back to a remote period when the em bryo of the future man was slumbering peace
fully as a bit of sponge in the coral beds of the turned into hay, that article of the large arnusually
abundant in quantity and low in price are now offering to deliver it at price. Partie ton, and
it is thought that it will be down to $\$ 3.50$ late in the season. A few farmers are cutting their
grass and immediately plowing the stuble
under for summer fallow. Experience prove
which are thereby rendered more friable for
future operations. future operations. With the exception of one
or two slight sprinkles, we have had no rain for or two slight sprinkles, we have had no rain for
some time and the hillside pastures are already
turning turning brown in spots, but the abundant
growth of feed upon them will cure standing growth of feed upon them will cure standing
and remain perfectly nutritious till eaten o injured by rain; and it is a well-known fac becomes dry, and milk and butter is richer and better davored than when the pastures are per-
fectly green. The weather has been slightly cool and breezy for soveral weeks, thus rendering all outside operations rather agreeable than
otherwise.-UNcLE Josr, Santa Rosa, May 18th, 1878.
Forestville.-Cor. Democrat, May 18: The
small grain crop will be small grain crop will be light with us. but th prospect for corn and potatoes and fruit
above the average. The hay crop is here, an a good one it is too. The farmers are wearing broad smiles, but their steps are not as nimble as earier in the season, ing they have been making themselves nseful well as ornamental.
Variegated Roses.-Healdsburg Enterprise: Capt. Norton has on his place west of the rail-
road a rose bush which excites much attention roang florists. It is a hybrid, producing vari gated flowers-the rose leaves being of different shades of red, with the center leaves edged and
mottled with white. The bush is a great mottled with white. The bush is a great
bearer, and the roses are large, full and very Hay.
fragrant.
HAY.-Sonoma Cor. Democrat: Hay cutting plaints in regard to a small crop are few. ing had occasion to take a ride a few days ago through the valley, I met Mr. Brittenback, a gentleman well versed in farming and who would be no end to hay this year, and that it is all looking well and has headed out nicely. He
has engaged about 500 acres for cutting, and hopes to get more.

## SUTTER.

Poor Crops.-Colusa ${ }^{2}$ Sun, May 18: The best grain growing portion of Sutter county is
along the road from Colusa to Marysville, and
it is generally good for a crop almost any sea-
son, but the present season has been too wet for it. We passed along the road this week,
and we do not think there will be more than one-third as much grain produced on the farms along that road as therever, a great deal of it plowed and being plowed for next year. Between Meridian and Butte Slough there is absolutely nothing. The
adobe west of the Buttes has mostly been drowned out. There is an immense amount of cheat in the grain also on those cold lands.
The wild oats in some fields are higher than the wheat. There is, however, an immense
amouut of oats in the wheat all over the country.
Settlers' Meeting.-Associated Press dispatch, May 18: A general mass meeting of
 ted and persistent resistance of the payment to
the Railroad company of any rents, first purhase monel, or any that adjudication by the Supreme Court of the United States. Many speakers addressed the meeting. Resolutions were passed and great enthu by order of the settlers: Resolved, That all men are hereby warned against purchasing any
of those lands that are occupied by actual set tlers, as no man can peaceably occupy them, or
any portion of them to our exclusion, until our any portion of them to our exclusion, until our
case is finally adjudicated by the United States Supreme Court.

Musical Boxes.-The roar of the great May ody which is poured forth by the musical caskets of M. Paillard \& Co., 120 Sutter street. These little gems of harmony, made by a branch
of the firm in'Switzerland, and sold in San Francisco by the makers, are unequaled in
their construction and performances. They are elegant articles for presents to friends, and they are charms to possess for oneself. They amuse instruct by the faultless execution of the finest musical airs. The excellence of the instruments is sufficiently attested by the high awards which hocel exhibitions, and they commend themselves to all who come within the sound of their trills and cadences. M. Paillard's establishment a come to see the sights of the city.
On File, " "The Dickens Party, ", Ecila;
"Taxation,", \& Sutter Co's.", A. C. K.; "Vieks in Monterey Co.,"C. H. S.; "Draining and its Appliances,"
A. R.; "Rose Culture," No. 2., Z. E. "A
Talk about Manure," U. J.; "Fresno Notes," W. A. ,S.;" San Joaquin and San Luis Obispo


New Employment Agency. - We call atten tion of persons needing help to the advertise
ment of C. R. Hansen \& Co., men of consider able experience in their line of business, wh promise to give satisfaction to customers.

The rains have materially damaged crops in Florida.
MinNe Minnesota proposes to sow 6,000 acres o Jor Coburn the the prison at Auburn, N. Y. MANY complaints are being made against the Aium-smoking dens in Virginia City
A FIFTY-THREE pound salmon has
in Mouterey bay, with a hook and line caught
The Oakland and Bantas railroad is nearly completed, and will soon be open for busiuess. the Police courts.
Ten thoosand orange trees have been planted in the vieinity of San Jose this spring

## as she had last year.

MANY complaints are being made in lity against the opium-smoking dens. The revival among the colored folks of Rich-
mond, Va., is still in full blast. quantities of hive slock are daily quarters in the lower valleys.
quars Dimon has been committed to the Napa Insane Asylum. He is 55 years of age, a nativc Insane Asylam, and a tailor by trade.
Levi Wurtz, who resided on Plumb creek,
Colorado, was struck dead by lightning last
Baker \& Hamlutox's extensive plow factory,
at San Leandro, gives employment to about 100 white men.
G. FAIR, of the Bonanza firm, has
or $\$ 5,000$, Toby Rosenthal's painting ought, for $\$ 5,000$, Toby Rosenthal's painting,
The Seminary Alarmed." The Seminary Alarmed.
to a $10 \%$ reduction of wases having consentes to a 10 reduction of wages, the cotto
ters will reopen their mills inmediately.
General Fremont is now very poor, his
household goods having lately been sold by the sheriff.
The triplets born in this city in February last are still alive, but do not seem to be growing very vigorously.
AT Wasatch Station, Utah, a train ran into a hand-car containing four men, instantly killing James King, the section foreman.
have been suspended for smoking within the grounds.
naximum price of sheep shearing at six cents a
Don Rafael. Castro, a pioneer, died at Ap-
tos, May 14th, aged 78 years. In 1838 he was Alcaldc of Santa Cruz.
A heavy frost throughout Wisconsin, Ohio, Iowa and Indiana has seriously damaged fruit,
vegetables, working small vegetable farms in the vicinity of Melrose, San Leandro and Haywards.
ing out a term of three months for violating the aloon ordinance.
miles west of Napa, which promises to tout miles
well.
A
A schooner is being loaded at Santa Monica with 300 tons of asphaltum, taken from the
Brea rancho, and intended for San Francisco. A Methodist Conference in Connecticut has
decided to admit no more ministers who use tohacco
MoriIssey's last political campaign is said to
have cost him $\$ 40,000$. It really cost him his have
life.
Clear lake is reported as fairly alive with day. monstrous size has just been dug up near Santa Rosa.
Good harvest hands arc in demand in the farming districts of the State at from $\$ 30$ to $\$ 40$ per month with board.
Ar the Merced woolen mills the machinery is in place and in successful operation, manufacuring blankets and other goods.
C. C. Milton, of Cottoneva, Mendocino county, was drowned a few days ago while working on the chute at that point.
Shad are saia to be plentiful in the Sacramento river, but are not caugerme ne arg to permit of their salmon nets arc so large as
getting through the meshes.
20,000 Rill One of the banners carried bore this inscription "If cheap labor be the basis of all prosperity, why is China not the head of civilization ?" Twolft District Court in this city, against the Bonanza firm, and the directors of the Con Virginia Mining Company, to recover in equity,
the sum of $\$ 35,000,000$, alleged to have been the sum of $\$ 35,000,000$, alleged to have been
withheld and misappropriated by them as the withheld and misappr
Tre Truckee and Steamboat Springs Com pany of Reno, Ne ada, pany for $\$ 36,000-\$ 800$ less than the lowest chite bidder. A public meeting has been
Chinee."
H. R. W. Clark, a lawyer of San Francisco, was shot on his ranch in Ignacio valley on the
19th inst., by his son Frederick Clark, by the accidental discharge of a breech-looding gun,
which he was carrying in a careless manner which he was carrying in a careless manner
The shot carried away one of the son's tingers, The shot carried away one of the
and the father's wound is fatal.

Tas opium smoking'vice has got a tirin foothold in Sutter Creek, Amador county: Srx men were killed by an explosion of gas the Sidney mines, Halifax, three days ago.
THe bill for the repression of Socialist ex. THe bill for the repression of Socialist ex-
esses has been submitted to the German Par cesses ha
liament.
The re
Thed recent earthquake at Cura, Venezuela,

## Caracas.

Nearly 150 persons have been arrested at Warsaw, Russia, as accomptices of the Nihilist The infamous divorce business is being carried on in Salt Lake through the Probate Court to as great an extent as ever,
Mrs. Margary Watson, btained a judgment of $\$ 5,000$ against Frederick Towell for breach of promise of marriage. The dead body of Cy Dubois, a well-known last week near Gilroy
The grain crop of Stanislaus county will be It is estime this year of any heretofore harvested. bushels.
About the middle of the week it rained heavily from two to six hours in various parts of the
State, damaging the crops in some places, and beneiting them in others.
At Martinez on the 20th inst., Louis Kamp through the heart while the latter was ectacter, through the heart while the later
GEO. WV. ABBoTT, the money-broker, who ran away with $\$ 40,000$ belonging to the Anglo-Calimissioners of Insanity.
WHuLE an iron girder of the New York elechain gave way and the girder fell to the ground, fatally injuring two men
Hemry Busse has been Napa Insane Asylum. He thought he must live 40 days without eating, on religious grounds.
A heavy wind and rain storm passed over St. Louis on the 18 th inst., doing great damage to
property and baily injuring a number of perTrie Petaluma Courier says there will not be ver half a crop of wheat, barley and oats in
Sonoma and Napa counties, on account of the prevalence of rust.
THe Utes are fast becoming civilized. One
them bought an umbrella at Ouray, which was shortly after stolen by another member o the tribe.
People ing, the fisheries tabrador coast are starvdogs is eaten, and many people have already The Canadians on the border are greatly exmilitia have been supplied with arms and gone into camp.
THE Bay City, a side-wheel steamer, intended to run on the ferry route between this sity and Alameda, was suceessfully launched last Saturday at the rolling mills. John Larsex, a French Canadian, 56 years old, committed, suicide at Brooklyn, Alameda county. He was formerly an interpreter in the
San Francisco Police Court.

## Fraco Fisher, a two-year-old boy living on

 killed by the discharge of a pistol which his 11 year-old brother was playing with.A ComyunisTIC society in Parkersburg, $V$ a. has between 500 and 600 members. It is offi-
cered and drilled. The members are reticet and the meetings are secret. Other societies and the meeting
A brisk shower fell in Colusa county on the In the eveniug of the same day there was a sixour rain in. Los Augeles, also a slight rain during the night in San Francisco.
Joserf DAvis has been arrested for alleged malfeasance in connection with the affars of
the Dime Savings Bank which rceently failed the Dime Savings Bank which rccently failed positors, mostly boys aud girls and very poor

## persons.

THERE seems little disposition among the ven temporari vould accept $5 \%$ reduction outright, and nothing more. This action will prolong the strife indefinitely
A passing vessel lately picked up, 200 miles off the Brazillian coast, a man on a raft in an exhausted condition, he having been there
lhe
His companion died after being on the raft four days and was washed overbord and devourcd by the sharks
Tue steamship, California, built for Goodall, Perkins \& Co., of San Francisco, and just Russian Government for $\$ 500,000$, the builders paying this firm $\$ 100,000$ to be releascd from their contract, and agreeing to lay the kecl of a similar ship at oncc. The California is very
fast, and is to bo armed by her new owncr.

The Washington Irrigated Colony.
One of our advcrtising pages contains the announce-
ment of the Washington Irrigated Colony, an enterprise ment of the Washington Irrigated Colony, an enterprise within the reach of small purchasers. The soil is admirably adapted for the growth of alfalfa and semi-tropical
fruits of all kinds. Water is abundant for irrigation, and those in yearch of a good chance for a home in Caliornia should oxamine the clalms of the Colony before
ehoneing their looation.

THE PACIFIC RURAL PRESS.


The Harvest Hour.

## 



## 

 Tis soff Spitember Matrest har ivest yildse,







Lines to the Cucumber. \%ㅈ․    <br>

"The Under Must Come Up.






Only a Hired Girl.
"Lena : Lena !" rang out on the morning air, and the shilill vice of ilrs. Niller rose at every
word, until it reseml, 1 d the screech of a hyena, more, than the voice of the lady she passed for
in socicty. "Lena Brown, do, for merey's sake, hurry a intle.
The girl was digging potatocs for dinncr
when she heard her mistress call, aud when she heard her mistress call, and pieking
up the basket she straightened hherself u up, as
well back, and started for the house, as fast as her wonder how I am ever to get through with this
day's work. It's so warm it seems to me I shall melt.
"You would'nt make much of a grease spot,
1 reckon," said a voice at her side, and turning, 1 reckon," said a woice at her si
she saw Jacky, the ehore boy.
"Why, Jacky" sail sle "i was speaking aloud. You won't tell anything "No, iudeed, I won t, until I get rcady. I
think it's a burning shame for you to be work. ing yourself to death to wait upon that litk.
stuck up, Belle, and 1 wouldn't do it if I were
you, cither," Jackey you, cither." Jackey hadl taken the basket
from her, and she coulld scarcely keep from laughing when she saw how cariust he looked,
as he shook his fist towarl the house. "It's a
long road that has no turn" mayle the fiue ladies there will tind it out some day. What do you stay for, any way?" and I don't like to be changing places. 1 ge,
plenty to eat here and better wagtes than I did at the last llaee, and I suppose I onght to be
contentec. I I an olly the liried girl, you know, and they are not expected to have any feeling.
Well, 1 must go now or "Ill be looked after for leaving my work so long."
"Mind you don't go that potato patch
again when 1 'm around. I'll sece to that if I
 By this time Mrs. Miller aplleared on the
scene with her armis fill of rutles aud laces, whieh she said must be ironed while the dimer
was cooking, so as to savc woot. "And now,

Lena, I want yon to Hy around and have the
diuner a little earlier than usual to-day. I can't atop my work to help get it if we never have any,
and I help, and she's going to a picnic to-morrow "A picnic? Dear me, how I should like to goo", sighedflena, bnt sle kuew there was no'use
to say anything about it, so she worked on and to say anything about it, so she worked on and
tricd to forgct it. she had lheen tolld when she came there that she must not expect to lear on a week day, but Sundays she might have
from nine until tlirec to either attend church or go aud visit her mother, who lived five or six
niles away. This distance must he walked, nines away. This distance must he walked,
although Pclle's pony stood in the stable idle all day. She was not going to lend her pony
alnd aydde to hired girl, by a good deal, she
and sade
told Jacky, when he asked her way she did not and sace to a h he asked her way
told Jacky, when
let Lena ride over to her mother's.
"Betle Millcr, you're the most sclfish creature I ever saw, and I'm going to tell somebody on
it too just the first change Igct sce if I don't $!$ ", it too just the first change Igct-sce in I dont th completcit the sentence hc was out of hearing,
and she left it untinished. She knew well enough who he meant, and she knew too by
experience that when Jacky said he would do a thiug you might deןend upon it.
Lyun Frazier would probably Lyun Frazier wonld probably got there in
the course of a week, and what if that little imp should sce him first aud tell hinim all he
knew? It must not be there must be some knew? It must not be; there must be some
way found to prevent it. she concluded the way would be to coax her father to send him away to school. The mattcr was not thought
of after that, for when Mr. Niller came in to tea he tossed her a letter which she found to be
an invitation to spend a week in town. This an ievitaion or spend a week in toxh.
she had long wished for, and the next moruing
found her ready for a start. Her mother found her ready for a start. Her mother
promised to send for her should 1 ymm arrive promised to sclud for hcr should
white she was away. He did come, but was so changed that none of the family reeognized
him, and he thourlt it would be a good joke to carry the deception a little farther, aud finding carry the deception a hittie farther, aud hinding
Mr. Nillcr in necd of another hand, he hired
for a month By this means he chad an opporfor a month. By this means he had an oppor-
tunity to look round; and he said to himself,
".lf the proonct is f? "'lit the prospreet is favorahle, I shall make
myself known, if not l'n John Davis, the man they take me for.", He soon leaucct from Jacky
that Belle was away on a visit. Jacky was that Belle was away on a visit. Jacky was
quite a favorite with the ncw hand, and being naturally communicative, John lavis soon
knew something of the affairs of the householl. knew something of the affiairs of the household,
He felt thankful that the knowledge of Belle's selfishuess had come before it was too late. He
should try and ascertain the true state of the should try and asccrtain the true state of the
affair now, at all hazards, so lic kept his eyes
and ears openen, and soon found that it was even ancer than Jacky represented it.
mere was no fear of Belle $r$ for she seldom canie dowu in the morning until hreakfast was over, and the remainder of the lay was spent with the last novel or in the par-
lor gossiping with some of her favorite friends, lor gossiling with some of her favorite friends,
who were generally as shallowed-brained as
John provell an efficient workman, and soou Won the esteem of lis ennjloyer and fcllow.
workmen. He was the strongest man on the place, and always on hand lllhere there was a de-
nand tor strengtly. How clanged since his visit mand tor strenglth. How changed since his visit
five years before ! He was then a pale, puny lookfive years before : He was then a pale, puny look-
iny college student, but the climate of the
ive Wost had done wonders in building up a strong
constitution. In the meantime he had not been idle, as a look at his brown hands gave evidence. his sabor had not beeu in vain, and a deed in
his possession slowed that he was the rightfinl owner of a farm in o
cuunties in Nebraska.
ln all these five years the image of Belle
Hiller had been mingled with his dreams until he laad come to thiuk her dispensable in his prairie lome. All his air
eastles lad conie to the ground with a crash, castles had conie to the ground with a crash,
but lie kept his secret in his own heart, and sought to drown his disapppintment by a close
applicatiou to the work assigned him. He des. piscd hinnself for the part he was playing, and had engaged, he took his leave, a salduer and wiser man. But go where he would, he could not get rid of the notion that a certain person
at the Miller mansion was very neccssary to lis happiness, and he was so boid as to write and
tell Lena so, and, although sle was somewhat astonished, she had the good sense to see that he was worthy the love of any true-hearted girl, They have gone West and settled upon that farm, and Belle has given up looking for her a young city chap, said to be a great catch. he came to go by another name. He had a pocket handk erehief exchanged at the laundry, eceiving one with the name of John Davis upon
it, and he aecilentally dropped it where some of the men found it and took it for granted that
it bore lis name. Ile says he is It says he is not sorry, for
it was the meane. in the world for his wife and she was only the bired girL-Mrs. Shedden, in Western Rural.

A p.a wrer once asked the late Judge Pick. better that ninety and nine guilty men should escape than that one innoent man should be
punished." "T'es," said the witty judge "I will give that charge, but in the opinion of the
court the niuety and nine guilty men have court the niuety and nine guil
alreally escaped in this county."

The woman who has to move from one home
another every year or perlays ofteucr fol to another every year, or perhapls oftencr fol
owing the declining fortunes of an unsuccess full hashand, father or brother, and whe every
time struggles with difficulties of new situa. timc struggles with difficulties of new situa-
tions, alters earpets to fit old-fashioned rooms tions, alters earpets to fit old-fashioned rooms,
arranges new lambrequins for the windows arranges new lambrequins for the windows,
improviscs closets and perhapls comfortable sleeping apartments out of the attic, while in hundred ways making the best of everything,
overcoming unheard-of diticultics, tlie greatcst overcoming umineard-of aincultics, the grcatcst chcering up of the man of the house, is a he roine. his, continues during such a depressing period as example, the use of books and kind words while not neglecting to train them to hahits of catness and cleanhness, and who keeps them from associating with low and vicious compan.
ions, is a heroine who will ultinately reap the reward of her labors. Even if she does not live to sce great results herself, she will leave a
inheritance to licr children, the value of which cannot be counted in any known currency. made a false step in life? Yoon't fancy that everybody is talking abont it. People have
plenty to think about, and they will not be interested in you very long. When you have got out all the stones and stumps, and have sowed it to some useful grain, youl have proved
yourself tittell to take another tield, and man age it with the same anount of skill, with the aalled alvantage of experience. That is all therc is in life. Success, the success which is
ccoonnized by those who look beneath the surrccognized by those who look beneath the sur
face, has been attained by climling. You naa climb. But he indepcndent, and choose your
own path. If you always follow another, you own path.
will never reach the top. He whom you lat other off the path. Accordiug to the law of right, soncheody will push you off theo. Put
rin choose your own path, and cut down the subdue the obstacles which, after all, are only there to test your strength. You will be happy
in doing this, and you will be respected by all the other ploddcrs in their respective path-
ways. Try to keep the sunshine ever above cheerfulness and Nood star all lee your of youn; le and in time you will reach the top, a recognized hero or heroine, while jou have been one to
yourself all the white. - Mrs. C'slticator.
Hfads asd 11 ats. - A scientific inquiry lately Paris, offers some it as true that the capacity of the cranium and devclopment of the brain are proportional to
the external volume of the head, also that the intelligence is proportional to the volune and certain families devclop like individuals-that is, they have a period of growth, then a stationary period, then a period of lecrease previous the extinction. In fanimies int the get perioc The citizens who wrought the revolution of 1789 had bigger heads than their fathers. On
the other hand, in families that are searing the other hand, in families that are nearing
extinction, the lhead grows smaller. The sons of the present ruling families in France have such small heads, according to the author, that
they require laats specially made for Among certain families newly risen frun the common people the head increases from genera-divars-woru by the liepublicans from 1830 1848 were very eapacions. The quarter in which are the largest heads in Paris is that of
the scloools. The hatters of the Faubourg St the schools. The hatters af the Fanbourg St.
Germain say they only fit finc heals. The Polytecnicians have larger heads than the St. Cyrians, and the students of the Normal school
larger than those of st. Sulpice, etc. The memhers of the clergy present a peculiar feature in these statistics. "Iu general," says M have larger heads than those from 20 to 30 Not so with ecclesiastics, for their heads cease to row at about 2 .

Physrol.ory.-It is imnossible that the mass cossful, without some knowledge of their struc ture and of its laws, which they must obey or
suffer. IIow can a young woman be called sener. How can a young woman be called
educated who is ignorant of physiolosy, of her How many men know anything of the relations af waste and suryly in the nervo teciano Why, not one man in the nervous economy what the stomach is made for, and the other 99 are constantly transgressing rules they have . We may take che ofr parabl the way men's stomachs make havoc with their moral sense. Not one man in a hundred knows or suspeets that God made the air to bebreathel.
Every part of his house Every part of his house may be recking with
niasma, the cellar full of all evil, the partitious clotted with dormant mischief, and he never dreams of it, but gocs on nailing down his see the air we have once breathed over! Even and churches have the crudest notions of ven-

## Boys and Girls' Aid Society

The fourth annual report of G. M. Johnson, Girls organization is doing a good work with full zeal. Nine hundral boys and girls now constantly frequent the rooms of the society. The library now enntaius $2,2: 2$ books. These books are be-
ing read more extensively than cver, and are ing read more extensively than cver, and are
proving a great source of chcer and bencfit to the children who have access to them. About 400 are in constant circulation, besides the many that are read at the rooms, with maga-
zincs, papers and other publications. The penny savings bank grows stcadily in favor; a and many are the dimes and half-dimes dropped during the year, for this year to $\$ 544.94$, and a total of $\$ 1,211.94$ for the four years that the bank has bech in opcration. The erage attendancc of 7.5 . At Jacksun strect the has beell organized but a few wceks, and baths have becu given. We are satisficd that and life saved throngh the opportunity afforded or cleanliness, to say nothing of its moral efects. We do not conduct an intelligence bureall only so far as finding homes for the waifs that come to us; aiming to place every one going home. "P'lanting" them wherc they may be noma out 155 , we have also furnisher 140 with clath ing; lodged 480 ; and furnished to the hungry 1,6.30 meals.
provement in asked: "can you see any im. To this we call answer, after four ycars' experience, most decidcdly, yes. We are no longer a et of hoodhums, with turmoil indoors and broils ness to preserve bookg and furniture from de struction, the members are now watelimen themelves. The older oncs exercising a constant restraining influcnce over the new comers. not have come to understand that our olject higher, purer life, regardless of nationality

Disasfreeable llabits.-It is easy to form a gain. Persisted in, they hecome a second na urc. to form them. There are disagreeable habits of nouth, biting the nails, continu, twisting the omething, twirling a key, or fumbling at a chain, drumming with the fingers, screwiug and hands on. Don't do any of these things. Cultivate a calm, quiet manner. Better be a statne habits than these, to be sure, but we arc speaking only of very little things that are only anpeech, also, such as beginning evcry speech with "you see," or "you know," "now'a," "I ance, sharp nasal tones, a slow drawl, aroid them all. stop and think what sou wish to say, just as smooth and perfect as a new silyer in. Have a care about your ways of sitting it, you will tind walking. Before you know cannot get rid of without terrible effort-habits which render you obnoxious to all around you.
How a large Business was Foended.New York Farmers' Clnb told the following story: The original proprietor of ane of the migrated from Scotland some time about the heginning of the present ceutury ; he was a naller by trade, and was entirely ignorant of anything pertaining to seods or gardening. But arm, half city, he saw a rose-bush in a cottage indow. It was a rosc in a wilderness, fo city of New York He went in and bought it for 50 cents, took it home, painted the pot sreen, and placing it iu the window of his nail-
shop, easicr work and letter pay than nail-making.
He started out daily buying plauts of all kinds, He started out daily buying plauts of and kinds, modern science would frown at), and doubling his money rapidly. From plants the transition in less thin 20 years from the time this humble Sotch mail-maker had purchased his tirst rosebush in the Bowery, his seed house had become the largest on this continent.

Burlington hawkeye: A sad incident wa oon. Whell the train halted for lunch about and ealled for a cup of coffee. A Caucasian the negro at the counter. They the presence of hite man snatched up a sandwich and harled it at the African's head. It fracture the man'
These lunch-eountadnt know it was loaded. weapons, and the State should cnact the sever ost laws against handling them carelessly.
 band, on his return from town, "what was the
sweetest thing you saw in bonnets in the city?" sweetest thing you saw in bo
"The ladies' faces, my love.

Cutting for the Cutter. - Hairdresser, (anxious to puff his anti-bare's grease): "Ex-
cuse me, sir, but you are a leetle"-Old Gentlecuse me, sir, but you are a leetle"-old
man: "Bald, eh? Yes, I was born so!"

A Grave Answer.-Doctor: "Thomas, did Mrs. Popjoy get the medicine I ordered yester-
day?" Thomas: "I b'leeve so, sir; I see all the blinds down this morning."-Judy

What is the meaning of a back-biter?" tion. This was a puzzler. It went down the
class until it came to a simple urchin, who said, "Perhaps it is a flea.
Little five-year-old is having her first experience of spring in the country. Looking at a pear tree in full bloom, the other day, she ex-
claimed: "Why, mamma! Just look at that claimed: "Why, mamma! Just look at
tree. It is all covered with popped coru!"
"Aut Cessar aut Nullus." - Architect:
What aspect would you like, Mr. Smithers?" "What aspect would you like, Mr. Smithers?" "Has Muggles" (a rival tradesman) "got a haspect? 'Cause, mind yer, I shonld like m
made a good deal bigger than 'is!"-Punch.
Mistress: I want Mary; where is she?
Why do you answer the bell? Cook: Beg parWhy do you answer the bell? Cook: Beg par-
don, mum, but Mary isn't at all well, mum. She's been trying the new fashionable tightlacing, and she finds she c
and that's the fact?-Judy.
"Havina in my youth severe notions of piety," says a Persian writer, "I used to arise in the night watches to meditate, pray, and read the Koran. One night, fully occupied
with these practices, my father, a man of prac-
tical piety, awoke. 'Behold,' said I, 'thy other tical piety, awoke. 'Behold,' said I, 'thy other
children are lost in irreligious slumber, while I alone awake to praise God.' 'Son of my soul,' answered he, it is better to sleep than,'
to remark the faults of the brethren.' A LAborer at work in a yard hung his coat
on a post. During the day some one in throwing a dish of water from a window, unintentionally dropped the conteuts on the garment. When the mau went to get it, on quitting
work, he perceived its condition, and in some consternation exclaimed: 'Howly murder?' the coat wasn't a thinking it was on my back knowing the chate."
An Ohio stumper, while making a speech, "Now, gentlemen, what do you think?" Instantly a man rose in the assembly, and with strong Scotch brogue, replied: "I think, sir, stump the conntry together, we would tell more lies than any other two men in the country, sir, Hearing Restored.-It is amusing to watch the movements and to note the expressions of astonishment of some of those patients who are
suddenly restored to acute hearing. This is most remarkable when the deafuess has existed explanation of the unusual sounds they hear, rustles the dress; hearing the noise of which rustles the dress; hearing the noise of which,
they become quite bewildered. They cannot
be brought to believe that the sounds they hear are natural. The noises in the streets are at
first terrific. A diverting case occurred in a short and remarkably corpulent old gentleman rcsiding somewhere at Pimlico. He related that on leaving the house in which his hearing
had been restored, he bore it pretty well until he got into Piccadilly, when the noise of the omnibuses (every one of which he thought
would be upon him) so frightened him that he would be upon him) so frightened him that he
started off in a run, and never stopped until he got into Green park.
Intellectual Culiture.-A cultivated mihd fication. Everything may be made interesting to it, by becoming a subject of thought or inquiry. Books, regarded merely as a gratificaearth. A taste for literature secures cheerful occupation for the unemployed and languid
hours of life; and how many persons, in these hours, for want of innocent resourscs, are now impelled to coarse pleasure! How many young
men can be found, who, unaccustomed to find men can be found, who, unaccustomed to find lectual activity, are almost driven in the long, ance and bad society.
Stmpathx.-Every man rejoices twice when he has a partner of his joy; a friend shares my
sorrow and makes it but a moiety, but he swells my joy and makes it double. For so two chanand make it fordable and apt to be drunk up by torches do not divide, but increase the Haine; and, though my tears are the sooner dried up
when they run on my friend's cheeks in the furrow of compassion, yet when my flame hath burn befant, like the golden candlesticks that shine by numbers, by unions and confederates of light and joy.-Jeremy Taylor

# Young Folks' Column. 

## Kitty and Bertha.

( rom school had been dismissed at three o'clock, so they had plenty of time and walked leisurely along swinging their lunch baskets and chat ting, school-girl fashion, as they went.
Part of the way home was by the stage-road and at the forks they met the momntain stage, which was loaded with passengers.
After the stage had passed Bertha and Kitty went through the large gate which led to more pleasant road in summer time, because it was cool and shady, and there were wild flowers and ferns all along under the trees and
bushes. Therc was also a brook with some fish in it, aud an old bridge that had been made for wood-road which led across the brook.
Here Bertha and Kitty often sat and watched the little fishes darting about in the water.
Sometimes they made little boats of bark and chips, with madrona leaves for sails, and seut them sailing down stream. When they had passengers on their boats the passengers were
always bugs or caterpullars. Kitty tried grasshoppers one day, but the grasshoppers seemed hopped off the boat as soon as they got
Bert
Bertha aud kitty would follow the boats as far as they could, down the stream, and then
watch them out of sight, and go back again to When the two girls came to the bridge, on this particular afternoon, they sat down on one of the logs, aud at the end where they could
look into the water, to watch for trout. If they saw any, Kitty was to tell her brother
Tom, and he would come and try to catch some or supper.
After a while Bertha got tired watching and began to look around, and pretty soon called
out, "What is that, over there by the big log? t looks like clothes.
"It is som
When they got ncarer they found it was
giggled Kitty, and whispered,
The man was asleep, his mouth was wide
open and looked rather ridiculous.
"Let's put some little chips in his mouth," spit and sputter when he wakes up. Won't it
"I don't want to," said the more sober Bertha. "Well, I will then," returned Kitty, and be gan to look around for chips.
"No, don't," said Bertha.
because he is a poor man, and my mother says t's always mean to. play tricks on poor people. shoe, and his foot is tied up with rags. I guess he's sick."
"Yes, said Kitty, 'he's sick, we won't
plague him; but I'll tell you what we'll do
I've got a piece of gingerbread left from my lue got a pet's put that in his mouth, its big
lunchgh to hold it and more, too," said Kitty, with another giggle at the funny idea.
want to make him choke to death? We might put the gingerbread in his hand and watch what any trick." "All right," said Kitty, as she took it out her baskest.
I believe got two pieces of bread and butter left and peeping into it, "he can have that, too; "Maybe he is," said Kitty, and she crept up
softly and laid the bread and butter and cake softly and laid the bread
into his half open hand.
"How will we wake him up?" said Kitty.
"Throw sticks over the log," said Bertha.
So they went behind the $\log$ and threw over
some brush, but the man did not wake up. Then they threw bigger sticks and kept on till they had thrown over enough to make quite a brush pile, but as they did not make very
noise while doing it the man still slept on
noise while doing it the man still slept on. "worse than I am, and he's the sleepiest fellow wait awhile. I want to see the fun when he does wake up, don't you?
the bridge; and after awhile the man woke and rubbed his eyes, and seemed very much astonished to find the food in his hand. He looked girls were hidiug behind the bushes; and after a little white hc rell to eating as if he was very
hungry. He did not look so ridiculous when awake, and seemed to be tired, and the girls were gly
After he had eaten it all and picked up the
crumbs, as if he might still be hungry, the wished they had some more to give him. But
took their books and baskets and went home hy the trail through the redwood clearing.

That eveniug somebody came to Mr. Clark's
door and knocked. Kitty's mother opened the door, and their stood the man the girls had seen in the woods. He was an old servant wh had been in the family several years before,
when Kitty was a baby. He had often carried her in his arms when she was sick, and he
mamma was sick, too, and could not attend to her; and once he saved her life when she fell into a tub of water and came near drowning.
Kitty's mother told her all this after she invited the man in and given him some supper been lame his foot hur trouble had come back to his former friends to ask for help.
Kitty's father was glad to help him, and took care of him till his foot got well, and then, as
he was a reliable mau, hired lim to work on the ranch.
Kitty was always kind to him, and was very
glad she had not played any tricks on glad she had not played any tricks on him
that day when they found lim aslcep in the

## GOod HEALTH.

Dangers of a Chill.
The Iferald of IIeath gives pointedly the results of cooling off too rapidly when one be-
comes heated by extra labor. It enumerates the following dijeases an traceable to thine cause,
Rheumatism, consumption Bright's
 wry neck, pleurisy, catarrh, cte, The follow
ing is the method of the evil: The coolness of the evening air is very refreshing to a laborer
after a hard day's work in the hot sum, but it is as dangerous as it is agreeable. During the day lis garments have probably been wet with
perspiration, and if still damp or wet wheu the cool of the evening comes, he experiences a
chilliness and arrest of further perspiration chilliness and arrest of further perspiration. surface, and congestions or uudue accuinulations in internal organs are the consequences From such congestions of important organs come
arrest of secretion ; the liver, for example, when engorged with blood, ceases to separate of jaundice follows. Or congestion may occur in the respiratory organs, and pneumonia, bron-
chitis, or pleurisy may result. An arrest of the secreticns of the skin or kidueys may terminate in inflammation of the joints, lumbago, sciatica, or some other rheumatic affection. Further
more, the diarrheal affections so common in the summer season, are frequently caused by exposing the body to a cool current of air a
ing been heated, although they are nsually as posed to disagree with the digestive organs Whilc the latter is true in some cases, the most especially at night, by going to sleep in front of an opeu window on a hot night, withont suffi-
cient covering, forgetting that it constantly becomes cooler toward morning; and so the sur-
face of the body is chilled, and the blood retreating to the internal organs produces conges
tions that result in diarrhea, dysentery, etc.

An Antidote for Strychnine. - An instance
f the prompt and successful use of an antidote of the prompt and successful use of an antidote tially narrated in Nature. A favorite Skye poison, which was intended for mice. The sixth of a grain. When found, the animal was rigid and apparently lifeless, except having an ties and found that a dose of chloral hydrate was the antidote prescribed in such cases. To
kill a rabbit, 21 grains of the chloral is sufficient the dog was twice the weight of the rabbit, and inject 45 grains of chloral (in solution) under it kin. About 15 minntes afterward, supposing the dog was dead, the owner applied his boot to
it, probably feeling a little disgusted with the result of his experiment. To his great surprise the terrier struggled to his feet. Shortly after though not for a while very lively, it seemed none the worst for its experience. The esseu chloral should be strong enough to kill, other wise it may not be sufficient to overcome th effects of the strychnine.

Brain Stimulant. -The best possible thing anything through is to go to bed and sleep a long as he can. This is the only recuperation of brain power, the only actual recuperation of
braiu force, because duriug sleep the braiu in a state of rest-in a condition to receive and appropriate particles of uutriments from the
blood, which take the place of those which have been consumed by previous labor; since the very act of thinking burns up solid particles as every turn of the wheel or screw of the the fuel in the furnace. The supply of consumed brain substance can ouly be had rom from the food eaten previously, and the brain appronstuted that it can best receive and during the state of rest, of quiet, and stillnes of slecp.

## Domestic Economy.

## Corn Bread.

Conrad Wilson recently read a paper before corn, in which he made the following allusions to corn bread: Perhaps the most familiar illus-
tration of the economic value of maize is to be tration of the economic value of maize is to be
found in the simple and unpretending article of oru bread, which, in its numerous forms and improved quality, is now everywhere growing
in public favor. As to the ntility and economy of using corn bread as a staple food there has never been any doubt, although its other valuable qualities have been comparatively overnow at length melting away, and the perfection of flavor imparted to coru bread by the progressive ingenuity of American cooks has been
widely recognized at home and abroad, and is winning the verdict even of those who are ever
slow to discern in food that is economical the slow to discern in food that is economical the
still higher qualities of health, nutriment and
I have in iny possession quite a numerous
collection of formulas for various preparations ollection of formulas for various preparations variety of fancy dishes, such as blanc mange, cereal is not only regarded as a luxury in the upper circles, but equally as a necessity in the lower circle of the millions.
I have stated formerly in the New England
Farmer that corn meal when made into bread gains about $100 \%$ in weight, and that, conse quently, a bushel of corn, weighing 60 pounds allowance is made for toll and waste in grind ing, and we take 60 pounds of maize, equal to still give over 100 pounds of corn bread, plus other ingredients beside the meal. I have also other ingredients beside the meal. 1 have also
shown that in a corn crop of 70 bushels per
acre, if the feeding value of the stover is added to the value of the graiu, it makes the crop total yield of such a crop is equivalent to 6,000 pounds of corn per acre, or 5,000 pounds of
corn meal, which would represent from 10,000

public institutions in Scotland found that on ration of 18 oz . of food per day, the innates, as a general rule, maintained their usual healt and vigor. If then we assume an average amily
to consist of five persons, and put the allowance of food at 20 oz . each per day, this would give 6
tbs. of corn bread per day to a family, and the product of one acre on the basis above stated, would supply such a ration for over four years. Of course there are various grades and qual
ities of corn bread. But the quality here ities of corn bread. But the quality here con
templated is made under a formula comprisin not ouly the meal, salt and chemical elements to
make it light, but in addition to these, milk and eggs
are all of them the products of as the meal the cost of corn bread to farmers who are of course supposed to grow the corn they use,
would be, when made under the plainest form ulas, less than one cent per pound. When
milk, eggs and butter are included with th meal, the cost should still be not over two cents. To consumers iu cities the market price ought would make the cost of the family ration above given about $2 \overline{5}$ cents per day.
In view of these facts and
reviously stated, is it nigures, and others ood crop is grown on either contiuent, that is capable of producing results so widely bene. crop of Amcrica.
Utilizing Bits of Soar. - Instead of throw ing away the pieces of soap which become too
small for convenient handling, make a square flannel bag of suitable size; leave one end partly open, and put in the pieces as they collect; makes a nice bath-tub arrangement. Another way is to add a little water, set them in a tin on the stove, and let them simmer slowly. Woap just the thing for putting in your wash soap, just the thing for putting in your wash ing part of the water you may get the soap hard
enough to be molded into small cakes, which can be dried for use.
Burning Chimneys.-An exchange says that a burning chimney, when the soot has been lighted by a fire in the fire-place, call be room, so as to prevent auy current of air up the chimncy; then by throwing a few handfuls of of common salt upon the fire in the grate or
the hearth, the fire in the chimney will be imthe hearth, the fire in the chimney will be im-
mediately extinguished. The philosophy of his is that, in the proccss of burning the salt muriatic-acid gas is evolved, which is a prompt
extinguisher of fire.
Capital Oatmeal Caken. - Work three parts
of finc oatmeal and one part of flour into a stiff paste with treacle (golden syrup), with the addition of a very small quantity of lard, and
sufficient baking powder to impart the desired sufficient baking powdcr to impart the desired
lightness. Bake the paste in the form of small lightness. Bake the paste in the form of small
flat cakes, much resembling the ordinary "gin-
ger-nuts" of the biscuit baker.

## PAC IC RUPAL

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## SAN FRANCISCO

Saturday, May 25, 1878

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## NEW ADVERTISEMENTS






## The Week.

The May rain was delayel, like all the rains

 ces was the laying the dust iu eity and town. Its evil hies in the injury to outlyng hay, and the increased danger of rust in the grain, Al. though the downfalle extendeld over a considera.
lile area of the $\$$ tatc, it does not appean to
hawe live area of the statc, it docs int appear to have grain, and to some late sowings it may prove a reiresinicnt.
Our paper this weck is moveda little from ite
ussual course. The increascol demand for adver. tising spazee, impels us to ald four pages rather than reduce the propurtion off reading matter.
The new advertisements will all be foulud to be on timely subjects. The space conmmandect ly the great musital festival, is only commensurate whin its promise as a meanis of praseworthy 1eppular entertainiunent, and an opportunity for
culture in the hearing of grand harmonics. The coming weck will he memoralle in the nutsical annale of this coast. We also give a good measure of space to illustration and description
of reent of recent achiev ementst in the transmoission and
recordiñ of sound, which we think recording of sound, which we think apropos to
the conjint of the whical festinal the comink of the inusical festival, and in itself
worthy the consideration of anl Worthy the cousideration of all. It is well,
once iu a while, to turn the nimud from the sul.
 jects whicl most constantly enyross it, and give
a thought to
recreation and the rest chauge of theme aftoris. Now as the crops are ripening and the weeks of work are upon us, ripenng and the weeks of work are upon
diversiou will give resoubled strongth.

Thomas Edison and the Phonograph.
We take occasion in this week's Press to in form our readers of the rceent allvances which have been made in the mechanical transmission and recording of vocal sounds. U1on the following page may be found an account of the development of the telephone. this moment is to describe a still nore startling achievement of genins, and that is a successulul record and reproduction of human speech by a simple machine called the phonograph. We shall speak first of the man who has aceomplished the
ehine itself
In 1847 Thomas Edison was linru in Ohio.
and reproducing
world-wide fane.
The phonograph is regarded as the greatest triumph of urventive genius which has been attainct even in this inveutive age.
est in its achievnent and peerless in its sin plicity. The engraving on this page shows all its parts, and from these it appears that there is nothing intricate in its meehanism. It consists, as ghown in Fig. I, of a lrass spirally grooved cylinder, $A$, moninted ou a long, horizontal serew, the cylinder being rotated and at the same tine moved laterally by turning a
crank at the end of its shaft. The chicf part crank at the end of its shaft. The chice par
of the apparatus is the diaphragm, marked $B$, in of the apparatus is the diaphragn, marked $B_{\text {B }}$ in
Fig. 1, and shown in detail of its parts iu Fig. Fig. I, and shown in detail of ats parts ia rig.
2. At $c^{\prime}$ is slown the thin plate of metal held by its edges, so that it can vibrate, and at $D$ is
a fine needle or stylus, which is attaelied to the


THOMAS EDISON Inventor of Telephone and Phonograph.
When he was eight years of age his parents spring, $E$, and brought in contact with the moved to Michigau, and young Edison began metal plate by a little piece of rubber, as show life as a newsioy. He was a iriving newsioy.
At 13 years of age he obtainel a contraet for the cxclusive sale of newsiapers wn one of the largest Canadian railways, and hail a squad of largest canadian railways, ald had a squad of
boys working under him. While he was still running on the trains he legan chenical stud-

The action of the apparatus will now be read ily understool from what follows. The eylin der is tirst very smoothly coverell with tin-foil
and the diaphragn, $B$, sceurely fastcued in place by clamping its support to the base of the


I'ily

the phonograph with sectional view of diaphragm.
jes, fittiug up a traveling laboratory to take with instrument. When this has been properly operator, and soon afterwards stood at the head of the craft. He celebrated his QOth year ly concciving the idea of sending two messagos ver the same wire at the sane tine, thus doub.
ling the capacity of all previous systcus of tele ling the eapacity of all previous systcins of tele his electrieal studics and inventious, working with surprising swiftness and exceeding zeal,
until at length he has succeeded in recording
done, the stylus, $D$, should lightly press against rank is now turned, wher the groove. The some one speaks into the mouth-picee of the instrument, which will canse the diaphragm to respond with the thovements of the latter co respond with the novements of the air produc narked along the line of tho groove by a serics of iudentations of different depths (Fig. 3),
varying with the amplitude of the ribrations of the diaphragm; or, iu other words, with the thesc intlections may thercfore lee looked upon as a sort of visible speech, which, in fact, they cally are. if now the diaphragin is removed, y loosening tho elamp, and the cylinder then urned back to the startiug point, we have only direction as at first, to hear repeated all that has been spoken into the month-piece of the appar atus; the stylus, by this means, being caused to raverse its former path, and consequently, rising and falling with the depressious in the oil, its motion is commumicated to the diahragin, and thence through the intervening air oo the ear, where the sensation of sound is produced.
The method in which the stylus indents the tin-foil is shown in magnified form in Fig. 3 , the ting foil In reality the marks left by the stylus are very fine. As the sheet of tin-foil is aken from the cylinder it is grooved with par. allel grooves alout I4 to the inch. In each roove there are the indentations of the stylus, quite regular in size to the naked eye and about 50 of them to the iuch.
The Phonograph at the Gestival. Gusical
'The phonograph almits of many applications. The tin-foil sheet, having recorted speech in one place may be taken from the cylinder and sent
thousands of miles, and being placed in another phonograph will reproduce the words and actual tone of voice originally imparted to it. This will probably be fully shown at the coming Musical Festival in this city. For some time past Manager Bugbee has been endeavoring to sccure a phonograph for the purpose of giving a
public exhibition of its wonderful performances public exhibition of its wonderful performances at the first day of the Festival. Samuel Hubbard, the agent in this city, has received a dispatch stating that the phonograph will lee
promptly forwarded-also the tin-foil impressions of warblings loy Hiss Kellogg, Miss Cary or liudersorff and a greeting from liev. Henry Ward Beecher, for the purpose of reproducing them through the aid of the phonograph at the Festival. ('arl Zerrahn, the director, brought with hin tin-forl impression of "Yankee Doodle.'
In an article in the North Americun Ricieur Mr. Edison indieates what are its probable appheations. If emay expect hefore a year is
enderl to have it ready for use iu currespondence. The principle can be applied to every implement or toy which makes a sound. A clock
may speak the hours, iustead of striking them. A child's doll next ('hristmas day may utter the moral precepts which we put in our children's copy-books. The locomotive approaching a crobsing may serceeln out: houk out for the engine!" or it may ery out the name of the station it is approaching, because Mr. Edison believes he call iutensify sonuds as well as reproduce them as they are committed to the inthe machine talk so loudly that it can be used on vesscls to warn off other ships during fogs, construct a huge phonograph to go iu the great bronze statuc of libinerty which is to be erceted in New lork harbor, so that the metal giant cau make a speech andible over the entire bay. In view of what $\$ 1$. Eidison has already accomplished, his success in this respeet would not urprise 118.

## Country Homes in California.

Our edition this week will be about 3,000 copies larger than usual and our paper will fall into many hands which have not before received it. Many of these will be those who are thinking of sccuring country homes in California, either by immigration hither or by thuse who are planning to leave the over-crowded occupapendent effort on their own acres. To both of these classes, if their individuals be of temperate, frugal habits, there is a good chance for success in rural pursuits. There is a power of ruth in the adriee which we recently gave to all those who are thinking of going into the country, and that was to join together and help each other to get the needful laud. Large tracts of land ean be had on easy terms; in lact, the owners will often let it go on easy creut llany of the large land owners are ready to sell. Land monopolies are evils in many ways. They not only hurt poor people, but they make business dull in the city, and this impedes the prog. ress of the rich. Mechanics, merchants and nanufacturers are hart by land monopoly. All classes shoutd labor to overcome it and turn every large tract into hundreds of productive To liastern people who may be prone to take up cipital and unyielding industry, may be well assured of success. It is a pleasant land to live in . There is a general disposition to measure each one by lis merit and accomplishments, and it is no disgrace to work. Iuvalids will do well in our genial clime, but strong men and womer will do better, for there is no true success without labor. It is a good time now to get a foothold in this state, because there is no prospeet that land will ever be cheaper; in fact, every ycar of our rapid progress and devel. opme1

# Parents ano ginventoons 

List of U. S. Patents Issued to Pacific Coast Inventors.

From opyiclal reports pos tile Mining and Scientific
Prkse, DEWEY \& CO. Publishers and U. S. and forkion Patret Aarats. 1

By Special Dispatch from Washington, D. C. Week Ending, May 7 rim
Rope Tramways and Apparatus.-Thos. H. Steam Boiler Furnaces.-Joseph Enright, San Jose, and John L. Heald, Vallejo, Cal. Vallejo, C'al.
Heating and Ventilating Chimneys. -Jere-
miah Browell, S . miah Browell,
OAsTs. - Joseph E. Chenette, Hillsborough, Oregon.
T. Herrmann and Win. Sexton, San - Adolph T. Herrmann and Win. Sexton, San Jose, Cal.
idewalk Hatcifay and Door.-Peter li. Jackson, S. F.
Rack Clearkers. (feorge lioyal, Truckee, Track
Cal.

## he-1ssues.

Joints for Sueet Metal Pipes.--Joseph
Moosc, S. F.
Stereoscopes.-Charles H. Wheeler, S. F., and James A. Bazin, of Canton, Mass.

Trade-Marks.
nned Meats and Fish. (2)-J. G. Megler, Brookfield, Washington Territory. Tobacco.-d. D. C'uly \& Co., S. F. Chewing lobecr-Destroying Powder. - (Yiovan Milco, Stockton, Cal.

- Fitapatrick, Davis \& Co., Fisherton, Washington Territory.
Ohthe until some are not realy for delivery by the Patent Norr.- Copies of U. S. and Forelign Patents. furnished
Ny Drwer \& Co., in the shortest time possible (1). tel-
 security and in tha shortest possible tin
of this Colony on another page of this issuenen of this Colony on another page of this issue it is
stated that "every purchaser of a 20 -acre lot stated that "every purchaser of a 20-acre lot
will be entitled to a town lot on making his first payment, or at any time previous by erect-
ing a house," etc. It should read last payment ing a house," etc. It should read last payment lot will be of considerable moment, when town
lots prove desirable in the growth of the Washlots prove desirable in the growth of the (1) ashington Colony like that already attained by the nearit. By the way this is a praiseworthy feabuyer a chance to profit by the increase in village property which a large surrounding popu-

Disbanding of the Dio Lewls PartyAceording to intelligence from San Josc, the
Dio Lewis camping party will disband. Two Dio Lewis camping party will parties proceed to the Yosemite. Others return to their homes. The doctor's sickncss is
most unfortunate, as he has lost money on the most unfortunate, as he has lost money on the
euterprise. His agents show every disposition euterprise. His igents

## Farmers! Farmers!।

Throughout California are requested to send Labor Exchange," 33 and 35 O'Farrell Street, San Francisco. All hands carefully selected free of charges to employers and employees.

## $\overline{\text { Semi-Tropical Fruits. }}$

## Fresno county has demonstrated its adaptation to the rowth of fine oranges, lemons, limes, figs, grapes, and

 the whole list of choice fruits. Orchards come into bearing quickly, and it is not long before the settler literally"sits beneath his own vine and fir tree." This land is now "sits beneath his own vine and fig tree." This land is now
being placed in the market by the Washington 1rrigated Colony: 'The advertisement appears upon another page. Woodward's Gardens were never more attraet-
ive than at present. A fine lion and two lionesses, all young and not fully. grown, have just been added. Bal-
loon asensions by Prof Martin1 are 1now being made.
The popularity of the mardens continues to increase. loon ascensions by Prof. Nart
The popularity of the garden
Rates of admission unchanged.
Portable Evolsks-Mr. H. W. Rice, inventor of Rice's
Straw-buruing Engines, is giving his personal attention to Straw-buruing Engines, is giving his personal attention to
machine marufacturing and jobbing, in S. F., as will be seen by his advertisement in this paper. He disposed of his pateut right on the Straw-murning Engine some tinue

See advertisement for furnished house in the country.

Any Photoaralinkr havin", a large Can
sale will please notify "N. S.," at this office.
Gold, Legal Tenders, Exchange, Etc. [Corrected Weekly by Sutro \& Co.]
San Francisco, May 22.3 r. M.
Lequal Tenderrin S.
$5=$
=

## S. F. MARKET REPORT.

 NoTE, -Our trade review and quotations are preparedon Wednesday of each week (our publication day), and ar
not intended to repres. not intended to represent the state of the market on Sat

## Weekly Market Review.

DOMESTIC PRODUCE. ETC.
Sar Francisco, May 22d 1878.
Trade is moderate. Aside from usual trans actions, interest is expressed iu some rather new features. There are now 11 carloads of Iowa Potatoes on the way to this city, some of which have been sold to arrive at $\$ 2.75$ per ctl. There
is also Rye on the way from Nebraska. There is also Rye on the way from Nebraska. There Oregon, but the low prices now prevailing her be exported to Mexico.
The Wheat trade is much at a standstill, e cept in small parcels for millers' use, and these have ruled low

Range of Cable Prices of Wheat
The eourse of the Liverpool quotation for days of last week has been as recorded in the following table:


To-day's cable quotations to the Produce Exchange compare witl same date in forner
years as follows: years as follows
Averaqe. Club.

## The Foreign Review.

Loxiow, May 21st.-The Mark. Lane E.rpress perature of last week have occasionod appree hansions regarding cereals, especially ou learyy
lanls. is needed to allay the eunxiety. Trade is ex cessively dull, both in country and Mark Lance
Atthough the supplics of home-grown Wheat still come forward sparingly, farmers have
shown more desire to realize in spite of the deshown more desire to realize in spite of the de-
clining prices. The offerings of Linglish What at Mark lane, although scanty, have been in two slinllings per quarter on Mlonday, aud buysion. I similar reduction was necessary to effect sales of foreign, of which the imports int reopening of the harbor of Cronstalt and the
arrival of some recent heavy shipments from Atlantic ports of the United States. A large proportion of the week's supply consisted of rod Wheat. Of the total import of about 56 ,
000 quarters, 000 quarters, nearly 40,000 were contributed by
America and North Russia. The supply is out stripping the demand, and as no fresh political stricted and sales are only practicable in retail. rally may spcedily take place imports, although large, are not so excessive but that an unfavorable state of the home crop will exercise its full influence upon prices. Trade ruled steady for American. Russ declined one or two shillings per quarter. Sales of Euglish Wheat last week
were 44,730 quarters at 52 s 4 d , against 32,690 were 44,730 quarters at 52 s 4 d , against 3 , $, 0,0$
quarters at 65 s 7 d at the same time last year. Inports into the kingdom for the week ending May 11th, $1,076,901$ cwt Wheat and 171,979 cwt flour.

Frelgnts and Charters.
Few charters have been drawn during the
week
The Commercial Seves says : Probably
 ing would be a fair quotation. At the close we have 3,010 tons in port for immediate, and 2,720
tons for new crop loading ; 43,155 tons disen-gaged-a considerable increase over last week's total, and 7,603 tous miscellaneous. The latest charters reported are : Ship Rembrandt, 1,41 tons, Wheat to Liverpool, 2i lay days, 52 is 6 . chartered for Wheat to Liverpool, at $£ 2$ Ts 6 d

Eastern Grain Markets.
NEW York, May 18th.-Though prices show very little change, decreased supplies of bread stuns have enabled sellers to maintain values above foreign markets, thus interfering to some
extent with the export trade. Nimber two Spring Wheat, the leading export grade, has sold at \$1.20@1.22, closing at about the inside figure. The chances seem to be in favor of a settleinent of the Eastern question by diplomacy, but in any event the chances appear to be in favor of a continued heavy draw upou our cereal resources, the Continent as well as the for food staples, with no great quantity anywhere available to meet the deficiency except on this sidc
of the Atlantic. The Black Sea Wheat of the Atlantic. The bling the consuming markets of Western Europe is of very poor quality, and therefore considerable extent. As to the future course of cereal prices much, of course, will depend on
seasonable influences. Grain crops in this
together so promising as they now are, and unless they sustain some great disaster later on it will be difficult to sustain present values.

## Eastern Wool Market.

New York, May l8th. - The Wrool market has not changed in any important particular. The demand is still slow, running chiefly on low price grades, quotations for which exhibit
greater strength than is manifested for better greater strength than is manifested for better descriptions. Ohio X and XX have dropped to
$36 @ 38 c .$, and even at these figures, which in ordinary times would be called low, the demand is not in the least stimulated, buyers still hold future. One thing, however, is thought certain and that is that the botton is about reached California is arriving quite freely, and tind willing purchasers. Quotations are steady, wit ehoice bringing as high as 30c. New Spring
Texas is beiug received quite liberally, but Texas is being receiver quite liberally, bu purehasers, conseqnently restricting trade. Foreign clothing
London public sales opened on the 14 th inst. The attendance was large and a fair spirit wa shown, but the opening prices were about five
per cent offes for the week include 152 , 000 pounds old and new Spring California a
$18 \frac{1}{2} @ 30 \mathrm{c} ; 39,000$ pounds Fall do. 15@ 13,000 pounds fine and medium Spring Texas $18622 \mathrm{c} ; 6,000$ pounds Canada pulled, 31 c
2,000 pounds nc medium State fleece, 37 c . 2,000 pounds new medium
37,000 pounds X Ohio, 37 c .
Domestic Produce.
The following tablc shows the S. F. receipts
of Domestic Produce for the week ending at noon to-day, as compared with the receipts of

| Articless. | $\begin{aligned} & \text { Wefk. } \\ & \text { May } 1 . \end{aligned}$ | $\begin{aligned} & \text { WeER. } \\ & \text { May } 8 . \end{aligned}$ | Werr. Miy 15. | $\begin{aligned} & \text { Wекк. } \\ & \text { Maу } 22 . \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Flour, quarter sacks.. | 35,136 | 39,108 | 47,862 | 44.981 |
| Wheat, centals | 36,153. | 91, 321 |  |  |
| Barley, centals | 10,687 | 9,097 | 12,169 | 11,498 |
| Beans, sacks. | 2,158 | 776 | 744. | 70 |
| Corn, centals | 2,820 | 9,523 | 9,192 | 2,20 |
| Oats, centals. | 2,924 | 1,699 | 1,297 | 5,175 |
| Potatoes, sacks | 10,414 | 6,675 | 2,226 | 4,305 |
| Onions, sacks. | 876 | 274 | 161 | 428 |
| Wool, bales. | 6,616 | 6,554 | 9,515 | 80, |
| Hops, bal |  | 139 | 19 | 164 |
| Hay, balcs. | 1,726 | 1,150 | 963 | 1,028 |

BAGS-There is no change in the Bag list.
Trade in firain lbags is proceding quietly and salce cover considerable quantities.
BARLRY - Barley has sold farly at last
weck' prices, Wie note sales: 1,800 sks Feed, \$1; 900 sks do, 9 cc per ctl.
BEANS Prices sustain last week's advance, coliN-The renewal of the export demand has raised prices a littlc. exact figures given.
DAlliv PRODUCE-The sithation is without change in supply or priee. l'acking is goins
on both in city and country.
EGGS-Erges are unchanged.
FliED-Hay takes a lower range, the top fo Wheat Hay being now reportcd at $\$ 15$. Wh mixed Oat and Barley at $\$ 11$; and a cargo SRock at
FRUIT-The first Apricots have arrived and
sold at $25 \mathrm{c} \mathfrak{b}^{\prime}$ tt. The market is now well sold at 25 c bi t . The market is now well sup
plied with Strawberries, Red C'urrants and plied with Strawberries, Red Currants an choice Black Tartarians have still brought 25 c P tb. A cargo of Tahiti Oran
in and finds a cleared market
HOPS-The local range of prices is quotably
lower in absence of demand. The choicest Californians now in store can be bought fo eight cents per tb., and other grades in pro-
portion. Emmet Wells in his New York ci cular of May 10th says: "Brewers have bough sparingly, and business, on the whole, has been rather quiet. It is evident that a large pro portion of our farmers intend this season to
give their yards less care and attention than aud low prices next fall. We think if grower
would act upon the advice of the Cobleskill In dex and 'plow up at least one-half their Hop roots,' they would do a wise thing. The Devising the destruction of yards, suggests that in place of growing five cent Hops, 'the remedy
is to grow the quality that is wortl 10 or is to grow the quality that is worth 10 or 1 always urged our growers to improve on quality especially since we have been dependent upo foreign customers for the purchase of our large
surplus. We have the facilities for supplying ther Hops wops, but we to frive forcig ter Hops before we can exp
OATS-Oats are selling
Wenge. Wete sales of 100 well at last week
\$1.323; 135 sks good, $\$ 1.45$; 125 choice at $\$ 1.62 \frac{1}{2}$ per ctl.
33.50 for the ons have sharply anvancca to livers are bringing $\# 2$. Oregons are held at $\$ t$, but there are none iu to-day
POTATOES-Therc is no change in the Po tato market. There are shipments on the way from lowa, as noted aro
PROVISIONS-Fiesh
PROVISIONS-Fresh Meats are rated lower sion trade is fairly active
ion trade is fairly active,
RTE-Five carloads
braska this week.
VEGETABLES - String Beans, C'abbaye,
Cauliflower, Green Peas and Marrowfat Squash are cheaper. Asparagus is rather righer. The
novelties are Summer Squashes which sell $\$ 1.50$ box ower range is assumy sales are to millers, and ctls good Milling at $\$ 2 ; 200$ and 125 at $\$ 2.02 \frac{1}{2}$ ctl. WOOL-Trade is circumscribed and the best Wool is being held above bids which are now mad. The market is quotable about 1 c lower We note sales of $100,000 \mathrm{tbs}$ at $16 @ 20$ for San

## DOMESTIC PRODUCE



FRUITS AND VEGETABLES.


Signal Service Meteorological Report Week Ending May 21, 1878.


67 | 52 mean daile hemidity.

- 271 | 230 | 404 | 211 | 134

HAND PRivg Press Wasten.-Parties having a sec
Ond hand Washington or other hand printirg press whleh
thley wish to dispose of, will please address thls office,
stating price, size and condition.

## From Our Friends.

Although we do not propose to make public all the kind words which have been written and spoken to us, there are a few whieh are deseriptive of our work and the value whieh is set upon it, and which, if spreal abroad, may shall quote:
"، 'Sueeess to our paper' - the Pacific Rural
Press, the farmers' true friend." -A. J. Mother -I,
'I renew my interest in the Press for au other year and am well satisfied with the paper,
having found many single articles well worth having found many single artieles well worth
the whole year's cost."- W'M. DUNAN, Red Bluff, Cal.
"The Rural Press elosed its fourteenth volume last Saturday. It starts upon a new volume with resolution strong to make it surc
pass all which havc gone befoce."-C'astrocillPass all whie
"The Pacific Reral Press elosed its fourtcenth volune with last year. The Prkss is a
favorite in this offiee, as well as in the housefavorite in this oftice, as well as in the house-
hold of the agriculturist. We trust it will con. tinue to enjoy many years of prosperity, and to its enterprising pubbishers be a satisfactory "The Rural has paid me its weekly visits many years, and I invite its continuance and
make provision therefor. I regard it as invalumake provision therefor. I regard it as invalu.
able to every agrienturist, pomologist and stock raiser. However well verscd each may be in
his department, the RURAL will give new ideas worthy of thought aud consideration, and no one will have just eause of complaint for hav Auburn, Cal.
"Enelosed is amount of my subscription for pleasure my most perfect satisfaction with the many important, interesting and earefully gathered subjects treatcd in the columus of the
RURAL. Though the past year has been truly a keen one in this part, I trust that you may not have felt the pressure that has. upon all in sou.
Hinds, Anaheim.
"I do not wish to lose any of the valuable information contained in the MuraL, for it has been a great benefit to me and I have found it
to contain many valuable hints to one in my business, that of narkct gardcner. Its eolumms are awways filled with valuable information to
the farmer, and I find it all you elaim for it, a first-elass, reliable journal, whieh is more than I can say for hundreds of other journals which
I piek up during a year. Please send it right along."-GEo. S. Browr, Silver Star, Madison county, Montana.
"I have been a careful reader of the Rural PrEss the last three months. I intend setting information now and at the same tim getting the money to get a home with. All I want is 100 aeres of good land, and I think when my old neighbors in siotland cann get rieh on 60 acres of land there, I ought to be able to make
a good living on 100 on the Pacific coast. I a good living on 100 on the Pacifie coast.
find a great deal of valuable information in the "Oue of your readers told me, the other day, that he cannot get along without the Press, although he has found it a hard year for him. Its Press is a stand-by and a farmer's friend.
Its columns are suited for all readers. Its eolumns are suited for all readers. The
'Young Folks' colunn pleascs iny ehildren with its odd cuts, pleasant stories and spicy sayings. Whin Saturlay comes, the first thing
is: 'I'apa, let's see the I'Ress, nd good things it has got to real.' I hope the opening year the press will still increase in popularity, cireulation and in correspondence, and continue to be alive paper annong the far.
mers aud the intelligent readers of the world." mers aud the intelligent readers of the world."

- (EO. RIcH, Sacramento, Cal.


## OUR AGENTS.

OUR Fripenc can do much in aid of our paler and the
cause of practical knowlecke and scienee, by assisting Agents in their labors of canvassin, by lendingst ther
intuence and encouraging favors. We intend to send


 Islands. Wurr-San Bernardino and Los Angeles coun-
ties. D. Wurtieq. W. A. Wrionr-Sacramento county:
J.
B. .E. .Libvo Sonona and Napa counties.
F.


Ropular Mcsic - Muke jour homes merryand popu-
can recommend this large, ifrst-class, standard and popu-
${ }_{1 / 5}$ establisliment. Examine his advertisement, appearinstruments possessing the very highest and must perma. Press can oficr to introduce you thcre.
MR. W. J. Woonluy, who took out a canadian Patent
some four years a


## An Improved Fileholder.

An artiele whieh is valuable mainly for its useeffective, is improved. The fileholder illustrated herewith is an invention of this sort. Like the short horse soon eurried, its operation is briefly deseribed. Its merits, however, are not so quiekly noted in words as observed by sight. To file newspapers, or other printed matter, elined end of the upper bar into the notehed eud of the lower lar. With the lower bar resting on a table, the upper bar is swung vertically or sideways, leaving the points The hinged ene papers entirely uno sorracted and held elastieally, the upper bar is easily and naturally
brought back to the right position, where it is quiekly fastened by slipping the adjustable band over the meline.
Among the advantages gained by this holder It can be

## The

The points are less obstructed while the arti The be filed are being placed.
The papers (wholly or partly folded) ean be in regular book order
The elastic hinge and band accommodate and
hohl firm either a large or a sinall number of


Devoid of all surplus material, it approaches nearer to bookbinding than other fleholders.
With less material, it is lighter and less cum. With less material, it is lighter and less cum-
bersome than other holders. It has no protruding ends
It has no protruding ends to tickle the readres ribs; no sharys eoruers or metal parts for
difacing furniture. It has no rigil ho
It has proved durable in practice Consist ing of so few parts, the two strong rubber rings are the only portions possible to wear out.
These ean be replaeed at trifling cost. The file is adjustecl but 52 theed at triming cost. The file is A sample holder can be opened and closed 1,000 times without showing depreciation.
Having, as a pubtisher,
Having, as a pubtisher, considerable use for
filehollers, the inventor could find none of the fileholiers, the inventor could hind none of the hunired different kinds patented or in use de-
roid of decidelly objectionable features. this reason he adopted and used some of the this reason he adopted and used some of the
simplest forms eoneeivable. After several years use and repeated improviments, the device we
illustrate has proved the best. The
The patent was allowed in April, 1876, since which time many holders have been used, giving full satisfaetion. About 100 have had con. staut handling in the Fres Reading- Room, Oak-
land, Cal., rendering full measure of satiland,
faction.
fifferent izes are made to suit the dimensions of inerent papers, viz, : $18,22,26,30$ and 34
iuches, inside measure.
From our own experinee and the testimony
of others, we do not hesitate to recominend this simple article as the best of its kind. Sanples will be mailed from this office for 50 cents, post-paid.
Orders will be
Orders will be reeeived by the S. F. News
The price list will also be furnished by same company on application.

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pcetus and terms of subbeription, and request that they Asy person receiviur this paper after giving an order to
stov it, nnay knuw that such urder has filied to rench us or that the paper is continued inad ertently, and they are


DEWF゙ \& CO's Solentific Passs
atent Agency.

GRAND
SPRING OPENING

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## FANCY GOODS,

Ladies' Finished Underwear,

## Notions, Household Goods and Gents' Fur

 nishing Goods.MANUPACTURERS OF
BOYS' \& MEN'S Nice Fitting Suits of French Beaver, Diagonals, California and Oregon Cash-
meres and Scotch Tweeds.

## PALMER BROS

## Nos. 726, 728, 730, 732, 734 Market St ,

san franeisco, cal.
GREAT SLAUGHTER

## IN SEWING MACHINES.

We are now offering for sale, at $\$ 10 \mathrm{EACH}$, the fol-
FLORENCE,
WHEELER \& WILSON,
GROVER \& BAKER.
these machines are
Guaranteed to be in Perfect Order,
And many of them NEW.

Partles in the country can have them packed and ship-
WILCOX \& GIBBS Sewing Machine Co.,
No. 124 POST STREET,
san francisco, cal

YOUNG LADIES' SEMINARY, BENICIA.
Mrs. Mary Atkins Lynch, Principal.
The next term will open July 31st, 1878. The Prineipal (Miss Atkins), desires to inform her friends and former Benicia, with a full corps of competent teachers, at the opening of the next term.

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## FIRST DAY

. Festival Overture and Chorus-"A Strong Castle is Our Lord," - Nieolai GRAND ORCHESTRA AND CHORUS. 2. Quartette-"Where the Bee Sucks," MRS. BILLINGS, MISS CLARK Dr. Arne FESSENDEN AND WHITNEY.
. Chorus-" Farewell to the Forest,"
Aria-" Honor and Arms"
I. W. WHITNEI

Ensemble-"Spirit Immortal," V Verdi
BOUQUET OF AR'TISTS AND FULL
Aria-"O mio fermando"
MLSS ANNA DRASDIL.
Triumphal March-"Dainascus,"
FULL CHORUS.

Overture-"Tamhauser,"
Overture-"Tannhauser,"
GRAND ORCHESTRA.
Chorale-"Sleepers Wake,". Mendelssohn
GRAND CHORUS.
Aria-" Nou mi dir,"
MRS. HELEN AMES BlLLIN(AS. Hungarian National Airs, $\simeq$ Pianos and Grand Orchestra,
MR. AND MRG MAS. HUGEELDT. . Chorus-"Soldier's Farewell," . Kueken 'Soldier's Farewell,
MALE CHORUS.
6: Duo-"Semiranis,"

SECOND DAY.

Wagner

1. Overture-"Warrior's Jubilee." lindpainter

GRerture "Warrior's Jubilee."
GRAN ORCHESTRA.
2. Aria-"Eurydice,"

MISS ANNA DRASDIL.
3. Chorus - "See the Conquering Hero Comcs," GRAND CHORUS.
4. Aria-"Immanuel,"

Composed exprcssly for this Festival Thayer
M. W. WHITNEY.
5. Quartette-"IRigoletto,"

MRS. BILLINGS, MISS CLARK, Verdi
SENDFN AND Ml. W. WHITNEY.
6. Chorus-"Anvil Chorus,"

GRAND CHORUS, FULL ORCHESTR
ANVILS, ARTILLERY, ETC., ETC.
7. Chorus-"The Heavens are Telling," - Hayden
GRAND CHORUS.

## THIRD DAY.

 . Overture-"Tour of the World,"GRAND ORCHESTRA.
Ballad- "Across the far Blue Hills Marie,"
IV. H. FESSEND Martsoll
3. Soprano Solo and Chorus-"Inflainatus," MRS. MARRINER-CAMPBELL AND FULL CHORUS
4. Aria-"Non piu Andrai,"
M. W. WHITNET. Ensemble-"Spirit Immortal," - Verdi
BOUQUET OF ARTISTS AND GRAND

Mlozart. CHORUS.

Fiuale-"America,"
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The following telegram from D. M. Osborne, Fisq., of Auburn, N. Y., head of the firm that Texas, explains itself: who is now visiting in Texas, explains itself

Dallas, Texas, May 18 th, $18 \pi$ s.
D. M. Osibornp. \& Co., $2 \overline{5} 4$ and $2 . \operatorname{cic}$ Market street, san Francisen, Cal.: Two hundred and seventy-five to two hundred acres each, and not a fanlt found. About two and a quarter pounds
of wire per aere used.
D. M. Osbornf.

## D. M. OSBORNE \& CO.,

## Nos. 254 and 256 Market Street, and Nos. 8 and 10 Front Street, San Francisco.

BX MI. AYEES, MANNAGER.

# 80 <br> ys 

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## Protection to Levees

(Written for the Press by W. M. Ryer, M. D.) We hold these truths to be within the obser ation of all persons, that earth, the deposit of rivers, when thrown np and suhjected to the
action of waves and currents of water does gradually or suddenly wear or wash away, That the smallest current of water, though no wider than the hand, cuts a channel through earth that has been nndistnrbed for ages. That larger streams with currents and waves dissolve and cut away evary earthy restraiut to their course.
If we go to the fields we see the ground chan aeled with water courses. If we go on the hillside we find them furrowed hy the water o rains or springs. There is no fact in nature more clearly presented to us than this, rumning vater washes tway

With this natural law hefore us as daily wit nessed by all persons, it hccomes a wonder why evees have been constructed withott refertnce composed of alluvium of excelleut quality for the purpose; they were thrown up at an im waves and currents of a swift runuiug river, and this with the earth in direct contact with he water. If earth never yct resisted currents of water, why should we have expected it to do so on the Sacramento? Earth, loosely
hrown up, we have believed wonld protcct millions of property, and because it has faited to do so we despair and declare the reclamation of the best land in the State impracticable Stopping Short of Success
We have demanded success without having fulfilled the reqnirements which command success; on the other hand, with ages of experience before us, we have refused to learn, aud have stopped our lahors omitting that which would have ensured success. Levees of proper hight, material as levees which have stood the action material as levees which have stood the action fie waves of the sea or the curreuts of rivers on the Sacramento river. When the river was two feet higher than the bank these levees commenced to waste and cut away, and the owners placed thousands of sacks of earth to protect them, thus attempting to do under unfavorable circumstances that which could have heen done by a different and more economical way at a time when there was no water present. The
immense expense and effort made to protect the levees during the existence of high water, seems show that the protection of levees is believed ne essity even by those who would not fore bare earth subjected to a current will surely be washed a way.

Good Material for Levees
The levees of the Sacramento have been con nature; and they have been built upon foundatons not liable to settle; and on a river whis hanks are exceptionally permanent. The deltas more favorsable conditions for reclamation than evees that neither the freshets of rivers or the storms of the sea do wash away. Now why The answer is hrief and simple. The sacranento levees were not covered or protected is re covered and protected as high as continent urrents can come.
What May be used in Protecting Levees. Upon the manner of protecting levees we do not profess to he expert, yet the importance of the uhject demands all the space which the Rural vations as follows: The question of expense i n California a prime consideration, we thereavailahle. Redwood timher is endurable, but a sloping levee, the carpentering would have covering would be liable to get out of repair
when most needed. The huoyancy of timber
together with the action of waves, makes it
and forming a dense mat, with others similarly
plat high-water line to the base of liable to break the attachments and float away. This was manifest last winter from the loosening effects of waves and the lifting power of
water, raising whole lines of fences and floating them away. By far the cheapest and most nsed material for protecting levees on the low-
lands of Europe, is the willow, pine and other lands of Europe, is the willow, pine and other
brush too small for fire woou, and of but little nse except for this purpose. For the purposes of protecting hanks and levees there is no ma-
terial in such general nse as the small twigs of terial in such general nse as the small twigs of
willow and other trees whicl grow upon the the levee. Every twig is most carefully placed on the outside of the levee, nutil the mat, or thatch, is from six to nine inches in thickness,
Each twis is transverse to the axis of the leve and noig is transverse to the axis of the leve When the thatching is thus axis. sidc of the levee, the workmen proceed to secur it. This they do with pegs, two or three feet long, with a cianneter of two or three inches
These pegs are driven down, leaving enongh of the top exposed or the Workmen to twist
wire or willow over them. When this is done

face of levee, showing pegs and wire lacings.
hanks of streams. These the Dntchmen care- the pegs are driven down, thus compacting the anly save and transport in hoats to the levees iver levee builders have always burned, and then have expended thousands upon huilding levees, which, unprotccted, were as certain to
wash away as that water will wash nncovered wash av
earth.
In constructing a levee let it never he forgotten that the protecting properties of a levee are only in proportion to the weakest part of the
levee; we would therefore impress the necessity levee.
Every peg is placed about 18 inches from the other, and the wire or willow, extending to it neighbors, holds the thatch so firmly that currents or waves cannot displace them, and so
long as this thatch holds together, no levee can wasl a away.
When the
When the levee is thus thatched six or mor inches, properly pegged and wired, then six
inches of carth may be thrown upon it to pro


SECTION OF LEVEE, SHOWing MEthod OF pegging the thatch.
of the most careful attention to all the details, and the most thorough watching, that every part is well done; for where water is your ad
ersary, there can be no compromise. The Hollauder takes twigs of willow, sycamore, down the lhine in boats, even from 50 to 100 miles. These twigs, from one-quarter to one nch in diameter, are sufficiently exposed and dried, so they will not grow, for no trees should grow upon a levee exposed to currents; although gro ob nd currents.
How the Small Branches of Trees are Used Care is taken that nothing mneh thicker than ne inch is used, and these are carefully laid, possihle, the lengthway of every twig extending
tect the thatch from the tramp of cattle an hire. A levee thus protected will endure four years. Then it may ho removed, provided proper grass may not have grown upou it, sult
Every tree, hush and such grasses as alfalf (with its single root) growing upon a levee cause a whirl of water around them during

The outside of a levee should be at all ti open to inspection, and, therefore, nothing but to grow upon it.

No greater mistake can be made than the seeding of alfalfa and the allowing of weeds $t$ grow upon the levee, for theqe harhor and feed nitals which burrow in the levee, and when the current is rapid, the water whirls around
the alfalfa and weeds and cuts away the earth

Simple but Effectual Protection. With a manner of protection so simple, aud fectual (for two-thirds of the levees of the Con tinent have been thus protected for centuries) is it not strange that not one levee on the Sacramento has thus been protected. It is quite ertain that five men cau thatch and firmly uild; such heing the case, how 100 men can ny should thung that they build thus neglect to protect that which brick, put on iron doors, and ro to vast in making houses fire-proof, but we invariably make every partition in the house of wood and cave them hollow, and then wonder why onr
ire-proof houses burn. We build levees, leave them exposed to the direct action of waves and currents, and then declare that levees cannot be built that will stand the currents of the Sacrameuto. The banks of the Sacramento in no place washed away last winter sufficient to cause a hreak in any levce; therefore the faul was not in the foundation. On the other hand the levees commenced cutting away when the tinued to cut as the water became higher, until the breaks occurred
Land in Holland worth \$400 and more per Howed and better than our whose surface is 14 feet above the land, and whose waves go many feet higher. Day and
night the sea breaks its force npon these levees and centuries pass away, but the levees continue as barriers to the water. These levees are constructed of earth no firmer than the earth on the banks of the Sacramento. Twigs of willow and other trees are made effectual in protecting
the levees of that country, why should they not the levees
The engraviug on this page will give th the style of levee protection which is practice in Holland, and proposed for use in this State One cut shows a section of the levee with the pegs reaching through the hatch into the earth of the levee. The other cut shows a view o
the face of the thatch with the ends of the peg the face of the thatch with the ends of the peg
and the connecting wires. The whole construc tion is seen to he very simple and it has been proved to he very effective.
A Suburban Farm. - A good idea of what a successful city business man can do in the way of gratifying his rural taste and longings can ho had by a visit to the heantifnl country seat o Grant I. Taggart, Esq., of Oakland. He has a finely located piece of five acres on Telegraph is ml the warm helt of the foothills. He ha ouly had a year to develop it, and we douh whether any similar "farm" shows as good re sults for the year's work. In front of his
tasteful and couvenient house he has a well seedied lawn, in the center for has a well orange tree in all stages of growth, from th profnsion of hlossoms to the ripening fruit. A good part of his land is planted to fruit trees, there being 150 orange trees-quite a grov
considering its nearness to the city. Mr. Tag gart has hrought a variety of fruit trees from the famous Tower house, in Shasta county where he formerly resided, and where the chic of the cherry trees of the state is now stauding, gart also has given attention to vegetable grow ing, and Mrs. Taggart has made a success of the ine early rose into "pin moncy" at a time whel good potatoes are scarce and ligh. One of Mr. 'Taggart's delights is in fine stock of all kinds, and he has some praiseworthy animals. One is a Jersey cow which yields two pounds of butte a day during part of the season. He has im hogs, which are very beautiful and show good rowth. One, aix-months-old sow, is particu larly handsome. Mr. Taggart's rnral pursuits afford him much pleasnre, and add to the com fort and health of his fanily. What he is doing hundreds of others of our thriving husiness men could do, aud there is no diversion so charming or coinmendahle.

Mer had a slight earthat shock at Colton,

## Cor orespondence

$\frac{\text { We admit, unendorsed, opinions of correspondents.-EDs }}{\text { Items from Yuba and Sutter Counties. }}$ Edtrors Press:-Since the spring trade opened, Marysville has shaken off the dullness that prevailed so noticeably during the long
rainy winter. Her foundries are once more busy, and her streets crow
both mountain and valley.
both mountain and valley.
The grain crop of Yiba and Sutter counties
will probably fall short of last year's yield will probably fall short of last year's yield. noy have the damaye from the unusual over-
nothow of the rivers. They have, however, a conHow of the rivers. of very fue grain in both
siderable amount of
countics, limited to special favorcd localities as a whole, or, taken in detail, to the higher and
drier spots of alnost eery farm or field
throughout thir eutire extent. throughout thcir eutire extent.
The county sent of Sutter county, is situated on the west lank of the Feather river, immediate-
ly oppositc Marysivile, and comnected with same by a good substantial bridge. It is the
great shipping point of this section, and backed
by a wile seope of agricultural land of excellent quality. They have seome wheat in this
lent
vicinity and also in thic neighborhood of Nicolaus, in the lower part of the county, that gives
promise of as large a yield per acre as was ever
purnd out here or auywhere iu the best porpromise out here or auywhere
turns of the Nacramento valley.
tion
As an offset to this, much of the grain on the
Yuba, Feather and licar riyers, as well as that Yuba, Feather and licar rivers, as well as that
of the red-land of the iuterior, especilly where
the water has stood upon it for some time is the water has stood upon it for some time, is
found much mixed with chess (or cheat) weeds or wild oats, each or all-so much so in many
parts as to be only fit for hay. The consequence
is that the hay crop will be immense, and the is that the hay crop will be immense, and the
quality the very best, and if properly stored
and secured will go far towards compensating and secured will go far towaras
the farmer for the loss on grain. tions of this region a more thorough system of
drainage would do nuch towards remedying the drainage would do much towards rclnedying the
evil arising from standiug water. But the great-
est dificulty and the one attended with most est difiticulty and the one attended
danger for years to come, arises from
The Mining Debris, carrying in its desolating path the rivers, and the finest lands uear their borders. It is not
to be wondered at that this is the all-absorbing topic, more particularly among the sufferiug
farmers along the rivers, all of whom have been affected more or less, pecuniarily; some ruined
outright and the majority threatened with destruction unless a speedy remedy be provided.
One can form but a very faint couception, from $a$ few isolated facts, of the character and extent of the damage, present and prospective. None
but the suffcrers or those who have personally
insectal every nook and corner of the atlicted but the suffcrers or those who have personally
inspected every nook and corner of the atticted
region can begiu to realize it. All that remains region can begin to realize it. All that remains
of fine orchards, as for instance that of the latc
ore Mr. Briggs, above larysuille, are the withered
tops of deal apple trees peering above the tops of dead apple trees peering above the
"slickens." lith and valualle ranches, that
to-clay would sell in the market from 8100 to to-day would sell in the inarket from sion to
\&200 per acre, such as those of Messrs. Keyes,
Brewer, Mccionacle and others, situated on Bear Brewer, McGonagle and others, situated on Bear
river, below the Wheatland bridge, have, with.
in the past two years, been almost totally dein the past two years, been almost totally de-
stroyed and now lie buried many feet deep beneath the sand. The last mentioned is under-
stood to have entirely abandoned a once very
valuable tract, consisting of 300 acres. valuable tract, consisting of 300 acres.
Clouds in the Horizon. One of the gloomiest features of the case is
that the evil is steadily growing. As the leds of the rivers fill up the levees nust in like ratio
be raiscd, causing continual and inereasing exbe raiscd, causing continual and inereasing ex-
pense as well as a greater liability to break and
thod the country flood the country for miles away. But recently
the fine orchard of J. G. Briggs, deceased, situthe fine orchard of elow Yuba City, was samatad
ated a milicor so belo
to the tune of several thousands by a break in to the tune of several thousands by a break in
the levee opposite, destroying 85,000 worth of
young trees and 100 acres of as fue barley as ever grew, to say uothing of the damage to the
old orchard. In addition to this, 8 , 6,000 would not replace the levee- 2 fact that will hel 1 ? the
readers of the PREs to some conception of the
extra tox the extra tax saddled on the backs of the fariners
of vhis region. Facts upon this subject could of his region. Facts upon this subject could
bo multiplied to volunes. This is ucedless.
The great question is, whiat is the remedy? "Ine have had wroungs, itter burrning eronge, that
Would stir a fever in the bloun of oge,
And make the iufant sinew strong as stecl."
The sick become inmpaticnt, who blames them?
They might die before the physician arrives They might die before the physician arrives.
A few farmers on Bear river, feeling that they A could not atford to wait the slow thoving of
legislative machinery to relieve them, and be. legislative machinuery to relieve them, and be-
coming thoroughly aroused to to sense of the
situation, deterniued some two situation, dctermiued some two years ago to sce
if any virtue or justice was left in the "common
law," and thereupon instituted a suit as law, and thereupon instituted a suit as a test
case, the gist and a brief history of which is
herewith appended under the impression that it may interest your readers generally,
 Che case was irst brought before the lothl
Judicial District Court, Sutter county, July
2Sth, 1876 , for the purpose, as set forth in the 28th, 1876 , for
eomplaint, of

Perpetually Enjoining and Restraining Defendants from depositing the tailings and debris from the countics of Nevada and Placer in the channels of Bear river or auy of its tributaries, or from suffering the same from flowing
into or from fouling or polluting the waters of cither.
Thc $p$

The plaintiff also sets forth as cause of the
tion that by depositing such tailings aud debris in the chamel and tributarics of Bear river, defendants have caused them to be washed and thereby injuring said land and interfering with the comfortable use and enjoyment of the same, and that they thrcaten to repeat and continue
said wrougful acts until plaintiff shall be totally deprived of the use aud enjoymen
and of the fixtures and improvcments.
and of the tixtures and improvements.
The defendauts set up in answer, among other things, that they could not mine successfully, or, $i n g$ their fiue gold if not permitted so to do; Congress, such as the act to "promote the
develowment of the mining resources of the development of the mining resources of the
United Statcs" passed in $15 \% 2$ and other enactThe case was transferred from the 10 th Judi. States Circuit Court for the district of California, under acts State courts to the courts of the United States. cided, as I understand it, that it had no juris diction over the case, which decision was after
wards aftirmed by the supreme Court of the wards aftirmed by the Supremc Court of the
United States, and the case remanded back at cost of dcfendants to be tried at the June term
of the District Court of the State to be held a uba City, Suttcr county.
Iu view of the magnitude of the evils entailed on the farmer and the inmense value of the property inwolved on each side, the decision is
awaited with almost breathless iuterest, more particularly in this quarter.

## Fresno County Notes.

 Chufas.Editors Press:-In answer to Mr. Coolcy I will say that I never have reached such
results as I have read of in chufa raising. But there is a cause for it. I have never had all the conditions favorable. Chufas, for the most perfect success in produciug them, require just such a light, sedinientary sand as the hol must have an abundance of water, as much as other sedges, and you know that sedges grow
only in or around the edges of water holes. With an abundance of water, enough to keep
the surface of the ground (which should be perfectly level) evculy wet, with uo puddle of mor mand of the water, to increase or lessen the amount at will. With all of these conditions careful attention, I believe as great results can be reached here as any that we read of and
tubers produced of a size and flavor that will justify the commonly accepted name of "ground as many other products more perfectly; but feel assured, from my preseut standpoint, in
saying chufas will become a prominent and profitable crop on the irrigated sand plains and certain portions of the extensive region of tule lands.
Chufas should be perfectly dried before storing them away for seed or other purposes. But destroyed by laying them ont for even a siugle
day in the extreme heat of our autumn sun lluch sced is injured in this way. I bought $\$ 5$
worth of sced from a Rural advertiser some time ago, of apparcntly as fine chufas as any one the vitality was gone, doubtless from the caus above mentioned. I cast no blame upon the
partics who sold me the seed. I know themknow them to be upright, honorable gentlemen of the value of anything; and the failure of the seed to grow was from a cause undoubtedly as a warning to secrl raisers and seed buyers. In buying seed chufas, be sure that they were
dricd in the shade and not in the glaring heat of the sun. Sun-dried ones are just as good for other purposes except for seed
Malva.
Certain persons write to me and of me as of malva as a forage plant. They surely did
not get this from what I wrote. Others have spoken far moro favorably of it than I have
One of your correspondents said that an experi year ago, in the Rural, it was spoken of as butter." But I'll not take up valuable space
with cnumerations. Wlat I said of it was that grew with tho earliest autumn rains aud ing the dime of dormancy in the growth of cows (a compound of mustang and Jersey, that
tender growth during the dearth of other feed
and did well on it, in health, flesh and production of milk. I shall put out a very small area of it on warm, sandy land, where it will afford green pasturage a short time during mid-winter,
without makiug a mud hole. And, also, without claiming that it should supersede or come or that competition with any othor any land where its growth cannot be controllcd. Its value as a forage plant, if it has any, is in its winte green feed here on our light valley soil fails. neither know nor claim for it any val
under these conditious, for cow feed.

Other Forage Plants
while animals are liable to die from but While animals are lianc to die from bloat or will wish for something else. Besides this, dur ing December and January, the best two month for butter making in our vallcy, alfalfa is dor is there any plant or combination of plants that ught to supersede it? 1 confess that I don know. But being one of those that tries to make the country and not wait for it to come
up, I'm trying to solve the problem. And, to this end, I have sccured and planted out an have growing prickley comfrey, golden millct,
pear millet, East India millet (Penicillaria spicata), dry field rice, four varieties of Egyp
tian corn, three of imphee, two of sorghum, perennial rye grass (Lolizm perenne), and thrue grasses recenty obtained in a sack or sccts from
Dr. Curl, New Zaland, viz. Panicum spec
tabile, Panicum hispildulum and Melilotus thibet, The last, he says, "will grow in a hot, dry climate-the hottcr and (Irier the better." n this respect. I an also trying a purcly
ropical plant, the principal feed grass of some parts of inter-tropical Anerica - teosinte (Reane uxurians). I have but a few plants growing,
owing to the rotting of the seed. The seeds of what I have growing have cost considerably more than their weight in gold, but from present
appearances, 1 shall be repaid for my outlay. Government Seeds.
I received a grain sack full of them last winter. I planted them out with note book in haud and from time to time will give the De partment of Agriculture and the result. The Golden Jelly turnip is perfect success, surpassing two-fold any other th. We've been using them since April lyth Philadelphia butter lettuce is good, but not
superior to the Hanson and some other tried superior to the llanson and some other tried
varieties. Potatoes No. 2 are perfectly white and are keeping pace in growth with the Early Rose. The extra early peas are a valuable
accession. They are ncarly a wcek carlier than Carter's first crop, our standard for early peas. The pods contain from five to nine peas, of larg
size and the finest flavor. supplied with them sinco the first of April, and they will last at least a month longer without
ny irrigation. The Mexican White and the Yellow Strasburg onions are the best that I have seen raised from seed.
Of potatoes I
Of potatoes I have a variety: Early Rose, Aarly Ohio, Extra Early Vermont, Suow Flake, Alpha, Burbank Seedling, Superior, Brownell's
Beauty and some others, of which I will give the Rural an account in due time.
to notice the first drawback that
have ever known of respecting this cereal. It wo weeks ago, orders for seed began to pour in upon me from our own county, saying that the
seed they had raised or bought had rotted after planting. I congratulated myself that I and followed my instructions in planting it, would
my exatrot from any such loss. To-day one o from which I also planted, after my supply gave out wrote me that his has failed to germinate
satisfactorily. This caused a carcful examinaion of what I have planted, and I find that over -0 acres have rotted so badly that I shal ablc. I have neither sold nor have I ever planted eed without first testing its vitality; and as a
further proof that the secd was not in iault, my neighbor, (ileason Hodges, planted from the kernel of his has grown nicely; but there was this difference: I planted before our last heavy
rain aud eovercd decply, as the ground was quin aud eovercd decply, as the ground was old, wet, sced rotted under the accumulation of over it from the rain. Mr. Hodges planted a week aftcr in newly plowel, wet ground, fol Althongh I have here positive proof that the tested all the seed which I have sold, yct fearing that a few may be as unfortunate as myself, seed of me or for whom I lave obtaincd secd
here, which I have done in many cases without one cent of profit-if tho seed has failed from
any cause whatever, 1 will send two-fold the uantity purchased, ,
seed; I to give sced and sack gratis in such
cases. I do this that I may do a little more
than custom among seedsmen would dcmand,
aud also the more perfectly to disseminate this
valuable grain, which under favorable conditions grown.

Testing Seeds.
To throw seeds into watcr and leave them there for au indcfinite time is but a very poor
and imperfect test. One or two decaying seed may cause fermentation that would destroy the lot. Put the seeds in pure dirt, sand is best, soak in camphoreted water preparcd as described between wet cloths, and keep constantly mois by sprinkling, letting them lie in a moderately
warm room. There are many other ways, somo warm room. Thore are many other ways, somo
better perhaps, usiug chlorine as heretofor given in the Rural, etc. But the most impor
tant guestion is how to cause secds to grow with certaiuty uuder slightly unfavorable conditions. This is a matter on which I would like to stud Will he not favor us, readers of the Rerai witl an article on this subject? I have found soaking the sceds bcfore planting in water to which a little camphor or chlorine, just enoug
to taste, has been added. W.-A. SaNDERS.

## Kingsburg Fresuo

## Notes on Carp Culture.

Edirors Press:-In answer to your request I will give your many readers a few notes on the arp tish and its culture; not that I fecl com ctent to do justice to them or it, but to satisf the many inquiring minds (for they are numer ous), as my letters of inquiry would
have letters from Elgin, IIl, westward.
I will first give what Bingley says, in his History of Anse "The the carp tribe: "The carp tribe for the most worms, insects, aquatic plants, fish and clay or mold. Some of them are migratory. Nlost of found ouly in the northern countries of Europe, aud consequently were unknown to the ancient
naturalists of Greece and Rome. The common naturalists of Greece and Rome. The common carp (or poud carp) in their general habits, ex
hibit so great a degree of cunning as sometimes hibit so great a degree of cunning as somctimes
to be called by the eountry people 'river foxes.' Wheu it is attempted to take them by a ne they will often
selves so deep to pass over without touching them. They are pawning time they are so intent on the bus ness of depositing their ova that they will suffer themselves to handled, by any one who at-
tennpts it. They breed three or four times in the year, but their first spawuing
inniug of Mlay. Carp, are found inners of Mlay. Carp, are found in the slow Persia, and here principally in deep holes under Ther banks, or great beds feet iu length and 20 pounds in weight, but Como it and others have been taken in the Dnesster fiv reet iu lengtl. From their quick growth and aable of all fish for the stocking of pouds, and he breeding and feeding nderstood and more practiod than they are very great. By being constantly fed they may he rendered so faniliar as always to come for "ept." Smith, speaking of the Prince of Conde's about it were the immense shoals of very large carp, silvercd over with age, like silver fish, aud perfectly tane, so that, when any passenheave each other ont of the such numbers as to bread, of which a quantity was always kept at ven allow themselves to be handled.
Carp are very long lived. The pond in the garden of Emaumel College, Cambridge, conmore thau 70 years; and Gcsner has mentioned are also extremely tenacious of life, and will the report of the Commissioner of Fish and Fisheries, he says: "Sufficient attention has not tion of the European carp as food fish, and yet it is quite safe to say that there is no other spe-
cies that promiscs so great a return in limited cies that promiscs so great a return in limited
waters. It has the pre-eminent advantage over su
ling, e
althoug
thrive
On this
ponds,
obtaine
the oth
accouut
centuri
flesh w
United
like.
tlaky,
In sl
Hesscl
region,
vated,
growth
sands
connec
estates,
This

Thates.
This the kind of earp that I have. I
might give more quotations, but I think this
enough to show that the earp is the fish above all others for stocking ponds and raising for mily use. I think they have a superior flavor in them save the back bone and ribs, and the form the cheapest meat that we can raise. I
do not think that any of our California streams get too warm for them, and I cannot see why well stocked before now. Sonoma county can
soon stock the continent, if no bad luck comes. soon stock the continent, if no bad luck comes. I now have some 20 ponds to fill
As to the construction of ponds I have spoken
several times in the Petaluma Argus, but I will now say that the great secret of success is to make good substantial dams that will not give a good place for them and carry your water to them in pipes. If you build on creeks, or want your outlets screened all the time so your fish can never get out. It makes no dif-
ference how much water you have if you can save your fish.
As to food I refer to the quotation I have made above; only I do not think they will
either eat fish or meat. I will also quote Mr. either eat fish or meat. I will also quote Mr.
Poppe on food. He says it may consist of wheat, barley, corn, pcas, bran, blood, sour
milk, or in fact almost anything. I also think their habits are somewhat different in this country, as my fish are hatching now. I will now
close, hoping some one that knows more about them will give us the benefit of their knowledge.

## The Wheat and Chess Question.

Edrtors Press:-On alate excursion into the favored land of Contra Costa, I had the pleas, ure of meeting, among other Grauger friends, the Worthy State Lecturer, Mr. Pilkington, who called my attention to the fact that the chess, comnouly so-caled by California
farmers, in this region at least, is not at all the
same plant understood by that name by the same plant understood by that name by the
rest of mankind, viz, not Bromus secalinus,
ret but a well-known old world weed-grass, which,
I find varies very greatly in different locations I find varies very greatly in different locations,
but is nevertheless nnquestionably the bearded or "poison" darnel, Lolium temulentum.
hereby make the correction, and, at the saine time, would like to call the attention of farner to the poiuts illustratcd thereby

1. The nnreliability of the "
of plants, carelessly and inaccurately as they are applicd by most persons, giving rise to to
numberless, and sometines extremely costly mistakes. Heuce the desirability of adopting whose uncaning there never cau be any mistake member or pronounce, in most cases, than any new name designating a new thing,
one objects to magnolia, petuuia, acacia, even eucalyptus, and numererous other botanical names which fortunately passed into common
use before any misnomers were applied to the corresponding plants by the public, or fly en terprising gardeners. Not that 1 propose to ng no passady well informed han can have have to be giveu, as is so commonly the case in plied until their use gives rise to mistakes and endless disputes about thiugs regarding which
therc can be no differcnce of opinion providc there can be no differcuce of opinion provide
the premises are mutually uuderstood; it then better to resort at once to the systemati
names which are immutable. But in doing so names whinch are immutable. But in doing so by proclaiming that we are making paper out of the trunks of the cactus when we are really using the yucca; nor astonish a Coloradian by "buffalo well-behaved buffalo grass was ever guilty o but which is very admissible on behalf of th are but a lew of the seores of similar that so ofteu give rise to bootlcss discussions
and contradictory statements in our agricultural and contradictory statements in our agricultural 2. The second point to which I wish to direct
attention is the bearing of the corfounding of chess and darnel, on the qucstion of the transformation of wheat into chess, which is stoutly
maintained by some farmers to be a stubboru fact, demonstrated by experiments instituted by agricultural socicties. The experiments were
nade, e. $y$., by sowing clean wheat in several boxes of earth judged to be free from chess
seed, on account of its having been taken in the prairie, several iniles away from any cultivate
land. It was found that the box, treated as in would be iu a good whcat season, 1 ruduced
elean wheat; while those subjected to excessive wet, or other ill treatment tending to stunt the
wheat, produced either wholly or partly chess judged to be complcte, it beiug supposed wan
possible that the groud could be stocked wit hess seed in an open, virgin prairic.
But a scientific experinent
mostrate so serious a fact as the traussormation of one species of plant in to a totally different

prepared, or every germ surely destroyed by
burning, or at least by long boiling with water, burning, or at least by long boiling with water question a serious one, because it involves in improvement by selection of seed but th utility of sowing any,definite kind of seed at all. If an unfavorable season can turn wheat into chess, then carrots may be turned into parsinip or poison hemlock; muskmelons may turn into plants, and figs will grow on thistles. This is o much the more probable, as according to the which in 1 llinois is turned into

The truth is that, so far from tbeir being an stubborn facts" on record, showing that wheat or any other plant is capable of being converted rom whes, arnel or anything ersucing sound wheat when sown-so far froin this, every ex
periment made with proper precuutions agains periment made with proper precautions against
mistakes arising from neglect of some controlling Heuce, it is accepted as a universal maxim acted upon ever since mankind began the prac within the limit of the variation of species Unfavorable circumstances may stunt or modify a given plant, but it will still be the same plant,
stunted or modified, and capable of resuming its ordinary appearance exactly upon the re
moval of the modifying conditions. The wild est Darwinian, fully convinced tbat his ances
tors were monkeys, is yet unable to show that tors were monkeys, is yet unable to show that
within the human record auy other changes than such as these have occurred, and he admit, the necessity of allowing millions of years for
the accomplishment of more radical ones, like that of wheat into chess.
And there is a serious practical point to be that an unfavorable season can turn wheat into chess or darnel, then the poor farmer is help fold lis hands in the presence of a Providentia dispensation. The man in the parable though therwise, for when his servants came to inforn he replied that he knew better, that the enemy had sown the tares. The farmer who refuse larnel, will lee likcly to do his best to get rid o the pest; and, if he perseveres, will, in tryin
seasons, larvest a moderate crop of clean wheat seasons, harvest a moderate crop of clean wheat,
while his credulous and fatalistic neighbor will have an equally clean and undefiled crop of
chess. Facts arc indeed stubborn things when freed curate observation, bias and illogical reason so often surround thell. The sum total of such
 which goveru them, constitute modern science nud no appearauces, experiences or experiments
not tested by its rigorous methods of investiga tiont, can fairly be cited as "stubborn facts," Facts evcn apparently contradictory of well are than "stubborn" illusions. W. Hilgard.
Uribbing Horses - Rat-Proof Granary
Edrtors Press:-In your issme of 27th you publish a recipe, evidently cut irom one of your
exchanges, under the captiou of "Rat-Proo Paint" as follows:
 the sharp ylass is still mone disagreeable."
The ahove may be the experience of some one but is more likely to have been their guess and
given to the world without a trial. The author evidently did not understand the nature of the sibstances he was proposing to combine. Pitch
is pine tar and resin melted together. Resin is the residuum left in the still after the distilla destructive distillation of coal in the manufac ture of gas and mixes with resin only mechanic ally. Coal tardistillates, however, are peculiarly and insects. The coal tar itself is not so offensive, while the smell of pine tar is agreeable $t$ most persons. It you impregnate or even coat
a piece of wood with the distillte of coal tar commercially known as "dead oil," neither horse, rodent or insect will touch it or come near it
I have curcd a contirmed case of a cribbing horse by the use of wood impregnated with dead oil, sinilar case by nailing laths impregnated with the same oil over all the wood within reach of
his mouth. There were no marks of the horse, teetl to show that he ever tried to bite the wood. His sense of smell evidently made him
Pine tar or coal tar used as a coating on woon dries in time with a smooth hard surface, and either of these tars used as a coating for wood would keep out the rats. If filled with glass that. I have repcatedly chewed both pine and
coal tar when they were in a semi-solid state, nit they have no offcusive taste. Dead oil, on the flestrary, which is greatly aggravated if taken int the mouth even in the most infinitessimal quinte like that of creosote

It is this peculiar property of "dead oil" being offensive to all vermin that is taken advantage of for the preservation of timber to be
used in the construction of marine works is the only known substance that will accom. plish the same result. Wood thoroughly inpregnated with "dead oil" has never been he Limnoria terebrans, the two enemies wood immerged in salt water, or by the Ter mites or white ant of India and Africa, the greatest enenny of wooden structures on the land.
Resin used in any mixture to protect a room Resin used in any mixture to protect a room
against rats would diminish the value of the rotection by exactly that much
I could reconmend for a rat-proof coating for a granary covering, the bottom, top and sides hich substances realily combines and time heath over the coating with three-quarter incb loor, where I would use inch boards. The door openings of a granary must also be pro
tected by light half-doors in addition to tbe main door or doors, say for threc feet from
he floor, so that the rats aud mice cannot run he larger opened
propose this fall to prepare a room for here given, knowing that it will be rat or mice ere given, knowing that it will be rat or mice
Mission San Jose, Cal

## Floriculture.

## Notes on Rose Culture.-No. 2

Editors Press:-In giving, as I proposed in y last, some further hints to the readers the Press upon the culture and treatment the rose, specially applicable in this State, upon the subject. Spring is the most favorable eason to studying the defects iu a garden while nost plants are in their first growth and bloom, though many of the most important operatious are not performed at this time. In my previous ion of sorts, coupled with the suggestion to iscerd all worthless varieties, and only grow the kinds which will reward the cultivator for
his care. The next point which should be considerel, where any number is to be planted, is ariety shall be displayed to best advantage, is so shocking to refined taste as to see a garden planted in incongiuous masses, without any commonly ignored that it is rare to see a garden
planted with taste. This neglect is specially conspicuous in plants as large as the rose. Many
ladies who would observe the greatest scruples in trimming a bonnet, by not placing rose color near light scarlet, etc., almost invariably neggardens. Tlic writer's attention and observa tion, among other points, has beeu specially di fnc specimens of this plant the operation above hanc others to be studied and applied, and the one most generally neglectel, even among many
who profess to be gardeners, is

This can be performed either in fall or early pring when the plaut is in a dormant condition, some prefer one time and some another, thongh
there is any choice it is in favor of spring bout a montl previous to starting so little consequence tbat any one will be en
tirely safe in pruning at any time when the tirely safe in pruning at any time when the
plant is not growing. It is somewhat difticult apply for all classes and ages, but sufficient dilittle care to be entirely successful. tart with the monthly $\qquad$
here is little dauger of pruning this class too After Areated one year's growth the pran away all suckers and sinall center, aud strag. gling side stems and branches, only leaving
from one to three main canes, according to rom one to three main canes, according
row th; aud cut from these canes all sinal hoots, leaving an occasional spur. Care should be observed to leave the straightest and strong est shoots, keeping in mind the symmetry o
the plant. The most favorite process is to
llow the main allow the main shoots to attain a hight of from
four to six feet aud prune so as to form a head, by cutting away all laterals which grow from he side of the main sloots, and keeping the when the plant is growing. As the plants attain an agc of from three to four years the same theral rule should be observed, pruning about
the same ratio. After some years' standing, and often younger if the plant becomes stuuted or does not make a free or strong annual growth the pruning should be modified accordingly, and
when tbe growth is rank the pruning shouli when tbe growth is rank the pruning shoon is
be heavy likewise. When too much wood is left, althongh the flowers may be more numerthe plant is laid subject to mildew, especially the exception of rank growing kinds), for any
variety to continue in a healthful state for
many years if the system of pruning is not nually applied. And again, when the roots have to support an exorbitant amount of top and decay away, thus enfeebling the plant and causing a sickly growth and puny flowers only process by which its streugth añd vitality can be renewed, is to cut away nearly all th top, relieving the pressure upon the roots; fol lowing this up a few seasons until the plant bas becoine entirely recuperated. Roses which scarcely ever make thrifty plants afterwards. Some rampant growing sorts seem to tbrive under very rough treatment, but the effect, in the delison to pruning, is poor, indeed, and When over five years of age and the shape of
Whe ate the bush formed, the pruniug should be gov
erned by the amount of annual growt made by the plant; and many will uuderstand me when I say prune something in the style of a young
orchard, cutting away all small and feeble side and center shoots, giving each portion of the
plaut an equal balance; and above all not allow plaut an equal balance; and above als not allow
too many shoots to grow jammed close together give them plenty of light, air and room. I lay special stress upon tbis point because it is the vineyardist who pursues an exact and careful system iu trimming his orehard or pruning his vineyard, will too often expect his rose garden to flourish, year after year, without any par The next class we will cousidcr is the hydrid perpetuals or remontants, which require hand-
ling differently, the growth being mostly long, few laterals or sid branches. In order to form a compact and
symmetrical bush, these shoots require to be symetreal and the top tied nequare the root, thus giving a curved or bow form to them,
causing eyes throughout almost the entir cansing eyes thevelop into branches, which would otherwise remain dormant. Pruning then should be confined to cutting off the whole shoot, when done at all, though many kinds
this class will require butt little for the first fe years, while others, such as La Reine, will need
considerable It is surprising to find how few did erable. It surprising to find how few reating this class in the et it the most satisfactory way it can be grown. As
the methods given for the two above classes can the methods given for the two above classes can
be applied to all the others, since the style of the growth of most of them resemble either the
one or the other, it will be unnecessary for me to speak further of pruuing, though a few reing rose. In training either of these classes take place every season and special pains ob-
served to keep the suckers off. The Noisette is of ten grown as a garden rose, and can be pruned
as the Monthly, for some strong growing sorts, howeve it is better to apply the system given for the perpetuals. In a climate like this, the
comnon Climbing rose is of little value, as the cominon Climbing rose is of little value, as the
Noistete can be used to better effect. Where a rank grow th is required, however, for covering
a wall or blauk surface, it is very valuable In order not to makee this article too leugthy, and irrigation in my next. $\quad$ Z. Eason.

## THE DAIRY

## Butter Making.

Edirors Press:-At our last Grange meet ing one of the brothers read a short article,
which the Grange wished forwarded to the Press for publication. Being a practical dairy man, his subject was, "How I Make Butter." To begin, I would have my cows in a good, Set the milk in
Set the milk in a temperature of from $60^{\circ}$ to
$63^{\circ}$, as near as can be oltained, and skim in 48 hours; or, if a warmer temperature, skim beforo the milk becomes thick. Churn every day. with cool water, and usually would work the butter in the worker with water, but not work the water out. Put in one ponnd of salt to
14 pounds of butter, and work till well mixed. Set away in a cool place. I nsually put the
butter in a small pan and turn a large pan over this, and set on the floor-this being the coolest ter, but in no case to work until the butter becones sticky, as this destroys its life and makes it more like grcase. I would then set this ber mold, taking care to work the butter as little as possible.
Mold neatly and cover with a cloth as usual, taking carc to cut (not tear) the cloth the proper ne-quarter or one-lhalf of inch. Makc th cloth smooth on the rolls including the ends, and lay on a table in a cool place until morning,
when the rolls will be firm and fit to pack for market.
I wou
I would say if not desiring to churn every
day, if the quantity of crcam is too small, put the crean in a can, and d cach skimming salt the warn, it it keep good for two or three days.

Galt, Sacramento Co., Cal.

## Paxtersy of Hospandry.

Address Before Danville Grange.
Tho following address was delivered some weeks ago by W. M. Charles Wood: assuming again, after an interim of two years, the functions of the honorable and important office of Master iu our organization, perhaps it
would be well to begin with a few thoughts and suggestions as to the true aims, purposes and interests of the Order, which it is apprehended, have been among many of its members, and by
the community at large, somewhat misunderstood and exaggerated. And it may be well also, to say sonething of its shortcomiugs, but
it must be understood, I speak not by authority, but rather what is conc
sentiment in the Grange The complaint of injustiee practiced toward
the farmers, as a elass, has not always been based upon facts, and has frequently been more
overdrawn and enlarged upon than they would warrant. To the power and greed of capital has been attributed most of the evils and depres-
sion under which we suffer, when possibly an sion under which we suffer, when phessils to be magnified and the eauses of depression to rest
elsewhere, sometimes even with ourselves. We misuse the terms capital and capitalists, or
mather misapty them, and use them in a narrower sense than we ought. It is forgotton that farmers are all capitalists, to the extent of their
investments in production, although combining investments in prodnction, al though combining on is grown is capital; the sect held over from the
previous year is capital; the animals and fecd bestowed in culture is capital; the machinery for harvesting and cost of running it are capital
and the labor of delirering it at the landings and depots is capital, and thus far the capital is in
the hands of the farner, though he may own buta moiety of it, and ought to receive fair the railroads, and the vessels used in its nex tal, and their claim for proper remuneration successive movement by land or sea until reaches the mouth of the consumer, eapital it nsed and those handling the wheat are entitled employed. Here then is the problem: Do farm ers receive the average eompensation for eapital,
time, labor and risk of loss thereof required in its production, that others do in its subsequen farmers eutitled, and proper efforts in obtaining it are legitim osoductions of the fariner, and it is one of the aims of the Order of "Patrons of Husbandry,"
and should be of every farmer: First, to tind nnd should be of every farmer: First, to find them, and second, to remedy the inequality such be found to exist. Our efforts may be only
approximate in their results, beeause the inexorable law of supply and demand must be recograised than is needed for consumption within reasonable period or before auother seasou
comes around, depreciation in priees is the in evitable consequence; if less, appreciation must ellsue. If we seek a world's market in the great
centers of population, the a avaiable production of the world competing in that market fis to be of the demand the depreeiation will fall mostly crop to go forward the greater the call for trans portation, for which owners ean exaet high rate of freight. But the endeavor should be made to get the world's market for our commodities, and if to this end farmers ship wheat to Liver
pool for their own aeeount rather than sell a any intermediate stage of transit, it is thei undeniable right to
complain. It is in furtherance of these com
mendable objeets of equalizing compensations terest on eapital and other burdens Grangers' Busiuess Assoiation, the (Grangers
Bank, the Farmers' Bank, the Farmers' Insurance Company, aud
other like business institutions throughout the tated have boen form; and we, as farmers and good Patrons \%of Huslandry, should patrouiz
and foster them as much as is in our power. Over-production in any of the industries times. Legislation may ameliorate or exaggeeen produetion and sumption must be kept up, and, to a eertain one of our aims to so diversity our products tha failure in one, or an exeess in another, may
not be disastrous. The interests of city, towu by fair exehange of its various peltians yair exehange of its various productions, the whole.
The "equitable asscssment and collection taxes is auother problem the farmer feels ealled
upon to assist in the solution of, and upon this
point it must be confessed that many of the
public utterances, by members of the Grange, are very far froin the faets in the premises. It
is assumed by not a few that the farmers pay three-fourths of the taxes of the State, and the Worthy Statc Lecturer of the Grange said in
December, in his official capacity, in a public lecture, that the farmers paid four-lifths of the taxes; , whereas, as appears by the State Con-
troller's rcport, San Francisco alone in 1876 troiler's report, San Francisco alone in 1576
paid over twoofifths, while Alameda, Santa
Clara, Sarento quin counties, containing cach hrge centers of population, , paid a another one-fifth, to osay noth-
ing of the tax lerived fron the mines and personal property in every towu in the State. Then he says our Supreme Court eosts $\$ 00,000$ per year aud the District Judges
Whereas the expense of the Supreme Court in 1576 , including salaries of the Julges, was but
899,600 , and of the year $\$ 114,000$ - sums District Juages for same large, requiring immediate reduction without large, rcquiring immediate reduction without
doubt. Thern again in a letter to the Patron in
November, this same official comparcd the cost November, this same official compared the cost
of the Government here with that of Minncsota, of the Government here with that of Minncsota,
and put down the Governor's zalary at $\$ 14$, , 000, and the salarics of subordinate sate
officers at just double what are paid. He says, officers at
total State salaries of Minnesota, 872,000, total he had divided the last sum by two, the amount would be correct. The (iovernor gets but
87,000 . The truth is bad enough without this exaggeration. And gagain, in a p public lecture in this county-if not misunderstood-he said it
cost $\$ 11,000,000$ to govern California and only 850,000 to govern Vermont. An exact state meut would be, perrapas, that the county and
city taxes for maintaining municipal govern ment, roads, schools, court-houses, jails, hos pitals, etc., were included in this is $54,000,000$ \$1,700,000 of that being for school purposes
 the tax for schools, as from a report of the Scretary of the ermont state Grange, it ap shool purposcs alone.
H1y prejudice against the Worthy to not from any prejudice against the Worthy Lecturer, for
whem we all have a high regard, but because he eorreetion should emanate inside the
Frange, and to cheek mistaken zeal, and to hint to our members to speak less at random, and more within the counpass of facts, which o
themselves make the showing odious enough All official salaries, National, State, eounty an municilal, require adjustment, and in many
cases reduetion, to the end that oftieers may bo paid what their services, with the responsibilit with the are worth aud for sill, as eompare various industries and oceupations of the state and in this conueetion it may be suggested the perquisites and fees require more careful revig-
on than the stated salaries. Extravaganee in expenditures, publie and private, is a prolifie
souree of corruption, fraud and embezzlement, aud it is the province of the Grange to assist in its discouragement. To return, however, to
he question of taxes, and here let me say, nuch more regard has been paid in Grang council, in legislation, aud by the public at
large, to the distribution of the revenue than iew, putting the "donkey behind the cart Now, what just cause of eomplaint have we in this regard?
18t. It may be said that the real and persona o eover up, is more generally reached by the Assessor than other classes of property. Not
that this is wroug, ouly so far as it makes him pay more than his proportion of taxes
ceording to what it will sell for in the upon it han upon other property except possibly eoin than upon other property, exeept possibly eoin;
and the assessment rolls invariably slow the country to be mizerably
3d. That land held in large tracts is assesse at less valuation per acre than that held by the ordinary farmer of the sane quality, exclusive
of improvements, which in all cases are listed of improve
4th. There being no eentral power to equal erking withous mat or more Assessor, ation between counties must necessarily vary and diseriminate against the lists of the more

5th. That although property and not the person uuder our systen is what is taxed, the
uule ought to be that the persons deriving th atual use or income from the property, though perhaps nominally not in the possession of it,
should bear their share in the burdens and cost of goverument, whieh alike proteets all iuterests
6th. T
ur own, is no elass of propcrty, not excepting plated by law in its rate of valuation. The is worth approximately in the ordinary relation f trade.
7 th. That the renters and holders of personal property, who have no real estate to secure the
taxes, are compelled by law unjustly to pay thein mouths before the same yearly taxes on real estate and taxes on personal property secured
by it are made due aud payable-a manifest in hy it are
equality.

Sth. That much property escapes taxation
altogether for the wat of a more rigorous searching out by the Assessors and a more strin gent enactunent forcing evcry person to make a
full, nuequivocal exhibit, without mental reservation, of what he is possessed of; and finally, in this conneetion, we eomplain that in a stat 000,000 acres of land, with rich dcveloped, as
well as undeveloped mints of coal, quicksilver, and the precious metals; with vast agricultural grazing and timber resources; with large cen
ters of population; with much foreign eapita seeking investment; with a growing commerce
both national and international; with large and various manufacturing industries already estab lished, and with the gold aud silver tide over our lap for investment-the Assessors thereo can only find the sum of $\$ 586,980,107$ worth o property at 1
tion requires.
Thy! the wealth, if correctly stated of the millionaires alone of San Francisco would make nearly one-half of that amount; the cash value
of the railroads now in operation in the state, and the corporate franehises and property o another half. We know from the assessment
and rolls that the small farmer does not pay taxes property, the large landholder on not over 15 to $20 \%$ the railroads on $15 \%$ to $20 \%$, the bank $40 \%$-see statement of amount in vaults of the banks and compare it with the coin found by the Assessors, espeeially in Alameda county-
and we do not belice, from the best sources of infornation, that maluation that citics, is reached. To sum up, we do believe
that assessed, there should be at least $\$ 2,000,000,000$ or $\$ 2,500,000,000$, and that 50 eents on the of State aud county taxation. Nor is the farmcr alone in these conplaints; they are shared
in by every eonscicntious and honest property in by every eonscicntious and honest property
holder in the commonwealth, and all should unite in sceking the remedy, which is to be
found in a simple amendment to the Constitution of the state, and a highcr standard of business integrity iu giving in property, and making ness integrity ju giving in property, and mat
assessmeuts at full value by the Assessors.

## Worthy Lecturer's Visits.

Edirors Press:-On Monday, the 17 th inst., in company with the State Master, Bro. Stcele, and Bro. Garduer, the Viee-President of the Califoruia Fire Insurance Co., we left San Fraueisco by the $8: 30$ A. . . . train for Santa Clara, our next place of appoiutinent. On arrival at Santa Clara, we were met by the Wor thy Master of Santa Clara Grangc, Bro. Keith, and taken to the Cameron house, and treated as his guests. Here instead of a separate meeting with the Santa Clara Grange, with closed doors, an arrangement had been made betweeu Santa Clara and San Jose Granges to hold a closed meeting on that day for both Granges, and a public meeting and picnic at Cook's grove on the following day for the joint benefit of the same, thus giving the whole of Monday to a closed meeting for the good of the day for both Grauges, and the whole or Tuessame. Tho public meeting and picnic for the success, thus giving ample time for all the Grange work necessary to be doue both at the closed and public meeting. Ne would say that
from such meetings all join in the conclusion fom such meetings all join ish he conclusion,
that great good is accomplished to the Order, as all questions relative to the Grange and its purposes can be freely diseussed and settled, as connected not ouly with the Grange movement but a practieal point of the Grange work, viz:
The (irangers'
Bauk, the Grangers' Business Association and the Grangers' Mutual Fire In. suranee Co. With these institutions it is not
only a benefit to every Grauger to become intimately aequainted, but there is a retroaetive good; first, in helping to build up and keep
alive their most desiralle Grange work, and secondly in becoming partakers in the great of conferring. The quainted with then, the more thoroughly will they deen them a necessity
especially a positive helper
The whole afternoou of Monday was spent at anta Clara Grange, discussing and settling
questions of practical interest to the Order and the whole of Tuesday fron 10 A . M. to 6 F . M was speut on the picnie grouuds in that nost
admirably suitable grove, in first listening to most able a
Iaster, Hon. I. C. Stecle, on Grange history
both National and State, Grange purposes and accomplishments, and the Grangers future obwell - whieh, by the frequent laudations, was
weeeived by some 1,500 persons within the hearing of his voice. The second exercisc Was our ow
Constitution
detailed statement from, and third was coudition and standing of tho Grangers' Bank,
the Grangers Business Association and the

Farmers' Mutual Insurance Company, of which addresses, everybody present was invited torent partake of the Grangers' picnic spread out on a
rcgular camp ground of tables, in abundance ulticient to fecd all
Ilow true it is that a Grange picnie is always a success; abundant is ever the supply of every ics-as well as in the good cheer. The social dance and the opportunity for everybody to see and talk with their neiglibors for miles around eeeived us at Santa Clara and San Jose, presided over in the first place by Bro. Keith, Master of Santa Clara Grange, and in the sec-
ond place by Bro. Settle, Worthy Master of San nd place by Bro. Settle, W orthy Master of Sa respective Granges are fully alive to onr nobl and glorions cause, and that in their hands it ill ever be successful
While in San Jose we made a visit to the new tore built by the Farmers' Union, at an ex This building would grace of abont $\$ 80,000$ Union, and for convenient arrangement and geueral facility for doing business has no supe ior anywhere. This institution is of grea nd as a teacher of the Gringe principle to and as a teacher of the Grange principle to 0 the Cirange movement.

## Hollister

From San Jose we next put in our appear-
 met by Bros. Oliver and Stockton, ready to . Here we were met in closed meeting b Hollister Grange to hear from the Worth tate Master of the good things he had in stor or them, and after a very friendly discussio lunch to the better fitting one and all for the duties of the public meeting in the afternoon not ouly ( he usua objects of the Grange by the State Mlaster Bro tate, the Constitutional Convention by the Bro. Gardner, to all of which there was a most satisfactory response by the meeting. Afte by Dr. Flint to the McMahon house and most comfortably provided for till our early morning Walnut Creek.
On Friday, the 17 th inst., we found Walnut Creek Grange in readiness to receive us, bu
only in closed meeting, as here thcy felt it greater necessity to enjoy such a meeting fo private discussion than to divide the time between a private and public meeting; and trul the time was held to be a profitable one, for only by such meetings can the subordinate Grang and the State Grange, through its represent atives, become fully acquainted and as fully
posted in the genuine interests of the Order. Here was time aud opportunity to ask all questo privately disells and settle them, atoo to become personally acquainted with their Stato Head of the Order, and to hear from his lips dom and truth, regulat cheering Separating for the day, each of us was mos comfortably taken eare of, and landed at Dan day, the 1 Sth inst., which will be deseribed in
B. Pilkington,

[^27]
## Agricultural Notes.

## butte. California.

A Mammoth Ega.-Mr. Sam Plymire, of Gria ley, called at the Register office last Saturday
and left an egg which was laid by a Canary
hind of the Brah bird of the Brahma species, owned by him. It
is an ovarian monstrosity, measuring nine inches in circumference from end to end, seven
and a half inches round the center, and weighs and a half inches round the
four ounces. The bird died.
COLUSA.
The Rain.-Sun, May 25: We have had this week seventy one-hundredths of rainfall,
giving in all just 33 inches for the season. The rain has dand deal of it down, but it has helped up somewhat the late sown grain, and has put a great deal of land in good no wind with it, it did not knock the whea down a great deal. This is generally the
trouble with spring rains. The least wind, When grain is wet, knocks down the heaviest of it. Taken all together, it it quite likely tha
the rain has done as much good as harm. Any rains in the fut.
lutely harmful.
LOS ANGELES.
The Bees.-Outlook, May 22: The bees have commenced making fine white honey from Angeles from the ranch of Butler \& Co., in Ver-
dugo canyon the other day.
living in the mountains southeast of Pune forms us that one day last week he extracted 120 pounds of honey from three stands of bees. making honey at a lively rate.
QUality of Hover.-EXxpress, May 25: We shas Angeles county this year, and we want the dealers of Sau Francisco to note this fact.
Whear.-Anaheim Gazette, May 25: The past few days of sunshine has brightened the
hopes and crops of the farmers wonderfully. The prospect a week ago for the wheat crop was very gloomy, but it is now certain that at least
half a crop will be harvcsted. The late sown wheat is untouched by rust. The late rains, hass, and humidity of the atmosphere gencrally crop. We are told that rust has appeared on
all the early sown wheat in this section, and that the most of it will be a failure. One exception, however,
sown by the Miles Bros. and by Mr. Gwin shows no signs of rust, and there is every indi-
cation that it will matnre in a cation that it will mathre in a perfect condition. The kind sown by them is the "Odessa
wheat," and its superiority over the "Sonora wheat," and its superiority over the "Sonora
wheat" will probably be fully established this year.
Crops.-Argus, May 25: We rode through the immense grain fields of Mr. Henry Huiff-
man last week, and we have never before seen the grain look so full of promise. We believe that some three years ago, the grain on this
farm looked a little more thrifty to the casual observer, but upon close inspection the straw grew more rank and bushy, but this year the beauts the stalks are slender, while the head is full and round, giving signs of a glorious crop. "he rccent cloudy weather has been
most favorable to grain-growing, and the farmers have high hopes.
SAN DIEGO.
Dates.-News, May 23: Letter from W. G. N. Hitchoock, Secretary San Diego Lyceum "I have just received from Egypt fou: small bags of date seed of a variety called 'sewah,
from the oasis of Sewall and Seltaine. I have sent you one of these bags for your use; plant
these with the groove down. I am advised by my correspondent in Egypt, General Stone,
that the date palm will not bear fruit unless it is noved from the location in which it started to grow, that it is alsolutely necessary to trans-
plant the tree to be successful in raising fruit piant the tree to be successul in raising iruit also informed that in Egypt the blossoms of the
female trees are fertilized by hand. In what female trees are fertilized by hand. In what be Gen. Stone and make the inquiry. It may never borne perfect fruit, are all of one sex, or
it is possible that the condition which he de scribes as necessary, to wit: transplanting, has
not been complied with. As to the curing dates and all that pertains to its profita
the agricnltural re
SAN JOAQUIN.
The Cror Prospect.-Independent, May 24 Favorable reports continue to be received from
all portions of the valley concerning the proshowever, informed that rust has appeared in
some localities, but it is not expected that any serious damage will result from that cause he late rains have also caused the heavy grain

growth of the grain and the quality of the be
ought to be better than in arerage seasons.

## SANTA BARBARA.

Presta Maria allex.-Cor. Santa Barbara ley, to ride through from Guadalupe to Frealer's, at the head of the Santa Maria valley, and see ing to "foot" and some about ready to harvest. It would be utterly impossible for a stranger to
see Santa Maria valley now, and believe the see sant could hava such an effect upon the
drouth could gencral appearance of the country as it did las does not. Near Guadalupe I saw some grain which looked extra well, and upon interrogathe cause, was told that the land had been plowed early last winter and then in February the grain was sown upon the laud and plowed ale or other foul growths. It would be well for farmers whose land is infested with foul grow ths to take a hint from this; as in many crop, where once plowing may allow fou arouth may cause it to blast. Los Alamos ha
about 3 ,000 acres of grain, mostly wheat, which bid fair for an extra large yield. Lom poc people are doing a driving business in the
way of threshing machines. Messrs. Angeline Reed and Streeter ordered a steam threshe and Mr. McDaniel has ordered an engine to be used with Mr. Preston Hodge's separato
Messrs. Summers \& Fabing and Mr. Huyc have ordered two horsc-power machines, and
it will take all the machines some time to clean out all the grain in Lompoc and vicinity SHASTA.
Tall Rye.-Record, May 25: Willard C.
Welch brought two stalks of rye to this offic the other day, one measured full, and the othe a little short, of eight feet.
SISKIYOU
SISKIYOU.
Edriors Presss:-It has been sprinkiing Some of our grain is just coming up out of the ground. It looks late to the writer. Heavy
loads of grain are daily arriving in town.--1.
D STANISLAUS.
Fine Samples of Grans.-News, May 23:
Mr. Henry Miller brought to our office some of Mr. Henry Miller brought to our oftice some of
the finest samplcs of wheat we have yet seen It was grown on his farm near salida, in this county. Many of the heads were eight and
nine inches in length, whilst one measured over eleven inches. True the grain when pulled
was only in bloom, still the meshes were well formed, showing there would have beent five and six kernels to the mesh. The stalks, reason why the yield should not have been imwere of the Nonpariel variety. There were also on some of the stalks shoots two feet from
the root, springing from a joint, with heads of grain maturing. There were other stalks wher nature apparently not satisfied with her lavish
work, after completing the growth of one vig. orous head of grain, had started a second. Nature appeared in several instances, from the
samples shown, to be attempting to surpass her nerfect laws of production.

## SUTTER.

The Crops.-Banner, May 25: From the best information we cau get fron various por-
tions of our county, we conclude that the wheat crop of Sutter county will fall short of last year both in quantey and quality. There is, how. ately west of Feather river and extending nearly the entire length of the county, where crops of is troubled with but little cheat or oats. The barley is now fast ripening and the wheat The low lands, as we hear much complaint from cheat and of
grain drowned out during the flood of last winter. The hay crop is very large and conse quently low in price, and is being secured in good condition. The editor of the Colusa Sun
is incorrect in his article on the state of the is incorrect in his article on the state of the lying contiguous to the Colusa road is the best rain-producing portion of the county, there as good grain land, and the strip already spoken of being superior
TULARE.
Farm Hands.-Delta, May 24: The debe great in a few days, and continue during the harvest season, at good wages. This county offers greater inducements for first-class farm hands than any other in the State, as many of them, if they desire to do so, can locate Gorernment lands and find employment at teaming or other work till they can pay them out, or can homestead and put their money into improvements. Improved land is cheaper and of better quality than in any other county, and
ever increasing. The Settlers' Warning.-The following is the warning of the settlers of Hanford, of which Oention was made last week: "Whereas, On S. P. R. R. Co., of California, 230,500 acres of lands, between Goshen, in Tulare county, and for the past several years have been occupied by
actual settlers, who, by their united efforts, in constructing irrigating ditches, have given these
lands their present value; and whereas, we
verily believe that these lands were neve granted to the S. P. R. R. Co., and that they are neither in law nor equity entitled to them, and that they now openly refuse to comply with, the contract with the Government, and complete the road, as required by the Act of July 27th,
1866 , but yet hold these lauds and our improvments; and whereas, they are now grading these lands from $\$ 10$ to $\$ 45$ per acre, which is at east 50 over and above her tur value (either roin an incompetency of their grader, or, to whereas, we verily believe that this high price is for the purpose of compelling settlers present crops-their all-to this corporation, or its "dummies," who will nake a fictitious purchase of said company and then ask the protec-
tion of the law as innocent purchasers; therefore resolved, first, that all men are hereby warne gainst purchasing any of these lands that are occupied by actuals. by the U. S. Supreme Court. By order of the

## Arizona.

A Yuma Apiary.-Sentinel: A couple of
months ago a Mr. Randolph, of San Diego months ago a Mr. Randolph, of San Diego
county, brought a wagonload of bees out here, in search of bee-range. He found it all along
he Gila. Peck, of Mohawk, who is alway trying some thing new, induced Randolph to stop there and go into the bee business with
him. The bees did so well that Randolph brought out another load, making 40 stands, and has now gone for still, more. The gums at
Mohawk are now full to overtlowing, besides what has been shipped farther into the interior,
and what has been sold to teamsters and trav and what has been sold to teamsters and trav
elers. They have now ovcr a ton of honey at elers. They have now ovcr a ton of honey at
Mohawk, and Peck has just taken out 60 empty five-gallon coal-oil cans, to put it in. He also
took out a are lo tof lumber for new hives, as the bees will be swarming vigorously nex
month and in June. There will be bees to sell Randolphfisan old bee-man, haviug becn 10 years new range. Wind flowers pleased with hi abundant here than most people seem willing to humming-birds discovered long ago. A whit sage is also very abundant,?resembling that of
San Diego, and from which the bees mak comb and honey rivaling, in whiteness and
flavor, the choicest frames of southern California. They have made much honey fron
willow and mezquite blossoms abounding alon the Gila, and, strange to say, secm very fond o gustamote that grows so freely along the river
The brilliant blossoms of the whipstock cactu have furnished a delicious honey. For this,
and for blossoms of iron-wood and palo-verde the bees fly far from the river. From the
ubiquitous hediondilla, or creosotemake no honey, but get quantities of bee-bread Peck guarantees that honey of the Gila valle
will soon drive the California article out Arizona markets. This is the kind of enter prise that builds up a new country, and w
wish it unbounded success.

## News in Brief.

New York brewers are sending beer to Ger
Or the 2,500 doctors in Philadelphia, 500 ar omœopathists.
The cars are again running between Vallejo Lasr month $\$ 2,470,000$ of the new silver dol ars were coined.
Prof. MARTIN made another successful balloon ascension on Sunday last.
THE Chinese butchers in this city are being arrested for keeping their shops open on Sunday The improvement in the iron trade is though denote an amendment in business generaly
According to the Yuma Sentinel, the condition of Indians on the Colorado reservation is truly deplorable.
panies of cavalry will leave Fort Russell shortly for the Big Horı country.
OAKES AMES was supposed to be worth $\$ 15$ 000,000 when he died, but the estate will no pan out over $\$ 25,00$
George Fozard and Edward Drunmond were drowned on Sunday last by the upsetting a bor rect
heaviest of the scason, one and three-eighths in ches having fallen.
Tre citizens of Chicago are arming against appre
Ture Russian government is negotiating with the Boston Iron Company for the manufacture
heavy ordance.
PERALTA accomplished his feat of riding 305 Park, New York, iu 14 hours and 31 Fleetwoo having 29 minutes to spare.
A terrific rain-storm and flood occurred in Colorado lately, doing great damage in Denver, aud on the
were lost.
vere lost.
Four camels, three young and one old, have
been runuing at large near Mineral Park, Arizona. The old one is surposed to have been
or.e of the 30 brought over in 1855 at the ex-
pense of the government. They live on cactus
and sage brush.

There were 82 deaths in this city last week. Moritz Marks was drowned hile bathing at North Beach.
A thousand Chinese fishermen
Halr a million orange trees are growing at A car-Load of eggs from the East has arrived Mou rancisco.
Moharr in considerable quantity is being Aipped from southern Oregon to this city. Water-spour burst at Barrington, a suburb Chicago, killing three persons.
UTAH potatoes are selling in ve cents a pound
The price of both covernment ond Arities have improved lately in the East. arysville, nine years old and 1 The trouble amon the settlers in Tular ounty in regard to railroad lands continues.
A ron of honey was received at Los Angeles,
st week, from the bee ranch of Butler \& Co. ast week, from the bee ranch of Butler \& Co.
JAMES Gordon Bennett won $\$ 60,000$ betting O'Leary's winning the great walking match On Oham By the jumping from the track of a train at Dutch Flat last week, six cars were wrecked and Charles Cassidy, a brakeman, killed.
pointed delegates to the International Prison Commission at Stockholm. Tood in the Black Hills, also at Denver, Col wood
orado.
Thu
Thurlow Weed pronounces Moody the
reatest preacher that has appeared since Paul's
The famine iu China is pressing upon 15,000 00 of people, while $60,000,000$ are suffering Narctsie a
Pleasanton in the mouthman, shot himself at Tans unknown. He leaves a wife in Paris. t San Rafael, committed suicide by shooting himself one day last week
Henry Roberts (colored) was hanged at
helby, N. C., last week, for murder. He died protesting his innocence.
Alexander H. Stephens announces himself a candidate for re-election from the Augusta Ta.) District.
The total receipts of the Cincinnati musical estival amounted to $\$ 67,500$; the expenses, SEVE
large mills at Fall River have stopped probably run only half time.
Is 1850, the length of the railway lines all over the earth was only 19,000 miles; in 1875, A lafge mass meeting of the Socialistic
Labor Party was held in New York, May 25 th. Addresses were made in English and German. The Free Labor Exchange last week found nen, and 87 of them were sent into the country. The Maxwell land grant in 1 the average thickness of the coal bed is six feet. CAPT. J. B. Moore, formerly of this city, candidate for Lieutenant-Governor in that

John Bright said in a recent speech at Rochdale that one-third of the whole land of the
United Kingdom being no less than $23,000,000$ United Kingdom, being no less than $23,000,000$
acres, belongs 935 men. Moses, chief of the Northern Indians, says he
esires peace with the whites. The people of desires peace with the whites. The people of
southern IIaho are fearful of trouble with the Bannock Indians.
JUDGE Hoffman has decided that the $\$ 19$, 11.55, recovered from the wreck of the steam ship san Francisco, belongs to the party of THE Pennsylvania State militia is rapidy be ng placed on a war footing in anticipation of
labor troubles at Pittsburg and in the coal
egions.
Frank
Daly fell off a freight train near the American river railroad bridge on the evening
of the 22 d ult., and 20 cars passed over him. He died in a few hours.
On the 11th of April a toruado swept over a portion of the city of Canton, China, destroying
9,000 houses and causing the death of about 9,000 houses a
10,000 persons.
There is on exhibition at the Paris exposiion a silver set manufactured by Tiffany \& Co. of New Y.
$\$ 200,000$.
OpIUN smoking is rapidy increasing among the white men and women of Vrgmia City, ndulge in this disgusting and hurtful practice The late toruado in Wiscousin turns out to ee more destructive than was at first supposed Thirty lives were lost and nearly 100 people iu jured in a single couuty, besides a vast amouut of property destroyed. The track of the storm
was from a quarter to half a mile in width and extended over several countics.

Stewart's hotel for women, which was opened not long since in New york, is said to have proved so much a failure that it is to be of boarders having dwindled down from 60 to Over 500 Chinamen arrived lately at Port land, Oregon, dircet from China. Great num Oregon, Idaho and Montana, by way of the


A Mother's Joy.
(Written for Rcral Presa by
 0 hissful thuyght, 0 wonderout In one sweet rapture of deligitht,
A human fornin eomplete!
 So in our home, with fostering care



Till son 1 haard two litle word

 Morher little sparklet
Fromm out the the heavanly Hame


## 

The Dickens Party.
The usual weekly rehearsal was over, but Mrs. Grey and John Blake were trying a new ing their conversational powers. Miss Norton drew limua Blake apart from the othcrs, say ing, "Come here, I want to tell you something

## Well, what is it ?"

Kou know Niss Harwood is going back to uba City in a conple of weeks." Emina
nodded assent. "We want to have some folks over at the house before she leaves, and thought it would be pleasant to get up a Diek-
ens party, which need not be an elaborate, ens party, which need not be an elaborate,
formata aftair, but would make plenty of fun.
What What to yon thiuk of the idea?". I shall be
"I think it would te de delightful. sure to go-that is, if I have an invitation"-
and Emina haughed roguisllyy.
"y "You little goose," said Miss Norton, giving
her a sly plincl, "of course you wontt get one,
so you"ll have to stay at hoone and imagine so you'hl have to stay at hoine and imagine
what a pleasant time the rest of us are having. But do you own 'Dombey and Son' or the 'liek.
wiek Papers?' I thought it would be Wiek Papers?' It thought it would be nicer to
have the elaracters from two or three looks, and then they eould aet their parts better tlan and then they eould aet their parts better than Emma went to the book-ease and took down LDombey and son" from its place hetween "A cles," aul the two turned its pages eagerly.
"You must be 1 liss Tox, Einma. I think you would make sueh a nice olld maid, only you
don't look faled enough"-aud Miss Norton surveved her friend's blooming counteuance critieally ved her yretend that Mliss Tox had renewed her youth. I think I shoukt like that
part, for theu I could sit in a eorner aud wor-
ship Mr. Dombey afar off. By the way, who is ship, Mr. Dombey afar off. By the way, who is
to De Mr. Dountecy?" to "Haren't decided. part do you think?" And then followerl so many sugyestions and objectious and hints much laughter that the duet was postponed and all erowded around to learn the cause of the uproar. They diseussed and discarled plan after
plan, until the eloek struek eleven plan, until the eloek struek eleven. "You don't know auy more after all this chin musie than wheu you counneneed."
But Emma Blake thought But Emma Blake thought differently. Coun-
try life is apt to be a little dull for young try life is apt to be a little dull for young
people, and especeially mouotouous to those who people, and especially mouotouous to those who a large eity offers. So she was welt pleased
with the idea whieh promised so much amusement, and went to bed wondering what ancient garments she could find for the arraying of poor
Niss Tox.

The eventful day arrived. The whole family were going, as Miss Mortou would not hear t Mr. and Mrs. Blake remainiug at home, but
prcssed them into service as Tony Weller and

MIrs. Blake was transformed into a uice old
 pron with strings, an old-fashioned silk hand kerchief with a gorgecus border of roses, and
cap made from a heavily cmbroidcred black calp made
laee veil.
Mr. Blikke was a thin man, but was paldei to such a degree
of the Wellers.
Ef The Mellers.
Emanted John to be Mr. Tuots, but he said he slould go as the Boots at the Holly said he shoulk ga as the Boots at the Holly Tarry Walmers, Jr., were among the invited guests, she yielded the point and thought it Kate was 'Melia, little Paul's friend at school and wore a long, black dress of Emma's,
white bib apron, and her thick brown hai oiled on the top of her head.
Miss Tox was arrayed in old-fashioned black silk of her mother's-perfcctly plain except
somnc lace on the corsage and slceves. Her broad lace collar was fastened by an ancient
cameo, and her lilac and white belt which hung cameo, and her rac and ward at one side, had been worn by her grandmother 40 vears before Her hair was combled low over her ears and
fasteued at the back with a ligh tortoise-shell comb-also her ,"grandmother's. "I know it will eome down"," said EnMma, as she put in the
last hairpin, "it fecls so loose; but there's one comtort, if it dobs, it can't come off." She ha
some troulle about the locket Niss Tox wa supposed to wear when in full dresss s she ha one, but it was hardly large enough, fiually her mother solved the dithiculty by hurting up a
old locket, fully tliree inches aeross, contaiuin a portrait of her great-grandfather; this, and huge fan of turkey s feathers 50 years old, eompleter "Wiss $t$ s
know the house has no hall, and who wauts to go through the room with everyone staring a They were early, the first comers, in fact, His jacket and pantaloons were trimmed with broad stripe of orange; his top boots were dec
orated in a similar manner, and he worc a daslı ing red cambric necktic. "Nary, my dear," sail this gorgeous iudivid-
ual to Niss Norton, "show the ladies to thcir room."
I wi
1 wish you could have seen how gay and
oretyy she was in the earacity of Nary, the
ousenniil "Yout never louked your life," said Mliss Tox, glancing admiriugly from the short gray dress to the quillei borler of the eoquettish little cap.
"Do you really think so? You
"Do you really think so? You see that dress I expected to have sent from home did not
come, so 1 had to rig up these things this after noou. Wait a minute; I've got some pampas
grass for you. Don't you know that Diekeus says that strannce grasses were sometimes per
ceived iu Niss $\begin{aligned} & \text { oxx's hair? And he ouglit to }\end{aligned}$ bc good authority." So the grass waved around
Miss Tox's high comb. As they entercd the back parlor in came Miss
Torton's friend, Mliss Harwool, dressed as Grarton's friend, Miss Harwood, dressed as
Crandma Wardle.
(irandma Wardle this is my friend, Niiss
(irandma Wardle this is my friend, Niss "Hey?" eried (irandma, with a peeulia
ing inflection. "Miss Tox
"Niss Tox, Cirandma," repeated the pretty
housemaid, with leeided emphasis on the surname of the maiden lady.
I can't hear; but it don't shacking her head, sam Weller, however, could make the old laly hear. "Mr. Pickwick, (irandma," cried
he, bringing forward that illustrious gentleman brave in his party dress.
"Al," said she "I can
say he don't eare for an old voman like me.". "Mr. Plick wick," he shoutcd, putting his "Outh elose to har ear.
"Oly yes, I hear. I am pleased to see you,
Mr. गiekwiek." Mr. Iiekwick.
Llake "Whe evening she said asile to Emma trumpet, but it is a merywh that we failed, for Diek roars at me so that my head is almost split, and the trumpet wonld have made nat
ters worse,"
The poetic Snodgrass and susecptible Tup. man did not appear during the evennng; busi without his A1abella, however. "You can
inake love to the Misses Wardle in the absence of your friends," suggested Miss Tox, but he aevoted himself to thre ladies indiseriminately.
Mr. Girey and his wife personated Mr. and Mr. Girey and his wife personated Mr. and
Mrs. Wombey, and wcre as stately as could be desired. Mrs. Dombey wore her weldiug dress
of corded silk, with white plunes in her dark Miair. Tor wanted to ask Mr Dombey what hadi letained her beloved friend, Mrs. Chick, but he was so cold and formal that she darcil
not, and wondered if he were the jolly neigh. bor who lived across the street and came after
milk each morning. The two little ones were mik each morning. The two little ones were
Mr. and Mrs. 1harry Walmers, Jr., and sat on Mr. and Mrs. Harry Walmers, Jr., and sat on
Colh's kuee while he told the story of their the fat boy had not bee
minutes before Sam Weller called out, "Mary,
my dear, bring Joe something my dear, bring Joe something to eat! "', So he
was provided with a huge slice of bread, which
he proceeded to munch with great satisfaction,
indulgiug in frequent naps by indulgiug in frequent naps by way of variety. periods of somnolence lyy inserting his hook (which the blacksinith hail made that afternoon nis eoat collar, and giving hinm a hearty shal)
ing. At auother time, Miss Rachael Wardle said to Mr. Dombey, who was walking past with dignity for compauy, "Oh! Mr. Wombery
will you please wake up Joe? He's fallen
whleep again!" But Mr. Dombey only turner asleep again!
with a look with a l look that nearly annililalated the poor
spinster, and muttered, "lietter left hiim at home
The
The Skewton party-Mrs. Skewton, Majo Bagstock, Florence and Sinsan Nippor-did not her favoritc rosecolor, Florence in a simple muslin and Hiss Nipper's glory was a ridicu
lous hat whicl she said Miss Floy had orderei

Soon after Susan had ensconced hersclf in
luxurious arm-chair Mlrs. Dombey, slowly saun
tering past, caught sight of her, aud tossing her tering past, caught sight of lier, aud tossing her
ostrieh featlicrs with scorn, drew aside her Iress lest its sweening follds should touch the lack -eyed.
This did not cscape Miss Nipper's notice and nruly member unloosed accordingly, and that of the evcuing. Nany a titl had she at Sam
Weller. "There's Sanuel now. Just hear hin saing vell and ry and veas. I may not be a pea If I don't I'll stay at home."

## Sam, however was <br> Sam, however, was not to be out-talked by

 the Copptain Cuttle waved his hook in delinh and hoarsely whispereel to Mrs. Bardell, "that the young woman had found her mateh, sure"I's hungry, $I$ is," said the fat loy for the
ortieth time, his portion of the staff of lifc fortieth time, his portion of
having long since disappeared
susan Nipper took him under her immediat patronage. "Iou poor creature," she cried,
" $y$ ourre actually getting, thin! Yon want some reall and lasses, don't yon? My name's sct some.
so she opened the dining-room door, but hai hardy put har liead insile wheu the pretty
housemaid eried, "Ciet out of here, Susan Nip cr! Don't be poking around where you're not "Oh,
"Oh, that Mary!" exclaimed Miss Nipper, langing the door, "There's no doing anything
witly her, uow that Samuel is here. I fcel it an with her, uow tha samuel
lronor to receive her eommands, being a black Meanuwhile
Meanwhile, Nary, the housemand, was labor when rekindlcd, needed much coaxing. She went to the china closet for more spoons, and,
in the dark, let a dozen fall on the floor, thereh, naking the people laugh und say that the fat boy had tumbled off his chair. At Mrs. Wel ler's suggestion, she poured part of the coffee
into a pitcher, which, unluckily, was cracked, and the brown lignid spurted over her dainty apron. But finally all was realy, and Mrs
Wicller asked her beloved son ind law to invite the company out to supper.
"Ladice and gentlemen,
Laklk and gentlemen," crice sam, "will lease."
Aud how the couplcs did get mixed up. Mr.
Dombey had Mrs. Bardell on lis arm, followed y Tony Weller and Mrs, Domhey, Mr. Pick. ick and Florcnee, Cobhs and Mrs. Skewton, clarming incongruity. A!ter supper, part of the asscmbly indulge he enjoyed watching the others, especially Mr. Dombey, whose dignity was overpowering, and
Susan Nipper, who skippel about like a frisky susan Nipper,
But the pleasant evening drew near a close as filled with into the dressing-room, whieh After fishing ulp her saeque from under a pile of Aherls and tieing on lier rigolette, she made of her gue
"Good night, my dear," said Emma, giving
her both liands, "I think you may consider the jiekeus party a grand suceess!

Someming to Ring Bells For.-The Rev
Dr. Day, in a recent sermon at Plainfield, New
ersey, told this simple story: In a town not
far distant, a few years sinee, two ehristian
young men, brothers, were doing a prosperours bnsiness, assisting many noble euterprises, and cach living in a leantiful home. A combina tion of disasters suddenly reudered them insol
vent. What did they do? They did not consult the law to see liow much of their property might be kept from their ereditors, hat at one surrendered
sets, all; and promised, if possible, the loalance should yet be paid to eaeh ereditor in fult liesuming business, poor in means but strong omy and industry, the last dollar of the old indebtedness was paid, with intercst. The day
on which this was completed the bells of the on which this was completed the bells of the
elhurehes were ruug in honor, and the whote a triumph of eharaeter such as the bells of any nity delight to honor.

## Spinsterial Spice.

It will not do to make salad with sugar alone A little vinegar is neecssary. We have made our selcctious on the subject of marriage so
swect that a little of the other thing may a relish. Here we have it then sharp may give from a writer in Lippincoll's Magazine
Legions of women with capaeities for making
ortunes speud their whole lives in darning carpets, dyeing old rags, gluing old clrairs, cementing
grease-spot
narries. In fact, three-fourths of the married women are doing it, being married to his thge majority of poor men; and very misera is married to a drunkard. Look at that! 'There endure while waiting for olious tunate, poor men to provide for them. Poor on cheeks uutil too old to do anything but sit with their toes in the ashes of the pinched chimney. corner. Girls are not tanght technical pursuits most of thein marry men of the sort who have
when nothing but their heart and lute to offer, both tainly do well to learn trades and arts.
The married folks are always talking about hing that if it might be hacken ond elapped on again and worn bent, lis bed b bonnet. It is a fashion with the married folks to say that when wast stay at home ininding the mother-robins sit on the nest while fathermotins auy comparison between sober, industrious vigorous robins and listless, debauched men! not play the rolin role to an at all satisfactory. legrec, most of them being oecupied in providing thenselves with drink and smokes. Now ven he gives his wife what she wants so grudgingly it is not worthl laving.
Horace Greeley once wr.
Iorace Greeley once wrote a regular married
 that women oulght to be contented, forgettiug the merc fact of her 'iscontcint proves forned great tasks with vast delighlt and in the nost scieutific manner. His ideal woman paintell pictures, practiced music and did house-
work, and was not in the least interested in the politics of the present nor of the mighty past, or in public
music she would play- - "The Battle of Prague," Without putting any spirit even into "tho sort of picturcs she would paint - papery
cabhage-roses and insufferable, horrid baskets of strawherries-upset, always upset. It would be dreadfin to live int the same honse with her mpossible to refrain from scolding her and abusing her pretures and music. Oh, give me would grasp the ballot if she could from the nation.
Won't begin to be tired; I ain not. Woman its like a log at the tabie of man, taking whatver he gives her: and an impudent dog he epends on man for all she iscontentealy site aud an ineunbrance in her own family. ilre would like a different arrangement, but is
not allowed to alter things. Still she must ennot allowed to alter things. Still she must en
dure contumely on accouut of this arrangement dure contumely on accouut of this arrantlemen
-men talk, books, newspapers coustantly con his contcmptaous heir own enstruction of society, though women are not; but men are not pleased with it and they blame women for their own dissat sfaction. The man most anxious to keep women dependent is the most constant com plainer aloout the burdens of domestie life; atou
he who keeps up this perpetual growl about ills and extravagance. The man who is loud est in denounerng woman's rights is the itenti-
cal individual who complains so of woman's illincss, ineompetence and extravagance. Yo Skewton, wants " more heart" and not so much sph " " big eyour for any ontemptuously of the "sphere;" bit he does. He says there is no neell of his wife's spending the money she does on housckeeping, and
she does not hasten to say she is tired to death at night, he wauts to know what she has been ditude of other things. He declares she has uothing to do but enjoy herself. He acenses he despises her incompetence, and yet he is furius when you aver that she ought to be as who strain at gnats generally have to swallow camels.
Now,
-o lon, then, let women adopt a new course let them walk np. and down the world as men do, taking possession of whatever they ean lay

Wryy orth having. I could

Why are alum mines like
Beeause they have a-loom-in-em.

## The Value of a Humble Home.

Tbe following extract from a Washington
correspondence with the Chicago Times, is correspondence with the Chicago Times, is
wholesome reading for the discontented humble wholesome reading for the discontented humble
ones who think that happiness abides in high ones who
places of the earth
" with Senator Trumbull and his first wife, says she will never forget Mrs. Trumbull's earnest-
ness, and how her blue eyes blazed and ber cheeks flushed, one particular time, in speaking of the trial it was to her to have her hus-
band so occupied with public duties. She said band so occupied with public duties. She said
her life would be ended before she could have one uninterrupted hour's talk with Mr. Trum
bull. If she were dead, it would be hard work bul. If she were dead, it would be hard work high public position virtually divorced man and
wifc, and robbed the hearthstone of the cheer warmth of a home.
A lady, whose husband held one of the highest places in the Government, wrung her jeweled
hands, and shed tears of regret while she stood in her magnificent home attired for her weekly
recention. How gladly would I give up all reception. How gladly would I give up all
the finery, show and insincerity of this public the inery, show and
place, and go back to the rooms I lived in when
we were first married? I would throw my silks and diamonds away, and sit down to my supper of chip beef and tea at sunset, and
afterward take a long, quiet walk with Will, and rest on the stump in the moonlight, and
tell my little plans for the future, and what I had done every hour while he was gone, and know that we were alone in the world, living
only for each other. Those days seem like days in Heaven. I work harder now than any
slave; often 300 calls to return it a single week, receptions or parties every night; sce the same people; hear the same talk; eat the same things; come home disgusted; wouder what $I$ am living
for; where $I$ will go when I die. So it is al ways. Help, influence, power; a smile on my
face, interest in my manner, living a lie; feedface, interest in my ma
iug my soul on husks."

## Sensations on High Altitudes.

To thosc in the enjoymeut of ordinary health, says the Rocky Mountain Tourist, the sensation expcrienced iu crossing the ascending elevations
of the great plains and in the higher altitudes at the base of and within the mountain, are, in a
in a notable degree, pleasant. The dryness and rarity of the atmosphere, together with its re-
markable electrical effects combined with numarkable electrical effects combined with nu-
merous other peculiarities of climate, excite the merous other pecutarities of climate, excite the
nervous system to liigh degree of tension.
The physical functions are aroused and reenergized, it may be even after years of sluggish,
inefficient action. New vigor and tone is imparted, the appetite is keen, the digestion is capable and strong, and the slcep sound. The Vital organs, stimulated and compelled from an
established routine of greater or less inefficiency,
it results that all those results that all those lurking ailments to
which men in the ordinary pursuits of civilized which men in the ordinary pursuits of civilized wh enjoy is summoned into fullest action, and one fairly revels iu the intoxication of good
health. Such are the sensations accompanyin the first entrance into the rarified electrical air of these elevated regions, which, with their
attendiug pleasures and benefits, will forever reuder the Rocky mountains a resort of unequaled allurenents for those wbo, not invalids, ioratiou of overworked professional or business
life.
Phonograpic Clocks. - Mr. Edison is said
to have constructed an instrument which, instead of striking the hours like vulgar clocks,
"tells its hearers, with a human voice, o'clock it is, interpersed with a few appropri-
ate remarks. For instance whe the ate remarks. For instance, wheu the hour of
oue arrives, it calls out 'One o'clock-time for
ond lunch!' to the astonishment," as the narrator
gravely observes, "of every one who has not gravely observes, or every one who has not
heard it before." Far from underrating the
value of Mr. Edison's discovery, we are inclined to predict for it a brilliant career. Clocks, in
future, may be divided into two classes-the stimulative and the sedative. The first would begin in the moruing with a shriek of "six
$o$ 'clock-time to get up," and the second, ato cuned to a lower' key for the evening, would
murmur "ten o'clock, ten o'clock- time for bed;" or, "twelve o'clock; late again;" or "two go! go!" Surrounded by these horological! monThe Modocs.-These Indians located in the northeastern part of the state have advanced
rapidy towards civilization since being placed
on their reservation in 1873, and after this they will be able to get along without assistance of any kind from the government. They
now own 4,000 acres of laud, on which they have built good houses, have fenced in and have son in the colony. They haves to each per-
wheat, 175 acres of
Torn, and 236 head of cattle have cut 140 tons of hay. Besides they have
plenty of poultry, etc. Fifty-nine children
attend school.
Rev. Dr. Martiveav tells a very funny story
about a German play. He says that in one of
the scenes Adam is the scenes Adam is represented as running
across the stage on his way to the Garden of
Eden to be created.

Young Folks' Column.

## Summer.

The following little poem in Sunday Afternoon for
June, was tre production in her ninthy ear of oor Read
Goodale. She is but eleven no


 least turned by the publication of the poems,
quite as rare as he genius that produced them

## heaven's glorious bue <br> ${ }^{\text {Sndeet with a }}$ A raxrance rare

From flowers be
And all for you!

## happy, tender days O shades in forests dee

And sweet, umbroken sleep,
And wolden train on rap,
And birds that always keep

## A Monkey Story.

This is one of the true stories that I tell my little boys over and over again, as we sit be-
fore the fire, and make ready for their journey "'Sleepy Land
When your grandfather was a lad about 12 years old, an uncle of his made a voyage to
South America, and brought home as a present South America, and brought home as a present
to his uephew a fine large monkey. Of course
Master Pichard was very Master Richard was very much pleased; and the
rolicsome pet would have had a warm welcome frolicsome pet would have had a warm welcome
from the whole household had not the uncle seen fit to report some of Jocko's pranks on Thipbard.
This put the young ladies upon their guard. But old Bcla, the cook, never seemed prepared
for his capers; and the fuss she made over
them pleased Jocko so much that she became them pleased Jocko so much that she became
the object of his attacks.
One day Bella went to the city, and brought One day Bella went to the city, and brought
home a fine new bonnet in a large bandbox. Done a fine new bonnet in a large bandox.
During the eveuing slle showed it with great
pride to the youug ladies; and, unknown to her, Jocko enjoyed the sight of the ribbons and laces and flowers from behind the parlor sofa.
Like Bella herself, he was fond of finery; and the bonnet seemed to him a very fit garment for a monkey to wear. So the next morning,
while Bella was busy in the kitchen, Jocko went to her closet, took out her bandbox,
dressed himself in the bonnet, and stole down the back-stairs.
Bella hearing a noise, looked around, and there he was, his head literally lost in a sea of
red and yellow ribbons. With a sbout of rage, she seized the broomstick, and hurried after Jocko had mounted two flights of stairs, leaped out on the porch and climbed up to the roof of There h
There he rested; and there he was when the came running up to see what was the matter, and threatened. Jocko would not cone down until he had finished his work; for he was
busily engaged in tcaring poor Bella's bonnet uto fragments.
As ribbon after ribbon was destroyed, her screams grew louder and louder; and nothing
could move her from her determination to kill could move her from her determination to kill Rut the one
But ocko never was forgiven; and the poor
fellow would have gone supperless a great many would have gone supperless a great
many times had it not been for his devoted

## Outdone by a Boy.

A lad in Boston, rather small for his years,
works in an office as errand boy for four gentle men who do business there. One day the entlemen were cbaffing him a little about beng so small, and said to him:
can do much business, you are too small."
The much business, you are too
"Welli," said he, "as small as I am, I can do "onething which none of you four
"Ah, what is that?" said they.
"l
I don't know as I ought to tell you," he
eplied. But they were anxious to know, and urged him to tell what he could do that none of them were able to do.
"I can keep from swearing!" said the little manly faces and there seemed to be very little anxiety for further information on the point.
The culprit was brought before the magistrate and asked his name. It was given as
Lachtenschlager. "Did you shoot the dog in self-defense?" "No. I shot
and he yumped ofer de fence."
"Do you see any grapes, Bob?" "Yes, but
there is dogs." "Big dogs, Bob?" "Yes,
very big." ""hen come along. These grapes
From a physiological point of view, Russia
From a physiological point of view, Russia
and Austria are both right. After getting
Hung(a)ry, of course, they want a slice o Hung(a)r
Turkey.

The rabbit is timid, but no cook can make it quail.

## Gooo HEALTH.

The Treatment of Bleeding Wounds.
It is now a time of especial activity in the use of machinery and edge tools, both in tbe shops and on the farm. A few words about the treatment of wounds may be valuable. Dr. C Bleeding is makes the following suggestions; All should observe the difference between arterial and venous hermorrhage. If the blood
flowing fowing from a wound is of a bright color and
jets out, it shows that an artery, leading blood directly from the heart, has been wounded, and
should receive instant attention lest the should receive instant attention, lest the
sufferer should bleed to death. If the artery be very small, compress it firmly, and it may
contract upon itself and the bleeding cease. contract upon itself and the bleeding cease.
But it should not be left without a continuous pressure in some form, elther directly upon the
tube or above it. The usual way is to bring a
strip strip of liuen or cotton cloth. tighty above the
limb till the bleeding stops. The artery may be larger and theu the same treatment may be proper, till a surgeon may seize it with a pair
of forceps, draw it out and pass around it strong thread, or ligature of waxed twine or
silk. A cut artery cau never be absolutel safe A culless a ligtery caure has beer be absolytutely The mode of tying a ligature is of some impor-
tance. The ends of the threads sbould be passed around each other twice, and then drawn
tightly. This prevents slipping of the thread, and secures a complete check to the flowing of
blood. These directions are important, because the life of the wounded person often depeuds upon the prompt and proper application of a
ligature. In every agricultural school in. structions on the proper mode of treating all
sorts of wounds should be given. And every man who uscs instrunnents should be familiar ments may possibly inflict. The most cautious men are now and then careless in nsing sharp-
edged tnols. A young man was mowing. He unintentionally disturbed a nest of horuets.
They returned the compliment by addressing him in a pointed way. He stumbled, and in hicted a wide and deep wound upon the calf of
his right leg. His brother, theu present, tore his right leg. His brother, theu present, tore
his shirt into strips, tied knots in the niddle his shirt into strips, tied knots in the miknle, bringing the kuots under the knee more and
more firmly, till the hemorrhage ceased. Two other men were mowing, when oue carelessly lit the other with his seythe just above the
inner ankle. The blood jetted out freely. The inflictor of the wound ran for help, and on his
return found the wounded man had bled to death. Very slight pressure upon the bleeding
artery might have saved bis life. When one can, press the bleeding artery against the bone above the wound. The services of a surgeon
are desirable, but an hour may elapse before he can reach the wounded person, so every one
should be familiar with the simplest way of cbecking the bleeding from a wouud.
If the blood flowing from a wound be dark colored, oozing slowly in a steady stream, but not jetting, as when an artery has been cut, it
can easily be checked iu the same way ing from a vein may cease by applying cold
water, by holding the injured limb higher than the head. If the lower limbs be cut severely
and the blod flow freely pace the sufferer and the blood flow freely, place the sufferer on the ground or floor, raise the limbs upou a chair,
apply a bandage firnly about tbe limb or limbs, aud keep it saturated with cold water. By observing these directions many lives have been
saved.
We have seen friends, upon receiving a severe cut use a large quantity of rags, as if concealing
the blood was stopping it. The compression of the blood was stopping it. The compression of just above the wound is worth all the rags of the known world.

The Causes of Sleep.
What are we to say as to the cause of sleep? It is very easy to catalogue the predisposing
causes of sleep, but most difficult to speak with confidence concerning the direct ones. The first aud most general predisposing cause of
sleep is a negative one. It consists iu the absence of everything that stimulates the senses or oppresses the mind. Darkness or the abseuce or the absence of muscular exertion, all help to bring ou sleep. To some it may seem strange that conthinous noise acts like quiet. The
truth is that the monotonous repetition of stimuli to the seuses produces a level uniformity of impressiou which is practically for soporific purposes, equivalent to the absence of impression altogether. In this way tbe influence of a mo-
notonous chant or lullaby, the "hush-a-bye baby" of the nurscry, the murnur of the waves, the "sough" of wind through the branches of
trees, and the dull roar of machinery in predisposing to sleep may be explained. Sameuess o on the operation of another great predisposing oppressions or activity. It neutralizes the self cousciousness of the mind, by making it cease for example, points out that cven when the
find is, by an act of will, directed to the con templation or evolution of monotonous impres
sions the cffect is the production of sleepiness.

## Domestic Economy.

Renovating Mattresses.-When mattresses and feather beds are soiled, mix equal quantities of soft soap and pulverized wheat starch into a soft paste, and rub it thoroughly into the spot. Let it dry in the sun ; then scrape off the paste, and wash it off with a sponge. If it does not feather-beds have been in use some years with out being renovated, put them on the grass when the rain pours heavily, and let them become thoroughly wetted. Then turn on the other side, and let the tickings have a good
soaking. When the sun shines brightly, it will dry quickly. Let it lie out several days, bringWhen it is perfectly dry, hang it on a strong line, aud beat it as you would a carpet, until all the dust is out of it, and you will have a clean,
sweet bed, as well, prepared as if tbe feathers had been run through a machine with a steaming apparatus attached. If the hair mattresses are lumpy, rip them open, take out the hair,
and pull it apart thoroughly ; then let it lie on over it and shake it up well, and put it in a
one when dried, and fill up the bed evenly. Take a long upholsterer's needle, with some strong rosette of cotton into each place, if desired, upholsterer six dollars for doing the work.

Washing Windows.-It is not an easy thing o wash windows so that they will look clear
and well polished, and if soapsuds are used, it is quite impossible to do it. The old-fashioned
way of taking out all the windows, ing them in soapsuls, and settiug them aside to dry, after the suds have been is $t$ be sure, the easiest way of cleaning them, but it is also the worst way to make them look clear
and bright. First brush them off well with a sponge or brush that comes for the purpose, and
then wrap a bit of cloth about a sharp stick, and wipe out the dust that adheres to the corners, then take some weak tea, boiliug hot, few add to it a tablespoonful of alcohol and a ate of ammonia, the size of an English walnut. Dip a piece of spouge or old flaunel, or of old
canton flannel, iuto it, and rub the glass on way only until it shines clear. Wipe it off with another clotb, rubbing it until well polished.
Newspapers used to be much better than any cotton cloth for washing and wiping windows
and mirrors, but now that the paper is chiefly and mirrors, but now that the paper is chiefly
composed of wood pulp, they are the worst
things that can be used, as they cover them witb a linty substanc

Ammonia iv the Kitchey. - The pantry shelves are getting grimy, or finger-marks
around the door latches and knobs are looking dark and unsightly. For lack of time they are
left day after day for it is hard worl to scoul all the time and it wears off the paint, too. The husband keeps his bottle of ini, or perhaps a large ean holds sit for he herever stints in in that.
Nowe suppose his wife las leer botte of spirits of ammonia to use she takes her basin of wate and a clean cloth, just puts on a few drops of
the fluid and wipes off all the dirt; ;it is worth more than a half day's labor, and does not hurt the paint either. She could put a few drops in
her dishwater, and see how easily the dishes could be cleaned; ${ }^{2}$ few drops on a sponge Would clean all the windows in the sit ting-rom,
makking them shine e like erystal. It would take
the解s of the teaspoons, too, and a teaspoon. fill in the mop pail would do more toward wash
ing up the kitchen floor than 10 pounds of elbow grease applied to the mop handle. A housewife has just as much right to make her work easy does not do it, the fault is her own in a grea

Sugar Cake.-Sift two pounds of flour int a pan and cut up in it a pound of fresh butter till it is thoroughly mixed. Then rub in a pound of sugar and a grated nutmeg. Wet the of rose water and a gill of milk, mixed with well-beaten egg. Add at the last a very small teaspoonful of pearl-ash or soda, dissolved in a little vinegar or warm water. Roll out the rolling pin. Then roll it thin and cut into square cakcs, notching the edges with a knife.
Put them into a shallow pan, slightly buttered, taking care not to place them too near lest they run into each other, and bake tbem a light brown. You may mix into the dough two
tablespoonfuls of caraway sceds.

To Wash Greasy Wool--Dissolve a large tablespoonful of borax in pint of boiling water.
Mix one-quarter of it in the water in which the wool is to be washed. Put in onc piece of goods at a time, using soap if necded, and if necesand rinse in cold water, or in water only slightly warmed. Shake well, and hang where the goods will dry quickly, For 26 years I have as hot as would be used for cottou clothing. My
tlanuels are beautifully soft as well as white. I tlanuels are beautifully
never have any shrink.

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## Saturday, June I, 1878.

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## The Week.

The week has something of the holiday charater. As we write on Wednesday afteruoon
the great pavirion resounds with the whole
rante of suunds from the dulcet trill of the esole rango of sounds from the dulleet trill of the esolo-
ist to the heary roan of the wide-chested lasso

 tympanum. The great festival of fong has beeu
well-noised abroad before it found its own

 Quitc in contrast will be the music which will
touch the heart closest to to touch the heart closest to-morrow. It will be
the national holiday, "Teeoratiou Day." All over the country trivite winll be paid to the the
memory of thos whlo uphel their ideas of
patriotisn at the oost of their lives patriotism at the eost of their lives.. Long ago
lines and colors were forgoten, and the Blue and the Gray will be awarded twin honors.
There will le military parades aud clonueut There will be military, parades aud cloqueut
orations. but no offering of voice or pageaut ean more fitly express the graterul memory of the
nation than the fragrant tarlants of fresh tlow-
ars ers whien winle neircle lalike the proud mowu-
ment of the coinmander and the uumarked ment of the commander and the uumarked And as one more day is numbered in the past. We shall come aygain to the busy duties of our
bustling lives. The harvest is now unfolding is glories, and labor is abundant for willing
hands. It is said that orders for harvest hands hands. It is said that orders for harvest hands
are hard to till in the city, but whether the are hard to till in the city, bit whether the
len is in material or dispositiou ruling it we
know not.

The World's Wheat Yields Per Acre. It is now nearly two weeks since the first sample of new wheat was reeeived in Stockton valley. It was a good grain, and whatever angury ean be drawn from the tirst sample, in this ease certainly promises favorally for the
erop. It will not be many days now before the new wheat shows its quality by more generous quantities, for the sickle is now well nigh the
stems. This being the ease, it will be timely to stems. This being the ease, it will be timely to
present some facts and figures concerning average wheat yields per acre, as these may assist our readers to make their estimates of the grain is turning out in their own localities,

## It is now coming to be generally understoon

 that wild and extravagant estimates of the amonut of this year's wheat crop will not berealized. While we have in mind the heary promise along the San Joaquin, the partial failure in the rich northern counties must not
be forgotten. While the seas of golden heads
fill the eye, a glance must also be taken at the fill the eye, a glanee must also be taken at the
fields which have been monopolized by foul growths. Upou the whole, however, the season
has been favorable. Although damage is reported from rust upon early sowings in some sections, there is a gratifying freedom from the and the wind has been tempered for the tender stems. The conclusion which seems fittest $t$ draw from the several features of the outlook, is that we shall have a good amount of grain to sell, and that it will be of the finest quality, overwhelming enough to kill itself in the mar ket. Any attempt to force prices below a good
paying rate, on the score of tremendous quantities produced, is muwarranted and should The harvest of 18,6 will serve very well to
use as guide to forecast this year's results. It use as guide to forecast this year's results.
is true that our acreage under wheat has iu reased somewhat, but we doubt whether ther has heen more gained than has been lost lyy the xcess of water in some sections, which made
wheat sowing impossible or destroyed that already sown. In 1s76, according to the report acres in wheat, and tho yield was $35,385,579$
bushels, or an a veragc per acre of 15.04 bushels. We do not expeet any greater average this year. The average yields for the 11 years preceding
the drouth of 18767 , were as follows, accorting he a table lately furnisherl us ly Hon. J. I Dodge, Statisticiar of the Department of Agri culture. It will be noticed that the year's of the rainfall in each year, which should be aken into consideration

| Harvest Year. | $\begin{aligned} & \text { Rain } \\ & \text { hcfore } \\ & \text { Jan. } 1 . \end{aligned}$ | $\begin{array}{\|c} \text { Rain } \\ \text { after } \\ \text { afin. } \end{array}$ | Tot | Averare linsh els of wheat per acre. |
| :---: | :---: | :---: | :---: | :---: |



These figures give onr State an average yield
f 14 bushels per aerc for the years named; the of 14 bushels per aerc for the years named; the is 12 bushels per acre. For tive years previous to 1860 , aecording t
the reports of the Statc A cricultnral Society ur average of wheat per acre was about 2 bushels. The deerease of late years is only
what nearly all old wheat growers have ob what nearly all own experience. The country which now seems to enjoy the prestige, which
once was ours, is Now Zealand, and it is re freshing to see this young wheat, region vaun tainly lose in time, unless it proves wiser than oll its prelleeessors. Aceording to the returns the average yield of grain per acre was as follow


| 35.8 |
| :--- |
| em | Taking a wider view, and embracing the

wheat-producing countrics of the world, so far in the following table

| Corntrix. | lear | Wheat | Barley | Oats |
| :---: | :---: | :---: | :---: | :---: |
| Russia. | 1572 | ${ }_{5.5}$ Bush. | Bush. | Bush |
| Norway | 1870 | 22.1 | 30.3 |  |
| Bavaria | 1813 | 16.3 | 30.1 | 22.5 |
| Wirtenbu | 1875 | 18.1 | 21.2 | 29.3 |
| Holland. | 1874 | 28.4 | 41.9 | 44.4 |
| Belgium. | 18613 | 20.3 | 34.9 | 41.2 |
| France | 1875 | 13.4 | 18.7 | 23.8 |
| Portugal | 1865 | 8.9 | 11.1 | 18.6 |
| Anstria | 1875 | 12.5 | 13.5 | 16.2 |
| Hungary | 1872 | 8.6 | 13.6 | 16.5 |
|  | 1867 | 13.2 | 18.8 | 19.0 |
| Egyt. | 1571 | 15.4 | 20.2 |  |
| Cnited Sta | 1874 | 12.3 | 20.6 | 22.0 |
| California | 1876 | 15.0 | 19.5 | 16.0 |
| New Z.caland. | 1576 | 31.5 | 35.9 | ${ }_{38.0}$ |
| These fig contemplate can be as may be in | 8 are <br> ont th <br> taine | parti are th Wha | arly acts as er le n to fa | sant arly th |

suit of that practice which shall cnable us to
regain the prosition whieh we occupied years regain the position which we occlpied yea
ago. What that system of practice shall be it
may not be possible now to clearly define, b by the inerease of judieious summer-fallowing we are taking steps in the right direetion.
What else can profitally be done it remains for progressive and thoughtful investigators and experimenters to point out.

## Points on Cream Raising

## Enitors Prpas:-Sonc of your enrrespondents claim the privilege of writing beeause they are old subscribers.

 He. I wish to ask a few questions. (1). Will the using
of shallow yessels for milk produe more ereand than to to
use deep and large pans? (2). Will setting the hottonss ase deep and large pans ( 2 . Will setcing che shing air
of the pans on a collier sunfuct than the surrond have a good or bad cffect in the proluction of eream?
(3). Can you give a simple means to test the crean. pro-
ducing qualiticies of nilk?-(casADIAs, san Hernardino.
The question of deep or shallow setting of milk for eream is one whieh has been widely advoeates of each method, according to result obtaiued under different eonditions. It is not
necessary to review the whole question. What necessary to review the whole question. Whatever other conditions may affect results, ther
in none more important than temperature Where dairymen have alundance of ice or cold spring water, which ranges at $50^{\circ}$ Fahr., they ting, beeause lowering the temperaturc retard the souring of the milk and the cream can al find its way to the top before the aeid appears. Dairymen generally in the warmer parts of this
State do not have the advantage of low tempera ture nor the iee to lower it, and they will, as a rule, get more cream from shallow setting. If, the examperature is $65^{\circ}$ Fahr., the creanm will all be thrown up lecoro the milk sours, if it is set in shallow plans. If, in such a temperature, inches, as in the coolers which were at one time popul,r in Eastern creameries, the milk would in most cases show an acid before the cream was all thrown up and consequently there would be a loss of a certain percentage of cream. Although temperature prevailing the shallower the milk hould be set, it is also true that in this Stat we have a eondition, either in milk or air,
which retards the souring and gives our dairymen a better chance to get their eream up be men a better chance to get thair eream up be-
fore the milk sours than is enjoyed by dairymen in the Fast.
The mere setting of the bottoms of the pans
on a surface colder than the air would inplart certain degree of cold to the milk and thus re-
tard its souring. This cooling would, however be very slow, because the coolest layer of milk would be at the bottom of the pan aud would
remain there. There would be no generated in the mass. If on the other hand, the cold shonld le applied at the top, the whole
mass would be cooled quickly, because the par ticles would descend as soon as their temperature was reduced aud warmer ones wonld rise to take their places. Thus the whole mass
wonld be speedily cooled. The effect which exciting currents in the milk have upon the
raising of the cream is a disputed point. The old practice in deep and cold setting has been to
apply the colld at the bottom and siles of the can and this application does not exeite currents except in a sliglit degrce. It has been
claimed lyy Mr. 3liss of Pernont, that by putting a piecc of iee upon the cover of a deep can,
he can excite the currents to act upward and hownwarl through the mass of the milk, and this he believes facilitates the throwing up of
the globules of cream. This is the disputed ground, one side claiming that the perfect rest of the fluid is best for the upward novement of the inertia of the glohules aud help, then to the top. Farther experiment is needed on this not get so thick a layer of eream ly cooling at the top, he gets a more compaet layer which There is one quantity
There is one point more coucerning the influ nee of the application of various temperature to the milk, and that is in the effeet produced
by temperatnre on the loutter globule and the serum in which it is suspended. Water contracts more rapidly than oil upon the appliea
tion of cold, but it is not certain how the solu le casein and salts in the milk arc affected a compared with the butter globule. There migh and oil. At all events the effect of cold (and wo suppose omr querist does not mean anythiu more than a moderate degree of cold), applie
at the bottom would have very little, if any ppreci

## The

easiest way to tcst the comparative ream-produeing cuality of milk is comparative quantities of each sample in glass vessels of the
same diameter. As these stand side by side
the layers of the layers of cream may be measured and comserve well for rough comparisons. There ar
cream glasses sold for this purpose, being uni orm cylinders with a graduated scale at the to
whieh shows the percentage of cream by the narks upon the scale. These are in common use in the liastern factories. There is, howdifferent cows, and the lest test is accurate weighing of the butter gaincd from exactly
similar weights of milk from the different animals.

Queries ano Replies.

## Diseased Turkeys.

Editozs Piess:-I send you the following from au old English paper in answer to your
eorrespondent, Mrs. F. B. N., of Red Bluff. Mr. M. Leno, an old poultry breeder, says:
Dnring the last 26 years I have been solicited Dnring the last 26 years I have been solicited young turkeys. I found the the included broken otf; some crnmpled up with sores; could searce move abont. I made the most careful inquiries of the several individuals as to the food given them, and in
every case I fonnd a large quantity of animal discont being used. I ordered the meat to be that not a single bird fell with the disease that had not been fed with ment, proving to my mind that the disense was cansed through the too liberal use of animal food. I will advise Mrs. F. B. N. to cease feeding boiled eggs and
to feed with light hread and sweet nilis the most of the time, and use a tablespoonful of the following solution: To a pint of drinking water, chlorate of potash, one ounce; crushed
sugar, one ounce. The water will dissolve all the sugar but not the chlorate. Feed plenty - B. D. H., Pajaro, Monterey Co., Cal.

Sliced Dried Apples.
Enitors Press:- In the prices current we see dried ap-
ples sliced, and dried apyles quartered. What are we to ples siced, and "sliced
understand Are they cut off from the core
with knife in hand, or is it done by the serew parer that slices an
ley, Cal.
Sliced apples, as known in the market, are either cut from the core by hand, according to machiue. The same quality of apple sells at the same price prepared either way. The parer-
sliced apples are more abundant because of the time saved by using the machine.

The Malva as a Forage Plant.
Editors Press:-1 would like to add my testimony against the malva plant. Cattle will hid, but as a weed we find it bad. A well manured piece of land was thickly covered with grain in February, aud uow there is nothiug but
malva to be seen, the grain having been completely smothered ont. I have seen a cow bloat from eating malva wheu it first starts. We it invariably gets the scours from so doing. am well pleased with the Prfss.-Cavadiax
nor

Marrubium Vulgare.
Fiditors Prass:- Plase tell me how unach horehound
is worth a pound, greell or dried. READR, Stanlslaus
There is not market enough for horehound to warraut any great saving of the herb. It is
used ehielly by candy makers, and they oity about 20 c . per pound for the dried article, as small quantity, and they use that paeked by press hakers at the Last. it is compacty eosts about $3 \overline{\mathrm{~J}}$ c. a pound at wholesale. The trade is very small.

> Side Hill Vineyards.

Editors l'ress.-I have just seen my late query in print about hillside vineyards in to. it says the hillside is so instead of too steep to allow a horse to go through the vines only one way, etc. I hope this corrected query
will bring forth some information.- W'm. Prapwill bring forth
FFR, San Jose.

Pop Corn for Horses.
Eititors
Santa Ana.
If softened by soaking or if cracked by a grinder it would do for a grain ratiou in con-
nection with other feed. Un the ear or shelled it would be too flinty.
Nerserfmen's Assomations.-We receive the announeement of the anupal meeting of the will he held in Chicago on the evening of Juue tion of Nurserymen, Florists and Seedsmen will June 19th, and coutinue three days. The objects songht by this association, are: The exchange and sale of nursery products, imple-
ments and labor-saving devices; the exhibition and introduction of new varieties of fruits, trees, plants, etc.; the cultivation of personal
acquaintance of others engaged in the trade; to perfect better methods of culture, grading, packing and sale of stock; to procure quicker
transit, more reasonable rates and avoiding needless exposure of nursery products when in
transit; to obtain a reduction in rates of postage on seeds, cions, roots and cuttiugs; to avoid the
evils of dishonest tree agents, and to prevent
the taxing of nursery stock when growing. D.
W. Scott, of Galeua, Ill., is Secretary of the W. Scot

On File. - "Culture," ete., C. H. J. N.;
"Strawberry Samples," F. "1.; "Wheat ard
Cheat," C. A.; "Botany for Boys," A. F.;
"Naming the Camp Baby;" J. U. L.; "Bee Chea "Naming the C

The Kohler \& Chase Building, Oakland.
Our neighboring eity of Oakland is becoming justly noted for the handsome style of many of its public buildings, private residences and business houses. Among these no more elegant business structure has yet been erected than the Kohler \& Chase building, on the corner of Ninth and Washington streets. It was designed by Newson Bros., architects, who have since dissolved partnership, J. J. Newsom continuing the business at 321 California street. It was built under the direction of J. W. Duncan, so well known as superintendent of works for the State University bu
was done by Geo. D. was done by Geo. D. Nagle, of San Fran-
eisco; the mill work
by Alfred eisco; the mill work
by Alfred $W$. Burrell, of the California
Building Company, Oakland; wrought-iron work by the Phelps Manufacturing Company; and the cast-iron by Low \& Charters, of the city Iron Works; the plumbing and gas-fitting by G. \&
W. Snook-the last three being San Fhree being San the plastering by Tucker $\&$ Co., Oakland.

As a beautiful and substantially-built edifice, it is highly creditable in every way to designers, builders and the enterprising inusic firm
forwhom it was built for whom it was built and whose name it
bears. The engraving herewith presented has been especially prepared, by pecially prepared, by Press, from a photograph by Strong, of Oikkand. The style of the building may be correctly termed the modern renaissance. Its material
is brick and iron. It is trick and elegant and is truly elegant and ontlines-in its fin. ish inside and outside. It was built last ycar. Its ground plan is $50 \times 100$ feet; hight to cornice, 70 feet; hight of tower, 120 feet to the vane. Messrs. Kohler \& Chase, well known as among the most enterprising and extensive dealers in mu-
sieal instruments sieal instruments
and music in San and music in San
Francisco, intended this building especially for the Oakland branch of their large business, and for this purpose, as shown in the cut, they occupy most of the lower story, the rest of the building being rented to different occupants. Theirs is the pioneer misic firm of San Francisco,
and has been in and has been in
business here about 25 years. The location of their large establishment is 633 and 635 Clay street, between Montgomery and Kearny streets. They are now doing the larg. their line in SanFran ciseo. They Fran-
at different periods
in their trade made sales of almost all kinds of instruments, but have now settled down chiefly Bros., the Emerson of all styles, and the Fischer upright; in organs, the Mason \& Hamlin. Their firm pride themselves on doing a strictly honest business in the sale of genuine instruments so that all who purchase of them can rely on getting exactly what the instrument is recommended to be.
Their list of brass and wood instruments by celebrated makers embrace-among other English, French, and American manufacturersBuffet, Crampton \& Co.'s and Martin Freresthey beinc sole agents for the first two At their handsome Oakland branch store, they merchandise, sheet music and music books.

KOHLER \& CHASE BUILDING, CORNER NINTH AND WASHINGTON STREETS, OAKLAND

Opium Production.
Mrs. O. H. Tufts leases the upper 45 rooms,
all nicely furnished for bedrooms or parlors, all nicely furnished for bedrooms or parlors,
and known as the Occidental House. The and known as the Occidental House. The
rooms are well ventilated, and the halls spacious. From the upper windows there is a fine view of the bay, the city and t.e surrounding the Kohler-Chase building adjoining.
Miss A. A. Johnson occupies the two front rooms on the first floor for her popular dressmaking establishment, having been engaged in the bisiness during the last three years. Her work embraces the latest and most artistic
styles, and she keeps from four to six ladies styles, and she keeps from four to six ladies constantly employed.
In the foreground of the engraving we represent a wagon of J. Cushing. grocer, whose hand some store is on the opposite corner. His spec

EDrrors PRess:--Please inform me through your ralu-
ahie paper, first, what kind of poppy opium is produced rom? Second, how should it be planted? Third, how is the opium obtained? Fourth, market value, etc.-R. M.
Duxoas, Gospel Swamp, Los Angcles Co., Cal.
We have given notes on this subject in former issues, but as there are, perhaps, other new subscribers as well as our querist who may not be
informel, we restate the facts briefly: The poppy from which the opium is obtained is Papaver somniferum. There are several varieties of the plant, the most famous of which is called the white poppy from its white seeds. The seed is generally planted in rows about 30 inches apart, and the seed is dropped so that
the plants are about eight inches apart in the rows. The seeds should be covered about one inch deep.
The only after cultivation is stirring the ground two or hoe or the cultivator. The plant grows to a hight of two and A light loamy soil is best adapted to its growth; one that is easily pulverized. tivation takes place in the cold season, sedulously attended flowers fall the plan is ripe for the opium
harvest. The peopl Hock to the fields in the evening, armed with crooked-bladed
knives, which are employed to cut in cisions in the cap-
sules or poppy-heads sules or poppy-heads They then retire for suming field work early next morning they find that juice has exuded through the incisions and
collected on the surface. At first it is white and milky,
but the heat of the sun speedily conbrown gummy mass, scraped off. The crude opium, is col lected as it exudes day after day, until
all has been ob tained; and this to tal quantity is af
fected, not only by the whole routine o culture, but by the
state of the weather during the cultiva tion and collection. The produce is either equalize the quality equalize the quality
the whole of the day's collection is
rubbed together in a mortar or similar vessel, and reduced semi - fluid mass, Which is then quick
ly dried in the shade ly dried in the shade. what is the market opinm. There has beon a little producel every year in an experimental way, and perhaps will tell us what they obtained and give some other points of local experience. Our local druggists

Only half of the front on Washington street, that is, the face on the right of the picture, be-
longs to the Kohler-Chase building. The remaining half on the extreme right
The Moody Building
Itself a handsome business structure, the poin of view from which the photograph is taken not allowing us to do full justice to its massive and neat frontage. It is the property of V. D. Oakland. At present but one of the stores on its ground floor is occupied. Here tho firm of Maxwell \& Haines, enterprising young men and well worthy of a generous patronage, have re and retail business. They are wholesal and retail dealers in farm products and prodoubt find it to their interest to give them oall. They can be found here or at 1231 Broadway.
ialty is a large assortment of the finest Eastcrn groccries at the lowest cash prices.
Sea Island Cotron. - We receive from James Wheeler, of 224 Sansome street, a package of Sea Island cotton, purchased of Thorburn, of New York. Also some black seed cotton or trec cotton. These seeds are left with us for distribution, and we will send small quantities to any of our coast readers who send a stamp
or postagc. The supply is small, but we wil for postagc. The suppl
send as long as it lasts.

Orecon.-Wc print in another column the avertisement of the Eactern Oregon Colony The enterprise seems worthy the attention of those who contemplate going to the north for
homes and farms.
do not like to touch the native article, becansc they claim that they do not know the percentage
of morphia, and do not get the same results in of morphia, and do not get the same results in
their compounds as they do with the imported article forwhich their formulas are adapted. As with all new products this one nust win its way gradually, perhaps, and must get the endorse. ment of accurate analyses to scrve as a certificate of its quality.
"Ferndile linterpilise."-A new venture in journalism in Humboldt county bears the above title. The issne which comes to hand is inviting in appearance and full of local news. Local papers are gencrally of great value to their conHumboldt county should be heard from more fully, and we trust the Enterprise may serve it suocessfully.

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able to save our patrons the cost of a fruitless application by pointing to them the same thing already covered by a patent. We are always free to advise applicants of any
knowledge we have of previous applicants which wi
patent.
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nected with inventions and all patent right conness, believing that the mutual conference of legitimate business and professional men is mutual gain. Parties in doubt in regard to their rights as assignees of patents or purchasers of patented articles, can often receive advice of imp
at our office.

## at our office.

Remittances of money, made by individual in carry, and it has repcatedly happened this applicants have not only lost their money, but
their iuventions also, from this cause and con sequent delay. We hold ourselves responsible for all fees entrusted to our agency

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porters and breeders of Pure Breed porters and breeders of Pure Breed Angora Goats.

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 M. FALLON, corner Seventh and Oak streets, Oak-land. Bronze Turkeys. Choice Egys for Hatching
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J. M. KERLINGER, Elisis, San Joaquin Co. Imy
ter and Breeder of berkshire Piss and fine Poutry.
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N. S. AMES, Napa City, Cal, Importer and Breeder
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Queens Imported from Europe of Italian. Queen Bees, Queens
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List of U. S. Patents Issued to Pacific Coast Inventors.


## By Special Dispatch from Washington, D. C.

Wefk Ending, May 14th.
Construction of Hells of Steay Vessels. -
Robert Charles Brown, Portland, Oregon. Robert Charles Brown, Portland, Oregon.
FIRE Esca Pes.-Francis C. Bryant, Seatle, Washington Territory.
Earth AcGers.-Benjamiu F. Mull, Merced, Cal. Washivg Macmines.-Truman Austin, Vir ginia City, Nev.
AiJssTABLE Trace Fastevives. - Adam Ruth.
erford, Walla Walla, Washiugton Territory. Trade-Marks.

## Cream Tamtar. -J. Saxon Ta

Edwardos superior Laundhy bleino Thite natents are not ready for dotivery by t. Oflce untitome lit days after the date of issue. Paten
Vorre-copies of U.S. and Foreign Patents furnishen


Fine Home-Made Wagons.
In our recent notice of our visit to the works of the sweepstake Plow Company, San Leau-
dro, we made spccial note of the excellent work they are doing in carriages and wagons of different kinds. At this time we would call at tention to their handsomely illustrated adver-
tisement on another page, from which some idea

## The Fair Season.

The era of preparation for the fair season i egun. Already the various State, district and county societies have placed themselves upon a working basis, their promium lists have been arranged and all producers who have work of arrange to judge it by the competitive test. which the fairs afford. As the year promises to be abundant in all productions, there ha arisen new life among the people on the fair holding question. Several of the smaller socie-
ties, which hibernated during last year's drouth have prepared aetively to hold exhibitions this ized in growing portions of the State. We lave just received a copy of the premiun apparen that the list hins been greatly improved by wise revision. Over $\$ 00,00$ are appropriated for premiums, aside from special premiums and
gold medals for certain exhibits. All iuterested should write to Hon. Robert Beck, Secretary Sacramento, for a copy of the new premium
list and study it, as it applies to the line of list and study it, as it applies to the lime o
work which they are doing. The following is a partial list of the coming fairs. We shall be pleased to add to it if read
ers will send us the dates and loeations of thei respective exhibitions:

## 

 Califorinia state Agtemer itural Society, September 16ulto 21 stt, inclusive.
clusive. Sevadu ste
 at Iletena, september er isd to 29th, inclusive.
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## S. F. MARKET REPORT

Nors_-Our trade review and quotations are prepared
on Wedneeday of each week (our pubbication day), and are not intended tor represent the state of the
urday, the date which the paper beara.

## Weekly Market Review.

DOMESTIC PRODUCE. ETC
There is Sar Francrisco, May 29 th $1 S \% 8$. There is little worthy of note. The Imple head of steam, but trade in Grain, except Corn, is confin.
grinding.

## grinding. The for

The foreign market
Range of Cable Prices of Wheat
The course of the Liverpool quotation for days of last week has been as recorded in the following table:

## Thursday Frida.. Saturday <br> Saturday. Nonday. Tuesday.

Tuesday
Wcdinesday

## 

 $\begin{array}{ll}118 & 1 d @ 1 \\ 118 & =(<1 \\ 118 & -(1) \\ 118 & -@ 1 \\ 108 & 10 d(\alpha 1 \\ 108 & 10 d(a 1\end{array}$To-days cable quotations to the Produce Exchange compare
years as follows:

## 

Oit suma

The Forelgn Review.

Lonnon, May 2Sth. -The Mark Lane Erpress ins: America and other Grain-producing countries, added to the quiescent state of politics, has rendered the Wheat trade remarkably dull and almost stagnant. The amount of business is so insignificant as to furnish no index of the
course of prices. English Wheat at country course of prices. English Wheat at country markets declined ls, but farmers were not
eager to sell. Much of the inactivity doubtless eager to sell. Much of the inactivity doubtless
has been owing to the suspense about the Fasthas been owing to the suspense about the tast-
ern question. As a few days will probably ern question. As a course of affairs, a movemeut in rade, even if dowuward, may be expeeted
soon. Imports into the Kingdom for the week cnding May 18th, 983,795 cwts Wheat, 145,998 cwts Flour.

Freights and Charters.
Nothing doing in grain charters. Nominal 0.a5s ti ton. The embraces 41,993 tons; engaged for Wheat, 13, $30 \%$; loading miseellaneous freight, $11,51 \mathrm{~S}$ tons.

Eastern Grain Markets
New York, May 25th. - The large supplies o Wicat and Corn at Western shipping points, board, together with the paeific appearance European advices, have contributed to depress the values of these products and promote out ward trade. For the first time during the season the reports of the crops have been slightly inged with gloomy forebodings, Winter Wheat lelt, having been hurt by rust. By far the belt, having been hurt by rust. By far the speak in glowing terms of the crops, and the acreage is 80 great as to leareat if not the lar st, Wheat harvest on record. South, cutting is now in progress, and will reach the southern portion of the Western States in a few days. Cureago, May 25th.- Wheat, for cash, kecps up moderately well, much better than futures, which are weak and continually lower, Jnly be ing about 10 cents below cash. The calse of European ucws and heavy receipts, which have exceeded shipments this week lyy about 150,000 bushels. The demand has slackened decidedly, and, as is usual when a smanl decline takes ing themselves on the Bear side of the game. June Wheat sold at $993(\propto) \$ 1.0 \overline{1} \frac{1}{3} c$, closing at the inside prices. Corn has ruled the lowest thi
week of any time since the Releellion. The market has been mnsettled and often exciting $t$ the large number of interested spectators and
merchants. To-day there was an almost star merchants. To-day there was an almost star
ing drop of nearly two cents. June sold $36 @ 3 S_{\text {s. }}^{3} \mathrm{c}$, and closed at nearly inside prices Oats were heavy, weak and lower throughon the week, with no reaction and not much inter est manifested. Sales of June at $25_{1}^{3} @ 25 \mathrm{c}$, the lowest price to-day. Rye sold for 57 c for cash down to 54 c , under good steady receipts and
small inquiry. Barley went from 50 c to 4 c .

## Eastern Wool Markets.

New Yoke, May 25th-The Wool market is in a dull and unsatisfac ory condition. To day the as the demand pring Caliorma is only 52 bales, as such grades. The balance of the large part of the eastern Oregon recently on hand,
amounting to some 300 bales, is withdrawn The Liverpool sales of holder wanting 24 c week, and though the attendance was large the prices showed a slight decline. The sales California at 151 @26; 44,000 lbs Fall do,
13@17; 10,000 ths Valley Oregon, 29; 15,000 Bastorn, May 25 th-Wool sales, wlthough


BAGS-Trade is lively and large lots are moving into the country. Prices are unchanged and rings are as yet unformed. Combinations will not be made until it seems too late for any one to bring in more stock by steamer.
BARLES-Barley is very quiet and unchanged. We note sales: 500 ctls good Feed,
$\$ 1 ; 200$ and 100 weevily, 95 c , and $1,000 \mathrm{ctls}$ Brewing, $\$ 1.20$, on time. BEANS-Butter, Pink and small White Beans have taken another advance. Limas are CORN-
Receipts are small and the demand good. We note sales: 200 sks large licllow, $82 ; 200$ White, $\$ 2.12 \frac{1}{2}$, and 1,000 do on private terms. An Yellow in warehouse
Cellow in warehouse.
DAIRY PRODUCE - The choicest fancy Butter declines a little. The supply is still ex. cessive. Dealers report receipts larger than they ever received before. The situation shows no promising fcatures yet. Cheese is easier and abundant.
EGGS-Eggs are plenty and dull.
FEED-There is no notable eliange except in advance of $\$ 1$ per ton oh Corn Meal. Hay
is about the same as last week. Plenty of new Hay is expected next week.
FRUIT-A few new Pears arrived from Sac. ramento during the week aud sold for $\$ 1$ per cheaper. C'herries arrive more freely, but the season's supply will probably be short from all acconnts. Tahiti Oranges are now in good
supply. Prices for all kinds of Fruit may be supply. Prices
found in our list
HOPS-There is nothing new either here or at the East.
OATS-Priees are well maintained and transand 120 do at $\$ 1.37 \frac{1}{2}$ per ctl. ONs-Aew Onions fro POTATOFS-Receipts of Potatoes are still comparatively small and prices hold up well. The trade is now running wholly ou new Pota-VEGETABLES-Our price list shows several WHEAT-There is nothing doing except by millers for immediate wants Che shippers are into making bids. Quotations are merely nominal. Sales: 100 sks good Milling at $\$ 1.90 ; 400$ sks Walla Walla at $\$ 1.87 \frac{1}{2} ; 500$ fair do at $\$ 1.85$; and 60 do at $\$ 1.80$ per ctt.
WOOI-Prices are about the same, althongh sales are small and trade dull. We note sales: 6is, 000 San Joaquin, $14 \frac{1}{2} @ 21 \mathrm{c} ; 86$ bales do, $17 \frac{1}{2} \mathrm{c}$; 15 bales Northern, $24 \frac{1}{2} \mathrm{c} ; 20$ bales Shasta
county, $20 \mathrm{e} ; 14$ bales Sacramento, $24 \mathrm{c} ; 52$ bales county, 20 c ;

## FRUITS AND VEGETABLES.



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FLOWERING PLANTS AND BULES, FRUITS AND
ORNANENTAL TREES ETC FAXCY WIRE DESIGRS, GARDEN TRELLISSS, SYR-
INGES, GARDEN HARDWARE. Comprising the Most Complete Stock EvER OFFERED ON THE PACIFIC COAST: will" "Ge sent to the Vegetable and Flower Garden structions on the culture of Fruit, Nut, and Oruamenta Tree seeds, Alfalfa, etc. J. TRUMBULL \& CO.,
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Contlnually arriving, NEW and FRESH KENTUCKY
ELAE' GRASS, RFI) TOP TIMITHY, SWEET
VERNAL, MFZQUITE and other Grassee.
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Importers, Growers and Dealers in Garden, Field and Bulbs and Garten Requisites of every descriptlon. Cata B. K. BLIS.' \& soNs, 34 Barelay

SOMETHING NEW.
Wright's Centennial potato, uriginatod at Reno, Nevalk,
fromm seen in 18is, has been fully tusted and is



Chance fo a Country Merchant.
There is a fure chanee to open a country store
The location is 16 iniles Irom Tehana and 20 miles to Paskenta, New ville, Roundr road from these two place, etc. The location
is surronnded by a very thrifty and proser in is surronnded by a very thrifty and prosperous faming
country. During the last 20 years there has not been a
finilure of crops and this jear everything looks better There are now at Ilenlywille a good Hotel, Blacksnith
shop, shoe shop and siliont but no store. There is a liew, first-class huilding, ready to put in a stoek of gromles.
 will rent the luilding at very reasonahle rent th a gooil
firm or they will take an interest in the store with good GLEASON \& MASON NURSERYMAN WANTED.
A practical and experienced nurseryman is wanted to
estallish a nursery in a nood locntion in Tclrama county. The owner of the liand hat the best of noil and plenty
water, one mile fromn the raitroad station He whits water, one mile from the railroad station. He wants a
good man to prt ont in few acres of cranlerrice, and raise
all kinds of oruancutal und forest treet. The owner of nik ind of ornamental and forest trees. The owner of
tho land wihhes on talie an interest in the proposed nursery and beliceses good sales of trees can be made. Good
men, expericneed and trustworthy mily address us on DEWEY \& CO
$\frac{\text { Yen }}{\text { Yen NAIIE }}$


One new Straw-burning Portable Engine, made by Ransome, Sims \& Head, Ipswich, England. This is a very superior engine, sent here as a sample engine for exhibition; one sccond-hand Straw-burning Engine, 8x10 inch cylinder, (Rice); one second-hand Wood-burning En gine, $8 \times 12$ inch cylinder, (Hoadley); one second-hand Wood-burning Engine, 7x10 inch cylinder, (Hoadley); one second-hand Wocd-burning Engine, $5 \frac{1}{2} \times 10$ inch cylinder, (Hoadley); one second-hand Wood-burning Engine, $6 \times 12$ inch cylinder, side engine; one new Stationary Engine, independent cut-off, $12 \times 24$ inch cylinder. [The Straw-burning Engines named are frce from infring ments.]
One large sized Rock Breaker, Varney \& Rix, size 9x15; one Wood Splittung Machine; one 36 -inch cylinder Russel Separator, (with extra cylinder,) and Lauffenber shoe- very cheap, on account of owner's death; (will be above second-land engines have been in shop and overabove second-land engines have been in shop and over-
hauled, and are in good working order. Various other hauled, and are in good working order. Various other
machinery for sale. Purchase made on Commission Machinery repairs solicited. Specialty of Portable Engines and Boilers for threshing.
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Rice's Portable Engines Have no Equal! Manufactured on the Pacific Coast. Four Stzes-Plain; Substantial, Durable and SAFE. Consumes less Wood, Coal and Water than any Engine known; over 150 now in
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PIONEER BOX FACTORY,
Corner of Front and M Streets, Sacramento. ALL KINDS OF
Fruit \& Packing Boxes Made to Order, AND IN SHOOKS.
AT3 Communications Promptly Attended to COOKE \& SONS, Successora to Cookr \& Gbegoby

# Winchester Repeating Rifle MODEL 1873. 



The Power and Accuracy of its Discharge, The Impossibility of Accident in Loading,
string measuring from center, of tar
get to center of each slot, of 32
inches. Averaze distance, of int
inches. Ater Aeraze distance of
each shot, $19-100$ inches.
Commend it to the attention of all who use a Rifle, either for Hunting, Defense, or Target Shooting.
The San Francisco Agency is now fully supplied with all the various kinds and styles of Arms manufactured by the Winchester Repeating Arms Company, to wit:
Round barrels, plain and set, 24 inch-blued. Octagon barrel, plain, 24 inch-blued. Octagon barrel, se $24,26,28,30$ inch-blued. Octagon barrel, set extra heary, $24,26,28,30$ inch-blued. Octagon barrel, set, 24 $26,28,30-$ extra finished, case hardened and check stocks. Octagon barrel, set extra heary, 24, 20, 28, 30 inchextra finished-C. H. \& C. S. Octagon barrel, set, 24, 26, 28, 30 inch-beautifully finished-C. H. \& C. S., known as "One of One Thousand." Octagon barrel, set, gold, silver and nickel plated and engraved. Carbines
blued, also gold, silver and nickel plated. Military rifle muskets, model 1873. Riffes, muskets and carbines, blued, also gold, silver and nickel plated. Military rifle muskets, model 1873. Rifles, muskets and carbines,
model 1866. RELOADING TOOLS, PRIMERS AND PARTS OF ARMS.
A heavy stock of Cartridges Manufactured by the W. R. A. Co., for all kinds of Rifles and Pistols, constantly on hand and warranted the best in the market.

Sole Agent for Dupont's Mining, Blasting, Cannon, and Celebrated Brands of Sporting Powder.
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## Wind Mill,

## the most powerful and the nearest perfection

 of any in use-one that protects itself in a gale, will keep your tank filled witifWater Without Waste and Without Attention, EXAMINE THE RECENT Improvements of Mr. Bachelder,

As nwo Manufactured by the Bachelder Manufacturing Co., napa, cal.

FARM APPRENTICE. A steady, healthy boy, who can give good recommen-
dations, would like a permanent bome with a farmer.

Engraving $\begin{gathered}\text { Superior Wood and Metal Engrav- } \\ \text { ing, Electrotyping and Stereotyp }\end{gathered}$
Engraving $\begin{gathered}\text { supcrior Wood and Metal Engrav } \\ \text { ing, Llectrotyping and Steretyp- } \\ \text { ing done at the ontice of the Misive }\end{gathered}$ and Suikntific Prese, Sain Francisco, at favorable ratce

Grangers' Bank of California, 42 California Street,
SAN FRANCISCO CAL.
Authorized Capital - \$2,500,000.

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The Bank was opeled on the first of August, 1874, for the transaction of a general banking business.
Having made arrangements with the Importers' and Traders' National Bank of N. Y., we are now prepared to buy and sell Exchange on the Atlantic States at the best market rates.
London Assurance Corporation, OF LONDON, ENGLAND. Established in 1720.
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Sierra Flume \& Lumber Co.
Have over 100,000 Acres of
SUGAR PINE, YELLOW PINE, SPRUCE
Fir and Cedar Lands,
10 Saw Mills, 3 Planing Mills, 1 Sash and Door Factory,

149 Miles V Flumes,
10 Miles Tramway,
157 Miles Telegraph Line,
13 Telegraph Stations,
Employ 475 Men and 550 Oxen \& Horses.
The Sugar Pine is unsurpassed in quality, and the whole Coast can be supplied. ine grained and superior to any other hard lini for flotoring, stecpiiig, etc.
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purposes.
Last year thirty millions of feet were cut and the estimate for 1877 is fifty millions, fiftecen millionn are now on
hand, thoroughy seasoned by the hot clinite of Red hand, thoroughly seasoned by the hot clinate of Red
Bluff and Chico. Larred orders. can be filled on a days' notice for all
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## BUILDING MATERIALS,

Rough or dressed dry, by which elcgant and substautial
work may becounplished without delay at the usual cost
for $y$ reen lumber. for rreen luinber.
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The new poison, Tophetine, is found and warranted superior to all others as a
Squirrel and Gopther Exterminator. Sold

 food. Onc unart, of hot water will dissolle the contents
of a 50 cant box, which effect ually poisolis two cuarts of of a 50 cent box, which effectually poioins two quartst of
grain
LA A

## Spring Wagons, Buggies, Carriages, Etc.,

MANUFACTURED OF THE BEST MATERIAL, BY THE
-iweepstake Plow Company, San Ireandro Cal. THIS COMPANY MANUFACTURE THE BEST AND MOST APPROVED STYLES OF

## SPRING, EXPRESS and THOROUGHBRACE WAGONS, CARRIAGES, PHETONS, BUGGIES, Etc.

No. 7.--PLATFORM SPRING WAGON. The llatform Sipring Wargn, as shown in cut, is designed for Furmers, 11 ucksters and ease of motion to the bolls, white the hearings are near the hull, instead of the
 Wagon which we make. There is no wood work to the gear, no reaches to lreak,




No. 1.-WITH TOP.


No. 000-OR MOUNTAIN BUGGY
No. not is a heary Road Buygy with lole and lirake and
hind Boot.
 Rods same as used and deseribed on our ©o. oo Waom, or we Patelt $E$ Equanizers, if desired inch, five-tear sipriugs wintese same
 Price, for Open Buggy, Wood Hub Whee!s. . $\$ 225$ Price, for pen Buggy, Wood Hub Whee!s.... $\$ 225$
Price, for Top Buggy, Wood Hub Wheels.... $\$ 340$. For Sarven Patent Wheels, add $\$ 15$ to above Prices.

No. 9.-heavy JIDE SPRINGS.


 Price with Wood Hub Wheel.......... $\$ 245$. P Price with Sarven Patent Wheel....... $\$ 280$ $\$ 245$. Price with Sarven Patent Wheel ...... $\$ 260$





No O-WITH POLE AND BRAKE

No. 00 - WITH PATENT EQUALIZING RODS.
No. no is a light Side-Spring Waron-or Burgy - put up with our
1atent Equalizing Rods, which cause the . body to set level when nevenly loadel; or when the load is upon one side, the loody will remaln level, and wot tip sideways, as is common with side springs and is much oasier riding. Its price makes it popular as a Business wagon as
Axle, one inch. Springs, one und one-balf fuches, four leaves Price, with Shafts and Wood Hub Wheel.......... $\$ 150$ Price, with Sarven Patent Wheel

Price, with Wood Hub Wheels.......... $\$ 280$.
Price, with Sarven Patent Wheels.... $\$ 285$.


No. 11 -THOROUGHBRACE.
 Wagons of an inferior quality, nor shall we impair our work in order to reduce the price, luat furnishlh Wagons and velicicles of any kind required, whifeli, for gencral propurtions, style and fuisish, ennnot be excelled on the Pacific
Coast, and at a reasonable price. of the dav.

SWEEPSTAKE PLOW COMPANY, SAN LEANDRO, CAL., or Baker \& Hamilton, San Francisco and Sacramento.

# (2x) <br> - ACXCYC AURALS 

Volume XV. 1
SAN FRANCISCO, SATURDAY, JUNE 8, 1878.
Number 23.

The Bread-Fruit.
The bread-fruit tree, an important tree of the order Artoccrrpucer", is a native of Southern Asia, of the South Pacific and of the Indian archipelago, and is now naturatized in sone of the West Indies with some success. In the
South Pacific it grows iu the Sandwich islands, the Marguesas, the Society, the Samoas, the Fijis, the New Hebrides, and, in fact, in most of the larger tropical islands, where it delights in rich, moist, shectered situations. It attains a hight of from 50 to 60 feet, aud measures about six feet in circumference at the base. The natified, or deeply dividect into gracefully pointed lobes or scoHlops, like those of a lady's acc eollar, and from 6 to 12 inches in width, and froun 12 to 18 inches in length. As they
are deciluous, and as they fade they almost are deciluous, and as they fate they a
rival the prisnatic colors of the rainbow, ival the prismatic colors of the rainbow.
The greenish and unconspicious, unisexua owers are borne crowin oments or calius the staninate oncs being club-shaped, white the uptil cooked in
this noble tree native names.
The pulp is juicy and light-yellow, when it is nhly ripc, but it
eating before it arrives at that stage
of maturity. The rind is perhaps an eighth of an inch in thickness; and denuded of this, at
the time when it is the time when it is
in the greatest perin the greatest per.
fection, the fruit ecesents a beautipresents a heauti-ish-ychow pulp, me he eaten, with the exceptio: of is easily core, which llowever removed. ne

the and, securing as much as will adhere to the fingers, passing it into the month with rapid
evolutions. Besides these there are a gread many other ways of preparing this valuable food. method of preparmethod of a district wourd
assenble and forn
a large conmon
aven oven, by digning a
pit fron pit fronill to 10 to and from S to 12 ing it with fire-
wood till the heal bood till the heat
becomes very
great. The cover great. The cover-
ing is then removed, anl many
hundrels of ripe
bread fruit thrown in with leaves laid

## Agricultural Statistics.

In the House of $\overline{\text { lieprescutatives recently, }}$ Mr. Burchard of Illinois made a speech in favor of repealing the bankrupt law. Buring the course of this speech he presented a summary 1570 in order to show the matcrial prosperity of the country. His figures were as follows

$24,525,000 \quad 31,500, \mathrm{cu}$
Mr. Burcharl further states that the cotton
$\begin{aligned} & \text { crop this year will equal that of } 1875 \text {, which } \\ & \text { was the largest which has been made since }\end{aligned}$
The net result of his statistics is that
fruit and leaf of the bread fruit reduced from natural size.
pistillate oues rescmble the balls of the sycaThe; bour the same brauch
cal, and somewhat rescmbles in matery sphergeveral appearance one of our citron melons of ordhary size, and sometimes weighs four pounds ongitudiually; its surface is narked with a network of small hexagonal divisions, having each a sinall prominence in the inidille. It greath resembles, on a larger scale, the fruit of the osage orangc, to which tree, as welf as the mul berry, it is clusely related, botanically. The refreshing grea of its rich follage, the ts branches together with the pleasant sharke it affords, all combine to render the bread-fruit visit Polynesia
The bread-fruit contains a large portion of starch or fecular, and forms one of the principal articles of diet amougst the islanders of tropical it and it appears to be very wholesome and nourishing. There are numerous varieties
some way. The most simple mode consists fruit, when in a particular state of greeuness, among the embers of a fire, in the same way that you roast a potato, and sometimes $2 m$ min-
heated stones. After the lapse of 10 or 20 min ates the green rind cmbrowns and cracks, and when it is removed it has the appearance of "a heantiful light-colored smoking loaf." Thus aisen it has a mild and pleasant flavor. There is oue wher iorm, however, 1 ml which the fruit generally served that renders it a very preas ant dish. As soon as it is taken from the fire, he remainiug part placed in a sort of shallow the remainng part placed in a sort of shallow wooden dish and briskly worked with a stone quantity of rich cocoanut milk, this is the great staple of food; it somewhat resembles in its cousistency our book-binders' paste, and is known as "poi poi," although "poi poi" is often made of taro and other esculcnt roots. The native way of eating this is by thrusting the two forefingers of the right hand into the
mass, which is generally kept in a large wooden
renaining hot stones w cre praced above them, Thus they were left for a certain length of time before being opened. This wholesile mote of baking the fruit has, however, beell much discontinued since the introduction of Christianity into the islands, in consequence of the fcasting, debauchery, rioting and kava drinking that invariably follows the opening of one of these ens.
This invaluable tree, besides producing two resiu, which the natives use to render the seans resiu, which the natives use to render the seans
of their canoes and boats water-tight. The leaves they sometimes usc for thatching their houses and other purposes, and the iuncr bark of the young branches for making a common varicty of tappa or native cloth. The timber, which is light, and of a rich yellow color, used for posts of houscs, making canoos, and many other useful purposes
ad who for the materials from which to make our illustrations and descriptions.
tion in the eountry has increased by one-thir the live stock by trom one-quarter to one-half and other staplo products in ergually striking propy to unde the why the of trado for the past three wers bas bin our favor, and why the promiun on gold has dechined.

El, ]obado ('ouvty Fahe. - We hear that the prospects are fine for an cxcellent fair at l'lacer ville this year. The date is September 13th to 5tli. The Secretary, C. II. Weatherwax, an the other officers are pushing preparations vid track and will lave it iu good shape and well finished before the opening day of tho fair. Much inturest is expressed by the producers of the county in the coming exhibition, and it behceved the infustrial eisplay win
than ever made in the county before.

The: result of a test case, tricd at Philadelphia, foreshadows that Allegheny county must
pay for all the goods destroycd in the Pittsburg labor riots.

## Correspondence.

## We admit, unendorsed, orinionso f correstondents.-EED

Wheat and Cheat.
EDrrues Press:- - Prof. Hilgard's lecture on cheat is quite poiutcd and positive. He says
wheat will not turn into chcat auy more than a wheat will not turn into chcat auy more than a
sheep will turn iuto a goat. Ile might have added according to his opinion, whicl we think is good on some points. If not trespassing in your statements of practical expericnce and matters of fact. Last year, in our delate on
the wheat and cheat
question, some argued cheat woulld not grow; hence, the arggment, it must spring from othcr grains. So as to kuow pan. 1 also sowed three different kinds of partitions between, so they conlld not mix. In due time all came up finely, wheet, cheat and all in their respective places. Thus I found out that cheat will grow; and, now, for a pro-
cess on the wheat, to see if it will turn into chcat. The result, when time to head the chent, was all good cheat, and each of the three parcels of wheat appeared, also a number of
heals of plump cheat, the balance being good wheat. Now, I Rnow there was no cheat sowed
with the wheat , and the soil 1 procured in such a place that $I$ was satistied there was no foul
seed of any kind in it. oh, but says some of the olppsition, the cheat might have worke en
 this time, lut I tried again, so lost at the next I procured three tin cans and arranged to
repeat the experinentit, except the cheat sowing. repeat the experinent, ex cept the cheat sowing.
I filled them with clean soil from the e liilsidide, where all prarties were satistied there was no
chance for foul seel of of any kind in it. Then 1 procured three tialierent kinds of wheat and
took particular proiss to see that nothing but on the upper porch, to be exposed to all the
weather changes. The resilt was that all came
 None died out, because $I$ watched it elose, and cleat in two of the parcels and bolanceaco good
wheat. The other can is all wheat; no cleat wheat. The othcr
at
and in in the thirl can.
Thre above is in brief my expleriments. The titest Now, as 1 kinw it was all whieat the tells us that chess is a hardy weed, whose seeds it is extremely dillicult to separate from wheat graiu completely by any means ordinarily
available on the tarm, unless it be the header,
 so we have the the theory that the cheat will remain in the ground until some other grain is
 sent issif as aperfect cheat, and in wiln not
even then telicate wheat will hurry yp
and get the start and keep ahead. Now, the and get the this war and don't tind the header to to
 will coone ont soon, as our crops are terribly I wonder what the P rofessor would think is he could be here now and look and belold the
fiels of cheat whiere never any grain grew
vefon
 acres and burned a, great lairt of the brush and
logs on the grouml, and, in so soine would heat the earth quite hot to a considerable depth in


 lardly a spear or whent to be found and some
considerathle larley in places and an anhundance of cheat, and in some places, rods together, all and not a spear of anything else alitong it


 sowed in time. The general opinion was that cops, never ooken sean of could not tel
that there was
cheat in the fields Bint it seems the grain did cot teat the the start
but tacked right square down in soue fields wholly demoralized, notwithstand ins the good start it hail 1 Iligard calls the wheat a conparatively
delicate and panppered grain, and still it will
naturally suppose if the chess is there in the ground areacy, through summer fato and the
the season, it is cqually as ready to take the alvantage of a good season as the delicate wheat, but we understand that if it is wet and ing at all comes, and it must be plowed and sowed again; so now where is your hardy cheat
that is already in the soil ? It becomes disgust ed and declines to come at all, unless it has some
other body to cheat after the other borly is parother body to cheat after th
alyzed and can't help itself.
I am aware that I am subjecting mysclf to
ome crit:cism from some of the learned. The tell us that science is a gainst us and nature strongly opposed to us. They teach us that i we sow wheat we reap. wheat; we think it may
chauce to be something else, as nature has freaks sometimes. It is thouglit ly many guod paper to talk or write about such an olde ques tion and advancing the idea that the golden ife, should be cheated out of from its ylorious life, sho
mission.
I am aware also that talent, observation anc robabilities thsting is not at all opposcd to the being sowed. 1 notice that in the firange we are about equally diviled, and among the bes and the only way I know of to settle this ques tion is for all to expcriment as Morse di
lightning until we bring it to the point.

## Alexander <br> Valley <br> ey, Sonoma <br> o., Mlay 2 -

San Luis Obispo County Notes.-No. 5
Edortors Press:-Descending the Arroyo a ew miles brings us to a wonderful little ranch in the thermal loclt, owned by Peter Haney
The place bore more the appearance of May han Febrnary, as the yard was full of delicat dowers in full bloom. There were pepper old, and nearly all the different varieties of ruit trees. So much rain had fallen that th malva had nearly taken the lowladd a dense verywhere in the county, and we found no one who holds it in any other estimation than nischievous encroaching weed, hard to get ri The next place below on the right bank he stream is the ranch of liamon Brauch. It is a bcautiful property, containing one leagu 4,444 acres) of land, consisting of rolling hills, ided inds and monte. It has recently bcen dioffered for sale at from $\$ 10$ to $\$ 30$ per acre. A reek runs through the ranch, emptying int springs upon the place, and an abundance o
tmber. The hills are clothel with a heav rowth of altilerilla and clover, and the low laud pronuces largely of grain roots and vege nany on this ranch and on portions of the Cor
ral de Piedra, should prodntec largely of such ruits as the orange, lemon, lime and olive. Adjoing this on the west is a ranch of
ral hmodred acres owned by Charles Fiuk. op yard of five acres yielded 2,010 to 2,20 the creek lies another league ranch owned by hamon Branch, which will probably go int
market another year. Adjoining on the west market another year. Alloming on the west a this rauch the wild coffee whichal. grows in th ountains, also tobacco plants two years old, th to thic locality. Further down are several thonand acres owncl by Messrs. Fred liranch and pelonging to $W$. S. Jones, on which are the uins of an old adobe, a brauch of the San Luis Mission, established here in 1780 to grow a sup
ply of corn, beans, potatoes, etc., for the use of place is loing well, and more will be sowed thi spring on the neighboring ranches. These places re now used almost wholly for stock purpose cops of grain and vegetables.
One of the best pieces of property to be see on the Arroyo is a 1,400 -acre ranch on which
are Newsom's White Sulphur Springs, situat in a charming glen about two miles easterly are hot and coll, strongly ron, magnesia and sulphur; heary coatings of salts form on the nail-heads in the plank encosures, and a tin cup is rapidly caten out their healing qualitics are highly recommende or paralysis, rheunatisn, neuralgia, and al tages have been erected, 1 enting from 810 to $\$ 20$ per week. D. N. Newsom ollers the springs for
sale, together with 700 acres of land; were little calital expended here, the springs might natc is very popular, for the for the choicest ruits, and with the aid of art its grounds would
be unexcelled. The region is thermal, and the The Arroyo bottom is from for years.
The Arroyo bottom is from one-half to three
with cottonwood, sycamore and willow. In arder folled to the ground and burned, thousands of cords of wood, for which there is no market, eing destroyed in this way. The land is of to irrigation.
('rossing th that portion of the Steele ranch known as Dairy
vetera eteran soldier in the late rebellion and a trnsted to California, he has chosen to employ his talents in developing the latent capacity of this ranch, which contains 1,000 acres. J. Bendasher 25. The dairy conveniences and method of naking siluilar to those described in the for going dairies. The calves are fe ments, each calf bcing confinet the tipar eeding in a small stanchion. We saw 100 acre of bald barley looking well. On the river are -hich of he produced the en irrigation, o Twenty-five acres of corn are raised annually with about the same of pump,kins, the ground first producing a crop of hay. At the upper ing a levec fron the point of one hill to another ne opposite, the water being taken out of th rroyo at a point above aud conveyed to thi evee in a canyon. It is a valuablc auxiliary to Oue-half mile west of the ranch is the

## Arroyo Grande

Situated on the river about two milcs from the ocean beach. An exceedingly rich farning
region lies on all sides, and the town must in a region lies on all sides, and the town must in at present it consists of 12 or 15 houses, two stores, and blacksmith shop.
One of the richest sections, perhaps the riehest in the county, is the Cienega (swamp), now rcclaimed and cleared of timber at an ex pense of nearly $\$ 50$ per acre, and lield at a
higher price than any other land on the steele anch. Its capacity for produ tion is almos unlimited, the soil being rich, dark, deep ant virgin. It contains some 2,500 acres, a part of
which is low sand lills, and, although barren in appearance, yielding very good crops under cnl andy 3.5 bushels per acre on the ranch of Mr. Seve nce. Five hundred acres of the best land has heen sold off in tracts of from 50 to 100 acres, and will all be eventually divided into tracts of rofit, properly farmed, and when transporta Dairy No. 1 , of Steele Brothers, is located
Dhat Dairy No. 1, of steele Brothers, is located at the $i n g$ from other dairies late in the season arge barn, sheds and dairy buildings are buil at this location, and a large spring furnishes ater for household pirposes, for stock and for irrigating a gardeu. The
charge of Mr. R. 13ushnell.
South of the Cienega is the Balsade Chemisal on which san pretommates. (One thousand ve hundred acres in a borly were sown here one year, yielding 30 bushels per acre. The sand is
yellow mixed with a tine sediment, giving it considerable body. This land and the sand on a or growing early potatocs
A ride some eight or nine miles over the santa Barbara stage roall leads to the Oso Flaco (poor brar) district. A gov-acre ranch is owncl b
iteele Bros. in the Oso Flaco, on which located Jairy No. 7 , of 150 cows . This distri s very rich, though somewhat variable in th character of its soil. There are spots of alkal 3,000 pounds and npward per acre, and other rops in proportion. There has bren some tal in this section showing the percentage of sac Che () mo Flaco consisto with 2.63 resilual matter and was a part of the 11 league fiuadaloupe rant, most of which lies across the saut Maria in Santa Barbara county, We heard estimated that southern part of san linis county and fi0,000 acres in the santa Maria valley
lmmediately east of the Balsade (hemisal ies the beautiful Nipoma (foothill) ranch, con 833 to Capt. W'm. G. Dana, of Boston, Mass, relative of the well-known author, lichar Henry Dana. Capt. Dana dying in 1858 , the property passed into the hands of his heirs, ho now hol it and who will shortly ofler it or sale in suludivisions to suit purchasers, at
prices ranging from $\$$ to $\$ 30$ per acre. The ranch is very productive, yicliling 15 to 20 grade of land tract is well watcred by springs and streams, the Los Berros (water cress) being one of the rty in the county.
Arrth or northeast of the Nipuma is the
Huasna ranch of 22,190 aeres which I hear will o into market in a year or two. Adjoining 11 leagne grant, owned by H. M. Newhall, of an Francisco. A portion of the 11 uasua ranch nown in San Francisco 11. F. Hallet. San Luis, April, 1878 .

Views in Monterey County
Editors Phess:-The northern boundary of Monterey county, is the Pajaro river, which, during the upper portion of its course is a very picturesque and intcresting stream, but it be-
comes sedate and lost in hollows of sand and copses of willow long before it reaches tho ocean. That portion of the Pajaro vallcy lying
south of this rambling river is of course a south of this rambling river, is of course a part
of Montcrey county; indecd some of the best The farms of Mcssrs. Murphy, Thompson, Nlann, Rowe, Specgle, Clough and others in the upper valley, are well improved, and well
tilled. Nearer the mouth of the river much more ground has been given to corn, potatoes and beans, so long a specialty of Pajaro farm-
ing. Early Californians will remember how, in and lest in the marvelons crops of this valley, Watsonville, just across the line of Santa Cruz county, has evidently grown in the past year, ooked very familiar.
There is a section which might be call "the Pr country, lying between the two valleys of Pajaro and s'alinas, which is rapidly filling up with a multitude of small farmers. This hilly region extends possibly 40 miles east and west, tion consists of sandy untimbered hillocks, tit, however, for cultivation, and this year rejoicing in unusual crops. The eastern portion is able for farming purp oscs. The white sage, for the use of bees, is very abundant here, a

## Castroville

Lies on the extreme northwest verge of the alinas vallcy, and is a rather quiet town, surrounded by sloughs and fresh water lagoons, which will soon be draincd, thins adding to the producing area. On the upland from this point to behold. On, past Salinas, Gonzales, Chuelar to Soledad, and on cither hand from the Santa where range to the prond Gabilan " broken only here and there by a few brown roofs, or the willowy line of some stream. I have a deep and measureless pity for the man who would
not, does not, thrill at this beautiful sight, which other valleys besides Salinas can slow, ulous plain of shining leaves and scintile trem ors, changing fast under the wooing sinn and the passing winds of heaven. And we rememhow last sume they were barreu, aul the earth was desolate, and the skics were iron, and a whole people mourned. Put to-day dear
Mother Earth is young as a lunshing maiden. Saiinas City,
Is the same old place, ouly a little morc so. It was the rarest of treats to walk up the street and shake hands with, as it appeared, half of
Salinas. There was Jackson, (assiday, I)r. Salinas. There was Jackson, Cassiday, Dr,
Archer of Santa lita, genial John I'atton, swift of the Abbott; farmer friends without it was Institute week, sprigs of the law. Salinas, be it soberly staterl, is a lright growing place, full of jovial people-wonld I conld here
name and thank them all for courtesics ex. tended during my sojourn.

$$
\begin{aligned}
& \text { ery pleasant day was spent on } \\
& \text { The Ranch of Jesse D. Carr }
\end{aligned}
$$

This is a famors place, on accout of the fine stock kept there, and 1 had long desired to
visit it; so when Mr. 'Carr, with that genesous visit it; so when Mr. Carr, with that genelous
hospitality for which he is noted, placed himselt and his team at my service for the riay, I weautiful undulating valley, past the old Gabilan honee, so famons in early times, and over low grassy hills, brought us to our blouled horses for a moment aside to look at group of Short Horns near by, unconscionsly arranged in a magniticent picture. full in the foreground, with the sunlight on his After we stabled our horses, others of tho thoronghbred herd came ninder inspection, and were pronounced unsurpassed. Mr. Carr has two strains of short llorns, the bulls of which and "11nkes of Mlonterey." He has now about 30 thoroughbreds, the constant demand for them keeping his herd small, but it is too well known at our State fair, to need firther com-
ment. Abont 300 grade cattle are kept, and the rest of the large range is pastured by Me well shcep. I noticed a well proportioned hogs, and fonnd that they in-
cluded full blood Essex, imported full blood Berkshire, and a cross between the two, which
Vr. C. prefers. The horse Hesh, also, was fine, as might expect from a man who owns
"Nambrino" and "Vermont," and young Thomas Elinore.
Part of another pleasant day was spent with fields near Santa Rita.
Mr. Jackson has planted a fine young orchard and started a lovely garden since I was last here. The Xle kinnon Bros. are also improving years ago. Mr. Jackson showed me his young eucalyptus planted around his whole farm, and
growing finely. We also saw some of Mr. Carr's
horses at the race track, and then drove to town. The former slough near Salinas, whose drain grain and is thoroughly reclaimed.
The interest and belief in orchards is increasing. For some time it was thought that fruit but this appears to have been a mistake, as Mayberry \& Low in full bearing, and Messrs. men, are building up, a fine business.
I understand that the irrigation canal from the Salinas river into the upper portion of the can hardly give a lively report.
Natividad a visit and shake hands to pay Natividad a visit and shake hands with our
friends Mr. Hebbron and Mr. Mathews, but the bright years will, I hope, bring ns together

## Draining and its Appliances.

Editors Press:-There are many hundred acres of exceedingly rich bottom land in this and kept in such a boggy state during the wet and kept in such a boggy state during the wet
season that it not unfrequently brings the cultiseason that it not untrequently brings the culti-
vator into debt, instead of yielding him a handsome profit upon the investment of his labor and capital. Good judges estimate that this
land would be doubled in value by draining. But this is such an expensive operation by the usual method of digging the trenches by hand, that few possess the means and the confidence claiming to lessen the expense of relieving the land of surface water, so as to bring the process
within the limit of small capitalists, is looked within the limit of sinall capitalists, is ane an interest in its success. I have heard that there trenches, that work quite satisfactorily. But the desideratum is a machine that shall, at a laying. The work to be accomplished is so require a very complicated apparatus, require a very complicated apparatus, or ing tried here for this object. It was experi-
mented with last fall in a sinall way, hut is now being more thoronghly tested with a view deciding its practical value for the purpose i
question. It is uudonbtedly a step forward i question. It is uudonbtedly a step forward ficent quantity of land to be drained and other circumstances are favorable, I think this ditcher
would be preferable to doing the work by hand, and am contident that a considerable saving with others who have carefully examined the ditcher and have seen it work, give it as our success, because it has never performed auyaud for the following reasons, which will atso serve to show the difficulties to be overcome in
the work, and may be of use in directing parthe work, and may be of use in directing par-
ticular attention to the requirements necessary for that purpose

1. It is very heavy and nnwicldy, requiring
ur horses to draw it with ease on a smooth four horses to draw it with
2. The construction of the machine is such that the work innst be done just in the nick of
time, or not at all. If the ground is wet and a little sticky on top, the wheels get so clogged as make it almost impossible to move them;
and if the ditching wheel either refuses to and hard,
to the ditching wheel either refuses to cut through
it, or to take it $n$ p after having performed that it, or to take it no
feat. teams to work it that it is exceedingly difficult
to get them together just when they are wanted

The machine and train required to operate it is of smeh length that it cannot be worked
close enough to the eud of the draiu, still lcaving a considera
done loy hand.
5. It can only be worked up and down with of the ditch to be graded to a proper inclination by some other meaus.
6. The trench, as usually made, is the same
wictll on top as at the bottom. rendering the width on top as at the botton, rendering the ditches, exceedingly laborions and tronblesome. 7. The anount of work done by the machine
in such utter disproportion to the force reis in such utter disproportion to the force rethe principle itself is not altogether a wrong one.
8. The cost of the ditcher would be quite a bar to its general aloption, and I do not think bar to its general adoption, and I do not think The agent himself has a ditcher which he has party who owns the only other ditcher of the days ago with 10 horses, but had to stop so
often to let them rest that he put on 14 horses he said that was none too much.? As near as I the machine in one day, with the seveu men long, six inches wide, by four inches deep, or its equivalent. This machine is a Texas inven-
tion, and is called the "Austin that eith have been built, but I cannot learn any extent
have heard it said of successful business
men that the opportunity served them. Well
here is the opportunity, and who shall say here is the opportunity, and who shall say, here is the man to take the opportunity by the
hand? Certainly there is a chance for some one to win a fortune by constructing a ditcher that When such a the above enumerated obstacles hinen such a man is found let us hear fro Santa Rosa, April 17th, 1878.

## Horticulture

## Why We Should Prune.

Edirors Press:--In my former article on the subject of pruniag, I spoke of some of the set; now I wish to speak, of the advantages of following it up. The first advantage is that you can form just such a top to your tree as
you wish, by cntting away snch limbs as you you wish, by cntting away such limbs as yon
don't want and shortening those that are getting too long, making them spread more and thin ning out where they grow too thick and train-
ing up those that are inclined to droop and fully, you want to stndy the nature of the tree To illustrate, I will give some examples of familiar trees. Take yellow Newtown Pippin apple tree. When it is young and thrifty, it is very close together, and, when the tree gets in
full bearing, the top will be bent and twisted all out of shape by the weight of the fruit an frequently the tree will be all broken down and
spoiled. Or if it be not broken, the long limbs spoiled. Or if it be not broken, the long limbs
will remain bent over and throw out a great many shoots from the upper sides of the limbs and thns make a very thick and ugly top. Now,
by proper praning at the right time, we may
avoid this, all of your limbs and the top of your tree when setting out and then prne every year, so as to keep the top that grod showing ton tall and thus make them spread out more, and thin out wher
they get too thick and never suffer the tree t
fork. When you see two or more branches equal size growing out from the main sten, cut
off all but one and let that form the main tree. Let the branches grow out from the sides, at
proper distances from each other, so they will have plenty of room to bear and mature the fruit, and, if properly shortened in, they will
bear their well-grown crops of fruit without The Yollow Pellteur is of
The Yellow Bellfleur is of the opposite class
trees, and needs a different treatment of trees, and needs a different treatment in
sone respects. Such trees are inclined to form
a wery thick top, which grows low and spreading, and hangs too low if not trained upward.
sinch trees need a good deal of thinning out ammong the small branches, and in such a way
as to encourage the branches to Now, if you commeuce pruning your trees
while young and follow it up every year (as yos Whine young and
shulh i), in a proper way, youry can form just
such a top as you want. If your tree needs sucreating out, cut the young shoots off just
above a bud on the ontside of the shoot, and if on the npper side of the limb where yon cut it off: Shese rules will apolv to all kinds of fruit "Well," says one of wy neivbery,
go a cent on your pruning friit thees. I know their trees all cut off two or three years ago, and now they are thicker than ever-half a
dozen, limbs now to where there was one be
That is not the kind of pruning I an talking every ycar, using nothing but a stroug pair of hand shears; they avoiding the necessity
cutting large limhls. But old trees may b greatly inproved in the same way
Now, let us look ahout our neighbors' orclards a little and see how they look. A. has differen
kinls of fruit trees in bearing that have never been pruned, aud some of them have run up so
tall that it takes a very long ladder to get to the frnit, that is swinging out on lons scattering limbs, while others arc low and busly, with the limbs so numerous and close together that a hird can hardly fly through then, and they
arc fnll of little, stunted, worthless fruit. But are fnll of little, stunted, worthlcss fruit. But
A. says they are as nature formed them and he thinks he can't improve on nature and he lets them go
B. let
B. let nature attend to his trees until she got so many of the limbs down in his way that he them" with ax and saw and cleared out limbs enough to make another sucll orchard at one clearing; and now behold what an unsightly job has made of it!
thought he would prune a little, and when his trees were young he cut off all the sile
branches up as high as his head, so that he could drive his plow team close up to them; and the consequence is that the main body of the
tree is exposed to the heat of the sun, while the top is so high up as to be violently swung about the gronnd and wasted
But D. conmenced with his trees at setting and has carefuly pruned every year since, and
his trees are shapely, with well-balanced tops
that are thinned that are thinned out so that the sunlight cas
get in to mature the fruit. M. P. OwEN.
So oquel, Cal.

The $\mathrm{S}_{\text {table. }}$
Breeding Horses in California.-No. 5
Intending to make such copions rimotation from the Duke of Newcastle's work in these essays, it may be proper to give a short accoun of this man, so that his testimony may hav
proper weight; and the historian Hume draw proper weight; and the historian Hume draws emarks, following the description of the battl
"This event was in itself a mighty blow to the king, but proved more fatal in its conse-
quences. The Maryuis of Newcastle was en quences. The Narquas of Newcastle was enthe ornament of his court and of his order had been engaged, contrary to the natural bent
of his disposition, with these military opera tions merely by a high sense of honor, and a personal regard to his master. The dangers o
war were disregarded by his valor; but its fatignes were oppressing to his natural indolence Inniticent and generous in his expense; polite and elegant iu his taste: courteous and humane
in his behavior, he brought a great accession of friends and of credit to the party which he em braced. But amidst all the luury of action,

## arts of peace, in which he took delight; and the

## ftens of poetry, music, and conversation

 He chose sir Williain Daumant, an ingenious poet, for his Lientenant. Gieneral; the other per-sons in whom he place sons in whom he placed confidence were more
the instruments of his refined pleasures than qualified for the bnsiness they undertook; an
the severity and application requisite to the the severity and application requisite to the
support of discipline, were qualities in which "When Prince lig.
ice, resolved on the battle, and issued all or ders without comnuunicating his intentions to him, he took the ficld, but, he said, merely as a
volnnteer, and, except by bis personal courage,
which shone ont in the action.
Enraged to find that all his successful labors Were reudered abortive by an act of fatal temerity, terrified with the prospect of renewing his
pains and fatigue, he resolved no lenger to maintain the few resources which renamed to
a desperate cause, und thought, that the same arins, now required him to abandon a party arns, now required him to abandon a part,
when he met with such nuworthy treatment. "Next morning early, he sent word to the dom; and without delay he went to Scarbor
ough, where he found a vessel which carrit him beyond the sea. Duriug the ensning years, necessity, and saw we with ind anfference his opu-
ine
ent fortune sequestered by those who assumed lent fortune sequestered by those who assumed
the goverument of England. He disdained, by to their usurped authority; and the least favorable censors of his merit allowed that the fidel
ity and services of a whole life had sulficiently atoned for one rash action, into which his pas.
sion had betrayed him."-History of England, sion hat betrayed him."-History of England,
Chapter 57.
That he was a nobleman of "great ability tring for the more refined pleassires he would
be likely to be in advance of his contemporarie in all pertaining to a higher civilization than the
period in which he lived. The æsthetic taste which he possessed led him to admire the high est type of the horse, and as the nanege wa the prominent feature of the time, the animal
the best fitted for it was his favorite. Not
withstanding the philosophical bent of his mind he could not regard anything under the commonwealth as being on a par with that of the days of royalty, and hence his denouncing the improvement atter the restoratiou. His pre great improvement in the breeds. Neweastl improvement. His writings were so much superior to any others who had preceeded him
and far beyond all of his contemporaries, that $i$ did not require his social promincuce to give
them weight, and being so universally acknowl dged the finest horseman of the era lis conn-
The "royal narares" have so loug been regarded As their blood, and though 1 am convince was their blood, and though I am convinced
views by hypothetical reasoning.
There has been a glamour about the A raliau horse which still dazzles the eyc and betrays che judgment. The absurd pedigrees and fan"pride of the desert" is still held up as the paragon of perfection in the equine world.
Comprare the best Arabian of the present day (and the importations of A. Keene Riichards
wcre made after thorough research and regardless of cost), with a fair average specinen of siastic fancy to belicve that the greatest prortion of the blood is derived from these diminutive

## Test

as wide a diveryence as is shown in the size be a
and
earl
hors
aud this has had a great deal to do with the The following is the description real Arabian. The following is the description given in the
"New Method," and though the animal may Nave not been one of the best, there have been would apply
"He is nursed with cannel's milk. There are the strangest reports in the world about these horses; for I have been told by nany gentlemen of credit and by many merchants, that the price of an right Arabian is, one thousand, two
thonsand and three thousand pounds a horse an iutolerable and an incredible price), and hat the Arabs are as careful and diligent in keeping the genealogies of their horses, as any
princes can be in keeping any of their own ped"The

They keep the genealogy of their horses with me men, then their fathers give them two suits of arms, with two cimeters, and one of these horses, and prays to God to bless them.
That is every one's portion, and his horse always lies in the next room to him (I believe not above
stairs). They talk they will ride four score miles a day and never draw the bridle. Wheu I was onng I could have bought a nag for ten pounds, "I never saw but ane much very easily. Mr. John Markham, a nerchant, brought over bay, but a little horse, and no rarity for shape, "M have seen many English horses far miner. $£ 500$, and being trained up for a course, when he canc to run, every horse beat him."
It is scarcely creditable that King Charles would inport mares of this breeding wheu his

The other component of the thoronghbred is the Turkish horse, and the description of him
will finish so far as the breeding of the blood "I have seen very few of them, but two merwarp; very fine horses but oddly shaped.
Their heads were very fine but like heir heads were very fine, but like a camel's
They had excellent eyes and thin necks,
coellently risen; somewhat great bodies; the xcellently risen; somewhat great bodies; the
roup like a mule's; leg not great but marelously sinewey; good pasterns and good
hoofs, and thin backs rising somewhat like a
camel.

"I had a groon, a heavy English clown,
hom I set upon then, and they nade no more whom I set upon then, and they made no more
of him than if he had been as light as a feather. They appeared not so fit for the manege, as for have sconred. They trotted very well and no "The price of one of these horses is about eet a pass, for the Grand Seignior is very strict
n not snffering any of his horses to go out of his teritories
These descriptions are the first really reliable intelligence of the various breeds frcm which
the race-horse has sprung, and by scrutinizing the descendants, it will be observed that the
Spanish horse, the Barb and the Turk las had Spanish horse, the Barb and the Turk lias had
the most potent influence in marking the progeny. That a race superior to any of them has
ghe snperior as it would have been had the Arab been the only ancestor. Had the breeders of
England been restricted to this race there would not have bcen born such animals as we now see; for,
the same rewards, it would have been nearly
impossible to produce such animals as "Blair impossible to produce such animals as "Blair
Athol" is the type, $16 \frac{1}{2}$ hands high and weigh-
ing 1,400 pounds. ing 1,400 pounds.
ention to old matters in treating of "breeding horses in California," but it has a bearing and I hope to make it apparent before the close of
thesc articles. The thoronghbred horse may loe and anything which will show how the result has been reached is important. Pedigree has the success. Though the study of genealogies is a dry sulbject to a majority of 1 eople, it is an in the breeding of "improved stock" of any de-
scription. To sustaiu the test which the racc cription. To sustaiu the test which the race
course imposes, it is essential; for though an animal of rare merit may come from the hap-
hazard system, a succession of them only follows study and care. Though the horses of a huudred years ago are not the proper gnide to
nfluence selections now, it is woll for the brecder to be informed of the position those patriarchs occupy, and how the familics origiof the present.
In writiug that the horses of a hundred years ago are not the ones to guide the breeder in his wight trace for very best sources in the calender, did the perligree end so soon, the animal wouk not be the
proper one to loreed race-horses from. There re numerous proofs of this in turf history. The proper statement would be that as the best back for a couple of centuries, and the most the blood which was the most celelrated a hundred ycars arg; the later strains, following inore recent individuals require the closest inore rece
scrutiny

## Ratrovs or Hosbagarr.

Handling of the Present Wheat Crop. Entrons Press:-Permit me, before it is entirely too late, to give a fricndly warning to our graiu crops of California this year, for the Reral has always been really to protect our producers. Have any steps been taken as yct
to secure their just interests this sunmer and fall in the sale of their surplus wheat? None whatever. On the other hand, is anything being done in the way of combined action by those
who have money to loan, or debts to collect, or who wish to make all they can by speculating in grain, aull sacks, and ocean freights? Comenable us to say yes, enphatically yes. Everyenable us to say yes, endae, with more or less
thing possible is bcing don whow so well how
uity of action, by those who kno to manage these matters in their own interests, rather than in the interest of the producer. And
who blames them for it? It is thcir business. who blames them for it? It is thcir business.
 armers-the men whose hard work and great risks have given 11 this fue crop? no use the strength they have to nuite properly, in some timcly and jundicious actiou, to in the emergency, are they not to blame? Let
them answer for themselves. At present the seem to be asleep, on this subjcct. Let us Consider a Few Fact
. The important issues of the Constitutioual Convention, and the election of trustworthy
delegates who will lee alive aud faithful to our real wauts, seem to have absorbed all their at tention. They ean searcely be too anxious and
careful about that. But haw true is it, in this careful about that. But how true is it, in this
as in many other matters, 'This we should have as in many other inatters,
done, but uot left the other monc
2. Last year the results of war in Europe and
small crop here made prices so good that the few who had wheat to sell were well satisfied, and all seem now to have forg
tribulations in these matters.
3. The large number of wheat and larley sacks demanded will be deemed good excuse for holders to make their prices high.. Reports
say, "'No sack-rings yet." But how long will say, No sack
4. If peace prevails in Burope, this will be
rged as an imperative reason why the price of graiu, especially in the beginning of harvest, somewhat hy the Liverpool market.
5. If war comes, the argument will be, freigbts
are high, beausc English shius will be in danl. are high, becausc English ships will be in danl.
ger, and shipping scarce. Consequently, buy. rs must pay low prices here.
Auyone who reads the daily papers can see how the public mind is being gradually prepared
for as low a price of wheat as can well be tixed for as low a price of wheat as cat.
at the beginning of our harvest.
From Liverpool, we are toll, that the " splendid crop prospects in Anerica" promise "seri-
ous trouble in the grain trade." Here we are told that the Liverpool market alone regulates
our wheat market. The last words of comfort our wheat market. The last words of comfor,
tell us, "the tendency of prices favoros luyers." tell us, "the tenclency of prices favors huyers.
lu Californian paramace, "you let,", and we have
olsservel that the prices usually "favor buy olsservel that the prices asually
ers." in the early part of harvest. farmers! Wake up and take steps to grotect your interests before it it to late and hefore elt. It is no time to sleep over these matters. Your Grange unity was intended to protect you
in this and in all your intercsts. No doubt the rraiu crop of Califoruia will he large, but the usual result of hringing down prices, All you
scek in this matter, or ever have soupht, is just narket price

## What Can Be Done?

Why, just such things as you lave done in
the past, only a little better guarded, if pos. show you what to do. At least, have a whea convention called as soon as possille. Let the attendance be large. Take enough time to do
its work well. Ways and means can he found or those who try. We have known of action
being taken by the farmers and their committee bere as late as the middla of July, and even the
 no time to losc. If no more caal he done, hold their grain, if early ypices are not satisfac
tory. And pleasc remember that the hory And pleasc remember that the writc selfish or pecuniary interest of his own what
crer. This is written only from an earnes hope of beuefit to the grain raisers of alalifornia with whom he has suffercd iu the past from
negligence of their interests. J. W. A. W.

Portronsh, - We are compelled to kay ove until next week the concluding portiou of the
address of Bro. C'has. Woods, of Danville
Cirange.

People's Convention at Elmira. Emron: Press:-- Pursuant to a call by A. T
latch, Worthy Master of the P'tnoua (irang of Solano, delegates from the several Granges the county, farmers and others met at Elmirt, on Tuesday, May 28th, for the purpose of nomtion. E. L. Bennet, of Fihnira, was made Chairman of the meeting; J. R. Morris, if
Cordelia, Secretary: In discussing the order of C'ordelia, Secretary.' In discussing the order of
business, a motion was made and carried that the chair appoint a committee to draft resolntions and platform. (i. C. Pearson, of Vallejo, Chairman of that Committce, reported the
lowing, which was unanimously adopted: Pesolece, That this convention procecel in nominuti,
dele state; selecting competent and hoonest men revarderless of
party or creel, believing that meritit isa better salfeguart








 Will pereventit thll property (except that of the Feleral
Fourth. That

 cermine. Thast we declare arainst all viotence, clisorler or
Sixthe
awlessiness in endearoring to neconplish what we so arnestly desire, bevievevint that the happiness of the peoplle
a onn only he securcd through the liallot. The following uominations were made fo 18. L. Bennet, Elmira; W. B. Davis, Vacaville; Landing.

## The "California Patron.

Transfer of Publication.


 The "Patron."
With this number, we commence the publiirst and third saturdays of each month. This chauge is made in response to the wishes of a
large number of our subscribers, who helieve tbat the interests of the Ordcr demands the month, as heretofore. This change does not eccssitate a declaration of principles a state sue, other than to say that we will ever be
oound on the sidc of law, order, aud good gor ernment; a defender of the rights of persons and property, and against Communism in all of its protean forns, whether it be by dividing up men's property hy process of law, or by the
more violent macains adrocated by the leaders of the so-called Workingmen's party in san
Francisco. Neither do we intend to make this an agricultural paper, believing that that field fuly occupied. All papers, not alonc agri some of it wisc and some otherwise), of how o proluce the largest crops, withont giving olitaining remunerative prices for their pro
ducts. We shall, from time to time, endeave lucts. We shall, from time to time, endeavo
to give the farmers such information as wo connection with the firangers' Business Asso ciation, as will assist them in getting bette We propose to make the pald
frange" where farmers can, through its col mns, discuss the right and the wrons, and
verything that pertains to the farmers inter ests. That will teach the farmors their rights and their power when properly uuited. That
will teach them to take their tutioual and law-making assemblies as leaders nstead of being led, as they have geuerall The P' Putron will not forget the ellucational
features of our Order, for it is in the eduation of the youth of the land, in the love of a farm life, the success of our noble Order, yes, the
very existence of our republican form of gor ernment depends; on the intelligent, conserva tre element of thic rural districts of our conu
try, more particularly so at this, time when is openly preached; when of men's property) arm themselves for the avowed purpose of $t$ t rying their Communistic doctrine into effect:
vhen one class of forcigners array, maltrcat aud murder anothcr class of foreigyers, who have cqual rights to protection under our laws; when
mols composed of foreigners, many of whom
are not jet citizens, blockade our strcets, smash are held; who hoot, how are be defiance to This clement, found alnost wholly in large cities, threatens destruction to our govermnent will the governnent look for support.-Patroil June Ist.

## Temescal Grange.

At a meeting of Temeseal Grange, held June 1st, among other bnsincss transacted the fo The Free Market.
Pitwolevel, That the sincere thanks of this
(irange are herchy tendered to 1)r. Fidward Gilbous for his untiring efforts during the past several years for the caud, and also to the city ofticials and others tho have so nobly assisted in making the opening of the market so much Resolvect, That the members of this Grange
Rill will stand firmly in favor of the Frec Market, and earuestly reçuest the Patrons of neighbor counties to assist, in all reasonable ways, in sustaining and umproving the trade of said Market.

For Equal Taxation.
Resolved, That each Grange in Alameda coun yy be requested to appoint a committec of one diction to examine the assessmcut rolls, and see if all property is taxed equally. It shall be the duty of said committees to point ont to the Board of Equalization all cases where property
is assessed too low proportioually; and in duc time urge proper action in the premises on the part of the Board of Equalization.
hrange Mantractuliers - Neveral weeka crs' l'nion, went East for the purpose of pro curiug the necessary machinery to manufacture barber wire fencing in commection with the ment. He visited the factury in Joliet, Illinois, where Scutt's barbed wire feucing is proat that place auc likewise proeured a Chicago, all of which is expected to arrive in Stock ton in a few days. It is intendel to put up sufficient machinery at first to produce a ton
and a half of the fencing per day, and then to enlarge the manufactory from time to time, as may be found necessary, to enable the pro-
jectors to suplly tbe demand for the material. -Stockton Judependert.

Sonord Grange.-John Taylor writes that the picmic of the above firange will be held at many conventions and other public gatherings, it was deemed wisc to postpone the picnic
pleasures until a suceessful meeting was sure.

## In Memoriam

grand island ghangen, No. 22, P. of he, May esth,


 in their bereave ementys, therefore,
Licestred, That in the death of Bro. Itearn, we have
 mourning 30 days.
hicrolred, That
vimutes ante a cily he inrished the wie wif of of the upen the

Lod ciraviek, io. in, San Jouquin County, May suth,











Time "Rckal New Yoiker."- We note with Heasure the recent enlargement of the liural perity and the progressirc spirit. This paper
has seent troublous times and we are glad it has reached calmer waters. Its present editor has our admiration for the reviving work he has accomplished.
Tue Alden fuit-drier at Sonora, Tuolumne
ounty, is nearly done.

## Agricultural Notes.

## California.

## ALAMEDA

The Frer Marker.-The following is a lis of those who occupied stands at the opening
day of the Oakland Street Market: F. Rbode, Fruit Tale, gooseberries; (irandoua Downing
1'eralta street, Oakland Point, vegetablcs; T. 1 . Balincourt, San Leaudro, cherries, etc.: Mr Miller, San Leandro, cggs and produce; Grove \& Co., Shell Mound Park, tlowers; Joseph Ra
gers, San Leandro; ponltry; Joel Webster
Fruit Firuit Iale, gooseberries, etc.: Menry smith Rerkeley, butter, cheese, eggs and poultry: C
Bagge, San Leandro, hutter and eggs; N . J King, Bag. Farm, Alamela, fruit and rege
tables; Wm. Nerro, Pryal hanch, veretables tabes; Wh. Serro, Pryal hanch, vegetalles,
lutter, cheese, eggs, fruit and buttermilk; Gill' Nursely, Twenty eighth strect, between Marke berries and vegetablesi Cous o strcet, between Broadway and Washington, bcrries, etc.; $W$ m. Devereaux, North Temeseal cow and calf and goslins; Otis Hill, Haywards, iruit and berries; John Gilmore, Oakland, rus: Land, San Lorenzo, fruit and leerrice; $W \dot{m}$. Au brey, bay farm, vegetables ani dairy produce COLUSA.
has been excellent fune 1: The weather lately the indications up to a day or so ago seemed ex cellent, but having leard of rust in the whea of the couns, and we now hear of a great amount of rust. While the weather is favorable for the filling account of the rust We have not or any smut. The very late sown grain on over
flowed lands is looking well. The volunteer also seemed to be all that could be required danage by rust nay not pove hope that the danage by rust nay not prove so great as some
now seem to apprehicnd, and that it may turn .
CONTRA COSTA.
Cror Prosperts. Gazelte, June 1: With
exception of the drawback of a heavy foul growth of cheat, dog-fennel and other weeds, the crop prospects of the county are good, the altosether the best promise of any Ther ha portions of the New lork (irant and Bay Point districts that will do tnely, unless the withering blasts of north winds conie to impair the pros pect. The lignacio, and the upper portion o
1inblo valley, will afford finc yields. San Ra mon has a large crop growing, but too larje a
proportion is weedy. The liodeo valley see proportion is weedy. The fiodeo valley see.
tion promises a fair yield, but the San Pablo, according to general report, will fall below it
usual avcrage in consequence of the heavy condition of the land from the protracted winter LAKE
Long: Valley: Eidtors Press: since the first issue of your paper we have bcen subscrib our various departments culled from its pages.
This valley is eight niles in length. At its head is a sawmill owned by Mr. J. 1. Hanson who has also a good ranch. Then comes the large and valuable estate known as the litchie
rauch. The present lessee devotes his energies dairy raish of tlessrs. Kenuedy lies nextonow route. The tine alfalfa herc rised doubtless conduces to the excellency of the butter. The Here sh no efforts are sparcl to bring the sheep to a fine crops of grain and hay, including alfalfa. We have had rather too much rain to suit the soil notwitbstandiug, aud the fine feel will keep our sheepl in splendid condition, and it is likely
that all bands will this year shear even better in the autumn than they have done this spring this virtue is equallv in possession of the whole LOS ANGELES
Hoses:- Oullook: Notwithstauding the will he thoncy crol ${ }^{2}$ of Los Angeles county ported that there are at least 5,000 stands of bces in the county, and as the bee fecd is abun.
dant, we may look for the maximum product from each stand, which is at least 200 pounds. duce it to 150 pounds. This will give 740,000 per ponnd, which will make the bandsome sum had a better prospect. The mountains are the bees are in the very hest coudition. A from the hires and shipped. Mr. Nhattuck has and he claims he will get $S 0,000$ pounds of Benedict, smith \& Carlyle, and many others,
all say they will realize handsomely from their roney product.
Wuok.-Erpres, Jnne 1. We have taken the
rains to interview some of our lealing wool
merchants and sheep men in reference to the
clipnow coming in. The entire clip of this
county last year was about county last year was about $3,000,000$ pounds.
Mr. H. M. Johnston thinks we
two th. thinks that it is not safe to connt on more than one-half. But he says our present clip is far
superior to superior to either of last year's. It is altogether 10 mer than heretofore. It is worth at least than last year's work. Manufacturing purposes
range of prices for the present clip at from the
the range of prices for the present chip at from
to 21 cents. Last year the highest figure he but the demand has been better as an average this year than last. The Messrs. Newmark place the range of prices lower-at from 14 t 20 conts. There is one notable feature in the wool clip this spring, and upon which there is
no diversity of opinion, and that is in reference to its improvement in quality. The drouth has great ineasure the poor stock and left us with a good quality of graded sheep. The grade will
improve fron this time forth, for we need fear no accessions of inferior stock

## MARIN

Loss of Cows.-San Rafael Journal: A good
many cows die from calving this spring. Some very choice ones have been lost at Novato. 'Too much flesh is gi
MENDOCINO.
Editors Press: The rainfall for Pomo far Mlay was. 65
MONTEREY.
Growth of Wheat.-Democrat, May 23 :
By Snpervisor Mnnroe, we have received from J. H. Matthews, of the upper San Benito, a sample of wheat now growing on the farm of
the latter gentlemen. The sample is the latter gentlemen. The sample is a bunch of head. The are bearded like the "Tren inches. The are bearded like the proper
wheat, and each grain being apparently fully
developed there are respectively three or four grains wide. the sample coines from a field of 65 acres.
Two years ago Mr. Matthews tells us, he har vested from one sack sown, 100 sacks, and from the present crop he expects a proportionate
yield. Mr. Munroe visited the field and he tells us, by way of giving an idea of the grain,
that it is more than seven feet tall, so that standing among it he could tie the heads together above him, and so thick that at four of him.

## SAN JOAQUIN.

BoNs.- - Stockton Independent, June 1:
entleman, whose name we forget, has bee yenteman, whose name we forget, has been
long engaged in the business of collecting bones in the interior towns and sending them to is curiously called "arrificialial guano." A car-
load gathered in this city was brought to the load gathered in this city was brought to the
water front yesterday and will be shipped by railroad to San Francisco to-day. When
ground into dust at the bone pulverizing ground into dust at the bone pulverizing estab. lishment at Berkeley, the principal portion of
the prepared material is shipped abroad, there being as yet no demand for it in California, on the Pacific coast. Bone dust has been in liberal use as a manure in England, and so valgood authority, "one wagon-load of small drill boue dust is equal to 40 or 50 loads of fold manure." It is pronounced particularly effective
npon thin and sandy land. We are not only sinipping to foreign lands the virtues of our soils in cereal products, but are actually sending to foreign farmers material to enrich their soil.
The skeletons of starved sheep, bones of slaugh. The skeletons of starved sheep, bones of slaugh our plains and hillsides, abattoirs and hotel yards to furnish phosphates of lime and am-

## states and nationalities.

## SANTA BARBARA

Sueve Hovse.- James Morse, in Guadalude Telegraph: On reaching the house we were
heartily welcomed by the hospitable and pleasant host and hostess, Mr. and Mrs. F. F. Fields, who superintend the affairs of this large and
valuable rancho. It it owned by Mr. H. M valuable rancho. It it owned by Mr. H. M.
Newhall, of San Francisco. I know of many spots eqnally as well citted by nature as this in
which to build np bautiful homes and to surround them with all the beauties and laxuries
we saw there. In the garden is an artificial we saw there. In the garden is an artificial
fish pond swarming with speckled trout-some
of which weigh of which weigh over three pounds apiece. In
the center of the pond is a mound on which are hundreds of callas in full bloom. There is also or the accommodation of visitors. On top of the embankment surronnding the pond are
three-year-old gum trees some 40 feet high and eight inches through. In front of the house are
a few trees of the same kind, six years old
anher Which I found by actual measurement to be 51 ground, and I judge they were 65 feet in hight and orange trees show a very healthy and vigto one of the ladies of our party a citron lennon remarked tat he had a short time before cut
and given away one that was a third larger than
this. Almond, apple, apricot, plum, pome-
abound, some hanging full of fruit. The main
walk passes under a large trellis covered with grape vines. I noticed a rose geranium trained to a stake and trimmed into a tree, which
stands seven feet high; also most beautiful res stands seven feet high; also most beautiful rose
bushes trimmed up like trees. SANTA Clara
Cheese Factory.-Mercury, June 1: Th Grangers of Santa Clara are making an effort to start a cheese factory in the farming district
west of that town. It is to be conducted by a stock company on a co-operative basis, a num buting their surplus milk daily.

## TULARE.

Army Worms.-Delta, May 29: The ariny worms are apparently going to overrun the county. They are now in great nnmbers around eastern sad havoc among the cornfields and growing crops.

## TUOLUMNE.

Entors Press:-The fariners are now in the visible everywhere. The weather is pleasantly cool for fatigning labor. The tramp is now supplied with labor and good remuneration for the
same. What a grand era might be inaugurated ame. What a grand era might be inaugurated
if farmers could and would hire men the year round. I believe that it would be better for all concerned. They pay as much for a fex By hiring through the year a mixed farming
would take the place of wheat growing. 1 cannot nnderstand why the systen woorks so well California should be an exception.--Jous Tay Lor, Mt. Pleasant
ventura.
Fine Barley.-Free Prexs, June 1: Messrs. their ranch on the Las Posas this week, whirh is of large size, but not by any means the largest
to be found there. The length of the tallest stem was five feet and a half, and the length of grain rows on the head five inches. The stand,
which is all from one seed, numbers 277 stalks. By actual count the largest head had 90 kernsls of grain, whilc the smaller ones ranged about
50 . Whe figure the number of grains which this stand will yield at 19,390. Rather a good showing we think.
Hoxer.-Among the many large apiaries of of the Sespe, stands in the front rank. They ian s hours, they extracted 1,000 pounds of honey from the comb. So far the firm have shipped
3,000 pounds, and now have 4,000 ponnds more 3,000 pounds, and now hav
cased, ready for shipment.
YOLO
Wiesit.-Mail, June 1: During the term of had occasion to interview farmess from all hart of the county, and we have been cheered by the
flattering reports from each and all flattering reports from each and all. The grain is fast ripening, in some places the harley has
already been cut. The wheat looks well at every point, and promises a heavy yield. We
are not yet away from the damaging influences of the north winds, should they come in their ury, but we shall hope for the best.

## Nevada.

Tie Crop Prospects. - Reno Jourmal, June 1 story of the rapid and luxuriant growh of valic tation within their several precincts. The season thus far has been a very remarkable one vent an abundant harvest.
A MADRONO BoRER.-The insects which are
njuring so many of our fine cabinet woods can injuring so many of our fine cabinet woods can-
not be too thoroughly studied, since only by learning their habits can any escape from th expensive pests be reached. At the last meet ing of the San Francisco Microscopical Society,
Mr. J. P. Moore read a paper concerning his observations of the madrono borer. He said Madrowith Arvutus Menziesini, which, as you will perceive, has been badly bored by an insect. I first detected the work of this insect in a young a great distance. In general it prefers the dead to the living wood. Owing to the very large size of the larva as well as the mature insect, the boring is very damaging. In fact, many of the
holes are nearly, if not quite, a half inch in holes are nearly, if not quite, a half inch in new insect-it is the well-known chytus con junctus-but siimply as an instance of another
borer at work in onr forests, hoping that sucl borer at work in onr forests, hoping that such
as can, will observe the work of this class of as can,
insects."
Sale of a Jersey Cow. We hear that Peter Saxe \& Son have just sold a five-year-old Jersey
cow to Gen. Thomas H. Williams, of Oakland or $\$ 300$ She is "No ") a pedigreed Cow rase in Colorado, and a perfect beanty. Gen. Wil-
lians buys the animal for a family cow. We hear alss that Messrs. Saxe \& Son are taking 18
head of Jerseys and Short Horns to Ventura head o
county.
Prof. Martin and C. A. Mahoney, all Alta eporter, who made a balloon ascent from
Woodwards Gardens, last Sunday, were badly brnised while tryin
lence of the wind.

## News in Brief.

The San Francisco police uniform is to be
Tis mines are said to have been discovered The bail of Joseph C. Duncan has been fixed THe Salin in all.
The Salinas and Monterey narrow gauge railCoL. FAIR is still
Tirginia City with rheumatism to his house in Cirginia City with rheumatism.
About $\$ 2,000,000$
Abour $\$ 2,000,000$ have been spent on the
Catholic cathedral in New York.
The Indians thronghout th
Nreaten to become troubhout the Northwest In May our letter-carriers coll letters, and distributed 598,550 . from the Augusta (Ga.) district
CUT-woras have made their
the corn-filds of Ventura county

## the corn-fields of Ventura county

Tue genuine Kansas grasshopper has made its appearance abont Tuscarora, Nevada.
TuE pioneers of Nevada connty held their THE tronble among the the lst inst. The tronble amony the settlers in Tulare Aunty in regard to railroad lands continues.
AMERCAN securities in letely recovered from the effects of the silver pletel
hill.
My
MYRIADS of young grasshoppers have made
heir appearance in parts of Paradise valley
The Los Angeles Herald says the barley crop
of that county will be one-third less than was
The frost has killed nearly all the young fruit and early vegetables about Aurora, Esmeralda The temperancc workers of Los Angeles are almost completed.
in the New York Cathedral on grand reception
There are 231 boys and girls in the Indus
rial school and 78 prisoners in the House o
Theree are several suits pending against the
Sherifi of San Francisco for cutting off the
queues of the Chinese.
Australian varieties have have been received a Stockton from Tulare county
Vras shssulirchi, the woman who shot
Trepoff, the St. Petersburg Prefect of Police, Trepoif, the st. Petersburg Prefe
cannot be fonnd for the new trial.
Tnere are 146 prisoners in the State prison $t$ Carson, Nevada, and over 1,400 in the State prison of California.
B. R. Prisce, of Altaville, Calaveras county, has a cocoonry in successful operation, with A. O. Perrry was killed at Prindle's ranch,
near Puena Vista, Calaveras county, last week, while trying to stop a runaway team.
Two journalists of the city will make a bal Two journalists of this city will make a bal
oon ascension to-morrow from Woodward's Coon ascension to-morrow rom sattended by a professional aeronaut. Mike White, of Chattanooga, was killed by mob. His life was insurce for sou,00. That
sum. Tre Nevada City papers say opium smoking
is becoming so prevalent among ang the youth of
that town that solne steps ought to be taken to suppress it. uhi h canue off on the 3d, is very close, each of
the old parties having succeeded in various secthe old parties ha
tions of the State.
The Pope has directed Cardinal Franchi to dispatch urgent instructions to the Catholic
clergy of Germany to use every effort to preclergy of Germany to use every
vent the spreading of Socialism.
A petrition is in circnlation at Fort $\gamma$ ancon praying that woman suffrage may be incorpoTerritory to be framed next month.
Judee Hilros has been severely denounced
by 3,000 women at a meeting held for the purpose in New York city, because of his action Syow fell in the valleys of Central Montana during the last week of May to a depth of two
feet, and to much greater depth in the mounfeet, and to much greater depth in the moun-
tains. That on the valleys has since disapeared
The body of Moritz Marks, the yonng man Who was drowned at North Beach, on Sunday, few hundred feet from the shore, has been re covered.
Count Basllewski, regarded as the richest man in Russia, and who has for many years $\$ 4,000,000$ a year, has died at St. Petersburg at the age of 92 .
A sTEAMER lately sailed from Liverpool hav-
ng on board 400 Mormons, mostly English, Scotch and Welsh, who intend to procced directly to Utah. In addition to these
50 Scandinavian emigrants on board.
ON the 3d inst., the Einperor of Gcrmany, While driving through Unter der Linden, was hot and senously woun ted by brough the Nobeding, Hho then shot himself through the head,
At Charlestown, West Va., on Monday last, several hundred miners captured the steamer Modoc, procecded to Blacksburg and stopped peake and Ohio train, refusing to

Mrs. Seentit
Gold Hill.
STIC The upper SSTIC
. higher the tramp again this Sc, beginning at Paris.
ased in the Philadelphia Nint.
The inventory of the Atherton estate, in San Covsounty, foots up $\$ 1,269,921.92$.
Consols are higher in London now than they THEY had heavy snow storns.
THEY had heavy snow storms at various Tre cereal crops in England are week.
Worse than they did a month or two ago much OLYMPIA, Washington Territory, markets are upplied with vegetables from California. IN the Washington Territorial Asylum there re now 72 patients, 58 males and 14 females. The commencement of the Uni versity of Cal-
ornia took place on Wednesday last at Berkeley.
l A serious attempt is about to be made in ood.
Rev.
Rev. C. C. Burleigh, the fanous abolitionist, was run over by the cars at 【Florence, Mass., the time of his death the oldest member of at the time
Andrew T. Byrne, formerly of San Franood, Black Hills.
Mrs. Margaret Golden has been committed to the Napa Insane Asylum. She is crazed on Tine Indinects.
The Indians are driving off and killing stock Las Anamas, New Mexico. Iv April there were shipped from Portland for dozen same month last year.
Two men, a woman and three children have rrived at Seattle, having come all the way, 300 miles, from the Stickeen river in a canoe. THE body of an unknown man has been found floating in Stockton channel, in such a state of TIIE weather hat it could not be recognized. ome places in the interior. The thermometer $t$ Wheatland touched $110^{\circ}$ in the shade on the 4th inst
Roads from Reading to Modoc county are lined with emigrant teams, some bound to
northern California, others to Oregon and ashington Territory.
Eccuador, South America, has not a mile of railway, but a party of enterprising men from with the government for the construction oi
line. por, Joun C. Christian, Assistant Superintendent of Public Schools of St. Louis, com-
mitted suicide at Denver, Colorado, Saturday mitted suicide at Denver, Colorado, Saturday
last, while laboring under a fit of temporary insanity
Later reports from the storm center in Wisconsin show greater loss of life than heretofore
reported. The death list now foots np 34 . The property loss amounts to hundreds of thousands dollars.
Frou all directions in eaastern Washington comes the reports of fine crops. The recent
rains have set the farmers to studying how get their prospectively enornous crops to
IT is said that for 29 years past rain has fallen in California every 20th day of May, there being snowfalls abont the sane time in the Sierra
Nevada monntains, extending often down to Nevada mon
the foothills
Ox the night of May 30th, four masked high waymen boarded the cars on the thion Pacinc,
near lawlins, and, after robbing the passengers near liawlins, and, atter robbing the passengers
of a few hundred dollars and some jewelry, made their cscape. Thcy have since been

On Tuesday last a man named Caldwell, liv. ing near Atlanta, (Ga.), killed his wife, three解 Failing to kill hiuself by leaping into
well from the roof of his residence, he finall succeeded by throwing himself from the top o his gin-honse.
Three men broke into the store of T. Sor raco, at Drytown, Amador county, last week,
and having bound and gagged hin, compelled and avitg bound and gagge to hin, compelled keys and tell Where he had hidden a lot or gol the extent of $\$ 10,000$ and cscaped.
Musical Boxes. - The roar of the grcat May musical festival will not drown the sweet melody which is poured forth by the musical cask cts of M. Paillard \& Co., 120 Sutter street These littlc gems of harmony, made by a branch of the firm in Switzerland, and sold in San their co by the makers, are nncqualed in elegant articles for presents to friends, and they are charms to possess for oncself. They amuse by thcir wonderful power, and they soothe and instruct by the faultlicss exccution of the finest musical airs. The excellence of the instruments have been made to them by world's fairs and have been made to them by world's fairs and to all who come within the sound of their trills and cadences. M. Paillard's cstablishment at 120 Sutter street, should be visite

# xode <br> 6 

## Somebody's Mother.

The wounan was whand raysed and yray:
The street was wet with a recent sin,w, she stood it the crussing and waited long.
Alone, uncared for, anitid the thring.
Mi human heings who passed her by.
Nor hecelect the clatuce of her anvious eye. Down the street, with hayhter and shout,
B:lul in the freed hno of "selloull let out." Chane the bers like a floek of sheep,
Hailiny the surow pited white and deep. Passel the Moman swo otd and gray,
Instened the chidrurel on their way. Yor ulfered a helping hald to her
to meck, so timid, airaid to stir. Lhet the earriuke whels or the harses' feet A last cane one of the merry triop,
The gaveet laddie of all the group).
He paused heside her, and whispered how
Her wed hand din his strong young arme He gniden the trembliur feet alouq,
Proud that luis own were firm and trongr Then back againt to his friends he went
Ilis y yunys heart haply and well eonterit.
 Tud hope smene elelew will tend a hand


## 

Was, "tied be kind tuthe notho hay'

## Driven to Death.

|Written fur Rerna. Prpses by Ras |
Last week I saw horses tugging with the strength of despair hauling rocks from the
quarry. They reached an inclination and then, what creaking of the wagon, what curses from the driver, what efforts from the sweating animals, until at last the quivering nuscles of one
could bear na more, aud the poor, weary, suffer ing thing dropped in his harness deal as one.
What were the Cireat Cesar's dumb inouths to the wistful eycs that moet us everywhere? spider of indiffrencence has woven her wel, all
over the inmost chamber of our hearts: the chamber where our mother's precepts lave lain so many years; where the dust of a hard and
prayerless life hats drifted and sifted over the gentle teachings, even as the driving sanuls or
Irifting snows have covered her forgotten grave. : that nature in her cruel fancies annd
Alhas: unlapipy freaks gives to wolves and hyenas the
furms of men, that she gives gentleness, pa-
tience, faith and long sutlerins to the halfstarved dog and the cursed and beaten horse. 1 have seen dumb animals that reminded me
 but ehange his nature suddenly, eonld take the
form of a deadly adder and st.ng his tormentor to death, would it n
kuaves nore wisd
Se criel to men, aud you change the whold
course of their lives ; be cruel to women, and they grow stern and hard; be cruel to animals, serve you.
(Coil forgive us that we so little appreciate
gentleness and faith! gentleness and faith:
Teachers guard Teachers guard your scholars. Show then
that it is in discord with the harmony of nature, that a mother lirl's note should be changed
fron gyalucss to grief because her brood is
stolen. Aothers, teach your little ones gentle manli-
 "f a wordless creature a tritling thing.
 lash ! It was seless for "Mrs, sicueers" to
give the little fellow dry toast, when his throat
was so sivollen te want to waiten till your criendn't swallow. If youn want to wait cin your friends are on their death
beds before yon lestow on them a kind worrl,
do so. There shonld loe a law, however, ayainst your owning a hurse, if you wait until he is
realy to throw off nortality before covering
him with a blanket, or never him with a blanket, or never plaeing oats before
him until his eyes are acpuiring the glaze and him until his eyes ar

## Jenison's Bet

When the widow Coe married Jason Carter she bronght him no money at all; only a small stony farm in Noppit, that had been her father's, and two wild boys of 10 and 12 years growth. Jack and Dan were hard sulgects for
atep-father to rule and Jasour Carter a step-father to rule, and Jason Carter found
lis hands full. Naturally he was a quiet, gentle, but persistent man; in his youth he had run away tu sea, and for 15 years had been a com-
mon sailor, which had pretty well knock ch the mon sailor, , haich had prety well knockect the of cuurse, thoush he had been strictly lironght ul, and went to clurcch and sunday sholol
always. His mother would have cried her eyes
ald ont to hear him talk in this fashion, luit sho ncver did; his father wonlld have used the rool, but he also was spared the trouhle, for both
father and mother died before Jascin canne back: and when he found they were gone he never wen-going took to peddling notions abont the seagong, and at last married the widow Coe
country
and settled down in Noppit .
He had stoppell swearing loug ago; for under He had stoppeld swearing loug ago; for under
dear old Father 'Taylor's preaching he had been
 thongh profanity laad become a habit with him,
he had couquered it at last, after years of pahe had couqnerd
tient endeavor, and now, was so gentle, and
no pleasant, and pious, that herel)e C
He lad come to know the widow Coc from Wing an ohd shipunte of her lirocher, Iohnn
Tircs what also left sea-faring becanse he had injurell a knee, and becolue too lame t
eliunb rigging; so he set np a small shop i loston, where he sold tobacco, twine, and
other odds and ends; but he had been married other odds and ents; but he had been married
and had one son, called Jenison. This boy was abont the age of widow Coe's youngest son, for her brother had married soon atter she dind
while he was still a sailor; and when Jason Cartcr legan the peddling husiness, John
Wircs had told hinn to stop, when he went throngh scranton and sce his sister. The ehildren werc small, aud there father living,
when Jason tirst saw them, and they learned to when Jason tirst saw them, and they learned to
look for "Uncle Jasc" every spring and fall with delight, fur he allways brought them marlles,
tops, eandy, string, and made them bows and
tole tops, candy, string, and made them bows and
kitcs, sure passports to iboy's shant. So when
their poor drunken father died and the widow their poor drunken father died and the widows
fund herself left without a pemy, she moved over to Noppit to live with her father; and
when he died too, leaving her all he had, the when he died too, leaving her all he had, the
farm from which he hal scrathct a scanty
living, and she foumd hersclf alone and helpess, hiving, and she foumblerself alone and haclitesso,
she listened favorably to Jason Carter's uroposal, for he was as tired of his wandering life
as she of her loneliness, and married hin. The boys were glal, for they lovel him, and they was as gool to them as if they were his owon,
thought a certain thrill of emotion shook hin when his baly dlaughter came, that uever hai troubled that worn old heart in any cmergency
of Jack or Dant. But then Celia was a girl; of Jack or Dal. But then Celia was a girl; o
course that made it different: Jason, when compared with his predecessor, was as mild and pleasant alout the honse as a spring day
after stormy winter. He becanue a uscful aud prominent member in the Noppit elurch, and word. Jeck and lam loved him or mpatien healthy boys ever love anything lyut mischief and meals, and Phr-be was entirely happy.
True, they were poor; Jasun had a himdred dollars laid by, but the Noppit farı was the terine to prontuce crops enoug ha sup
part the fanily, so he laid out his little canital or part of it, in a good breed of sheep, which
found abundint living among mullens, harihack and linckleberry bushes, and proved in days dogs, the curse of New Eingland, were by no means common in the country; there was no money and mutton instead of hydrophobia and horrors. The wwol sold well always and kelit
the fanily in stuckings, for Jason's wife eould shin and knit with wonderful rapidity; the Hartford aud sold to the butchers, and now and then a fat old wether went to the meatman eart in the shape of juicy quarters, But the
ylory of the Hock was a lig llack-faced ram, who
territied bonds, aud asked no better fun than to send sometody hecls over head whenever he had a chance. Tack and tran had brought him up from
lumblood, but he was no louger a lamb, and if ainstaking eduention only oue trait stayed l,y that liad not leen sparcd on his early and some what stupidy yonth. To the day of Billy's death scnd him, "head on," at that luckless object and the boys often annused themsel ves by climb-
ing the rine rail fenee and dangling a smal ing the pine rail fenee and dangling a small
switcll full in lilly's sight against a ligig post: the resnlt was sudden and severe to billy, and he might have seriously injured himself if
Daddy, as the boys called Jason, hall not found them at this sport one day and strietly forbidden it. 'ruelty to animals was onc of the few things that
imperative.
Onc summer Mrs. Carter reeeived a letter rom her brother asking her to take his hoy for was going home to her father's with the bahy was going home to her father's with the baby
and a young ehild, and Jenison eould not go
with her for want of room. Mr. arres did not
want limm in the city with him, at a loarding house, lint was willing to pay his board in Nop. pit; so he eame.
Jenison Wires with very little faith in anylbedy's 11 is father was a pushing, money-making, profane man, and his mother a meek cipher; he himiself. at the mature age of 14 , conld sinoke, he had run alout the wharves over since lie could run anywhere. Mrs. (arter was tronbled and disgusted to find such a boy on her
hands; Jason eonsidered that I'rovidence had sent the lad there for his good, and resolved to 1 ray for him as for his own loys, to
him as good an example as he tried to him as grool an example as he tried, to sct
Jack and Dan, and to "deal with him," as he expressed it "with a view to his eternal ealderful; he knew so much; he had seen so wany things; he had such a pocket-knife, such mar.
hles, swayger: But when his tirst round oath hles, swagyer But when his first rou
eane ont, Jack and Dan were startled.

Look-a-here! " said Jack; "don't yon let
ldy hear no such talk as that; hell tune ye, Maldy hear no such talk as
ef he does, and no mistake."
baly; 1 gness 111 swear if I wison; "I aiu' baly; 1 gness 1 ll swear if 1 want to, for all
hin; he ain't so pious himself, 1 bet, lut what he rips out sometimes!
claimed in unison
"H'm! I guess you don't hear him; the old fellow keeps shady before folks, but he usel to
swear like a Botany bay pirate. I've heard pa say su!
The
boys were shocked into momentary "I don't believe it!" sail fositive l)an

I don't believe it! " said lositive la, an.
And if he ever did, he don't now,", added rensonable Jaek; "Ire's aw ful good; he's a pro-
essor; he prays in meetin" and to home too, and he don't ne ver scold, nor swear, nor nothin'.
Scure ever he licks a feller; he did give Dan scure ever he licks a feller; he did give Dan
and me one whalin', but he'd onghter hev, that's a fact. lian he told a thunderin' lie and I backed him up. 1 iell ye! we were sore for out
slell, arter hc found it ont." ship, I ve heard pa tell more storises about him! They called him 'still Jase', to lo sure, , hint
when he toht riled, the fur tlew' I'll hee my ack-knife 1 can make him swear insille of next
"I'll bet my head you cau't!" retorted Dan.
"I don't know as 1 want your head for any; maplle sugar you've got in the closet, that 1 11

The boys were so sure that nothing could first bet of inportance, that they accepted the terms at onee, and Jenison began to culgel his brain for means of tripping up, Jason Carter's tongue.
One
ield of ay he slyly let down the bars into The two cows, turned out of the barn-yard to mip at the road-side until 1 an or Jack could
drive them to pasturc, accepted the hait the clover and riotcd in its fragrant crinson sphcres, half killing themselves with greedy
feeding. Jack fouud them half an lhour after chores was done, in the coudition that results to cows from eating givenn clover, aud Unele Jason
worked over the poor creatures all day Worked over the poor creatures all day, with.
vut a word of impatience, thongh he said more out a word of impatience, thongh he said more
than onee: " 1 wish I knew who let down them bars; ,,'d kinder like to say a word in season to The pins were taken out of the ox-yoke and while the fanily egtever could have any egys for great gray cat's tail her ears snipped, but Uuele dase never swore or lost his temper; his scyth-sileath disappeared,
but he borrowed another; the grindstone was soaped, the hay-cutter broken, hoes and rakcs disapl, eared when wanted and reappeared when uscless; his razor was mimslaid and hopelessly
dulled when he found it and a thousand petty annoyances heaped "on him in vain; he only
said to his wife: "It docs beat all, what's got inter things this week; seems if I never was so pestered. It aiu't in human natur' ior things to happen so; somelooly's a doin'
on't, I feel to believe; but I declare for't I can't see into t a mite.
Jack and Han began to triunph: only one
day more of the week was available and Jeni day more of the week was available, and Jeni-
son was put on his mettle and laid plans accordingly. They had prayers always luefore hreakiast, and the weather was so warnu and
the kitchen so hot that. Jenison sct the outer door open wide this morning, and stepring out,
just as his uncle laid down the Bilble, under pretext of scaring an old hen away the boy opened a little silie gate into the lot where he had previously driven the old ram, and laying a
train of salt to a big lump on the doorsten, re treated specedily to the kitehen and knelt down next Mr. Carter, where he had left his chair.
Biily had sean the tinl pan in Jenison's hand surrely to the door, and, having begun to nitbble the lump, hearl, an earnest and accustonied door. Jason was praying earnestly, and the
rest had their eyes closed and heads bent; all Lut Jenison, who was watching Billy from under his arn. As he saw the ram ioos in, he pieked
up a short switch from under his chair and held up a short switch from under his chair and held
it threateningly over his nnele's back. Billy
gave one great leap across the floor, charged "Damn that ram!" he roared, in a vowice of thinder
Jack and Dan sprung up at once, drove Billy their father was on, lis luere they could spea pouring out such hat the sin he had been letraved into such tearful petition for pardon, such heartfelt contritio for a lapse that seemed to him dreadful after long years of prayer and struggle, that hard an it was the turning point of the lroy's life. H got up from Ins knees and eonfessed the whol
thing to his muele and asked his forgiveness; an the other boys cried lieartily.
Jason Carter never forgot that day. It wa
remembered with humility and thank fulnes both, for years after Jenison told himes deep feeling, that he had learned then and step toward desiring and obtaining it.
enison never claimel his bet, but when h went home gave Dan lis knife for a remen brance, and years after Deacon Jason Carte affection, reverance and aursement miugled the only oath they ever heard him speak and - Rose Terry Cook, in Sunday Afternoo

## The Preservation of the Voice.

"In a recent lecture, in Ncw York, on the Hygiene of the fluence the voice, the four principles of which are climate, dress, diet and excreise. Chang e on tho larynx but this influenee is greatly overestimated. Al clothing should be loosely attachell to the body The present fashinonable style of dress is decid uunaturally coutined, the lungs andother organ thus being prevented from acting in a normal manner The dress should be worn high in the neck, and the sensible female artists aroids much as possible appearing on the stage in full dress. The throat should not be wrapped in not lers, boas, etc., chest proteetors sharde against wet. Foorl supplies nourishment and warmth, and the article of dict which has th special property of producing heat in the hody
is fat. The diet of the singer shonld te as well as nutritious. Of the different kinds meat, venison turkey, ronst bef and lamb ar the easiest to digest. Cooked vegetables, unless too highly seasoned, are easily digested; cut eabbage, cucumbers and such like should b
avoidel. l'astry should be invariably dis carded. Dimmer at noon, followed by a ligh toa at nightfall, is a rule which, if rigidl adhered to, will be a safcguari against all ordi of singing be properly performed, it is also lutely necessary that the stomach be nearly consideration be indulged in by vocal artists For the proper development of the voeal observed. The exercises must be rocgularly and systematically practiced; they must always be within the register; they should never bo pushed to the proint of fatigre; they should never be by cold, no matter how slight, and they should be practiced while standing upright, so as t vocal organs. Bodily exercise is especially beneficial to the singer. In coneludiug his lee
ture, Ir. W. said that learning to siug correctly is learning to be healthy

Car linimise, Those who have passed
miserable hours in the scpulchral light of rail. way cars will be glad to know that Mr. Web ster Wagner has devoted much time to inves tigating the best method of lighting railroal cars, and has hit ulon a discovery which is
thus described: "The lamp has a shape not unlike that of a telescope. The larger end, a in turn gently forces the lard oil from the reser voir in the upper joint, saturating the wick stcadiness and strength. The alparatus is wound every ten hours. and annoyance. The light has a poe, expense alent to 13 candles. These lamps are furnished to each car, and a person is enabled to read the
smallest print without the slightest difficulty.'

Mrs. Partington on Diseases. - Discases is poor 1 a - faze has tro buckles upon her lungs! It's dreadful to think of-'tis really. people's dying of "hermitage of the lungs," another of "brown-creatures;" here they tell us of the "elementary canal" being out of
order and there about the "tear of the throat;" here we hear of the "newrology in the head one side of us we hear of
$\qquad$

a-days. New names and "rostrums" take the place of the old and I might as well throw my old yerb bag away

## How to Study Science.

Prof. F. W. Clarke has an article in the Popular Science Monthly for June, in which
allusion is made to the true method of studying
science: Every student of science should meet Nature at first hand, and learn to observe her
phenomena for himself. Lectures and text books are but minor accessories to study; in the
sciences they play a wholly subordinate part; sciences they play a wholly subordinate part;
in the laboratory, the field and the museum,
ind the chief work is to be done. No matter what
branch of science is to be pursued, the student from the very first must meet it face to face.
The biological sciences ought to be studied iu the field, collecting; in the museum, classifying; scalpel. Far too often is the study of natural history degraded into a mere mennorizing of classifications; as if the transitory part of the
science were more valuable than the perma nent : The student must see, handle and investigate for himself. He is to study the phe--
nomena of life, and not merely the external apnomena of life, and not merely the external ap-
pearance of a lot of stuffed specimens. Chemistry, and physics also, is to be studied chiefly dent to see experiments, he must perform them. Thus only can he learn the true scope of these Thus only can he learn the true scope of these analysis, he learns to observe closely, and to
reason from his facts to their interpretation. Quantitative analysis gives him accuracy of value of experiment. This insight also results from delicate practice with instruments of precision in physics; a kind of exercise of the very
highest educational value. If the course of study in any science can be calpped by ans orig. inal research leading to the discovery of new
facts, so much the better. In a German uni. facts, so much the better. In a German uni-
versity the caudidate for a doctoral degree in science is absolutely required to carry out such This is not a severe requirement-every student who has been decently trained is able to
come up to it, all the popular notions about the mysteriousness of scientific research to the contrary notwithstanding. Why shou
aim to equal the German standard?

Subiarine Volcavoes. - We find in Iron submarine solcanoes. The master of the British barque $D$. . A' $B$. Park, which arrived at Cowes,
Isle of Wight, some days ago, from Batavia, reports having seen several submarine volcanoes on January 29 th 7 A. M., in latitude $42^{\circ} 200^{\circ} \mathrm{N}$.
and longitude $21^{\circ} 44^{\prime}$ W., about 900 miles southwest of Sierra Leone., Large volumes of
water were thrown about 100 feet into the air, and the whole sea in the neighborhood was in a state of violent commotion with a strong under-
current. The weather was calm, but with
. current. The weather was calm, but with
clouds and rain; sounds as of distant thunder accompanied the outburst. The other report is
from New Zealand, Captain Helander, of the from New Zealand, Captain Helander, of the
steanner Go-Ahead, while on a voyage from Gis-
borne to borne to Auckland, reports having witnessed a
eurious phenomenon on December lst last, between 8 and 9 r . M., when about five miles
trom land off O . tance ahead of the vessel was observed to be a mass of seething foam, traveling at a rapid rate
towards the vessel. The course of the steamer was changed in order to avoid the disturbance, and though it cleared the outer edge of the agitated water, the influence was felt for some
time, and the vessel pitched violently until long after the artual scene of the agitation was passed. There is no doubt that the phenome-
non was due to volcanic forces, a slight shock Hon was due to volcanic forces, a slight shock
of earthquarke haviug been felt at Gisborne on the preceding evening. When we consider that habitable globe occur on an avcrage once in three days, it is easy, with such examples before us, to imagine that an incessant discharge of going on, and that not a day, perhaps hardly an hour, passes without some disturbance oc-
eurring in some portion of the oceans and contieurring in some portion of the oce
nents which the earth comprises.
The Total Eclipse of the SuN. -On the
29th of July next a total eclipse of the sun 29th of July next a total eclipse of the sun takes place under such circumstances as to pre-
sent opportunities that occur scarcely once in a generesting phenomena with which astronomers have to do. The path of the totality of this eclipse runs diagonally across the center of the
United States from Montaua to Texas, and is somewhere about 140 miles wide. Many of the
best points for observin $\alpha$ the eclipse are therebest points for observing the eclipse are there-
fore directly accessible by railroad, and several expeditions might be sent out fully equipped to
as many different points, without spending as many different points, without spending so narily take to equip a single expedition to a more distant point.
Prominhnt amoug the nuisances inflicted upon
Congressmen are the albums in which they are Congressmen are the albums in which they are
requested to sign their names. Occasionally an appeal is made for something more than a a law banishing to Alaska any ame favor of An editor apologized to his readers after this ashion: "We expected to have a death and
marriage to publish this week, but a violent being sick himself, the patient rerovered, and
we are accordingly cheated out of both",

## Youna Folks' Column.

Boys, Study Botany.
Written for "Young Folks" Column" by Uncle Frrsso.] word is used in our language plat or herb. This science which tells us all about plants and flowers. About 120,000 plants are deseribed in botanies. These are arranged according
their resemblances into classes, families, You know how words are arranged in a dictionary, so that any one, the first time he hears new word, or sees it in priut, can readily find it in a dictionary and learn how to pronounce it,
its meaning and all about it. In a like manner the person who is master of botany can find description of a new plant in the botanical dictionary or thora. By examiniug the new
plant he can tell to what class, family and tribe it belongs, and he then knows just where to
find its descriptiou in the botany. "But why earn all this?" asks some RuraL readers. Our Savior, you know, said, "Consider ye the lilies
of the ficld, how they grow." But I will tell you a story, perhaps that wil be the best way about two men that can be seen from my chainber window at
day in the year
They were boys 25 years ago in one of the well-to-do farmer. They attended the con of a school together till they wished, and by their learning, desired to go in higher studies. Then they were sent away to an academy. But their
studies were very different. We will call their names Smith and Jones; not because these are
their names, but only because these will do as their names, but only because these will do as
well as any others for our story. Smith learned the names of all the different kinds of plants the wild strawberries were finest, where the violets and phloxes exhaled their richest per-
fume, where the sorel and wintergreen jume, where the sorel and wintergreen were
juilest, and where, in autumn, the rich purple
wild ranes hung among the thick timber along wild grapes hung among the thick timber along
the river. These he learned, besides much else that is useful. His father often said: "There is enough that is useful to keep you learning all
your lifetime; and to devote time to the learning of what is oruamental only, is like the savage
who invests his money in the purchase of a stovepipe hat to carry with , him for display All this time goes naked.
Ald this time Jones, too, was learning. He could conjugate a Latin verb or decline a Latin the nost difficult problem, and was of ten first in his classes. He had been tanght and believed that fully in the mastering, of the lessons assigned in his books to acquire knowledge.
A quarter of a century has passed. Jones
lives yonder, in that little, unpainted board house, his books, what are left, unread and
nearly forgotteu. Sunith lives in that other nearly forgotteu. Suith lives in that other
house, surrounded by growing trees and orchards, where are growing a score of kinds of
fruit trees. He still knows the names of all the plants that grow in every part of the country stock of plants aud exchanging seeds and plants with seedsmen and nurserymen in Australia,
Japan, New Zcaland, South Africa, Europe, New, England aadd the Southeru States, and if years, have a homc, where may be seen growing everything that is "beautiful to the sight or
good for food." And all these come to him almost without money and without price, while Jones is complaining of his luck and that he
can't even get a few peach trees, except by "the can't even get a few peach trees, except by "the
hardest work and the biggest price." Boys, there is very little difference in luck in the
world, but there is very great difference in education and management.
God planted the garden of Eden, and placed
man therein, to tend it and keep it. He caused to spring forth out of the ground every tree good for food. It was a command of God that man should till the ground. Boys, would you
obey this command understandiugly? Would you know all the useful and beautiful plants
that our California can be made to produce and that our California can be made to produce and
how to tend and keep them? Then learn botany.
"IIAve you enjoyed our strawberry festival,
boys?" "Oh! yes sir!" "Then," asked the teacher, seeking to append a moral, "if you had slipped into my garden and picked those strawtasted as good as now?"' Every small boy in
that stained and sticty that stained and sticky company, slrieked:
"No, sir!" "Why not?" "Cause," said little Thomas, with the cheerfulness of conscious virtue, "then we
cream with 'ch.


## GOoo HEALTH.

The Philosophy of Hot Bread.
A correspondent scnds the Journal of Chemistry the following query: "Physicians often recommend for sick people oatmeal or graham
pudding, made by stirring the meal into water and boiling a few minutes, as one of the first things to be eaten when the stomach will not bear hearty food. Why is the meal thus pre pared any more easily digested than new bread
or hot muffins, which are considered unhealthy : Is not the same chemical change necessary in the one as the other, which can only take place
by standing for several hours after cooking?" The two cases are by no means similar. The
oatmeal or graham flour is made digestible by oatmeal or graham flour is made digestible by
boiling, the starch granules being ruptured, so by the digestive fluids. In the making and baking of bread the same change is accom-
plished. and that which is older is esscntially the same as between "heavy and light bieas. It is its ready digestibility. When new, it is softer,
rom the steam of the water it contains: and this makes it difficult of mastication and liable o form a close aud cloggy mass, which, on pass ing into the stomoch, 18 less easily penetrated
and acted upon by the gastric juice. By cool ng and drying it becomes firmer and more fria-
ble, so that it is more thoroughly mixed with the saliva in the mooth, and goes into the stom$t$ is to be subjected there. If the bread is hot enough to melt the butter melted grease fills up the pores of the bread,
and iuterferes with the action of the saliva and gastric juice. The fatty matters in pastry ar
objectionable for the same reason, and also on account of the chemical changes which they un-
Bresd becomes more digestible by toasting, chiefly because it is made drier and firmer-
that is, if the toasting is properly done. The
slice should be renter slice should be rendered crisp throughout its
entire thickness. If it be merely scorched on
the the surface, as often happens when the slices
are thick and Biddy is stupid or in a hurry, the
interior is interior is merely softened and made like new What English peopple call "bread jolly" is a
light and nourishing article for weak stomachs in some cases preferable to the oatmeal or wheat porridge. It is made by steeping stale bread in
boiling water, and passiug it through a fine
sieve while still hot. It may be eaten alone, or sieve while still hot. It may be eaten a
after being mixed and boiled with milk.

How то Sit.-IIall's Journal persists in rob bing us of our comfort in this style: All condeformities sit habitually crooked, in one or more curves of the body. There was a time
all these when the body had its natural erect ness, when there was the first departure on the
road to death. The make of our chairs, espe
cially that great barbarism, the unwieldy disease-engendcring rocking chair, favors these leads to bodily habits which originate the ail inents just named, to say nothiug of piles,
fistula and the like. The painful or sore feeling which many are troubled with incessantly
for years, at the extremity of the backboue, is the result of sitting in such a position that it eral inches forward of the chair back. A physiological chair, oue which shall promote the
health and preserve the human form erect and mack straight, at right angles with the seat, the seat itself not bind will do nore towards correct-
chair of this ing the lounging habits of our youth than multitudes of pareutal lecturings, for then if they are seated at all they
there is no seat-hold.
How to Eat Oatmeal-Oatmeal, cracked wheat, and similar boiled breakfast dishes often hecome more or less indigestiblc, says the Journal of Yankee style. They are soft and "go the stomach, with no delay in the mouth en route. They necd mastication as really as beefwhich many people scem to suppose is the sole reason for che wing), but to mix then thoroughly
with saliva, which is a digestive agent and not a more lubricant to expedite the passage of dry was latcly complaining that oatmeal did not agree with him, and we found on inquiry that way, without insalivation. He was nuch surprised when told that he ought to "chew" it, mouth before swallowing it; but after a brief in digesting it. If the oatmeal or whcat is not thoroughly cooked it is all the more important
that it should be masticat $n$, as the half-softened grains offer con
gestive fluids.

## Domestic Economy

Some Facts About Bresd. - Professor F. de medical department, gives the results of some investigations he has been making with regard to the weight and nutritive value of bread. One fact which he states might have becn anticipagood deal to do with the amount of crust has a cooling and subsequently. Where several loaves are baked iu one mass, an inside loaf, with
crust only at top and bottom, loses about three per cent in cooling; one with four sides crust ixes two per cent; and one baked singly, with per cent. The loss by drying afterwards is proportionally more rapid in the loaf with less rust; so that this becones unpalatably dry
nuch soouer than the loaf well walled in with crust. The amount of solid matter in crust 18 read of first-rate crumb only about $63 \%$. In $30 \%$ of the whole weight, , but often it is little wherever bread is to be kept for some time and portant that it be thoroughly baked. The mount of acidity in bread-a point of some in-deternined-has been investigated by Dr. de haumont. Taking a known quantity of bread, then treated it with standard alkaline solution. This process showed an amount of acidity equal 3.85 grains of glacial acetic acid, for each pound of (fresh) bread-an estimate of acility which
may be provisionally adopted as the standard
proportion.

How to Select Meats. - An English journal and wholesome meat should be neither of a pale rosy or pink color nor of a deep purplc.
The first denotes the diseased condition, the the last proves the animal has died a natural
death. Good meat has more of a marble look, in counsequence of the branching of the veins
which surround the adipose cells. The fat, especially of the inner organs is al ways firm and
suety, and never moist, while in general the fat uety, and nevcr inoist, while in general the fat
irom diseased cattle is flabby and watery, and
nore often resembles jelly or boiled more often resembles jelly or boiled parchment.
Wholesome neat will always show itself firm and elastic to the touch, and exhibit no damp. act, almost wet, so that all the liquid substance neat be the blood when pressed hard. Good emits a disagreeable cadaverous smell, and dif. fuses a certain medicinal odor. This can be
distinctly proved by cutting the meat through
with a with a knife and smelling the blade or pouring
warm water over it. Lastly, bad meat has that pecmliarity that it it shrinksty, considerabaly in in the
boiling; wholcsome meat rather swells, and boiling; wholcsome meat rather swells, and
does not luse even an ounce in weight.
Keeping Hams.-I noticed an inquiry in a late paper for the best method of keeping hams
through the summer from the fly. I have tried many and find the best to stick them in paper sacks such as millers use to put flour in, made of thick manilla paper. Wrap the ham in sevkeep the moisture from striking through and spoling the sack. Tie up tightly first, twisting the fly will not find its way into the ham. I know a pork butcher that serves his in this way,
and has them hanging in the market house, some of them all sunmer. This paper is strong pound sack, costing from thrce to five ccuts, is years enough and will tast
Stale Bread.-Every housekeeper will find is a gonally bits of dry bread accumulate. This water several hours before supper or breakfast, adding plenty of milk, if convenient; mash up egg, a cupfulu, or more of flour, a teaspoouful of same as buckwheats. Thcy are very nicc. No bread need be wasted, even if somewhat sodden, heavy or a little sour.
Sweev Potato Pone.-One and three-fourths tir in while swcet potatoes boiled and mashed, stir in while warm two tablespoons of buttcr;
beat these well, add a little salt, three tablespoons of good browu sugar, one of ground ginger; beat in three gills of milk; when quite right from beating pour into a buttered pan,
and bake threc-fourths of an hour. Scrve hot.
Sweet Potato Buns- - Boil aud mash two potatoes; rub ind as brcal; add a littlo nuturg and sugar, with a tablespoonful of good ycast. When it has risen, work in two tablespoonfuls of buttcr cut tins a nice brown. Serve hot. Split open and butter.
Cueaning Crocks.-Common brass clocks
may' be cleaned by imunersing in boiling water. Rough as this treatment, appears, it works well whenever they stop from dust or thickening of
oil upon the pivots. Boil in rain oil upon the pivots. Boil in rain water, and
dry in a warm stove.


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The Scientific Press Patent Agency DEWEY \& CO., Patent Solicitors.

SAN FRANCISCO
Saturday, June 8, 1878.
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THE STIABLE- lifecliny IIories in Calitornis. PATRS. ${ }^{5}$ PTS OF HUSBANDRE, Hand Ming the






## new advertisements.



## The Week.

The harrest is fairly begun and the larley is falling fast during these loug bright June days. The wheat is pressing forward rapidly aul thare
will be steady work for the reaper. The nisual will be steady work for the reaper. The nsual
concomitants of harvest time are appearing. Ships are dropping anehor in the bay, auil the sailors, one would think, are doiug their washbrecee finds no "bellying sails," but rather thapping tails, which, rauged along the rigging, turn the queens of the sea into a semblance of many
storied wash houses. The sailors' song secms be: "Down with the anchor and up with theproachin's harvest are not wilely different. Al hands are dropping the priee of grain aml hoist-
ing their burlaps. Twas ever thus from a long Way back. They cry: "The market's gone to
rack; lut charge two prices for a sack. Mcan
time the fand time the farmer gives but little heed to the mer-
chauts machinations, unless, indeed, his nccessitics compel him to realize at once npou his
crop. Those who are masters of their own resources are masters of the situation, and they
will not be caught by any specions argmeuts will not be caught by any specions arguments
which aim to depress prices below true market Which
rates,
The rates.
The coming of abundant field work, for the
time, annihiliates the yenuss ambulututhlus and the time, anmisesiffes rejoiees that her kitchen is no
longer nuder tribunte to the tramp. Would it not be a blessing if these ten-month idlers
nilould take such a draft of industry that they woull become intoxicated with the pleasures o earning bread and forget the art of tramping for
it! It is too much to hope for. and yet, if thesc
it Coolish fellows would see it, they ecull get
start on one harvest's wages, whieh, if followe up by industry afterwards,
into dispensers of bonnty instead of absorbers
of it. No better start than this has given the
otate mone

Stamping Out the Scab.
Several of our flockinasters, who believe in having elean shecp, have, from time to time expressed their appreciatiou of the need of somo legislation which should preseut the spread of
the scab from illy-kept Hocks to well-kept ones, which may be pasturing in the neighborhood. It does secm hard that a man who goes to the trouble and expense of fighting the disease in his flock, should be continually liable reintroduction from other shecp who deposit pest may he takcn up, by all soundl animals womld be just and eftective to compass the evil complained of, it is diffieult to detcrmine, and yet the subject is of great importance and
should be earcfully aud fully discussed by all Who are interested.
The attention of those who have thought upon this subject has turned naturally to the Aus-
tralian provinces, because it is generally known that Anstrahan flockmasters have fought the succeeded in reducing the evil. We have had difliculty in ascertaining just what are the pro-
visions of existing auti-seab laws in that com visions of existing auti-scab male considerable
try, although we have male iuquiry for them. We have just reecived an
intimation of what they are from an article in New Zealand cxchauge. It appears that the
vew Zealaud law on the subject is not as cflecNew Zealaud law on the subject is not as cflee
tive as some flocknasters desire. In fact, the Writer to the Anck land Serrs calls the New ealad law a bll for regulating the per vexa-
tion of scab, and rendering perenial the vexa
ion, loss and depreciation which this diseas tion, loss and tepreciation when sheep farmer i
inflicts npon the muf ortmate
whose neiwhborhood it establishes itseli." I such be the fact, it does not appear that the New Zealanl law wonld be of much valuc to us,
whatever its provisions may be. This free Whatever its provisions may be. This free gocs ou to say: "There is but one principle with compensation to the owners. It is now
some tive or six and twenty years since a scal some five or six and twenty years since a scal
act cmbolying this principle was passed by the
old leegislative Council of New somth Wales, which, at that time, included Yueensland, and for more than 20 years of the sulseqnent period
the clisease has been unknown, cxcept by name, in either of these colonies. so far as my mem ng a rate of, I think, 2d. a head on all sheen,
 Hock, the owner or person in eliarge shonld at once report to the inspector of his district, who orders for their slaughter and destruction ly
fire in their wool, which had to be completed within a fortnight. Previous to being slaught-
ered, it was provided that the sheep should be ered, it was provided that the shecp sanmetent parties on behal the valuc as clcan sheep, the certificate of which aluc, accompanied by the inspector's certificate of destruction, forming a claim noon the Colonamount asscssed. This act, wathin two or stamping out the discase iu New south Wales and Quecnslam, and a vigornas quarantine a The assessiment has long ago ccased or fallent becu gainers to the extent of many hundreds of have hecn free to travel in auy direction with out any restriction more than a simple inspyed
tion, cnabliug them to supply nulimited breed ing stock for new couutry in the north an and storea to the butchers aud grazicrs of Vic and Tasmania up to the present time cannot their northern neighbors, without the sheep This record of Austratian experience wil This record of Australian experience wil
afiord food for those who are thinking about lringing the foot of the law upon the scab cril
It would secm to be very douhtful whether Wich a system as was practicel in New he introulued in this state. If it were, the ovine bonlires would far outstrip the right of such procedure should be tenable whether the healthy slieep could stanit the ta: necessary to pay for the destruction of the unhealthy
It seems more likely that the wiser course wond lie in hedging about the evil with regulatons wh possible. It might be that the en-
trance of diseased slicen upon public territory comld be stopped by a peualty and that the
highway could be guarded against their passage, ou the ground of the public safety. This wonk lead all sheep owners to the observance
of thorough dipping and other preautionary measnres. We do not profess to know what
would be the best way to meet the evil of which many complain, aud yet the importance of the
subject warrants comparison of opinions and experiences and inquiry for the true solution of
the problem. The snbject is open. Who speaks?

## Pacific Coast Insects.

We learn with regret that the vicissitndes of ife lead one of our most distingnished citizeus, Mr. Henry Edwards, to break up his residenee npon this coast and find a home clsewhere. W
shall lose a man of genial and gennine characte and of distinguishing emiuence in his branch of cleutitic research. We shall lose a sonrce of light which, at this time, we most necd, because
no one knows so well as he the insects which are making inroads upou our agriculture, aud no oue could have been freer in commnnicating
the results of his stndies for the public good. During the scorc or more of years that Mr. wasy he hasen building upa collection of insects until he has now, we believe, 60,000 species, properly arranged and named. These include all typical forms. This collection is the when he sted this coast and wished to secur for llarvard Vniversity. Althongh we might specak at length of the scientific value of such a
collection of Pacifie coast insect lifc, this docs not comprise its greatest value from our point
of view. We look num the collection nuore from the side of practical value. Wic do from the side of practical val
mention the so-called 'imuseum
collection at all. It is rather as a means f insects which they mist master or the insect may master them. A collection like that of hat a library is to all of us. It is so much knowlenge stored up, classified and always ac Ir fibe. come up to do and extend his work as each ncw ycar may recpuitc. If these followers of his tudy each new nest which makes itself know boinents nceessary points which otherwise they might have to search for far and wide before they found them. We can ill afford to lose this advantage in onr future strnggle with inhurious
insects. Althongh Mr. lidwards las made his ntomology a lator of love during all these afford to lose the money actually ceprended in its material result, the collection. It has if not here. He will part with it forsimply the mount of moncy invested in its material mak ing up, if it be hought for the mblic benctit,
and that is S 112, , 000 . It has been proposed to raise the money among eitizens who can well ollection for the I iniversity or some ather pul ne-half the amount, sif,0(10, providing the bal nec can be raised by voluntary contribution lere is a chance for onr men of wealth to pint benctit. We trast they will not be backward and placing it for the penblic good. It ought and placing it for the public good.

## Native Flowers and Ferns.

One of the most praiseworthy publications which we have lately secu is "The Native Flow ers and Ferns of the United Sitates," by l'rof Mechan, puhlished by h. I'raug \&' ('o., of Bos work is to be issned in parts, each one of which contaius chromo-lithogranhs of four plants and o pages of descriptive matter. The chromo ure we have ever sucn. The drawing is botanically correct aud the coloring is strikingly natural. The anthorship heing vested in (ray mer. M Moulh!!, carries its own surety of excel
mis deseriptions ar charming. They are scientifically accurate and, more than this, they present the native
Howers in all the range of their beautics fron poetry to the practieal growing of them. W now of no man in the world better hitted than 'Ihomas Mechan, and we are glad he has \& Co. as his publishers. The tirst two parts, "spislerwort" (Tramined with care, show the Howerel arens" (Geum lriflorum), "yellow jessa-
mine" (Gelwemitun sempurvirens), "hoary polypody" (Pol!norlium incanum), common blue
violet (Viok cuculleta), wood anemone, (Alve mone nemorost), golden columbine (Aluulegin -lirys(minha), and American "thick stamen" (P' enmmeration that a wide rasge of our territory has already been called upon for native plants,
and we believe the work is one in which the whole country will take pride. Of late unusual interest has heen awakened in the genis of our own forn, and this work will give this eom will be solll only lyy subscription aud at the low rrice of 50 cents per 1art. Messrs. Prang is
Co. must secure a large circulation to be able t urnish such plates at the rate of a bit ea


Queqies and Replies.

 by taineries and woolen milhs, At what season, ga: heredi
What preparation shauld be made of the materina by the

 summer, wiile we were discnssing the possiWe will, however, answer the above gnerics bricfly: In Southern Europe the practice is as ing the seed, the leaves are stripped from the lower branches, and in October the whole head is broken off. The sccond year. in June, the branches are again stripped, and in August the ground. The loranches are dricd in the shade, leases then beaten with a flail to scparate the The leaves are then gromid ly a stone revolving on its calge about a center, or by any simple
arraugement with close rollers. The prodnct is then siftell and packed for markct. Full description and illustration of a simac mill may
be seen in the licport of the Hepartment of Agriculture for $186!1$.
We to not know what can be obtained for California sumac. Last year there was no price
on it becanse it was a new article, and our local tanncrs would not buy it, as they had 10 expericnce with it and did not kuow its value. We bolieve they tried it, but whether they have learned. Sue of the leader in the sumae move. inent was Alr. J. Anderson, of Orange, Los
Angeles county. Jerhaps he will tell us if a Angeles county: Jerhaps he
market rate is yet established
The agitation of smmac production in the lewsss and other journals has ealled the attentcrial. A city merchant called upon us the other day, and said that a large house in Enrope natcrial to hom samples of the new brought out the substance last year. It seemss quite sure that our sumac will win its way in trade, but, of conrse, it mnst take a slow course
at first nntil its valucs are generally known. Medicinal Malva.
Fintols Press:- Cour issue of June Ist Nomes freighted with agricultural information, age. lialva scems to have very few fricnds. I do not helieve in it as a forage plant, but I do worthy of note. I have seen half-dead horses by the malva, for extcrinal injuries. for many years stage horses were kept at my place. sometimes, brinising and cutting valuable horses, the hostler used nothing bint malva poultices its use, if we culy know how to apply
$\qquad$
Tulalie Corvity-Mr. J. W. A. Wright will
isit Tulare county in the interest of the Press and will be pleased to note the forward steps ocspeak for him the kiud aid of our frienda

## Widney's Patent Transplanter.

Gardeners and tree-planters have heretofore becn disappointed in the use of tools made expressly for transplanting plants and shrubs, and we shonld not be inclined to devote our time the subject of this article if we were not, after well considering its merits, satisfied that it will many small trees or plants to transplant. One important reason for its snccess over all its pre lccessors lies in the fact that its work is better done than it can be accomplished by the most
careful hand work. Plants transferred by its gency are more certain of life, and there is les interruption
their growth.
Although positively a labor-saving apparatus, superiority of its work. The invention is fully described by the patentee, R. M. Widney, o Los Angeles, as follows :

The Object to be Accomplished.
The object of the transplanter is to take up the plant with a solid plug of earth around the
roots undisturbed, and resetting the same in hole, around which hole the ground is undisturbed and ready to receive and nourish the young roots, thus leaving the plant in as nea its natural growing condition as possible. How it is Done.
The transplanter, $A$, is first used to cut a hole,
, in the ground or in a box of dirt, where you want to set the plant. Next the transplanter is set doun over the plant so that the top of the The outer cylinder is then pressed down into the ground, giving it a slight rotary motion, until you have cut to the depth desired, generally two or four inches. (In pressing down on the handes, care nside cylinder, which must be lif oif froin the to sicice freely), The rotary motion gives a slarp drawing cut.
After cutting down around the plant to the epth desired, lift the transplantcr out of the plug of earth, $C$, inside the cylinder. Now put the transplanter containing the plant iuto the hol in the ground (or box) first cut. Set it down to
the bottom of the loole so that the bottom the plug of earth rests on the botton of the hole; place the two thumbs on top of the inside cylinder, retaining the hold on the handles with the fingers, and close the hand, thus drawing up the outside cylinder while the inside cylin
der thus loolds the plug of dirt in the hole. The plug of dirt is thus forced out of the trans. plug of irt is thus forced out of the trans-
planter as the wand is forcel out of a pop. gun.
When this is donc, the plant with a solid plug When this is donc, the plant with a solid plug unmoved dirt. Pour a trifite of water around crevices around the plug, and the work is conlpleted. After a few experiments the work ean The performed with great rapidity.
down into the ground aud take up a plug of earth. The object of the inside cylinder is $t$ force that plug out.

What the Transplanter has Done. Mr. Widney has put his transplanter to care-
ful tests to prove its efficiency, and has se ful tests to prove its efficiency, and has se-
cured the aid of his neighbors in makiag trials of it. He writes as follows: three years ago commenced to set out
some 200 acres of eucalyptus trees. In the plants and put theny in boxes, $20 \times 24$, setting them two inches apart-the usual plan, and do the work rapidly, was the question The result was this transplanter. With it one man will take the boxes of plants and set out set out over 100,000 plants, and not onc plant in 100 will die from transplanting.
"Mr. Arthur Bullock set out some 60 acres of H. H. Spence set, out probably 100,000 plants The tre result.
The transplanter is used for transplanting plants from one box to another, so as to fill out
boxes. Also is used in taking out of boxes any number of plants and resetting them in sinall the flower garden or vegetable field.
These transplanters are made any diameter desired, two, three, and up to eight inches, for made and drawn over the cylinder or transplauter, and the plug of earth forced out into
the sack, which is then tied, and the tree ship. ped or set in the ground and the sack allowe to rot. The implement is guarantced to give entire gatisfaction iu its work, aud when used by the
day one man will accomplish the work of two The transplanter
Widneyransplanter was patented by R. M. M. sale by P. J. Trumbull \& Co. and Geo. F. Sylcan be seen at their stores, or at this office.
Prices range from two dollars upwards, according to size. The patent right (for any state ex-
cept Califoruia) is offered for sale.

All the Powers have accepted invitations
the Peace Congress, wherefore matters loo the Peace Congress, where
muoh more pacific in Furope,

## Notes on the Olive.

Has any fruit a richer history than the olive ? From the time the dove brought the branch to old Noah down to the present, it has held its place in literature, and at this late day, its history, its poctry and its practical uses are being set forth by industrious writers. Some of our readers have asked ns for books upon the subcct. Mr. G. P. Rixford showed us the other day a handsome volume, "L'Olivier," which he had just secured from Paris and which would give mnch delight to those of our readers who are masters of French and have a penchant for he olive. It treats of the olive from the ark downwards, and is without doubt the handsomest and most complete monograph ever prepared upon the subject.
Another work we read of in an Adelaide exchange. It seems that olive culture is being dvocated for South Australia, and one of its promoters is Mr. W. R. Boothby, Sheriff of the Province, who has lately visited the olive dis-
tricts of France and Italy and returns to his tricts of France and Italy and returns to his have not seen the book, but it is highly spoken have not seen the book, but it is highly spoken
of by the Adelaide Observer. Judging by the description given of its coutents it covers much of the ground set forth in "Lolivier," and has the advantage of being written in English.
In France the olive is cultivated in no less than 11 departments, covering an extent of 303,072 acres; and in Italy its growth is general
through all the Ligurian sea coast. The varie-

## complete the soil.

The gathering of the fruit takes place at dif ferent periods according to the locality and the variety, the fruit remaining a long time on the
tree in the warmer climates. In the Var and Alpes Maritimes the gathering conmences about October, when the berries fall uaturally; and this continues until the eud of Jaunary, when the remainder arc knocked off with rods. This practice is condemned, inasmuch as it injures
the young shoots; but in the case of large trees the young shoots; but in the case of large trees
it is impossible to do otherwise. In Italy they it is impossible to do otherwise. In Italy they are gathered with ladders and baskets, and
sometimes cloths are spread under the trees. The gathering is done by the day or the task, a woman being able to collect as much as from 18 to 22 gallons when the crop is heary. In
the districts where the best kinds of oil are made the olives are deposited in layers in cool dry places. Olives gathered late produce fine
white oil, but it does not keep well and is no white oil, but it does not keep well and is not early. The pointed kinds produce less oil than the others, the best being those that are large at the end than at the stem. It is said in Italy
that the pulp should weigh at least three times as much as the stone, and the quantity of oil produced by each olive shonld not be less than one-tenth part of the weight of the berry.
according to the climate. In the colder climate the berries are pressed before they arrive at maturity to guard against their being injured
by the frosts. At Grasse, wherc fears of frost are not entertained, the olive is allowerd to become thoroughly ripe before it is touched
The berries arc put in the mills and crushed


## WIDNEY'S PATENT TRANSPLANTER

ties of the olive in both countries are too many to enumerate. The most noticeable difference
is perhaps in the shape of the fruit, of which llustrations are given in Mr. Boothby's work These show the well-known egg-shaped olives at the free extremity, pcar-shaped olives, hean
shaped olives and olives in the form of a heart shaped olives and olives in the form of a heart he character of the olive and produce these differences. The principal varieties are the Caillet-Olivier, La Blanquette, Le Prun, Cayon, the Saurin and Curnet d'Espagne.
The fine oil of Nice is made from the fruit the Caillet, and a mannfacturer at Grasse tained a gold medal at an exhibition in Paris for oil made from this variety. Of the methods obscrved for the propagation of the trees the best is considered by competent authorities t


Fig. 1. Single Sackholder
be by sowing the seed. The plan of planting cuttings, greatly practiced in parts of Italy, is trees raised from seed are naturally more vigor ous than those raised from cuttings. In parts of France the common wild olives spring from seed scattered by birds, especially by a species
of thrush which is very fond of the berries of thrush which is very fond of the berries.
Another method is by taking up the trees and Another method is by taking up the trees and
dividing the roots, the portions so obtained being known as souchef.s. In this way old tree are utilized, and the plan succeeds well, but has never been grafted they will produce wild ful treatment, but it will well repay the labo bestowed upon it. In dry soils it is uecessary single horse plow is used for this purpose, care This, however, can only be resorted to when the trees are planted in rows, and then it i necessary to dig round the foot of the trees to
and, at the first pressure, the pure virgin oil
flows ont. After this all the remaining liquid flows out. After this all the remaining liquid
matter is squeezed out, and this is put in a tub, with a little warm water added. After it has remained for a short time the oil is skimmed off, and, when it has cooled, is placed in stone jars or tin tanks. The thick matter which remaius in the bags after pressiug gives, in a short time, oil very good for hurning, which is much nsed by poor people. Three men suffice to work a olives, and the quantity of the owner of the is about 1,056 gallons. The water not used up s carried off into underground tanks and materials for making oil and soap are olbtaine deposed the the bottom of the toits matte deposed at the bottom of the pits is used as an excellent fire, are sold for fuel, so that every


Fig. 2. Sackholder for Threshers
particle of the olive is used in onc form or anothe
Metionohogical sumars for May, - The report of the U. S Signal Service officer, of San Francisco, for the month of May is summarized as follows: The mean hight of barometer for the month was 29.96 ; mean temperature, 57.2 nean humidity, $69.05 ;$ prevailing winds, south 678 ; highest temperature, $78^{\prime \prime}$; lowest, $48^{\circ}$ monthly range, 30 ; greatest volocity of wind 30 iniles per hour; total number of miles trav eled by wind, 7,571 ; total rainfall, 16 inches Rainfall in May durby former years: 18\%2, 18 inches; 1873, . 00 inches; 1874 , . 66 inches 1875, . 22 inches; $1876, .24$ inches; $1877, .18$
.
Tue threatcned difliculty between China and ave now rccognized the completc indcpendence have now
of Sian.

## The California Sackholder.

We illustrate herewith an invention for use on threshing machines, in flouring mills ard all places wherc sacks are to be filled, patents for which were secured through the Mining and Scientific Press Patent Agency by J. S. Covert in 1876, and by Covert, Carner \& Walthall in 18:7-8. The device is for holding sack and keeping them open while being filled, the construction being such that any sized sack can ee instantly adjusted when empty, and released when full.
The holding apparatus is secured to a frame or standard in such a manner that the holde may be elevated or depressed to suit any size of it may represent the side of a machine like thresher, so as to enable the sack to be filled irectly irom the machine. A bar is journaled tally across its front, and from this horizou tubes or sockets projet towarim the front two right angles. These tubes or sockets may be extended through the axis or har upon which they turn, so that the slides which run in the sockets may be made as long as desired. A cross-bar mnites the ends of the slidcs whicl bar are provided with projecting points
In the single sackholder shown in Fig. 1 o and mounted on a suitablard is made vertical guides may se sliding guides may be secured to the frame at any point
by set screws, to bring it to the proper hight by set screws, to bring it to the proper high
for any sized sack. Journal boxes on the frame support the axis which receives the tubes, the
tubes extending through the axis. By this construction the rods may be pushed back of the od forming a telescopic brace extend from the frame down to one of the arms of the hase, and is pivoted there, so that by loosening a sct screw the brace may he lengthened or shortened to
accommodate the lowering or raising of the frame.
A spring is attached to the frame, and this spring projects downward so as to press agains turned up this spring will hold it in position by its pressure, and the device may be turned dow catch.
When the bars are pushed into the tubes sack is hooked upon the rear hooks or points, and its front edge is held by drawing the bars forward uutil the poiuts hold or penetratc the arrang and the readily adijuste to any sized sack. The weight upon the bars pre
vents their sliding back readily, and the sacks vents their sliding back readily, and the sack
are thus held. When full and distended the are thus held. When full and clistended the bars are slightly raised, and thus relieved from
the binding friction on the tubes, when they the binding friction on the tubes, when they up of the device will release the rear points. may be set side by side, having a tilting spout hetween them, by which they can be altcrnate ly used, as shown in Fig. 2. This machine is double, and is set in a wooden frame which may
be attached to any spout or separator. Beside be attached to any spout or separator. Besides its saving the labor of oue man it holds the ing of sacks much less liable, and at the sam time enable the faruer to get from three to five pounds more grain in each sack than if held by hand. The device is very convenient and prae with great favor by the farmers, and is being extensively introduced throughout the State. Further information on the subject may be gained by addressing H. M. Cove
agent, 306 Havis street, in this city.

Anerican Dhbyuen's Assoclation. - The 13 th anuual report of this sterling dairy organization has just been received from the Sucretary, Prof. L. B. Amohd, Rochester, New lork. It contains in full the proceedings, addresses Cleveland, Ohio, last January. The association is widely Amcricall in its character, having vice presidents in each of the dairy Statcs and in Canada. The President is Hon. Horatio Seymour, of Utica, New Vork. In the 13 reports
which the socicty has issued, may be fonnd a which the socicty has issued, may be fonnd a concerning dairy scicnce and practice, which concerning dairy scicucc and practice, which
cannot be found clsewhere in our languagc. The latest report is one of a valuable serics, and is another monument to rof. Arnolds suceess in an office which he honors in holding. We work, for its influence is felt for good in all parts of the country.

The Cholcest of the Sbason. - We have re ceived a large bov of most luscious cherries from br. Strentzels Ahambra ranch, near Martinez dicatc that there is no depreciation in th quality of the Doctor's fruit this scason, and
we hope (for the benefit of both producer aud we hope (for the benent of both producer aun
consumer) that the quantity will he more boun tiful than evcr:

The Lick Trustees have secured a State patent to the land in the vicinity of the Ob
servatory sitc on the summit of Mount Hamil


## FORTY

## ACRE <br> FARMS．

In offering the Reading lianch for sale in sub－divisions， I am dispused to accomodate the interests of all elasscs of desirable scttlers，I therefore offer（besidcs large tracts）to sell farms （in favorable locations）of from 40 to 100 acres， at from $\$ 20$ to $\$ 30$ per aere．Semi－tropical friits， eorn，vegetalles，and all kinds of grain and graseses，（including alfalfa，）will grow well with－ out irrigation on these lands．The Oregou Di－ vision of the C．P．R．．「．，and a brisk growing town are near the lanil on the west，while the Sacramento river is near at hand on the east． For further information of the Reading Grant，see my advertisement which appears from time to time in this paper．Address the proprietor on the premises，

FHWARD FRISBIE

## HiEADS

BUSINESS college， Pos Near kems，

## teachers are conpetent and experienced．Its pupilis are

 such broad culture as thic times denaand．Thoroughi in－
struction is siven in all the branches ol an Euglish educar tion，and Modern Languares are practically tayht．The
discipline is cxcellent，and its gystem of Actual Busines，




## H．H．H．

HORSE MEDICINE D．D．T．－1868．


## FRANCIS SMIITHI \＆CO．，

## THE PATENT CHANNEL IRON WHEELBARROWS，



The Strongest Barrow Made．These Barrows are made by Supcrior Workmen，and of the hest material
Lap－We＇ded Pipe，all Sizes，from Three to Six Inches．Artesian Well Pipe．Also，Gal－ vanized Iron Boiiers，from Twenty five to One Hundred Gailons． Iron Cut，Punched，and Formed for making pipe on ground，where required．All kinds of tools supplied for
making pipe．Estinates givell when required．Aro prcpared for coating all size of pines with a composition Office and Manufactory， 130 BEALE STREET，San Francisco，Cal．

## THE EASTERN OREGON COLONY

## JEIE JOWIN SITH

## A Plenty of Government Land for All．

un

640 Acres Secured for a Town－site and Called Lockville．


EASTERN OREGON COLONIZATION COMPANY．
DR C R．ROLLINS，Pres．J．B．DOW，Treas．G．M．LOCKE，Sec＇y
GRAND HEADQUARTERS FOR MUSICAL BOXES
M．J．上AII工AI \＆ $\mathbb{C}$ ．


Holiday，Birthday
Fedding Presents，


Holiday，Birthday Wedding Presents， OF STANDARD REPUTATION．
Our stoek cmliracest the latest noverties，the newest
tTWe offer this season many new improvementes tlat must he seen to be appreciated，therclore buyers coruine

 M．J．PAILLARD \＆CO．，No， 120 Sutter St．，（Rooms 5 and 6）San Francisco．
$\qquad$

LEA AND PERRINS＇SAUCE， which are calculated to deceizc the Public，Lea and Pcrrins have adopted A NEW LABEL，bcaring their Signature，

## weacterxizo

which is placed on every bottle of ITORCESTERSHIRE Ask for LIEA \＆P PERRIVS＇Suuce，and see Aiame on Wrapper，Label，Bottle and Stopper． Wholesale and fir Fixport by the Proprietors，Iorcester，Croase and A．Iackuell，London， To be obtained of CROSS \＆CO．，San Francisco．


BIJCHAN＇S
CRESYLIC SHEEP DIP CURES SCAB

M．B．V．WATSON， 313 to 319 Battery St．，S．F．F．

S．D．BURBANK，OPTICIAN， Special Attention to Fitting Eyes， office－nicholl block，nintil stieet，


BURNHAM＇S 817954 WARRANTED BEST \＆CHEAPEST． Also，MILLING MACHINERY． PRICES REDUCED APR，20，＇78．
Pamphrdeta free．OEFICE，YORE，PA

## Land for Sale in Napa County．

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## RANCH FOR SALE

A ranch for sale in Riverdale，Fresno County，it com－
prises 160 aures，$U$ ，$S$ ．Patent，if rich bottom land，with house and out buildings．Grass is green the year round． Alalia grows the year round without irrigation，as
water is sut sis to eifht feet leneath the surlace．There
is two irrigation dithes runing acruss the ranch and three cubic feet of water pher secound beloligs with the the
place，und 42 Rmall fruit trees and two to thrce hundred place，and serry and strawlerry plants；30 acres of alfalfa；20 garden．sixtt，acres inclosed，thlice plows，one ewo gang
sulky，（Jolnt Deere，）and two siugle plows，harrow，two number one cows，two calves，one work，tcam，hameses，
old bugry and two dozen hens．The ranch is one mile West of the liverdale postoffice．We have a good school，
nie store nuld preacling every two weeks of the south Methodist．The rancl．is 10 mile worth and west of
Lecmore，a fourisling rairoad town； 9 miles due west of
lingsiton； 20 milcs irom Fresno，the county seat of All the crons stock fron the Central Califormia Colony． ranch if sold goon．Price，$\xi 2,500$ ． 81,500 gold coin down，
and one year＇s time on balaice．For further particulars DAVID S．ORR，Riverdale，Fresno Co，Cal．

## CHOICE

PROPERTY AT SANTA CRUZ FOR SALE．

Eleven acres of land，planted with Ornamental Trees and Shrubs．Two hard－fluished Cottages and other
buildings，large choulh to accommodate about 40 per－

Charming as a Private Residence or Sea－Side Hotel．
Finest views of the Pacifce，Montercy Bay and the Coast Mlouitains．Sca bathing within one minutee＇

JULLUS Pelton，Owne
C．H．DWINELLE，
202 Sansome St．，San Francisco．
FARM FOR SALE．
\＄4，000．Two Hundred Acres of Land in Mendocino County．


 minted inside．gyeel trame barn，granary，storehouse，



FINE RANCH FOR SALE．
One thnusand six hundred reres of deeded land，in
r．Pe 19，X．R．B W．，in Colusa County，situated near stoncy，creck，on the connty roall，fronnt，Leesvinite to tilk
Crech，comprisint No．1 farming land，and frst－claes Grazin，lands，all enclosed．Gond honse，seven rooms well fini hid a aul painted．Two large barns，one wagoin
housc，one wool house，large store house，wood honse and other sinall buildings complete．Two good wells of pure
cold water and a larde pring of never－failing water run－
 surounded with shade and ornamentan trees．All the
farnuing ntensisis and abrint 60 tous nf hay will be thrown
in if purchased sonn diary，or stock business of any kind，can tor fing a bether
location in the state．Price， 87.50 per acre onc half down and the balance to snit purcliaser．For further particu－ Elk Creek PANIEL JOHNSON，Colusa County，Cal

HOG RANCH FOR SALE． Ilog ranch of 800 acres for sale at Borden，Fresuo
Comuty，Cal．stocked with hors，work horses，mules and farming utensils， 300 acress，ol it in horsalfa，and tho
balance the best of grain land．The harlcy bpon it is expected to turn out So huslcley new stamding ovecd and ditclhes inade for irrigating，with the water
upplied ly the Fresno（＇anal Co．1ig pens，water supply， etc．，all arranged． 300 lruit trees and large karden．For premises to

June 8, 1878.]

PURCHASERS OF STOCK WILL FIND IN THIS DIRECTORY THK
NAMEs OY SUME OF THE MOST RELABLE Names or sume of the Most Reliable breeders.
OUR RatEs. Six lines or less inserted in this Directory at
50 cents a line per month, payable quarterly.

## CATTLE.

BARRETTO \& CO. Downey City, Cal., breeders o
thoroughbred Jerscys. A. MAILLIARD, San Rafael, Marin Co., CaI A. MAILLIARD, San Rafan,

PAGE BROTHERS, 302 Davis street, San Francisco,
(or Cotate Ranch, near Petaluma, Sonoma Co.), Breeders of Short Horns and their Grades.
R. G. SNEATH, San Bruno, Cal., breeder of Jersey
cattie. Has Jersey bulls for sale-various ages-at $\$ \$ 0$

## SHEEP AND GOATS.

L. U. SHIPPEE, Stockton, Cal. Importer and

$\overline{\text { M. EYRE, Jr., Napa, Cal. Thoroughbred Southdown }}$ Sheep. Rams a
LANDRUM \& RODGERS, Watsonville, Cal. InLANDRUM \& RODGERS, Watsonville, Cal
porters and breeders of Pure Breed Angora Goats.

## POULTRY.

M. FALLON, corner Seventh and Oak streets, Oak-
land. Bronze Turkeys. Choice Eggs for Hatching land. Bronze Turke
from Pure Bred Fowls.
T. A. FREEMAN, San Jose, Cal. Pekin Ducks for
 hatching.
MRS. L. J. WATKINS, San Jose, Cal. Premium Pekin Ducks, etc
A. O. RIX, Washington, Alameda Conity, Cal.
Breeder of Thorouyhhred Pouttry. Send for circular. C. P. STONE, San Francisee, Cal, Importer and

## SWINE

ALFRED PARKER, Bellota, San Joaquin Co., CaI Importer, Breeder and slipper of Pure Berkshire Swine Agent for Dana's Cattle, llog and Sheep Laber A. J. TWOGOOD, Riverside, Cal., 1
J. M. KERLLINGER, Ellis, San Joaquin Co, Impor
ter and Brecder of Berkshire Pigs and fine Poultry.

## BEES.

N. S. AMES, Napa City, Cal., Importer and Breede
of Itaian Queen Bees, Queens Imported from Europe $\$ 10$ each. Tested Queens, $\$ 3$.

## Poultry.

BONE MEAL FOR POULTRY Ground raw bones are hoth stimu-
lating and restorativ c unequanted for FORCING EGG PRODUCTION, And have been proved hy experiment
to hasten thie erayiug of pullets and
increase the laying of hens fitty per increase the laying of hens fifty prer
cent., while burnt bones foumded
have not the sanne effeet, being re-
dueed to minal hate of lime, fresh bones ground raw ontain jelly and much nutriment. When fed regularl oung chickens, and wards off many of the diseasess they
re subject to on this Coast. Hundreds of poultryme neal farmers on the Pacifin Coast are now of poultryme the Bone
neal prepared by me, and say they would not Meal prepared by me, and say they would not get along
without it, after knowing its beneficial qualities. I also nanufacture Bone Mcal for cow feed, and for the use of
ardners, nurserymen, ctc.
Also, Agent for lmperial Egg Food. CARBOLIC POWDER.
Calvert's English Carbolic Powder, the best tning in the
world for destroying lice on fowls, put up in four pound
packages for $\$ 1$, can be shipped in the bone mea world for destroying lice on fowls, put up in four pound
packages for $\$ 1$ chan be shipped in the bone meal sakks,
thus saving freight. Price of Bune Meal in 100 pound sacks, \$t; 50 pound sacks, $\$ 2.50$. Sent hy Express, C. O. C. P. STONE, Mission Market, Sixteenth Street, San Francisco, Cal
OAKLAND POULTRY YARDS.
Cor. Sixteenth and Castro Streets, Oakland
Constantly on hand and for sale, choice spe
of the following varieties of Fowls:


Dark and Light Brahmas, But White and Partridge C Leghorns, Dorkngs, Polish Hem urge, Plymouth Rocks, burgs, Plymouth Rocks, Game and Sebright Ban-
ams, Bronze Turkeys, Pekin Aylesbury and Rouen Ducks. Sale after January first. No Inferior Fowls Sold at any Price Satisfaction Guaranteed
dizFor further information send stamp for Illustrat GEO. B. BAYLEY,

## EVERYBODY KNOWS

Ihat Mrs. C. H. Sprague, at the California Poultry
Yards, at Woodland, Yolo County, keeps the cloicest lot and the greatest and best varicty of Thoroughbred Fowls of any one west of the Mississippir river, and that one can
get just what is wauted by sending orders to her.

## Bremers' Directory. <br> GRANGERS' BUSINESS ASSOCIATION

Incorporated Feb. 10th, 1875 . Capital Stock, $\$ 1,000,000$. officers and directors.
WANIEL INMAN, (PRESIDENT).
A. D. LOGAAN, (VICE PRESDERY)
AMOS ADAMS, (SECRETARY). $\qquad$ J. WN LELBY.
I. C. STEELE.
W. L. OVERHISER W. W. GRAY.
A. T. HATCH.
O. HUBBELL. SHIPPING AND COMMISSION HOUSE,
Grangers' Building,
106 Davis Street, S. F
Consignments of Grain, Wool, Dairy Products, Fruit, Vegetahles, and other Produco solicited, and
Advances made on the same. Orders for Grain and Wool Sacks, Produce, Merchandise, Form Wagons, etc, solicited and promptly attended to

We do a Strictly Commission Business, and place our rates of Commission upon a faial
able the country at large to transact business through us to their entire satisfaction.
Consignments to be marked "Grangers' Business Association, San Francisco." Stencils for marking will arnished free on application DANIEL INMAN, Manager.

## BYRON JACKSON, Woodland, Cal.

 manufacturer ofFeeders \& Elevators for Threshing Machines, Horse Forks \& Der ricks,


The above Diagram shows the proper position for the Derrick, Scparatur and Engine, and the best size Two medium sized stacks with the Derrick between them is far better than one large stack, because the grain
has only to be moved one-half the distance. Address BYRON JACKSON, Woodland, or BAKER \& HAMILTON, San Francisco or Sacramento, Cal.

## IRA MARDEN \& CO.'S

brands of
Coffee and Spices Have no Strperior.
Twenty-Five Years Experience
in tuie business on this coast exabies then to place ox the market tue very best coons at tile Lowisst posslise prices.
Ask Your Grocer for Marden's Coffee and Spices.

## THOROUGHBRED POULTRY.

 Unlimited Range
Healthy Stock Largest Yard Largest Yard Brahinas, Leghorns, Plymonth Rocks, F
keys, Geese, Pekin Ducks, Gumnea Pigs, Etc. 4TSafe arrival of Fowls and Eggs Guaranteed ©TSF Pamphlet on the care of fowls--hatching, feeding
diseases and their cure, etc., ADAPTED ESPECIALLY To THE Pacifrc Coast. Sent for 15 cents.
Send stamp for price list. Address
M. EYRE, Napa, Cal.

WHITE LEGHORN EGGS, $\$ 3$ Per Dozen. From 3 pens of 20 Hens and a Leghorn Fowls ever seen in one collection on the Pacific
Coast, selected from upyards of 600 bred during the sea Coast, selected from upwards of 600 bred durnyy the sea
sons of $1876-77$, packed to arrive safely and hatch. Sen
or circular Address, C. P. STONE,
35 Mission Market, San Francisco DALTON \& GRAY, Commission Merchants, All Kinds of Country Produce 404 \& 406 Davis Street, San Francisco. aric Consignments Solicited ©a
C. \& F. NAUMAN \& CO.

Wholesale Commission Merchants,
Farm and Dairy Produce Sold on Commis
sion. Butter, Eggs, Poultry and sion. Butter, Eggs, Pou
231 WASHINGTON STREET, San Francisco (Bet
Cuas. nauman. is.)

## DAVIS \& SUTTON,

- No. 75 Warren Street, New York Commission Merchants in Cal. Produce. Reqrerser.-Tradesmen's National Bank, N. Y.; En
wanger \& Barry, Rochester, N. Y.; C. W. Mced; Sacra


## GRAY'S MUSIC STORE,


On receipt of the amount in postage stamps, any of the
following pieces will be mailed, post-paid
poor little chloe, (Ballad…...by Luther, 35 cts fiss the little ones good night for me,

Good night, farewell. .......by Rutledge, 3 cts
my dear little home o'er the sea,
help the needy when you can,
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THE LITTLE TORMENT, (Scllottische). . Far West, 35 cts.
the republic grand gallop, $\begin{gathered}\text { by A. h. Woods, } 75 \text { cts. }\end{gathered}$

Send for our complete Catalorue of Songs, Ducts an
Choruses. $n$ NTS Say where you saw this advertiscment.
PILES! PILES!! PILES!!!
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Willentirely disapperer if the Truss is worn and the Rem edy applied as directed. For particulars call or adaress
MAGNETIC ELASTIC TRUSS CO., 609 Sacamento strcet, (up stairs), San Francisco.
fif State in what apler you siw this notice. ©AA


Stock Notices.
HEREFORD

success.

The best Beef Bull in America. The Herefords the best cattle in the world. For particulars write to T. I. Miller, Beecher, Will County, Hlinos.
For Cotswold Sheep and Berkshire Pigs t. L. MILLER.

Beecher, Will County, 1llinoss
BERKSHIRES.

 Also, pure Suffolk hors and piss. Short Horn and
Jersey, or Alderney cattle. Merino and Cotswold
 PETER SAXE, Russ House, San Franciscu, and Los Angeles City, Cal.

## \$25 EVERY DAY Is warranted usinc JILZ



THOROUGHBRED

## SPANISH MERINO SHEEP!

200 Extra Rams For sale. Yearlings and two-jear-
olds. In size, quality and condition unsurpassed. Also, 100 ewes
prices to suit the times. The nu-
cleus of this flock was from a pul chase made from Severance \& \&
Peet in 1873. My ranch is at Haywards, Alamed
and mand and may be reachicd by rail from San Francisco, seven
tines daily. Parties desiring choice sheep should see
this flock before purchasing elsewhere. J. H. STROBRIDGE.
W. \& J. ROBINSON Hanford, Tulare County, California. THOROUGHBRED BERKSHIRE SWINE,

Pure Brown Leghorn Fowls.
birds and eggs for sale.
200 COWS WANTED.
$\begin{aligned} & 1 \text { WISI TO ELY Prom one To Two } \\ & \text { hundred frst-class dairy cows for Jersey }\end{aligned}$
$\begin{aligned} & \text { R. G. SNEATH. }\end{aligned}$
23 California street

DO
NOT FAIL


$\qquad$




MOMTGOMERY WARD \& CO.,
e27 \&゙ $2: 99$ Wabash Ave., Clicago, 111.
CHOICE PIGS FOR SALE.
1 have a few flue Lancastershire pigs for salc, now about four wecks' old. Bred from choice imported stock. Address GRANT I. TAGGART,

Eighth Street, near Broadway, Oakland

## A JOB PRESS WANTED.

Any printer having an Eighth or Quarter Medium Job Press for sale, will plense address J. P., carc of Dewe \&. Co., S. F. State condition and lowest price.
Bress! Querns!! Mives ! ! !-Sec advertisement under Bees! Querns ! ! Muves !!!
this head in last weck's Rural

Patents ano dinventions.
List of U. S. Patents Issued to Pacific Coast Inventors:
 By Special Dispatch from Washington, D.





The Relation of Science to Industry. There hass been a great deal written upon this subject: a great deal too much perhaps. There the people. llean swift usell to wage bitter warfare aysinst it. In those days it used to
dress in prestly garments and assume a saintly air, now it goes abont with it karned look and prates amler its hat aud was not made of dnst and ashes. But it is the same hollow pretender to-
day that it was then. It is the same false prophet whether it stani hehind the pulpit or ciety.
In these times we all know how common this scientitic eant is, and we all know how to tall
it. True science is a worker. Truc science it. True science is a worker. Truc seience is morctalking than thinking; there is more
buncombe than science. Again, true science is modest, not loud and ranting, it works in the
silence, often in the dark; and, in short, science is truth-seekiug, eant is self-seeking.
This humb-monthed ranting of empty heads has done much to throw discredit mpon science member the distinction we have made, and let
nis make the application until we have separateld nes nake the application ur
the wheat fron the chaff.
That is the kernal of the whole matter seeking in its broalest, widest aspirations seeks to take the remosest star in the uuiverse to the nearcst,
mimutest atom of earth dust, and to bring it all mimintest atom of earth dust, and to hring it alt
to a fous npon its camera. It sechs to reproduce in minature the great miverse about us, so
that before jts vision it can see accurately phothat lofore its vision it can see accurately pho
tographed each fact and factor in the great
whole we call nature. This is seience it is not a mere aggregation of facts. That would le gaineds: with inlinite lalhor from the top of them
Andes to the bottom of the deepest oeean, gathered by inen young and energetic, and by men whl and wurn with years. It is an arrangement
of facts so made that they show their natnral relationship to each other. the foress at work
amony them, and the law that knows m., break. ing. I'his is what science is. It is omr heritage
from all the past. it is our store-house for all the future.
Now las industry no interest in this store of knowlellye wrestrd by the work of the
best minds that have evor come into existence? Le.t ns see. What would iudnstry
be were it to become petrified: It would be be were it to become petrified": It woukd be
what 'hima is to-day. If then progress and
impruvenent are necessary, whence ean it come improvenent are necessary, whence ean it conne
 master:
This is not very new, but it is very trne, and
we are all liable to forset it in the lonstle of the we are all lialle to forget it in the lmstle of the
workshop and the tield. The practical man has got tr lowk on scientiticknowledge as all very well, wathe does not see just how it hears on his
work. He may agree nbont all this iu a gen-
eral sort of way, but he does not find the help from science that he ought. What is the result: Ask any one who has been to the l'at-
ent Ollice at Washington, and hear what he has to say on the endless host of men who have wasted years on the perpetnal motion phantom. Stop to think for $\varepsilon$ moment of the wasted
brains and bullion that has been put upon this brans and bullion that has been put upon this
one mistak effort. Think again of the addi-
tions that might have been made to our industrial resources, if seicnee had directed this en
ergy and capital. 'cieuce then is valualle to industry, first, because it avoids expenditure of energy in the wrong direction.
In the second place, science helps in suggesting new fields for inventive and iudustrial genius. Science, pure science remember, is only the
orderly aurrangement of facts. it is not the order y arrangement of facts.
applican of them that is the field of the inapentor and the practical man. But let ns see what has come to industry from the pure sci-
ences. We do not need to search fur illustrations, but rather to ounit, there are so many at
hand. In the first place look at the work of Micharl Faraday, a poor book-1hinder's apprentice, who devoted his life to the study of prre science withont any idea 1 put the love of truth.
And belhull the result of his labors in manifold And belholl the result of hiscoveries in the laws of applications of his discoveries in the laws of
electricity that teem on every hand. His name Cikc Franklin's is a nane to conjure with
lagan see low chemistry has made of coal tar Agye stulfis that rival the rainbow's lines. Pnt examples are needlless. Let ns learn the lessonl.
Let ups send our iuventors, our miners, our me. L.et uss send our iuventors, our miners, our me.
chanics, our farmers, our chid ren to learn not of loud-monthed talkers, lout of science what is and what is not a possible
tion of force and matter.

## Anti-Cruelty Prize.

In the windows of Messrs. Evans \& Varden, picture dealers, on Nan labllo avemue, a few
doors north of the postoffice, may be seen a beautiful steel engraving entitled "The Wound ed Honnd.' 'This is offered ly the Patapio Romal Priss, of San Francisco, Dewey \& Co., prcprietors, as a prize for the best essay, to be
written by any lady in Alameda county, uponi the sinbject of "Our Obligations the first of July
mals." Time is allowed until the fors to write essays and send to the following arl.
dress: Necretary of the (Oakland society for the Prevention of Cruelty to Animals, care of W . B. Hardy, Nak land; or they may le left at Mr.
Hardy's Hook store. On Jnly lst the Secretary will sulhnit all the essays to a committee, con-
sisting of liev. Mr. Mcilean, I. A. Johnson, of sisting of liev. Mr. Heclean, I. A. Johnson, om
the Times, and II. 1: Wiggin, who will exam. ine then1 and determine to which writer shonld This awarded the prize
This generous gift of the Rras. Prises is an peus of this county. It represents a hound
which has come in fron the chase with a broken leg. and he extenls it in a piteons manner,
whlule his master bathes it and dresses it, and a companion hound moans in the most sympathiz ing manner at seeing his matc thus disabled. to a faithful dumb heast, and is most appropriate to hang on the walls of any family and gilt, the size cever all beiug 40 inches by 51 . Those intrested will do well to examine the


Tur, Mracsi. Fsithal. - The great May Festival touk place last week and was a decided snecess, the attendance being large and the andlience appreciative. The building is not
well adapted to the purpose, being rather large and barn-like even for the immense orchestra and chorus, while the solo siugers failed to fill it even
with their utinost exertions, Aside from this, however, Manager Bugbee may congratulate which has twen interest to the music-lowing public. but to the Whole community. Large delegations from the thoroughly enjoy the eutertainment. We hope
something of the kind will be arranged esery year, if for no other purpose than to encourage perple.
the interesting article on the Melicinal Springs of Califoruia, prepared by doln s. Hittell and published recently in the Prass, it is stated that the mineral springs on this coast possess brated waters of Burope, save the purgative property. From an intelligeut gentleman who
has extensively explored the mountains in the southern part of the state wo learn that he some time since discovered a spring in that thar-
ter which possessed powers, the water having leen amply tested in that respect. This then supplies what has been anch wrathm inelour mineral springs, and an likely to give to this discovery special importance
ment iu another columindists, An alvertis of 11. H. Talhot, land, scrip and warrant broker, at sioux City, lowa. The attention oî
thuse neelin"t the services of a broker in these properties or claims may find his annonnce inent of alvantage to them.
A ruik at Wcaverville, Trinity county, last
week, which to the carelessiness of Mongolians, destroyed 15
S. F. MARKET Report.



Weekly Market Review
DOMESTIC PRODUCE. ETC
Trale is Clief interets and devoin the coming leatures, rop, and it is bing talked down unite frecly It present there is no market fur shipping Wheat
early.

Range of Cable Prices of Wheat.
The conrse of the livernool quotation for Wheat to the Produce Exchange during the
days of last week las been as recorded in the following table:

## Thurgda Friday. <br> Friday.: Santurda Slowday <br> Movday. Tuestay. Wednesda <br> To-day's cable quotations to the Prodnce Fxchange comp <br> 1576 1877 1878 <br>  <br> The Foreign Review

says: By the most - The Mark Lane Er fres scarcely be said that the state of Wheat and Barley on heavy low-lying land is other than extremely critical. The crops are weak, dis colored and rotted in some places from pro longed immersion, and even on high lands, har vest prospcets are two or thrce sacks per acre
worse than nine months ago. If rain speedily ceases and a long spell of dry weather succceds, some, lint not all of the damage, may be re paircd. Such unfavorable change in the pros pects of the English Wheat crop would once
have had a marked effect upon prices, but so independent has this country becomo of indi genous grain that the reverse has actually been the case, and ralues have receded Is (a-s all over the Kingdom, both for English and for
eign proluce. The inmediate causes of this eign proluce. The immediate causes of this Anerica, with the splendid prospects of alsunAnerica, with the splendid prospects of alun-
dant crop this year, and a feeliug that our difdant crop this year, and a feeling that our dif
ferences with Kinssia will be pacifically adjusted The result is general stagnation of trade, which has moved within narrow limits throughout the week. Wheat and Maize are only salable at is. reduction, and cveu then only in retai quantities. Quotations are now at a peace
level. Possibly a revival of the continental demands may occur to rally prices somewhat gainst the depressing effect of heavy prospec tive supplies from America and Russia. Im ing May 25th-749,504 cwts Wheat and 9,908 cwts. Flour.

Freights and Charters.
Another very quiet wcek has passed, with but few engagements to note. we hear of no offers being in the market cither
for immediate or new crop loading. Under or immediate or new crop loading. Under
these eircumstances acenrate guotations caunot be given. The last wooden ship taken fo mmediate loading was fixed at in to liver $t^{*} \cdot 1.3 \mathrm{~s}$ for same lestination at the clos ve have 5,033 tons in port for immediatc and 5,309 tons for new crop loading, 9,290 tons mis cellaneous, and 42,361 tons disengaged. We have now a little over 200,000 tons on the way to this port, against 236,000 in 1876 . Com

Eastern Grain Markets
New Yonk, June 1st. - The decline in Wheat bushel the weck has been fro to $\$ 1.05(u \$ 1.10$, and the range of all grades to $\$ 1$ ( 81.13 . The deeline has had no perceptible fall has taken place in Europe. Corn has also declined to 40@4ic, which is the lowest point reached in many years. Malting harley
worth $75($ (i 8.5 c . Culacago, June ist.-Another heavy break in
grain ocenrred this week. Whent was a speculating market, with pretty wide fluetua tious, and a tendency to go lower was evident during each day. $\ln$ cash there was a great lreak, it going down from \$1.0.5 to :7e in one
day, and showing clearly that a well-developed corner was there. dune heat sold from 94 Corn showed the cffects of the reached to-day and went dowin to the bottom figures. The daily average of eorn rcceipts has been over half a milliou bushels the past week. Nales o June, $343(a 365$. Oats were dull. June sold
 to day.

Eastern Wool Market
NEW Yurk, June lst.-Business in Woo?
continues of a haud to month character, and the prospects for an early improvement arejvery vague. From manufacturing districts come re-
ports that many mills are closing, and that
others are working on short time, being eom
pelled to pursue this course in the abscnce of demand for their goords. Prices are still entire the purchose being regulaterl almost wholly by favor, but holders complain of their inability to penses lonskic, at $22 @ 28 \mathrm{c} ; 70.000 \mathrm{tbs}$ Spring Califor
 snper pulled, $36 \frac{1}{2}$
been quitc limited dur Wool the demand has ctions comprising only $766^{2}, 000$ ftos of all kinds, and buyers appear as indifferent as previously prices, There has been no material change in change. Considerable old $W$ ool is still pressing for sale, and cau only be disposed of at low and ers find it difficult to obtain cost. Sales of the week comprise Ohio and Pennsylvania $\mathbb{X}, \mathcal{X}$
 and delaine, at $3 \overline{7}(\omega+45 ;$ unwashed combing 18 a 28 jc ; Oregon, Fastern and Valley, at
$21(a+2 \mathrm{c}$; Neloraska, at 22 c ; Colorailo, at $18(u)$
 fornia comprise 274,000 pounds at is(a 30 c for pring Wool were principally at 22 (atic. Domestic Produce
The following table show's the S. F. receipts of Domestic Produce for the week ending at previons wecks

| Articliss. | $\begin{aligned} & \text { Wgrk. } \\ & \text { Hay } 15 . \end{aligned}$ | Werf May 22 | Wкяzк. May 29. | $\underset{\substack{\text { Wrak. } \\ \text { Jnne } 5 .}}{ }$ |
| :---: | :---: | :---: | :---: | :---: |
| Flour, quarter | 47,862 | +1, | 17,2 | 31 |
| Wheat, | 47,170 | 25, 516 | 38, 1605 | 27,97 |
| Barley, cental | 12,169 | 11,493 | 14,038 | 15,4.3 |
| Beans, sucks. | 9194 | $7^{704}$ | !01 |  |
| Corr1, centals Oats, centals | 9,192 | 2,204 5,155 | 5, 5 | 2,8 |
| Potat | 2,226 | 4,305 | t.148 | 5,7 |
|  | 181 | (2) | 15 |  |
| Wool | 8,515 | 4,803 | 25 | 4,11 |
| H10p9, | 19 | 164 |  |  |

BAGK-Prices are unchanged. Bids are made or large lots at a little below ruling rates, but holders are firm,
BALLEY-B
BARLEA-Barley holds its own, in fact the Barlcy in the East is firm aud the outlook is oorl for price in the Eastern markets, becaus the rednced acreage in Barley in the prairic 81.05 H ctl.

BEANS-Beans have taken another stcp up COHN - Corn for nearly all kinds.
COFN-Corn rests for a week as the deman has fallen off and the market is quiet
DAII: PRODUC'E-
DATI: I PRODLCE-Receipts continue ex but loses a cent or lso tends downward because of increasel
ceipts.
EGGS-Figgs are 2 c lower all round
FEEN-The usual discrimination is being made in favor of old Hay over new: Choieest old Wheat brings \$15.50. and choicest new $\$ 15$
ton. The hest grade of new Hay has not yet FRL in any amonnt.
FRUIT-The novelty of the wcek is Brigg's ied May Peaches which now are worth It . Anotler cargo of Tahitı Oranges has ar rived. Full prices for Fruits may be found in教
HOPS-There is no change in the local trade proved
MFATS-The supply of all kinds is abund ant. Prices show no change from last week, except Spring Lam
LIVK sTOCK-Receipts are ample and in band of fair cattle from Tulare county for $\$ 3.5$ band of f.
per head.
OATS-Oats are quiet and unchanged. We ONION: 400 sks Oregon at $\$ 1.4 \frac{1}{2}$ per ctl. supply of new eomes from Stockton. The price is abont 2 c per etl lower than last week.
IOTATOFS-A decline of 25 c per ctl Early Rose aud 50 c per ctl on IJalf Moon Bay is PROV1SIONS--There is no change whatever the market for Cured Meats.
EGETABLES-Our list shows an advanee and Asparagus, Buets, String beans, Gircen Pea
and Rhubarb drops a point.
WHEAT--sales are small and for local use. Sales 5,000 etls choice Milling at $\$ 1.75: 350 \mathrm{~d}$ WOOL:-The Wool market is very quiet and ales much reduced. There is no change in rice, except that some sales are made at col Holders arc, however, generally tirm.

Gold, Legal Tenders, Exchange, Etc.



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卫IANOS TO 彐URO卫耳。


## STEINWAY \＆SONS Or．der：From Firopx

Hire incred to au extort， and connected with extent，necessitating the estabhshinent of Wareroons in Londen，Fingland， Warerooms in Furopc，and stands there as a momment of Ameriean genius and industry．Pann It is impossible to mention in the limited space of an advertisement the inmmerable tri－ ampl in that respect，no sinall compliment to their inventiousentors in Princ building in America， their competitors，as shown iu their imitative efforts．Certain principles of the steinsays are however，so completely protected，that no imitation or substitute is attcmpted at all，and the shallow method of erying such inventions down arc resorted to and relicd upon．
plication of the Agraffe Arrangements to Square and Upright liances．The Patent Duplex Sicale rcating the most beautiful treble tones，（the Duplex scale is of recent invention and only to be aund in Pianos sold rccently）．The inproved Donble Danpers．The later idea cxtending the Agraffes to every string in the Piaro．The highest finish to all parts of the instrument，inclu－ ding first quality of ivory，ebony，felt，eloth，etc．The wood and varnish of such first－class The name of Steinway has become a＂householl word＂in Americannt．
factory record of 18 years＇trial on the Pacific Coast，in itself assures the prorchaser that satis vestment is no speculation，but one of perfect sccurity： The oft－repeated story of rival makers claining t
alould have no weight with parchasers．An immense manuarturng business like the ite nway
is slivided into departments for the various classes of work，and a foreman of one repartman uperintends that alone，and cannot he perfected in other details．
The anteinways（anumerous family）are the inventors and designors of the principles of then－ panos，and are alme respousible for the thorongh cxecaticn of their own ideas．
［n the Wachincry llepartment at the late Centomial Exhihitiou，Steinway special medal for and the square centimeter．（This award was distinet from their medal for the best pianos exhibited．） The iron frames in Steinway pianos are the only ones so tested，and while other makers rely on castings from an orlinary foundry，the Steinways maintain their own foundry，and mannfacture frame of composite mefal，which adds greatly to the resonant qualities of the instrnment in general． It often oecurs that the attempt is made to raise the character of pianos constructed on Icss costly principles to the rank that the steinway maintains，by naming a price，the same，or nearly so．This method is frequently exposed by the perfect willinguess of the dealer to make astonishing discounts for cash，or extremely long eredits；systems not entertanca in any first－ class business，In sclling a steinway piano，a guarautec of worth is given protecting the pur－
chaser for five years，and catalonues issued by the Pacific Coast Agencies have an uniform rate of prices in cold，and where desired a liberal iustallment plan is offercl to responsible buyers， with an additional charce of simple interest on deferred payments．Catalogue mailcd on ap－ plication to

## MI．GEAAT，GHINEREAI，AGFINT，

No， 105 Kearny Street，San Francisco．
THE BURDETT，THE＂KING OF ORGANS，＂NEW STYLES AND PRICES．

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Volume XV.
SAN FRANCISCO, SATURDAY, JUNE 15, 1878.
Number 24

## A Cosy Cottage Home.

We give on this page a view and floor plans of a cosy cottage, which some of our beginners in the art of home making, or some of our more advanced readers who have small families, may
find adapted to their requirements. It is a pretty little dwelling. It looks rather bare in the engraving perhaps, but with a windmill and barn behind it, and with the fore-ground uicely laid out and planted more freely with shrubs and flowers, it would soon grow into a little gem of a home. The design is drawn to aid those who have not the money to build large or more ornate dwellinge, and it eould be erected and finisled for about $\$ 1,000$. The de signers are Messrs. Isaae 1I. Hobbs \& Sons, of Philadelphia, and they offcr to furuish ful working plans, as malum.
The cottage contains three rooms upon the first floor, a parlor, a dining room and
kitchen, and there are three chambers with kitchen, and there are three chambers with
olosets upon the second Hloor. The roof is so constructed as to admit circulation of air he tween the rooms. Above the ceiling of the up,
per tloor there is au air chamber with ventila. per Hoor there is au air chamber with ventila
tors in each gable. This hclps to cool the up tors in each gable. This helps to cool the up-
per roons by allowing the passage of air lee per roons by allowing the passage of air lie
neath the roof while the hot sunshine is brat neath the roof while the hot sunsh
ing down upon it. The cottage is
The following explanation inter
The following explanation interprcts the numbers upon the engravings, and gives the
dimensions of the roums: 1 , vestilule, 31 feet wide by 43 fect long; 2, parlor 12 hy 18 feet in
clear; 3 , living room, 12 by 18 feet; 4 , kitehen, 15 by 18 feet $; 5$, baek poreh, 8 feet long by 1, feet wide; 6 , a small entry, affording entranee to the living room, parlor, and to the stairway
leading to the cellar. The second floor rooms leading to the cellar. The second floor rooms
are all private and are entered from the little landing at the head of the stairs. Nos. 7,8 and
9 are the chambers; 10,11 and 12 are closets, 9 are the chambers
one to each room.
one to each room.
It will be seen that the little building has no waste room, but gives the inmates the full bene fit of all the space. Although it is small the tious but it will hold a happy wife and balies and afford a spare room for a nice mother-inNotes on Fish.-At the last meeting of the
Nores on Elsh-At the last meeting of the
California Academy of Sciences, Fish ComCalitornia Academy of sciences, Fish Com-
missioner B. B. Redding preseuted to the
Academy a fish resembling the skate, which he Aad received from A. W. Bush, of the Sand wich islauds, where the fish is found. Even there it is quite rare, and the Kauakas have a supersti-
tion that it never comes inshore nuless to die tion that it never comes inshore muless to die.
It is ouly caught when close to the shore. The It is ouly caught when close to the shore. The
speeies of the fish is unknown. The specimen
. will be examined, and if no determination is arrived at it will be sent to the Smithsonian In-
stitute for classifieation. A gentleman inquired stitute for classifieation. A gentleman inquired
about the habits of shad ou this coast as compared with the habits of those on the Atlantic eoast. Fish Commissioner Throck returns to the place of its propagation, does likewise. On this coast, however, the Siuce 1870, 350,000 shad have been propagater here, chietly near Tehama, and since 1870, shad miugton to the columbin freak of the shad in alandoning his natal place is laid to the herring, from among whom th gles the shad from the path of his forefathers. his companionship seems influence over himthat the patrician shad willingly renounces his birthplace and travels about the ocenn with schools of plebeian herring. The shad of the his birthplace.

The Colorado river is said to be quite high,
and the steamers rumning up from Fuma and the steamers rumning up from Yuma enstream at present from the swift current.

## Bisulphid of Carbon.

The bisnlphid of carbon treatment for squirrels, introduced by Prof. Hilgard, oi the State University, is being rapidly put to the test in the different parts of the State, and so far all eports which come to hand are favorable to its till wider employment. The demand for the material has already more than doubled its price in our city stores, as our merchants are fragrant substances than the bisulphid. The ocal manufacture of the matcrial has already Visalia Delfo noting that Mcssrs. Jefferls and
home at the time. We put the carbon into all
the holes, but less than one eighth of an ounce the holes, but less than one-elghth of an ounce
has proveu efficacious; a live squirrel forced to hreathe the carbon died in about tive minute Care should be taken to keep the bottle corke as much as possible
Rivet in Wheat. - As the grain matures the signs of rust become more apparent, and some reduction of the crop will doubtless be oeca-
sioned in some parts of the State. The stocksioned in some parts of the State. The Stockton midependent says: "linst is said to prevail
to considerable extent among the wheat fields in the northern part of this county, and we are
told that patches of 15 or 20 acres may be seen told that patches of 15 or 20 acres may be seen
through the fields where the grain is cntirely through the fields where the grain is cntirely
dead." In the southeru coast valleys there is also

## Drouth and Sheep Losses.

Our spring elip of wool has shown ly its reduced aggregate the losses which many flock masters sustained by last year's drouth. It is impossible now to state exactly what the redue tion, but the figures which will be compiled at the elose of this month for the half year wil show it. Our sheep owners have borne thei losses with commendable good temper, and the full rate of increase and fat animals which this winter's abundant fced has brought, have gon far to wipe out the depressing effects of the
drouth. A Los Angeles exchange goes so far as to call the drouth a blessing in disguise, in that will be replaced by better. This it may ulti mately prove on the whole, but another pros perous year or two will le needed to console The interest of the wool grower in this Stat naturally inchudes the fortuues of the Austra lian Hocks, for their wool has come into sharp est competition with our owu in come of the Eastern woolen factories. It is true that w have made poiuts over the Australian, and har gained customers, as at the Cohoes mills, in
New York, which formerly used the South Se

It is true also that the protective duty -defended only by a small faction of the United States," bids fair to be let alone by the presen which our markets can afford, without fre Australian competition, as they hoped.
Although we are rree to congratulate our selves over these trade advantages we are not
wanting in feeling of friendly sympathy for th Australian growers in the grievous losses which they suffered by the protracted drouths which they have undergone. We learn from a loeal authority that the wool export from the three
leading colonies-Victoria, New South Wales, aud South Australia-shows a reduction in the number of 67,170 bales as compared with the export of last year, from which, however, must be deducted abont 25,000 bales, known to be waiting the opening of the navigation of the Darling, thus leaving an ascertained deficiency of about 42,170 bales to the prosent, instead of the usual iucrease of $7 \%$ to $8 \%$. Had the in crease been maintained they sloould this season have shipped 646,000 bales, or about 48,000 bales more than last year. Taking, therefore, into account the quantity that mightreasonably have ben ex mily favorale one they may estimate the deficiency at 90,000 bales; and assuming that each bale contains 100 fleeces the three colonies referred to are thus $9,000,000$ o sheep short. But the actual deficiency is eve greater than it appears from these figures, owin to the unusually large proportiou of woo shipped in the greasc. Clean-washed woo would not requiro so many bales, but this sea son comparatively few growers had suffieien water available for washing their sheep. The reports from Queenslan, Western Atustralia, and Tasmania are not likely to show any mate rial alteration, probly be anticipated. The increase may prob hef olowiug colonie for the year ending September 30th, 1877 , wer ar follows: Vietoria, 320,791 bales; New Sout Wales, 145,008 bales; South Australia, 123,556 bales; total, 598,355 bales.

The Drainage Canal. - The engineering party have commenced the survey for the sac ramento River Drainage Canal District. The which will be the headquarters for the time which will bo the Suisul ber wale ( charge of the work.
"Cognac."-A dispatch from Petaluma says: gnae,' and known as the 'man-eater,' who killer a man in l'etaluma in September, and has since been on exhibition in San Francisco, had his right hind leg broken yesterday by the kiek of a horse. He will probally be killed.

Join C. Fremont has been appointed Goy

## Gorrespondence

$\overline{\text { we adm }}$

## A Talk About Manure.

Edrrors Press:-I have often heard the remark made by farmers of California, that "manure was of no use to the land in this
State;" and I was painfully reminuted of this erroneous idea, this morning, as I rodc past Dick Shasher's place, aud saw eorlds upon corls of valuable manure ying sattered about ont.
sile of the barn, where it had bech wheeled sine of the earni, hierere in the becan whelleed
and duntred daily during the winter, and left exposed to all the drenching
storms and washiugs of the season. I said storms and washiuys of the season. I said
"painfully remiudel," because it always grieves and distresses me to see wastc of any kind, but especially suel glaring and unealled for waste as this. I know it is the custom among most
of the old school of farmers to do son thit hour any person of intelilignee can thus, allow his
goods to waste away is a mystery to me.



 then th ask to te tanght a hiener wiscomu,
 able to ascertain, it is somcthing like this: The
farmer throws his manure out of doors and leaves it exposed, throughall the wet season. The
consequence is thc most valuable part of the manure, the soluble part, is disolved and
washeod away, and when syring or the follow.
 the farmer carts out, in he has faith nenongh to
do even this, and deposits it in luye chumks on the surface of his land, as a top d desssing, or
attenits to plow it under or manures in the hill



 of attractuy and asorbing moisturre, execept
when there is aredundinney inthe surounliug
oljeets; and so the farncr abuses the mundure, saying his time is wasted in drawiug it out.
But, sulpyosiug the manure heapss are left in the barn--ard all summer and carted out in the
following fall, the result would be somewhat
 aud washing into the soil what little virthe
was left; but the amount of perceptible good is not enough to satisfy the exacting, tiller of the
soil, and so he looks around to sec if there is a sild hill or cuoch whiere he ean throve his
manure and lett the floods wash it away, thus
mat saving himm much valuable time.
Anothcr very common methal, and one which
sates a deal of truuble, and has, besides, a certain dash $h$ ahead, business-like look about it, by

 doing away with the pecossity of paint, and
also creating, at little expense, niee irregular drawings and qnecr looking figures on the
building, which prescot qunte an ornamental


 a draeeful curve upwardi, "chenistry may do
for druygists and and aricultural colleges, and
tho those who wish to make a display of their
learning writing bokk about tanming when
they hinow nothing about it practically. Chen-








 properties of vegetally one of the most valuable
 is the process of deeomposition that takess plice in all animal and vegetahbe matter in the rota.
tion of Iife, and nay, therefore, be properly
called the chemistry of life, for it is a chemical
change that takes place in the himhest forms of change that takes place in the highest forms of animal life as well as in the lowest substances This decomposition in Dick's mannre heaps, if allowed to go on uninterrupted, changes the best
part of the regctable substance into gases, which takc wings and Hy away into the air, thus becoming the general property of the vege-
table kingdom and leaving bchind then but a valucless mass of dry hasks after the nutriment las been extracted
A little theoretical knowledge of chemistry Wink, make this matter cnable him, instead of allow ing his manure heap to burn up and vanish in thin air, to convert them into a valuable form of plant food, replete with life and nourishmen
for his grain fields.
Uncle Josh. Santa Rosa, Cal.
San Luis Obispo County Notes.-No. 6
Editors I'ress: - Journeying northward through El Charro valley, we pass through a handsome country for a distance of four or tive the Hollister ranch, consisting of scveral thousand acres, which carries several thousand head of sheep and in which grain is raised to some extent. Mr. Hollister being absent we
were unable to gather any particulars about the management.
A few miles beyond is a very fine ranch owued by Mr. H. Y. Stanley; there are 1,000 acres in his tract of hill and monte lands; 200 acres of the latter are eleared. This land is
low, level and immensely produetive, raising crops in the driest season; the hills are adobe,
covered with altiterilla and clover and affording the best of pasturage. Mr. Stanley's honse i the finest adobe dwelling in the connty, having San Bernardo ranch. It is a square in shape and estimated to have cost from $\$ 25,000$ to $\$ 40$, Cambria piue and were hauled by oxen from 25 miles np the coast, while the redwood finishing
was hanled in the same manner from Monterey was hanled in the same manner from. Monterey
connty. The house is very large and divided connty. The house is very large and divided
into rooms some of which are large enongh for into rooms some of which are large enongh for
an ordinary ranch house. It is paintcl and grained inside, making a very pleasant and comlittle knoll, past which runs the Chorro creek. The view is very beautifnl, embracing in its IIt. Lomo Grande raises its bald and rocky hight from the west, overlooking the ranch and throwing toward evening a long eastward
shadow far into the hills. shadow far into the hills.

## Dairying

Is the ehicf branch of farming carried on here. The ranch is an early one: the season com. the ranch 60 cows were milking. The number will be limited to 100 cows this season, though 120 are nsually carried on the ranch, besice
other stock. The dronth during the past year was mueh more severe in this section than in connty, and stock sutfered greatly on some barley and 40 or 50 acres of corn will be sowed together with a few acres of beets for summer feed. Two hundred hogs are annually turned
off, besides many calves. The dairy-honse is supplied with clear, cold water, led into the making-room by a pipe. Mr. Stanley's practice
differs a little from that of other dairymen in some respects. We found the temperature of the making-room, dining the setting and man-
ipnlation of the curd, at ${ }^{\circ}$, which was lower than that of any other we saw in the county. being closed as in other making.roons, and water heated outside. The milk was heated
to 88 before adding the rennet and then mp to 102 , the whole process only occupying $3 \frac{1}{2}$
hours. The press used is worked by weights and levers, being one of the most convenicet in
Leaving this ranch we proceeded up San Bernardo ereek, passing throngh the rauch of J.
1I. Cockc, who lost many cows last scason and at present is milking only 31, from which he off to Morro creek, which we strike at a point on the ranch of Mr. Langlois. This is au ex-
ceedingly choice location, warm and sheltered, rarely or never secing frost, well snited to the supply an abundance of water for the dairy, structed and designed for carp. honse is a thrifty orchard and a vineyard, famous for its delicious grapes. A profusion of
delicate tlowers grace the garden, blooning perpetually, untouched by the icy breath of Following the creek down to the montla we
saw land which for fertility is seldoun eqnaled saw land which for fertility is seldoun equaled,
The ranches of Messsrs. Isam and Motherstead, are among the fincst in this seetion, embracing somely in cercals. Near the mouth of the Which at Morro,
being surrounded by a good conntry and plave a good harbor. The harbor is formed by Morro
bay and is, we believe, the only one land -locked
onl the eaast south of San Francisco. The bay is three miles in length, shallow over the greater part, bint having a deep and throush its length. Two wharves are built cut into the bay, the water being 14 feet from the ocean is eight and a half fect in depth at low tide. Col. Mendel in his report on the Coast Survey spoke very highly of its natural ture of a moterate amonnt of mhey in aredg below the surface, that this harbor might be made very safe and serviceable. Morro rock trance, with rugged sides of naked rock rising 600 feet in air and covering an area of 50 acres
This is the best point in the connty for slip This is the best point in the connty for ship
ping cattle, the water inside the bay being per ping cattle, the water inside the bay being perpretty, and with a liberal planting of trees which grow very rapidly here, any nupleasantne avoided. We were told that Mr. Riley Who owns I 60 acres here, on a part of which the
town stands, offers to sell. The place is small, there being at present but a ecore of houscs, two stores, blacksmith shops, etc. Were a litits rightful position as one of the leading towus of the county
Abse miles above Morro is Tarro creek there are some very good dairy ranches on this
stream, and some land for sale off the Morro y Cayucas grant.
The next stream above Torro is Old creek One mile from the heach lies the fine ranch for merly owned by Hon. I.. M. Preston. N1r. Ireston's health failing he sold the ranch, took up his residence in san Lilis Ohispo and eom-
menced the practice of law. After serving in the Assembly and very receutly as Nlayor of gaining the warm esteem of his fellow citizens, Mr. Preston is now devoting his whole time to a large and constantly increasing practice sce ond to none in the county: If ranch is now
owned by the Mabel Bros. It is several hun owned by the Mabel Bros. It is several hun
dred acres in extent and 100 cows are carried. Forty-six cows ware being milked, making 175 Above Old per week.
empties into the ocean near Cayucas banding This is a small ocean ncar Cayucas landing dwelling houses, a hotel, the store of Mlessrs. Tull \& Grant, and a store aud warehonse owncd shipping points in the county, and an immense quantity of butter, cheese, pork and grain goes
over the wharf each season. In the hight of orer the wharf each season. In the hight of
the season nearly 300 boxes of butter per week are shipped from Cayucas.
Two milcs alsove the landing is the Burnet ranch of 2,000 acres, rented at $\$ 1.25$ an acre to
Mr. Tonansiue, a swiss. There are between 300 and 400 cows on the ranch, and it is the largest single butter dairy in the county. At county are swiss, who came from Marin eounty. A few miles above the Cayncas is Villa creek.
011 this creek are some 600 eows, 4.50 of them in On this creek are some 600 eows, 4.50 of them in
three dairies of 150 cows each, owned respectively by Messrs. Nusho, (iatti, and the shaw for a variety of products.
Beyond Villa creek on the coast is a ve cood dairy ranch owned by R. Logan, Esq.; it
consists of $S 00$ aeres of goosl grazing land well waterel, and stocked with 100 head of cows, and a number of head of horses aud calves. Fiftytwo cows were inilking at the time of our visit.
Everything was very neat about the dairyEverything was very neat about the dairy-
house, sweet and inviting, and the bntter fine flavored.
of Mr. Geo. Campbell Mr. Logan's is the dairy of Mr . Geo. Campbell. Ile has 110 head o
grade Durham cows, which average 200 pounds grade Durham cows, which average 200 pound
of hutter apiece per anmmm, sone of them yicld of hitter apiece per anmmin, some of them yicld.
ing 55 pounds of milk a day. 1 ln 1876 he milked 74 cows on natural feed, raiserl 21 calves and made 6,440 pounds of cheese and 11,445 pound
of butter. The chese was made in a neighbor ing factory in ol days. Mr. Campbell urges
the claims of the Durham as being the best breed for dairymen, aud claiming for then as much hardhood as the Amcrican cattle possess. try we come to the ranch of Mr. Everett, who fommlation of the herl is American stock improved by Durlana and subsequently cross-bed
to Jersey bulls purchased from A. Nailliard, of Nlarin county. In 1876 one of his grade Dur ham cows gave $7: 2$ pounds of milk per day for a
short time, and he has a six-ycar-old cow that now gives $2 \frac{1}{2}$ pounds per milking, and many He is makiug on the average one pound per day of butter from each cow, while some are mak ing two ponnds a day.
Close by this ranch we saw a cheese factory but a part of the tirst season. Mr. Bowen, the owner, dying, the fatctory has been closed since
his decease, and is now offered for sale lyy Ars. his decease, and is now ottered for sale hy Mr .
Bowcu, who resides in San Francisco. The factory is furnished with impro
and built in eonvenient form
The road beyond the factory interscets Honey creek, Howing through

## Green Valley

This is a beantiful valley, the hills low and
olling, with considerable low-land bordering

on the creek, yielding heavily under cultiva tion. There are several dairy ranches in th Davidsou's more particularly in my next letter H. E. Hallet.<br>San Lnis, April, Is;s.

## Horticulture.

## Fine Strawberries.

Edrrors Press:-Having advertised in th Press last winter, the different varieties o
strawberries that 1 have introduced in Califor niawlerries your readers sent to me for plants. I claimed to have superior varieties, both for proluctiveness aud beauty and size of the frnit It is true that they did not bear such lig names as the "Champion of the World," "Monarch o
the West," etc., nevertheless many of the Pres readers had confidence in the trath of my as sertions, and got some plants at a rather high At thi Apening time of writing my strawberries ar ing you by express some sample French varieties. I wish that every one wh got plants of them last wiuter, could see thos three or four pounds of my barren hill protuct I pied espeeially for the Rural Press.
of the box. First you will notice the content erries are packed to prevent molling, bruising berry culture, I have given a description of that method of packing choice berries, and hope that you will let me know how fresh the three layers of berries in the box, the first on after opening the box, the top layer, is th beautifnl "Bonne Bouche," one of the larges berries and most prolific bearces on my place
Thongh obtained from France, I must say that Though obtained from France, I must say that Royal garden of Frogmore. As you will se the berry is nicely shaped, fat, large, sweet and nicely flavored. The biggest one in the lo mnst measure five inches and a half round The second layer is composed two-thirds of "Car olina superba," origiuated at the "Persaille
palace garden, and one third of "Pourguig palace garden, and one third of "loriginated in Burgundy). The latter splendid for shipping and so prolific. As to Car
olina Superba, I leave it to yon; loes it or not deserve its name of "Superba."
The last layer at the bottom of the box, tha beantiful, shining red berry, is the "brilliant" Anrelie, as I called it in my dose
logue. 1 do not certainly expect that those berries beat those raised below in the rich loam of your valleys, but do you not think
compare favorably with them?
I would advise every one of your readers that be afraid to root runners this year, lut set tout as many plants of them as they can, and then not to bother themselves about the big names of sorts.
Nevada City, Cal.
[The berries arrived in perfect condition and merit the best words which could be written of them. We do not remember ever seeing any hing finer. They were carefully laid in with layers of grape leaves above and below, and above and below the grape lenves was a thin layer of hay, to guard against the eontinuons jar of the railway cars. Holes were bored iu the box all around, which adnitted air an kept the fruit dry and souud. The package was the best we ever $s a w$ for safe carriage of Iclicate proluet like strawberries. We ar glay that Mr. Gillet is meeting with suecess in desirable.- Fins. l'ress.]

## A Santa Clara Strawberry Farm.

Editors Press:-I had the pleasure this morning of a brief visit to the tine fruit farn
of Mr. J. W. Briggs, located on the west bank of the Coyote river, three miles north of San called to a remarkably fiue looking plot of straw berries, looking so much fresher and more vigor ous and healthy than any I have sfen this year that I was anxinus to learn something more of
them. Mr. Brigys informed me they were a new importation from the East, ealled the
"Alonarch of the West." And when he told me all about them, and presented me with a scen this year before, I concluded they were the nlonts. the 10 th of last January they have already anne more fruit and bronght more money tha
any 10 or 20 acres of the olld "Longworth's I'ro stand-by has seen its best days in this vicinity and sone new sorts must be introduced to keep upiggs has tried several new sorts from the East,


## Argeratum De Lasseaux.

Edirors Press:-This handsome ageratun is not as well known as it shonld be, it would have becn well known in our gardens ere this, but for the unfortunate circu
which it was first introducel.
A. Lasseauaii, or rose-flowered ageratum, was first introduced into French gardens in 1870, from the envirous of Montevido by the late
Lasseaux. In the spring of that year some young plants were offered for sale, but unfor tnnately a terrible drouth, lasting from April to August in that year,
grown to perfection.
grown to perfection.
The following year the war between and Germany oceurred, whici put a stop for detriment of not only this but many other rare novelties of peculiar merit. In a few loealities
during the season of $18 \%$, the during the season of 1872 , the plant was suc-
cessfnlly grown and blossomed, and created quite an excitement among florists and anateurs; and, to the delight of all, it was found to be as
hardy as our most eonmon and well known vahardy as our most eommon and well know
rieties. The following season of 1873 , rieties. The following season of 1873 , a few
seed were sent to Eugland and America, but seed were sent to Eugland and Anmerica, but
not until 1874 was it offercd for sale by Aneri.
can seedsmen and even then in a quantity.
The flowers, which are of a most bcantiful and delicate rose color, are borue in very pretty,
light, grazeful tufts like those of $A$. Ȟericana. Like the common blue forms it is not ouly adapted for garden decoration, but peculiarly adapted to bouquct purposes, the llossoms be-
ing arranged in terminal bonquets, with long and fine pelluncles. Like all plants, it has some faults, but these are in the form and halit of
plant, viz., of bad sliape and slender sometimes plant, viz., of bad slape and slender, sometimes
straggling growth, and will in the course of a few years be removed by a julicions selection of eed in in eareful culture.
As in the blue ageratum, pincling off the length, and in selecting for seed the speciumens length, and in selecting for seed the specinens
which are the earlicst to bloom and most dwarf and connpact in habit, will enable one in a few
seasons to oltain a race of compact, thick set
and and well forned plants suitable for any purpose Culture.
A. Lasseauxiï is of perenmal duration. It it
grown from seod which should be sown in light, grown from seod which should be sown in light,
sandy loant or vegctable mold. In the early
part of the season part of the season using a hot-bed or cold frame
or later it inay be successfully sown in the open or later it may be successfully sown in the open
ground. The seal is very fine and shonld be ground. The sed is very fine and shonld be
but slightly covered. Laying a wet eloth over the soil will keep the grond moist and hasten as yon would an aster, and they will tlourish. into pots or to the places they are to transplant Huto pots or to the places they are to occlpy in
the garden. They may be readily increased by
euttings or root divisions when well estallished. They are also fine for conservatory or wiudow

Answers to Inquiries


## $\left|\begin{array}{l}\text { The ground should receive a good dressing of } \\ \text { decayed mannre every fall, to insure fine } \\ \text { blooms. Water freely when coming in bloom. }\end{array}\right| \quad$ POULTRY Y ARD.

 The only trouble with pronies in California is the rampant growth of the foliage, which takes the nntrinent from the buds and they remain undeveloped. The prony will seldom bloom the first season after removing.El Dorado, Cal.
WM. C. L. Drew.

## The Apiary.

## Bees in Napa County.

Edirors Press:-Swarming is in order with the bees, although 1 have kept it down to some extent with mine. I have substituted artificial swarming. I commenced with 18 swarms, all blacks except three, one of which has an im-
ported queen, the other two from imported ported queen, the other two from imported
stock. I have no black queens now and have no black drones yet. I have all Italian drones from the importel queen. Enclosed I send you a rarity (a white-headed drone) from imported stock. I have seen but one more like
The Italians are beauties and good tempered. They are too busy to think of stinging. I can handle then withont smoke, and no black robber can gain admittance withont risk of his life. Blacks are cross, reuderin
necessary; also a plenty of smoke.
This seems to be a favorable season for bees and honey. Flowers are blooming earlier and in more profusion than I ever saw before. Bnckcyes are coning in bloons much carlier than
last year. The hawberries last year never perfected their fruit. It is nsually alive witl bees as barberry.
that had not been attended to for several years It was in one of the old Harbinson hives. There were threc fran fes below, a honey board on, and
and one small frame above. The hive bas been in its present position for over two years to my
knowled ge. A swarm eame from it a week ajo and $\begin{aligned} & \text { went back again, probably lost its } \\ & \text { quiuen. I found helow the bottom board a space }\end{aligned}$ filled with capped honey, the upper laitt in the puzzle, The comb was crooked, old and black, and drones hatehca and hatching enough to
sipply the neighlorhhood. $1 t$ was ard job,
mot 1 got several slicets of worker brood in all stages, gave them to a new hive, put in empty
frannes alternatcly, and put in 1 think a peck measure solid full of bees. There being a plenty of queen cells, gave them one in 1 liace and cut
the balance out. I took about 30 pounds of wood clear calped linney and yave the swarm
the balance in a top story to elean up and start new, as the weather was threatening to rain. - lid not decm it necessary to look for a queen. ing for the tirst quiten to hatel to swarm again. As they hai anl allowance of stores, a plenty of have changel their mind about swarming for "Hhile. $\mathrm{C} . \mathrm{K}$. Lyptus" wishes to hear the resnlt o changing swarms in cass of robbing. I tried it to my satisfaction last season, and concluded it is not saie; 1 do not care to repeat the experi-
ment. As for a standarll frame, I don't see how it can be possible. The Langstroth seems to
be the popular one. I have it myself, luat fonnd be the popplar one. I have it myself, but fonnd
this wet winter it molded ladly. It being long this wet winter it modded laddy. It being long
and shallow. bees did not fill out the end, and the loug wet spell molded the part that was nore syuare shaped, the bees covered it better but swarms from the Harbiuson uptil I changed the whole thing. First I reduced the botton, making the rear slightly higher than the front,
say one inch or less. Thea I let the front side lown to three-eighths of an inch of the bottom board, and open whole width. I took the mid-
de bar out of the frame, giviug the whole die bar out of the frame, giviug the whole
size of the frame to the broonl. I puta mid-
die He har at the bottom, cut out all drone in place with wire hooks, as described in a previous issue of the Rural. 'The result is eight above brood combs, the 18 small franes are nearly all capped and ready to replace with
nopty frames. This is in a hive that was transenipty frames. This is in a hive that was trans-
ferred from a box hive in January, and blacks at that. The queen cells were cut out as often
as once a week. The swarm is as large as one as once at week. The swarm is as large as one
could wish, and no drones--the guillotine served hin. I have now a young Italian queen in I had a few of the Quimby closed-end hives to conmelve with, and lave inate thie liang-
stroth deeper-say 11 inches deep-and trinmed the Quinly to slip inside them, so as to use
either frame. I find it haindy, and think I shall keep to that size in future.
I krafted guteen cells fron a comb of Italian to
ind 1, ask successfully this season. Thave some of
the qucens alive and as natural as ever. If
some of the readers of the Rural wish to know some of the readers of the Rural wish to know
the process, I may inform them at some future
time.
J. D. linos. Napa, Cal., April 20th, 1878.

## Plymouth Rocks.

This is an American breed, of New Englan origiu and quite popular. Their colors are Dom-
inique, of shades varying from light to dark, inique, of shades varying from light to dark,
combs single, and legs clcan and yellow, o
dusky-yellow, with occasionally dusky-yellow, with occasionally slight traces o
feathering, which is being bred out, and it feathering, which is being bred out, and in They are a symmetrical, sprovare built, heavy bodied, splendid looking fowl, cven rivaling
the Asiatics in size. The longer we keep them, the better we like then, and, of all other
breeds, Plyyouth Rocks the lonl for the breeds, Plynouth Rocks the Forl for thie
farmer, and for geueral purposes. They combine more in themselves than any variety w
know of. Are so hardy and healthy that the know of. Are so hardy and heal thy that they
seem proof against the diseases that annuall carry of so many tine lirds. The ehicks ar ary lively and strong, and mature very rapidly,
becoming larye and early fit for market. Their flesh, in quality, is fine grained, teuler and full breasted, and, with fine ycllow skin and legs, look well aud sell well in the market. They can be depended on for eggs atl the year rounct
as well as for sitters, anl nothers, in season,
Are not high flyers, and are excelleut forasers, Are not high flyers, and are excelleut foragers,
when given their liberty.
Who originated them is a disputed surestion, Who originated them is a disputed (Inestion,
and is of small importance at this tine. II,
are aware that what we have written will are aware that what we have written will b
stale and uuintercsting to the professional stale and uumterosting to the professional
breeder ; but as our aim is to enlightcu the
amatpert-and it is from them the professional is to receive the larger portion of pat satisfied that the larger number of the prom inent breeders have different mith olls of orig
nating and perfecting it; but we wo
hes hesitate in claining that before long they will
he the breed selected as best alapted to the
South, and monst profitalle for the farmer, cot South, and most profitalle for the farmer, cot Virginia who hreed fowls for pleasure or profit
will he without them. (ur reason for so broad massertion arises from the fact that no on
having fowls upon their yards in the section named wish to care for and feed them merely
for egg production ; hence, as this brced thrive of necessary qualifications, being hardy ann healthy, "ot as liable to tisease as some othe year round," remarkably fine for the table,
coold sitters and mothers, easily kept in contine-
ment and yet good furagers when allowed to roam; what more cau be asked: The chick
thrive from the time they are hatcbed until
maturity, a पualification that we have never
scen in any other brecd. This is our experience sen in any other brecd. This is
and that of others in this section.
Then The collor is one tbat will not tarnish ly soot
or smoke of cities; not lialle to attract hawks in the enuutry, and is pleasing to the eye color, we were anused once while trying to persuade an old farmer to purchase a pair
ight-eolored fowls, when he remarked that would not have them for the reason that in the country if a brood of white chicks were hatched
ut that the hawks would take all lut one pair, eaving them to raise another lot for his (Mr. In extolling this breed, we do so from convietion, and will state that we are not lrecding
poultry for sale, and do not intend to do so in poultry for sale, and do not intend to do so ind
the future. All we breed will be for our own pleasur
Eges is Food.-Eggs of various kinds are largely uscd as food to than, ahd in scal cely ity, so simple aud convenient are they in their form and so manitol may be their transforna-
tions. They are exceedingly delicious, highty nutritions and casy of digestion, and when the thenselves all that is required for the construc tion of the borly. Ithas been claimed for them that they be may served in about 600 ways, although
it is generally found the more simple they are it is generally found the more simple they are
prepared the more they are approvel. Although prepared the more they are approvel. Although
other eggs than those of lirds are eaten, for instance, turtle's eggs--it is generally agree plover possess the richest and sweetest flavor. The eggs of ducks and geese are frequently nsed iut cookery, but they are of too coarse a
nature to be eaten alone. The eggs of the
nat turkey and of the pea. hen are highly esteemed for some purposes. The weight of an ordinary
new-laid hen's egg is from one and a half to two and a half onnces avoirdupois, and the quantity of dry solid matter contained in it anounts to about 200 grains. in 100 parts, altont 10 parts consist of shell, 60 of white and 30 of yolk.
The white of the egg contains a larger proporThe white of the egg contains a larger propor-
tion of water than the yolk. It contains no fatty matter, but consists chiefly of albumen in a dissolvel state. All fatty matters of the
egg is accumulated in the yolk, which consists relatively of a smaller proportion of nitingenous natter and a larger proportion of solid mattel
than the white. Thercfore, in an alimentar pont ons view, the white and the yolk diffor aiainly a simple sach of althe former heing being a solution of a modified form of albumen, together with a quantity of fat.
and lightly-boiled eggs are
issaid that raw eggs are more easily digested than
cooked ones; but this may be doulted if the egg cooked ones; but this may be doubted if the cgg
is not over-cooked. A hatd-boilcd cgg presents a decided resistance to gastric solution and a
constipatory action on the bowels.-Casselfs. constipatory action on the bowels.-Cassell?
Domestic Dictionary.

## The STock Yaro.

## Assessment of Migratory Stock.

The Board of Equalization met this day at he office of the Governor. Full boarl present, A communication from F. M. West, County Treasurer of San Joaquin county, alddressed to
the Attorney-General, was referrcl to this board for consideration, in which the following
questions were asked: Several parties removing questions were asked: Several parties removing
sheep, ctc., from San Joaquin county to Alpine County for pasture are conpelled to pass throug Cies have buen complellod by storms to dclay for

## Calaveras county assessed the parties and made

 then pay the taxes on their stock by seizare,notwithstanling the fact that the assessor San Joaquin county land made his returns to Alpine county in due form. Has an assessor
any right under sucll circumstances to reassess said storel and euforce the collection of the tax: Second-Can any assessor make returns to
two eounties for the same stock, if parties so

Third
toek once assesscd be assessed a second tan during the same year, execpt for violation of
dhe law in conneetion therewith?
the To the foregoing inguiries the h
the hoard instructed Certified to be a full, true and correct copy of lating to migratory stock, in answer to inquirives
made by F. M. West, County Treasurer of Sau


Amendments to the Game Law.
The killing of quatl, partridge and duck is
prohilited in San Liernardino and Los Angeles connties between the 1st of April and the 1st of August; and in othcr counties except Lassen, nd the 15 th of september. The killing of Tween the lst of January and the Ist of Juily. my species of wild duck is made a misdemeanor.
The killing of any male deer bet ween the '1st
Novenber and the 1st of July is prohilitited. November and the 1st of suly is prohinitect.
The killing of any antelope, elk, mountain
sheep or female deer is prohibited for four years rom the passage of the Act.
The kiiling of spotted fawn at auy time is The killing
rame laws, except animals mentioned in the meanor. This clanse is designed to prohilit the The taking of auy speeies of trout is pro-
hibited between the lst of November aud the 1 st of April.
The taking of salmon is prohilited betweel he lst of Angust and the 15tli of September, on the following Sunday throught the year.
The taking of shad is prolibitech betwec Ist of April and the 31st of April and the 31st
of December. Fish of any description can be taken at any time with hook and line in the tide waters.
Traps and other permanent contrivances for catching fish in aury of the streams or sloughs
are prohibited. ing, with mashles of less than one and one-quarone.third across any stream or slough
It is required to return to the water all the young of fish, or fish too small to be markcted.
The penalty of violating any provision of the law is a fine of not less than w, nor more than
$\$ 300$, or imprisonment in defanlt. Onc-half of all fines collceted gocs to informers and half to the Bistrict Attorney. All nets and apparatns
illegally employed nay be seized and sold, and he procecds will or the person making the seizure, and the other half to the
school fund. All ncts with meslics under size The Act is already in force.

Deatil Rites in Citues. - The sidniluzian ior May furmishes some interesting statistics of the
death rates in different cities of the Union durIny the month of March last. New York ex
being 2 .2. 69 per 1,000 inlalititants. This, liow
where the ratio is 32.59 . As a rule, the south
ern cities show a larger death-rate than northern
ones. In New Orlcans it is 24.5; in Washing
ton, 23.55 ; in Nashville, 22.21 ; in Mohile,
24.11 . St. Lonis, however, shows one of the
lowest rates in the table, viz. 9.39 , while the of biltimore is only 18.26 . Of northen eities, Bnston has a death-rate of 20.38, New Haven,
1S.44; Nyracnse, 18.2 .5 Bronklyn, 18.19 , while many, these figurcs, Thic lowest rate is the list is that of Yonkers, in New York, where the mo

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Address before Danville Grange.
The following is the eoneluding portion (f the address of Worthy Master, Charles Wood, June Sth: Next, fellow patrons, but perhaps par mount in interest, and in need of correction, if it were not too late, is the management of th public lands, both State and National, in whieh every citizeu is supposed as a member of the body politie to has plaeed in the hands of Con gress and state Legislatures, has been so much abused, sometimes ignorantly on the part o most members, but more frequently througl the connivanee and men. What were ealled do nations to the State by Congress, but which were in reality ouly segregation of a moiety o atica to if the pubthe several States-have been disposed of in a
reckless, improvident manner, and loug befor a necessity existed to part with them, at priee ranging from $5 \%$ to $20 \%$ of the real value.
laws providing for their sale have been s loosely drawn and unskillfully guarded that bled" np a great part of the douations or a , to whom fron the first they should have been sacredly set apart, bave had to pay from
The reengnitiou, possibly from necessity unde Mexican law and treaty stipulation, of spanis orrupt surveys, mutnat "il" forge facility afforded by the law makers in thei njudicious zeal to realize from the trust, aide by the selfish desire of those on the inside in
the land offices, both State aud national, and their iriends, "to feather their nests" at th
expense of the publie domain, is little short o criminal betrayal of a plain duty. The land should have been put upon the market only so
fast as the need of aetual oecupants required fast as the need of aethal oecupants required, o 320 acres for a reasonable time, at least, lik the U. S. pre-emption law, a prerequisite t
ssuance of certifieate of purehase. The lan has always been worth much more than has quence in comparison to the evil menacing th publie good by the concentration of large lande the Land Commission, provided for by the las how this to a ow this, to a great extent, has been aceom
plished in the matter of school lands by dis honest and unserupulous speculators. The re port speaks of a provision in the law of 1568
and $15 \% 0$, where the engrossed bill (which ought, and is supposed to be, the instrument as
finally amended and passed by both houses), now on file in the oflice of the Secretary
State, shows a restriction of sales of land quantities greater than 320 acres to any on out from the enrolled bill (which is simply copy on parchnent, made for the Governor's
signature, oI the engrossed bill, as anmended and passed, without interlineation, erasure o signed by the Covernor. Query? Is the land acquired under and by virtuc of sneh a palpable
fraud held legally and cannot proceedings be nstituted to set aside title
Any land system, State or national, whieh has allowed, and will yet allow by means o
subsidies, desert land laws or otherwise, th
aequirement of thousands of aeres of the publi aequirement of thousands of aeres of the public
domain, however lawfully, by any one person or corporation at lirst hands from the fovern-
ment, is based upon wrong principles of public policy, and is sulversire of the eqpality which
must be the superstructure of Republiean instiniust be the superstructure of Republican insti-
tutions, and we look with favor upon the faet tutions, and we look with favor upon the faet
that the penple everywhere are awake to this that the penple everywhere are awake to thi
question, and are trying, by proper legislativ is not already "stolen from the stable." land bas not been quite so disastrous in its re sults, as much money has had to be spent
their reclamatiou, not always proviug a judic ious investment, still the fact that large quanti-
ties are held by a few persons is to be deplored. ties are held by a few persons is to be dephored
The spoliation of our magnitieent forests i another question of magnitude, and however
necessary it nay lave been in the building u"
of this "Western Empire" to utilize the tin of this "Whestern Enppire" to utilize the tin-
ber, sone sinall part of the provits thered
should have gone to enriel the depleted should have gone to enriek tbe depleted publie millmen and speeulators.
Another grievance, affeeting the wholo com-
munity, more or less understood and magnified, munity, more or less understood and magnified, exorbitant tariff of freights and fares upon our publie highways, for so I elass railroads, as well
as toll and common county roads; for eaeh
alike in order to exercise its functions, appeal to that high principle of public poliey
called the "right of emineut domain," which i
the "right to take private property for public se nyon paying just eonplensation therefor."
Thee law of eorpuratious, and especially that athorizing the ineorporation for railroad pur he profit to the eorporation itself bein econdary aud incidental. It gave them power f way and personal liability of members, de
aied to individuals; and it has the right t paet liberal and unoppressive management, partieularly management, by their very magui ude, defy competition. Happily the late de sion of the United states suprene Court in beyond eontroversy the prineiple of the right to coutrol common earriers, even earrying it so fa to embrace the warehouse and elevator sys interest," the same as the public interest in the business of millers, draymen, hackmen, ferries, toll roads and railroads, and ought to be nude
public regulation, viz: "That it exaet but easouable tolls."
All that now remans to be done is to appl uch a manner as will eause no hardship or in justice to the corporations, and yet do justice to hose in whose interest they were primarily erries and toll roads, rates of water and gas upplies, ete., ean be delegated to municipal
authorities, Board of supervisors and special commissions ereated for that purpose, why ean ate fares and freights ou the railroad? In in ther manner can the power be exereised uuder tandingly and with equity to all parties con $a$ broad sense, the interest of the State, and cor poration are alike and each should endeavor to
meet the other half way in an equitable adjust ment.
s farmers we have also a strong interest in the subject of irrigation. Wo think ther ing the following principles and declarations: 1. That in mauy parts of the state irrigatio is a prime necessity, grcatly conducire to the 2. That the waters available for suel distriet be dedieated to irrigation uses and segregating
any given source of supply to the use of all tbe and given source of supply to the use of all the suseeptible of irrigation there 3. Declaring the right of condemnation to greater public uses, whenever so required for 4. Prolibibiting the further acquirement ested private water rights when in conflic with publie uses, although permitting the pri Legislation should then be had under these Co titutional rights, athorizing, with careful re trictions, irrigation distriets to be formed, and expense, equitably, of those to be beuefite withiu the distriets, at the same time permit ting such expenditure by the Sitate lookiug to public interests.
The canse of education conecrns every one. as farmers have no just eause of complaint. The division of school money rlepends npon the
school census, which does not run parallel with property values, and if anything, agrieultural t . One great want is that the rights of the child be more fully reengnized. If the natural guardians, the parents, fail to do their duty, it is higher funetion of the government to ingnorance, prejudice, or bad principles of the
parent, children are not sent to school, the compulsory law sbould step in and compel it to be one; and the power to do 80 ean be maintaiucd
upou sound prineiples of publie policy; even ir upou sound pruneiples of publie pol
The State has the right, and it is its sacred the public expense as can be availed of approxinately by all, and she should insist that
avail themselves of sach facilities. Peyond
this, the question of additional edlueational this, the question of additional edueational
faeilities should be deeided, and the cost borue by the locality particularly to be benefited, and
becomes a question of local legislation. The state should delegate to such munieipalities and
districts wherein avail themselves of the benefits, the right to estallish high sehools aud to locally tax for their support within such limits, but eare should
be taken that l,euefits and burdens be cotermi nous. The nornal sehool is, without doult, a necessary part of our common school system, intend-
ed solely to provide eapable teachers for the publie schools: but the questiou is frepuently supplemental to it even, and should it not be the ineome derived from its already large donaby the state to givo a few a better erlueation than ean he given to the many based upon the
theory that such better education is to reflect upon and inerease the general welfare, and not upon and inerease the general welfare, and not
npon the theory of benefiting the individual ? Is it for the publie good so many persons are the education so aequired is for no public ntil-
ity, but rather to make sharp professional men personal purnoses? Aud another question requently asked, how far, or to what extent a bout 40 ) students, but larger demands ar being made, and shall the State go on furnish. ing them for six, eight, ten or twenty hundred sesent aceommodations be maintained, how hall it be determined among us, who, in th increase of those desiring to enter, shall have
the preference? These questions are pertinent the preference? These questions are pertinent
and must be eonsidered sooner or later.
No fault is to be found iu the application No fault is to be found iu the application of poses. No fault is to le fannd with the mnnitipent endowment by the State, and no fault wil be found in the coutinned fostering of such a noble institution, until all wishing to enter can be admitted; but still the question it not to be self-sustaining. The stat hould be gencrous and liberal toward the pub tally, and without discrimination. As to indus culties, and its elucidation will not be attempt ed to-day; but so far as the Agrienltural Col ege of the University is eoncerned, and to intercsts, are not the few students to be foun in its classes more owing to the wishes and
tastes (however perverted), of those sendin heir sons and danghters to the University than o any other reasou": Jo not parents and stulazsieal, seientific, or literary departments that of agriculture
The reports of the regents show that in the re no students in agriculture; in the seeond junior clase, of 76 in number, but one; in th third or sophmore class, of 63 , but two; and in This, however open to eriticism, may have bee or nay be the acts of the liegency toward th misapplication of the terms and true meanius of the so-called Morrill grant by Congress; however disproportionately the funds derived therefrom have heen expended in unjust dis-
rimination agaiust the agricultural and inechan cal departments, it ninst be coneeded that we must look elsewhere for the cause of limited at In conelusion, fcllow Patrons, having alluded tc most of the practieal issues, affecting not leaving out any that might be considered polit ieal and that would ereate antagonism in the irange, let me say to you, "lo not forget th prineiples of our Order
We band together to dignify and cle rate our ealling, not to degrade or depress the eallings of others; to assert equal rights, not to trample apon the rights of co-ordinate industries; to e tend our knowlenge of the husiness of the educate ourselves and eliildren to better under staud the problem of life and aid in its solution; to encourage industry, both mental an physieal, "pnitting thonght with labor to proasefulness and haputs; to raise the sphere in all well-regulated homes, by opening up new
channels of thought and action; to beautify and adorn onr hoones that they may be more attraetive to inmates and friends; to do away with so
inuch isolatiou-tbe bane of farm life-and cultivate more sociability and congenialty o eelings; to assist each other make us better and happier creaturcs.
us be watehful that these noble obje he not paralyzed by indiffcrenco and undue sel fishness, and the Order of Patrons of Hus bandry cannot be a failure.

|  | Worthy Lecturers Visits. |
| :---: | :---: |
|  | Dan ville Grange is situated iu ther |
|  |  |
|  | dows of Mlt. Diablo, where they have built |
|  | paid for a large firange llall in a spaeiously |
|  | ll |
|  | numbers, is oue of the largest in the state and |
|  |  |
|  | one of the most prosperous. We found here preparations had been made by its Worthy |
|  |  |
|  | Master, Bro. Chas. Wood, for both a private and jublie meeting, with a regular (irange feast |
|  |  |
|  |  |
|  | Bro. Wood being called away, Bro. Stone, the |
|  | Worthy Overseer of tho Grange, presided, and calling upon Bro. Steele to instruct them in the good of the Order, he gave this very large col- |
|  |  |
|  |  |
|  | lection of Grangers a most able and exhanstive aldress upon that head. He was followed by |
|  |  |
|  | liro. Fardner on the true condition of the three |
|  | (irange institutions in San Franeisco |
|  | It being high noon (irange feast was announeed, and all plaeed around a table loaded |
|  |  |
|  | with all that could be desirable, and partaken of with a cheer that espeeially belongs to these |
|  |  |
|  | occasions. At two o'cloek, $\mathrm{P}, \mathrm{M}$., tbe open |
|  |  |
|  | meeting was called to order by tho presiding officer, and so crowded was tbis spacious and |
|  | well-seated (irange Hall that extra seating had |
|  |  |
|  | The afternoon meeting was opened hy a Grange song, called the "Beautiful Grange," rendered |
|  |  |
|  | g, ealled the "Beautiful Grange, rendered |

most of the audience and aceompanied hy the organ. State Lecturer was formally iutrodnced and and delivered his full lecture upon the great tion, which was listened to witutional Conven tencion
audiene
speaker speaker. The singing of another Grange song empleted the arraugements and the meeting was dismissed, and ourselves, being the guests
of Bro. Wood, were taken to his beautifnl farm home and there entertained, as his good make comforn till we were bieakfasted and by six o'eloek sent on our way to meet our next anoointinent at Point of Timbers, 25 or 30 miles distant.
We shall all ever remember this risit to Danrille (irange as one of the most pleasant ones of our life, aud the kind brothers and sisters that

## Danville, May 20th

Taxation and the Constitutional Conven-

Enitors Press:-The following preamble and年位ions were passed nnaninously hy Washingtou Girange, No. 22S, P. of H., at their last Wu
titutioneas, In view of the approaching Con selves to definc our position as a Grange, and that we will support no one for Delegate who will not support the following resolutions:
Resolved, That we are in favor of equal taxation and opposed to the si,0,0 exemption, of San Franciseo

## Pesolved, Tha

ages so far as to we are in favor of taxing morttbe property 80 mortgaged from the mortgagor. Roll that we faror the assessing and ing rates of such stocks at the time of assess.

Resolved, That we favor the taxing of moneys
in banks, moners due, and all solvent whatever nature or deseription.

## Oregon State Grange.

Editors Press:-The Orcgon State Grange completed its sixth session at two o cloek this morning in this city. Its last work was the iustallation of the officers for the new term, of whom Bro. A. R. Shipley, of Oswego, is Master was re-elect to that position. The last hours of the session were marked by mnch of the spirit of fraternity, and present.
The Order in this State has for two years many fin no little tribulation by reason of it many failures in business aud the overhanging
delot of $\$ 5,000$, the fruits of the nnbusinesslike ageucy system. This load, however, was tbrown eame nobly forward, provided by sulseription and otherwise for its payment. Both Master and Overseer now installed are accomplished men and earnest Patrons, fully competent to th ork before them.
Salem, June 1 st

San Diggo.-Editors Press:-The Crangers have been highly favored by kind Nature's bounty the present year, and the people have
shown a laudable appreciation of the worthy shomn a laudable appreciation of the worthy
husbandman by nominating one for a delegate to the Constitutional Convention. F. T. Black mer, Past Master of National Raneh Grange, is position. He is a man thoronghly imbued with insight incral sentiments and possesses a keen of which we hope to see him elected. Thero are radical wrongs to be righted, and when the
Constitution is entrusted to wise and honorabl men the permanent prosperity of the State is

## In Memoriam.


Fuperor William continues to improve
His would-be assassin, 1) Nobeling, still re mains in an nuconscious condition. A hrother
of Nobeling, an ollieer in the army; has been arrested. Bismarek is very nervons over th situation. The German Covernment has bee horshly dealt with

Agशicultural Notes.

## California.

## AMADOR.

The Peach Crop.-Ledger: The peach crop this season will be very light. The trees are
all more or less affected with "curl leaf." The foliage is shriveled up and blackened, the trees have make no wood, and the fruit, although
formed in abundance in some cases, looks small formed in abundance in some cases, looks smand very sickly hue and not more tha trees wear a of an sickyy hue, an is expected old gardeners of an average crop is expected. Old gardeners
attribute this disease to excessive moisture. attribute this disease to excessive moisture.
It is noticeable that on sidling lands, where
the the water has drained off, the trees are less markable that the peach trees alone are
affected. In spots where the disease shows the worst, en spots where ty of fruit-bearing trees are the picture of health, and promise to yield in superabundance.

## EL DORADO.

iforiarialunral Maje lanj.-Homes in Calcounties, an in El Dorado, Placer, Tuolumne,
Nevada, and other Counter Nevada, and other counties, agriculture is suc-
cessfully taking the place of miniug. In many instances, where old mining claims. have long since beeu worked out, all the former surface soil washed down to our river beds, to fill them in places with mining debris to the depth of
a hundred feet, plans have been adopted by a hundred feet, plans have been adopted by
which the silt from mines higher up in the mountains is made to flow over the old clams,
filling them to any desired level, with new soil, and in a few years restoring them as valuable agricultural lands. This is done by making a small gulches and canyons. While such dams small gulches and canyons. How off readily, the mod and soil, with which the water in all pla-
cer and hydraulic mining regions is charged, is held iu place, and soon fills the gulch to the level of the dam. Usually within three ycars'
time, this soil is sufficiently settled and hartime, this soil is sufficicntly settled and har-
dened to maike good garden spots and orchards aud vineyards. While visiting El Dorado county, where gold was discovered, and much
of the first mining was done iu California, the writer of this article found some of the richest
soil for gardens and orchards between Placersoil
ville and Cardens ana consisted of this "'inade soil,",
Colo examined, the gulch had been filled to the examined, the some 15 or 2 ) feet.

## fresno.

Deer Plowing.-Expositor: I have the pleasure of introducing the first rauch ever cul-
tivated ou the Fresso plains. This ranch belongs to Audrew ackson, and comprises an
area of 200 acres- 40 in the bottom, and 160 area of 200 acres-
plain land. The soil of Mr. Jackson's ananch is
of a clay consistence. Mr. Jackson says deep of a clay. consistence. Mr. Jackson says deep
plowing is the surest method to procure good erops. The canal here is three feet below the surface, the surface of the bank was once the
bottom of the ditcl. I never saw better wheat bottom of the ditcl. Inever saw better wheat
and barley than is growing on this ditch bank. Out of curiosity I took the trouble to count the heads belonging and coming from one seed. a length of six inches, growing from one seed.
Mr. Jackson is of the opinion that deep plowMr. Jackson is of the opinion that deep plow-
ing will greatly enlarge the kernels of wheat
and barley, and he intends to cxperiment to this effect.
 while chasing a bear in one of the rough can yons in the viciuity of White Deer, on the south side of King's river, discovered, a clump
of trees so different to those common to our mountain country, that his attention was par. ticularly drawn to it. On reaching a sniall
opeuing at the confluence of two creeks, he miscovered a beautiful grove of the trees. He nade an examination of the trees and found
under them a number of nuts. Upon showing them to some of his frieuds they pronounced
them to be black walnuts. These, and his them to be black walnuts. These, and his
description of the trees, renders it certain that
he lias discovered a walnut grove. This is the first instauce that we know of where wild wal nut trees have been discovered in the Sierras. EERN.
Agricultural Items. - Courier: J. C. Crocker is sending large bands of cattle north
to the San Joaquin ranch of Miller \& Lux, and
to San Francisco. They travel to the west of the lakes, and most of the way on their owu
lands, a distauce of 250 miles. The grain fields on the island never looked more beautiful than at present. We noticed a number of ent on the late rains and dew for their dependment, it being impossible, owing to lay of the The in in lan lack of moisture demand for labor will be in excess of the sup. ply for the next fonr mouths. The yield of
grain will be heavier than ever before. Arrangeroad eompany to take grain to the San Fran-
cisco market for $\$ 5$ per ton; they are now ask-
ing $\$$ by the carload. No grain has ever been
shipped from this point to the San Francisco
market, the demand to market, the demand to the teast taking all the
surplua. The large crop of this season will
force the shipments north, and will establish
much needed connection with the much needed connection with the grain mer
chants of the city. LAKE. Crop Prosprcts.- Bet, June 6: There seems to be some diversity of opinion as to the proba-
ble yield of wheat and barley in Lake county ble yield of wheat and barley in Lake county
this season. Mr. Burtnett, of Kelseyville this season. Mr. Burtnett, of Kelseyville,
thinks the crop will be considerably below average, owing to the anount of cheat, and we find other rcsidents of Big valley who are of the same opinion. On the other hand, Assessor Allen and Deputy Assessor Everett, who have
been in every portion of the county, give it a been in every portion of the county, give it a
their opinion that the crop will be a full average
one. There are many foelds in the one. There are many fields in the low valleys ruined by cheat, except for hay, and this is par-
ticularly the case in Big valley, where large ticularly the case in Big valley, where large
crops are usually made, but on all uplands and on the valley lands on which the water did not stand ong during the raiuy season, the carly
wheat is splendid, and that sown after the rains promises as well as usual. There is every pros. ones.

## MONTEREY.

salinas valeex-- 1 ndex, June 7: Wc would
say that iu the portion of the valley which we say that iu the portion of the valey which
have lately traversed, from Salinas city to Santa
Rita aud Natividad, there is no sigu whatcyer Rita aud Natividad, there is no sign whatcver
of rust anywhere; ou the contrary, the cropswheat, barley and oats -are in a a most vigorous and hcalthy condition, and almost totally free
from that troublesome weed, mustard. The farmers are every where jubilant over the flat-
tering prospects of a bounteous yield and the tering prospects of a bounteous yield and the
consequent "flush times" this fall and winter. SACRAMENTO.
Drainage District.-Rio Vista Euterprise, June 7: The Comimissioners of the sacramento River Drainage district, met Friday morning,
all the members present, to consult as to natters connected with the inauguration of the eral having advised, the Board that the law made it imperative upon then to have a trasone, the Secrctary was authorized to issue a call for an election for such office. Polls will
probably be opened at one place in each county -say in Sacrancuto, Washington and Rio $V$ ista. It is scarely probable that the election
will be a success, as the law directs that the Treasurcr shall give a boud in the sum of
$\$ 500000$, while the pay of the office is small,
and it is therefore questionable whether the and it is therefore questionable whether the person tected such a boud. If the party elected
tempt to file
fails to
 Cominissioner Egbert and Chief Engineer
Smith should proceed to Rio Vista and make arrangeneuts for the commencenteut of opcra-
tions near that place. After a suitable locality has been agrced upon the eugineer's corps,
which will be recruited here, will go down, and this will probably be in a week or two. SAN BENITO
Prospects.-Advance, June 6: Every availand on the foothills, was seeded for hay and rain, and we bclieve, with but very few ex-
ceptions, the farmers will all be richly rewarded. A vast amount of hay has already other portions of the state, is of excellent
quality and will bring good prices. The grain
crop will be oue-third larger, aud in most cascs of a better quality than previous years.
SAN DIEGO.
Enitors Press:-There is some rust reported in the wheat of this county, in places; not very serious, I think, and by 110 means general.
Barley is good, aud a large crop will be
secured, both for hay and crop has been the best ever raised here; our shipments to date going to about 325 tons, and
still they come. The yield of honey will be a still they come. The yield of honey will be a
cood one. The season is so far advanced that little is feared for the fate of the crop now. Of
course it cannot be so large as in 1876 , when we course it cannot be so large as ind
were credited with 23,000 stands of bees, from which a yield of $1,225,000$ pouuds of honey was
had. The drouth of 1877 destroyed, as castimated, 8,000 colonics, so that this year we started off with an estimated stock of 15,000 the same, we are short that number of work-
ers. The little that has come in so far is a cood article, but not so fair as that to follow from the sage and other better honey-yieldiug flowers which comc later in the season. The season is curious, with light showers of rain at unusual times, and a strange and unknown coolness of emperature.-J. M. Julian, San Diego News.
Editors Press:--I see but little in the RuRAL Press of late from San Diego, and, judging farmers' peu will rust from inaction. Such a busy season we have uever seen. fimmeuse all the available farm hands, including inany Indians, are still cutting and stacking and the end is uot yet. Grain sacks are purchased by
our mercliants by the hundred thousand. But little grann is injured by rust, and the latc rains
probably did more good thau harn. The pros probably did more good thau harn. The proshan 400 tons of potatoes have been shipped rom here to San Francisco this season.-F. M

## SAN JOAQUIN

Furtier Improvimpri.-Independent, June
Thomas Powell, inventor of the Electric
derrick and net, yesterday, hit upon an impor-
tant improvement to his netin tant improvement to his netting, which adds to
its value in the estimatiou of all who use these its value in the estinatiou of all who use these
implements in the harvest field. It is a simple rope attached to the jerk rope and passiug rope attached to the jerk rope and passiug
through the bars of the netting, and makes the jerk rope serve four purposes-to dump the to draw the uetting bars together after the load has droyped and to guide the netting back to
the wagon. It makes the uetting complete and the wagon. It makes the uetting complete and ELar Trees.-Elm trees the cork-bark use, have qualities that render them very unde sirable. Suckers shoot up from them in every
directi. lawns and drawing all the life out of the flower gardens. This is probably accounted for by on an incline from the surface of the ground to
the roots of the trees and all water applied the roots of the trees and all water applied to
them by that means, they would not be iuclincd to throw out shoots on the surface.
SISkIYOU.
Editors Press:-This place, known to the nitside world generally as Butteville, consist
of a store, hotel, blacksmith shop, stagc station and postoffice. It is. 25 miles southeast o
Yreka, in an odd-looking section of conntry Shasta valley is intcrspersed viith buttes of dif-
ferent sizes, more or less covered with rock, especially the tops of them. The principal re-
source of the valley is dairying aud stock raising. Strawberry valley, famous as a summer
resort, lies 12 niles south on the stage road to Reading. I think the majority of the people
are in easy circumstances. Some of the land is are in easy circumstances. Some of the land is
very productive. I Ind some nice alfalfa. Th
peope are courteous and hospitablc. On my
way np I stopped over night with Thonas Orr
who owns 2,100 acres of land. He has 500 aure in alfalfa, and is dairying. With has head 100 head cows. He was onc of the original discoverers on
the Salmon river mines, in this county. Ga-
zelle is a postoffice 18 miles southeast of Yreka zelle is a postoffice 18 miles southeast of Yreka.
The farms. arc all large liere. As I witct I can
look ont on the snow-capped mountains five or lok out on the snow-capped mountains five rectly east about 15 or 20 miles is Shasta butte
Grand old Mt . Shasta looms up above the sur rounding mountains like a grim old sentinel suow, about which so much has been said an written. Amidst praise and abuse it stands
with its cap of snow towering appareutly into
the the clouds. The peach crop here will be light,
and other fruits generally good. Hy and grain
are fair.- R. D. Nex NALLY, Edgewood. stanislaus.
Harvesting.-News, June 7: A few fields of early sown barley have been harvested in this
section. The yield was heavier thau expected. section. The yield was heavier thau expected.
STock-fizowERs Falr.-MIodesto Herald: We learn that at a meeting of the Board o
Directors of the Stanislaus County Stock-GrowDirectors of the stanislaus County Stock-Grow-
crs Association, held last week, a resolution to
hold a fair this fall was passed, and the date hold a fair this fall was passed, and the date
fixed for the exhibition is October 9th, loth and 11th. Officers were elected as follows:
Frank Ross, President; U. Dorsey, Vice-Pres-
ident; Capt. James, Sceretary, and T. J. ident; Capt. James, Sccretary, and T. J.
Young, Treasurer. The Board of Directors are
determined to use every effort to make the
determined to nse every effort to make the
coming fair a decided success, and they will
The abundant crops and consequent
gond times will assure a full attendance of the
perpuilace, aud nothing remaina to the doue but
cnterprise and liberality on the part of the
Association to insure suceess. YUBA.
Thatching Levees.-Marysvillo Appeal,
June 7: In the Rural Press for June 1st will Sune 7: In the Rural press for June lst will
be found an excellent article by Dr. Ryer on the matter of protccting levees by thatching
them with branches. Applying these suggestions to our locality, we deem it imperative that the Brown's Valley grade, as well as our
northeastern line of levee, be subjected to this northeastern line of levee, be subjected to this
thatched carpet. There are also one or two localities ou the front levee below the city, that should be p-otected by the same. By
this simple and cheap carpeting of our levee the city will be as safe as the farm house in the Buttes. Our levee funds may be judicionsly
expended in protecting the Browu's Valley grade. As a second precaution the northern plenty of idle men who would be glad to work or one dollar a day and found, and this is the
time to do the work. Grading the surface is time to do the work. Grading the surface is
good for prevention of rain washings, but the outside face of our levees is where the enemy

## Nevada.

Alfalia-Fed Beef.-There was a beef connoiseur with us yesterday, says the Reno chawas being loaded into the refrigerator car for was being loaded into the refrigerator car for
shipment. The verdict was that this meat, which has been fed all winter on alfalfa hay, was as fine beef as ho had evcr seen; evcu in
the markcts of Louisvillo, Cinciunati, St. Louis
or or Chicago. It is of the best color, is fat and
bears every characteristic of tirst-class locef. We were informed that it is tenler anul fr
from any taste of alfalfa Cattle fatten on from any taste of alfalfa. Cattlc faten on
and cattle men find it the inost desirable
fced. This testimony is unerohorated by the
fact that those of our ranchers who have a good
quality of alfalfa hay, sell it at the highest inar-

## News in Brief.

A large number oí hogs are dying near Rene from some uuknown cause.
Eungration on a large scale has lately comThe Wood tariff bill has met with final de feat in the House of Representatives
Grain is worth six cents per pound in PresThe opinion prevails in Mauchester, England hat the cotton strike will be ended this week. The coinage of the Carson Mint for the last Nonth was $\$ 701,000$ in standard silver dollars. John Kyle was thrown from a horse at Pet.
luma, Cal., last week, and received fatal injuries.

June 6th four unknown men in a boat went over the Cascades in Oregon and wero
drowned. Some fields near Healdsburg, Cal., that were dhought to be of cheat, are now developing into Ssow to the depth of five feet fell a few days since at San Gorgonio pass, San Beruardino
ArTificala ice sells iu New Orleans for $\$ 10$ per ton, and Northern ice has been driven out A son of Brighan Young has gone to West Point, to be educated at the Government's exLos Avar.
Los ANGELSS county, California, figures on
$, 500,000$ pounds of wool this season, half of L. J. Rose, of San Gabriel valley, Los Angeles county, has paid a tax of $\$ 30,000$ on brandy during the past year.
NeArLy 300,000 bushels of grain will be cut in Honey Lake valley this year, the most of it raised ou sage land.
SIX members of a family named Rogers, liv.
ag in Austin, Nev., were poisoned last Monday by eatiug canned salmon.
B. R. Prince, of Altaville, Calaveras county, has a cocoonry in successful operation, with
about 500,000 silkworms. Turkey and spent $\$ 5,000,000$ in efforts to conIT is asserted that Germany las invited the Powers to consider necessary mea
checking conspirators located abroad.
TuE trial of the Chinaman Wong Chu Shat,
just convicted of killing a countrymau, cost the county of Los Angeles $\$ 2,500$.
AT Bayou Sara (La.) on the 7th inst. stx
negroes were seized by the mob and huug for attempting to kill Dr. Wm. Archer:
A DECRER has been issued at Berlin proclaiming the Regency and noninating Crown Pri
Frclerick William as Regent of Germany.
Ir is reported that a company will soon commence building a narrow-gauge railroad from
the town of Sonoma to deep water on the creek. Os the 7tho inst. an explosion took place at Vans wood-pit colliery, at Haydock, six miles

## 280 men.

IT stormed every day last week at Susan-1
ville, Iassen county. Three times daring the week the mountaius surrounding the town wero overed with snow.
JoIIN C. FREYo
and an Ensigu in the Nary, clandestinely mar ied a Niss Anderson, in Washington, before his departure for Europe
ecently knowles Shaw, the evangelist, was Texas. Five other persons were seriously, and 12 painfully, wounded.
A DISPATch from London says: Lancashirc cottou mill owners are arranging to bring oper-
atives from the Uuited $S$ States, in view of the coutinued lock-out.
Tus wine-making industry in California has
thus procresscd: In 1859
5000 thus progressed: $\mathrm{In} 1859,500,000$ gallons
were made; in $1869,1,000,000$, in $1872,3,000$, ere made; in 1809, $1,000,000 ;$ in $1072,3,000$,
000 ; in $1875,7,000,000$; in $1876,10,000,000$; in $1877,8,000,000$.
ThaUIRE, theatrical manager, has en gaged Henry Ward Beecher to deliver ten lec-
tures on the Pacific coast in the fall. Beecher tures on the Pacinc coast in the fall, Beecher
to receive $\$ 10,000$ for the course and an additioual $\$ 1,000$ for expenses.
Dr. Dro Lewis and 12 of his party are canping at the foot of the hills near Calistoga. They
will probably remain in the valley two week or more, and then move toward Lake county whcre they iutend to remain during the warm est weather of the summer.
The laborers on trike in Qucbec parade the streets and refuse to allow men to work on the street railway or on the public works uuder $\$ 1$
per day. Some of tho contractors havo given way to the demands of the men.
TIIE Chicago Board of Trade has passed a resolution memoriaizing Congress to provide 1,000 men cach, "to the end that all parts of omergency likely to arise of complications fron without or of dcmonstrations of vlolence within our own country.
Porter Rockwell, under indictment for tho murder of Aiken and othcrs, parties from California in the ycar 1857, died suddenly last week at Salt Lake City. He was about 60
ycars of aqe, and was to have been tried next ycars of age, and was to have been tried next
Septcmber. It is belicyed that he was poisoned at tho instigation of promineut Mormons who
were fearful that he would through his confes sions implicate them in the coremisgion of sions implicate
merous orimes.


A Sunset Picture. $=$ 프둥 2 $=$
 3다= 5 $2=$ 3.


Livingstone.
 = = =

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The Best Culture for our Boss and Girls.

## Constitutional Convention.

 So mueh matter fur discussion has accimunpeals to me personaily-that I have conctuded
 acceptally, whititurese for expression. Sisters
colly aull Mumntain are calling on mothers for experiences, and giving us charming samples of
hher own.
Hzon. Berwick, siuce his appeal for my views (in the ellueatimual tepis, las given us a clayter chainn to my attention. Hr. Anlerson redeems
his promise in recaral to the hent centure for
nineteen-twentieths of our boys and airle" mineteen-twentieths of our boys and girls," by
reducing, as the tells us, his answer to two justice tor it is rumunilo over with sughestions
of which honest lator is tut the sinew. The co-elucctaion of hand land bane and
the anion of the practical and the scientific in schools, whiche practilieal and ivide the scieutitic in hurs health.
fully aud tijoyally letween industrial pursuits antl princtples involvel in their mastery -so
that the result shall hle, in every department of
life, workers alle and willing wearkers whose
 nobhng in houcly uses shall strip libor of and
that is servilc, and cluthe and erown her right that is servile, ant chathe and erowni her right
royally. This is not culy the popmlar demand,
lnit a consummatiou carnestly sought l,y thinking persons oi all eliasses. noune of whom are sa isfied with the results of present methods.
Our topici tio extensive for one paper, and
probibly too complex to be fully compreliended
by any one mind or treated from any one staud-
rowint ionint of exllerience.
teuntic culture-which, nevertheless, we can appreciate-may disylulify us for technical de-
tiails, while it leaves uni niental hurizan elearer tails, while it leaves onr niental horizan elearer
for the cibservation of true and fatse methods for Yor the observation of true and fakse methods for
its attainmunt. The lest thoughts of many
 host if humanity the aloption and app thestion of ways and ueans tet it is inte phessulte that some one soul
quiekene ily its own ungratified longings for
 ences en riphorl with the ennobling nes of such
a culture Hay strike the key-note whichl stall liring the vie
happy accord happy aecord.
It seens to me that of all the interests likely
to be tiscusel to le discussed by the coming Constitutional
Convention, this of selinols and schooling is by far the most inportant in its beariugs upon the saceinel, molititalal and industrial character of the
sitate. Our snolss are the mushrooms of socicty the fungur groveth of antecedent soeial repres
simn, fructitied hy suddenty acquired wealthwho in their moral and intellectual poverty of
culture rush into the dissination and reekless culture rush into the dissipation and reckless
extravagance of fashimable life, as offering the extravagance of fashinnabley are competent to
only arena in which they are coll Morlusty, simpl siderate regard for the feclings and interests of sthers, rirraspectite of soeial prestige, are almost
certain characteristies of a generous moral and intellectual culture, when aceompanied ly hal. its of industry and economy. To such minuls neither wealth nor poverty are disturbing inoral
furees, but prized or regretted chictly, as conditions for rare enjoynents and wider usefulness,
or the reverse. They see better uses for suror the reverse. Hiey see better uses for sur-
plus means than fashionalle extravayances. and
more nuble and eniovable nes of themselves, phas means and enjoyable nses of thenselves,
moren ante and

than startling and ilemoraliziug erujtions on | soeicty |
| :---: |
| In in | In my attempt to contrilnte to truth, without overlaying anuther's thoughts in this mat-

ter, perliaps 1 eamnot do better than adeplt IIr. Anderson's method, aul beyin by summing up in two words what, frum my standpoint, secms
fundimentally requisite in the iest culture of humanity,

## Educated Mothers

More than a quarter of a eentury ago, an lidian chief, negutiating with the powers at
Whashington, liscussel the domestic and poplitical eoonomy of ellucating mothers, with a force and
directness I eamuot hove to improve directuess I eannot hope to improve nipon.
Said this nuenltured but shrewd observer: "We male a mistake in our first efforts to educate pur people. Wes sent our sons to your
sclaols and colleges When they returned they
married wives of their own people, and their married wives of their own people, and their
chijldren grew up like their mothers. The
and fathers, disgusted with their ignorant families, neglected then, and becanc reckless and dissolute, If insteal of onr sonls we hal sent our wonld have educated their children, and we
would now be an educated peoule." As a rule, ean the ehitlren rise superior to
mother-culture? If they eanuot, why all this flagellation of mother intluence, as if it haid baiked with its precious lurden at the foot of
intellectual and nural eninences within easy reach? If the mother's erltinese sets limits to
ehill- enlture, are not ourcivilizel chiefs ehild-enlture, are not our civilized chiefs repeat-
ing the early educational experincont of the ing the early educational experiment of the
Indian, in providing for tleisis sons elucational fiailitios from whied their disughters are ex. chinted? Anil are not the neglected homes and danghters, so justly complained of, the natural
harvest of sucli uanatural planting? harvest of suclh unatural plauting?
The iesst culture for everylooly is orestalls temptations to extravagance and disspation by prooccupying heal, heart and hanuls with henalhful and ecungenial pursuits. Ancl
this work of precocupation is the mother's.
and It implies tile "la ling her children well in
hand" lefore they eseape or are turned over to The father is
hume to ludge and eat and speud a portion at suulay. The training he can give liis children
in these his brief seasons of re-uuiou with his in these his bricf seasons of re-uumu with his
family, nust necessarily be fragmentary, if not supericial, and its etticieney for good or evil depents argely upon the ability of the mother
to ntilize or count turact its influence. The chil. to ntilize or count tract its influenec. The chil-
Iren are the "business" of the mother : her hreal, heart and hauds are pledged to their
heal
decelopunent. As they arow developinent. As they grow in grace, or in
years, their demands upon her mental resources suggest the need of improved methods, of
renewed sup, tiencc aud courage, and the acquisition of just for the proner filling of whose positions of
trust and profit, the home traine drua will be held more or less responsible. liut luty to connsel and sccond her efforts hy sus tainuing her in the entidence and respect of sus. chilliren, and supplying, according to his pe.
cuniary ability, the neeessary aids and applli-
To secure this best culture for cur loys and girls, we must begin by providing the lest cul-
tivaturs, and these are, by pre-enineence hatural gifts, Educated Women.
Happily we have a brave sprinkling of woinen -fuly as competent as the men who are in pos.
sessiou of the tanagement of our schools - to
aid in the inauguration of net
as a result of the exclusion of young women
frum the liccher institutions of learning, which are fostered and supervised by the state, the (nst of education to them has heen so out o and irrespousible supervision of private institutious failing to sustain thoruach inethods ant frst-class professors -that the number of women fualibect to meet the ellucational needs of the And all ton few for the relief of overcrowded mannal inlustries are the women qualified to
enter professions and oceupations for which, lyy enter professions and oceupations for which, ly
temperament and mental endowment, they are pre-enininently fitted. And just here 1 am re ninded of the reply of Damiel We bster to thi
young law graduate, who asked if there was rom for him in the profession-"Up higher young man, plenty of room up higher.
Unly this broad preparaty send higher-into the eartistic, literary and scientitie ranges of iudustry, where there is plenty of To initiate a real
To initiate a real and satisfactory ellucational must look to this Constitutional Conventiun to shouli not he left to a Legislature. A Legisla ture is more or less controlled by partisanship the acts of its prelececssor, if of a diffcrentit pooliti cal stripe. Sut a Constitutional Convention is
intended to be the intellisent chuice of a people intended to he the intelligent chnice of a people
seeking only to forward its interests by leveling them npward. Again, Cousitutional 1 ro. secure of time for a fair trial.

ur schools is the natural result of the perssis tent dry-nursing to which they have been subjected. From thie frrst they have hecu swad.
dled and preseribed far by fathers and batchelors, who, forgetful of Giod-provided minother-love anll inother-wit, or covetous of
offiees and salaries, snullied and liarred the mothers from their cunneils, The situation reminds me a man innew, who rotbeerl his
gentle wife of hier tive. nuenthsold laly and started with it on a journey of hundreds on
miles, provided for all emneryencies, with pocketful of eakes and a bottle of soothing The filp.
Tirst step is-

Equal Educational Rights.
The State educates men for the duties of cit isens lhy investing them it ellueate its women for edueational duties by ceordiny to thell the rights as welt as the responsibilities of clucaturs, associating them
in the control and manarement of schuols, as in the control and management of schools, as
voters, tristees aud supcrintendents, and mak. voters, trnstees and supcrintenterts, as of learn ing, which are fostered or controiled by the tate, as free to danghters as to sons;
the supervision of women as of men.
The children being the "peculiar responsi bility of the mother," patriotism aud good the state pate in the direction and as eligible to particistitntions in which their children are being ed ncated for duties with which they theniselves
have grappled, aud learned by experience, lave grappled, aud learned by experi
wherein they failed, wherein succeeded.
I cluse with the appeal of a revolutionary mother, which should tonch every manly heart for the artion of the convention. Aligail franchisement of women, as hosts of her dangh-
 John Adans, then a member of that Congress which prumulgatel the Deelaration of Indepentence: It you complain of nesplect of ofdaughters, who every day explerience the want children, I finc destitnte and defifient in every part of educa,
tion. I nost sincercly wish that some nore liberal plan might be laid and executed for the bencfit of the rising generation, and that our new Constitution may be distinguished for encouraging learning and virue. if we mean to should have lcarned women. The world, perity, but you, I know, have a mind too enlarged and hiberal to disregard the sentiment. If much depends, as is allowed, upon the carly elucation of youth, and if the first principles which are instilled take the deepest root, great
beuefit must arise fron literary acoomplishbeuefit must aris,
nents in women."

## Bereavement.

In a private note to the elitor our esteemed
eintrilyutor, Mrs. Niehols, tells of her recell alliction, and we print the paragraph leeanse "e know many of the "Home Cirele", will feel
it a privilege to tender her a heartfelt supn thy. She writes: "'since my last communicamusic of our home-tlie youngest of thece moth. erless grandehildren in my care. He olied 11 arch 8th of rheumatism of the heart, aged eight years. I feel sure of the sympathy of yon
and yours, and you seem entitled to know the yreat sorrow which has come to me and mine.
I am still fecble from a serious illness of I am still fecble from a serious ill,
weeks which followed his death."

## Is Life Worth Living ?

Let nis, so far as nay be, lonk at life steadily
and whole. It is not all darkness; it las its and whole. It is not all darkness; it las its clouds; it has its silver enubruideries, its radiant limpises of heaveu's bhec. It is not all winter thas its summer days in which "it is a luxnry breathe the breatio of life.

Ask the happy little clikl with its round hecks, and loright eyes, and dlaxen curls, and pure swcet face, and the tender, tender love, it, and smooth its path the whole day long; ask the harpy boy, tingling with life to the fingertips, making the fields ring with his glad yoice ni, summer holidays, happy in unselfish fricuct in 1, , in generous inpulses, in strong health,
the freedom from all care, in the confidene of all holles, when "the boy's will is the wind's haplyy lovers, when the youth are long; ask happly lovers, when they know the joy of being
all in all to eacla other, and to their glad gaze "A livelier emerald twiuk les in the grass,
Ask soldiers in the hour of victory; ask great Ahmers whell some immortal trata bursts npon et nullroken eircle round the Cliristmas hearth or, take less thrilling moments, and ask fatherg and mothers when cares do not press, aud the yether ly the fireside, through they sit tove; at such times, perhaps, all these will be inelined to tell you that life is worth the liv-

## Giant Powder in a Cook Stove

(iiant powder cartridges are articles that ought to be liandled with considerable eaution. Ths is a self.e evident proposition, and las been affirmative test on this sulpject is furnished by of the Newark Valley range, but at the present cousiderable territory: Billy has bect absont fron his hunble abote for some weeks (in a prospecting trip out to
Muncey ereek and vicinity, and Tefure his departure placed half a dozen of the roek-rending explesives in his stove oven, in order to secure them from leinks speiled ly the dampness during he was hungry, iml withont thinking of the contents of his stove, he built np a roaring fire, sliced otl some bacon and startel to put on the tea kettle. That remindell hium that there was juurueyed to the spriug about 100 yards distant. It is lucky he dill, for the trip probably saved his lite, and gave him a chance to relate to us
the inevitalle sequence to that incideut. Whe the ineritable sequence to that incideut. Wo
thiuk that pilly exaygerates wheu he likens the explosion to an earthquake, and his statemen hat that there was nothing left of his lat ceived cunnt a hole in the ground is to be re mixed, shook up aud seattcred, but his story alont there not lecing timber enowgh left to furnish material for a tooth-piek, and that the stove lils lit in Ruby vailey, is absurd. How-
ever, Wiilhan savel the water pail, aud is of ever, William savel the water 1 nail, and is of
the opiniou that lakell giant powder cartridges the opiniou that laked giant rowder cartritges
are a snecies of viands liable to raise thing are a siecies of viands liable to raise things
more effectunlly thau a case oi yeast powders.Eurreka Sentinel.

Rhmon Axb the Babis-Mr. Edison, the inventur of the phonoriaph, promises to
have sich a clain to be regarded as a pullic since the ereation of tie world For enturie the world has longed but longed in vain for two or threc thincs. for some certain cure for ballnncss, for an unibrella that would find its way back home when it is lost, and fur a deviee hy which a baly could put himself to
slcep. Human ingenuity has doue nuch for slcep. Human ingenuity has doue nuch for
the baly; he has had soothing syrups concocted the baly; he has had soothing syrups concocted for him; he has had self-rocking eradles con
structed fur him, and the greatest musieal conn pusers have written lullabies for him; lut still he refuses to go to slecp) in a reputalle and Christian manner. Edison now propuses to ranquixht the triumplanit and indomitable baby He is hnilding a eradle which is so arranged that when the baby eries the sound will be re ceived by a telephonc. The vibrating waves
will set in motion a lever which will rock the will set in motion a lever which will rock the cradle. When the baby stops erying the
cradle remains at rest; when the baly lifts $u$, his voice the movement of the rocker begins riously the cradle rocks. The theory is that the child will cry himself to sleep, and this
seems inost reasonable and probable. But ther Will be exceptions, of course. Therc are strong
lunged balies which in monnents of intense ex citement, will be likely to infuse into Edison cradles such veliemence that they will turn complete somersaults. - Philtrin - Bulletin.
Several years ago a young man in New Or leans put a sum of money in a savings bank,
and forgot all about it until recently, when, after reckoning up the interest, it was found that-the bank had failed.
A sunday-scuoos boy, upon being asked
what made the Tower of Pisa lean, replied "Because of the famine in the land.


The persistence and earnestness with which
the press of New Mexico and Western Texas eontinues to comment on the San Elizario massacre, evinces how deep is the public feeling iu those sections of country in regard to that mat-
ter. This butchery took place now some five months ago, and yet the people and the press off that way seem as much alive to the subject as if it were an event of recent occurrence. That these cruel murders should have aronsed general indignation at first is not at all strange, with at this feeling, instead of a more in tense, denotes how deep a hold it has taken on the popular heart and how very likely it will be to eventuate in serious trouble unless proper little doubt the American residents, snpported by the better class of native-born Mexican would long ago have proceeded to avenge this most atrocious crime, had not the public authorivisit the guilty parties with condign and speedy punishment.

In pursuance of such purpose, a commission the Governor of Texas to investigate and report upon this horror. What may have been the exact finding of these commissioners, if any
report has been made by them, has not publicly transpired. With the delay and uncertainty attending their action, the citizens of El Paso have grown restive, the whole look of the busi-
ness seeming to them not at all reassuring ness seeming to them not at all reassuring;
heuce, this growing discontcnt and a revival the excitement, that the hope of vigorous measures on the part of
If now the government expects, throngh the adoption of a non-committal and temporizing
policy, to repress this excitement, or, through mere promises, to appease these well-founded demands for justice, it is preparing the way for a disappointment. These bordermen do not
like to dispose of injuries of this kind in that way. To an open and manly foe they are apt to be forgiving and generons; to the cruel and cowardly, exacting aud implacable. "Remen-
ber the Alano"-how wildly that war slogan fired the Texan heart! In her struggle for independence, it was worth to the "Lone Star a sad day for the banded assassins on either side of the border, if ever the avengersof this most recent and most dastardly of all these frontier murders, shall raise the cry of "Remember San note of many of them.
The circumstances attending this massacre
were of the most aggravated kind, being were of the most aggravated kind, being bricfly as follows: Judge Howard, an American citizen, a resident of San Elizario iu El Paso county,
Texas, having taken up certain salt marshes that had before been open to the use of the Mexican population in the vicinity, these people
determined upon taking his life, to which end determined upon taking his life, to which end last to the number of several hundred, comiug from both sides of the Rio Grande, and commenced an attack upon Howard and his friends, who sought shelter in an adobe building, which they barricaded and thus kept their assailants at bay. On a promise from the mob, solemnized by the sacred oaths of their leaders, that their lives should be spared, the besieged consented to a surrender. No sooner had they done this, however, than three of their number, Judge McBride, were seized by the cowardly treacherons miscreants, and shot in cold blood. This accomplished, the crowd proceeded to plunder the houses and stores of the murdared wore. Atkinson, before the shooting took place, had given up to the fiends the sun of $\$ 11,000$ that he had about him, on condition that they would release him and his companions. Charles
E. Ellis, an old resideut in the place, was lassoed, after which his throat was cut and the body thrown into a well, simply because he sought by kindly words to divert the murderers from thei purpose before the bloody work eommenced.
These men so ruthlessly butchered were all These men so ruthlessly butchered were all good character being amply vonched for by the people among whom they lived. Concerning Atkinson, the writer can say of personal
knuwledge that he was a young man of fine character and very superior parts. We have
becn conversant with his history from childhood up, and can honestly say it was without spot or our California mouth and hardly find one of exemplary in all the walks and relations of life as he. Brave, truthful and industrious, he
educated himself by his own efforts and won Wl cont the outbreak of the late civil strife the county called for soldiers, he was among the irst to respond, having served long and well he was appointed to several positions of trust
under the Government, in the discharge republic, where bed to that remote section of th reparation be m lo

## Young Folks' Column.

The Ten Little Grasshoppers.
Ten little grasshoppers
One ate ton onnche green
Then there were nine
Nine iitle grashoppers, A Aithe boy went a fishing T , Elich litule errashoppers

 There came a hurriane
Then there e were six.
 One iound a bumble b be,
Then there were five. Five itite e grastoppers
Hopping ont the Hoor ;



 \begin{tabular}{c}
$T$ Tien on oroser the reve <br>
Then there was two <br>
\hline

 

TWo litle grashoppers <br>
sititily on on stene; <br>
\hline
\end{tabular} A turkeeg gobstler passed that way,

Then there was ous.


A Children's Garden.
Let us talk together about a children's gar
${ }^{\text {With }}$ ith very little ground and little expense, we will plant a spot which shall be a joy to the
restless little folks all sumuner long. We will cut ourselves short of land, if necessary; but the cliildren's bit need not be more than 12 or 15
feet long or square-the form is unimportant. We shall find a middle path necessary, a place feet must have a placo carts and the whace for the trunding a carts and th that all sorts of small teams cannot be confort. ably upset therein, or that encroachments shall constantly be made upon the flower borders;
for we will have a flower border an each side of this path. There let us plant the flowers that hildren lov
Do you think flower borders and a path com plete our plan? The bost is yet to be an-
nounced. We are to have a pond! Not a large affair, to be sure; the size may depend on the be large enough for boats, large enouch for be large enough for boats, large enough for
pleasure without danger. One could have a tub to sail boats in, but a tub is not a prett object in a garden. Let us do better. IV need a large dry-goods box, or one in which have a box made, as small or as large as you please, but do not have it over a few inches in epth; for, in case of accident, it is exceedingly
convenient to have the bottom of the sca a arn's length
Have the bex pitched within and without, like the ark of old, until it is water-tight; plug in one corner is desirabied to draill the pond
when fresh water is required. Then sink the box into the ground until the edge of it is nearly level with the grass. If you strew the will look very pretty under the clear water Having completed the work so far, we shall
find the children eager to bring pails of water find the childre
to fill the pond
On one side of the box (that most exposed to the sun) have an arbor made of two or three bean-poles, firmly driven into the ground and
united at the top; the shape should be broad united at the top; the shape should be broar
rather than high. Before these poles let inornrather than high. Before these poles let morn
ing-glories be trained; they are preferable to ing-glories be trained; they are preferable to
other climbers because they will grow. Surmounting all obstacles, they run as for their the shade of yur not
If our boys think a small wharf indispensable for the mooring of boats, one can easily be
nade fron another smaller box, and-but surely, I need not tell a boy with a box of tools how to build a wharf!
At the four corners of our pond, small trees
should be transplanted. If that is impossible a sun-flower or zinnia will do, but will not look as real.
Lastly, we want a bridge. Not that it is very important, but a bridge gives beanty and
character to a river. For our water is to be a river
pleas
Let us not be too particular about the construction of a bridge. A strong board, a few you have more? A littlc ingenuity, the help
of papa or a big brother, and you will have a satisfactory piece of architecture. Not only
will the boys enjoy this pond, but the girls will bring their dolls for many a sail. A boat-
while gentle breezes blow from a skillfully
wafted
palm-leaf fan on the shore waited palm-leaf fan on the shore! But we gales may blow--a puff from one side, a contrary gales may blow-a
puff from another, all sorts, of suffs from little
mouths around the water's mouths around the water's edge. And how
could a poor ship endure such conflictiug gales? So overboand they all go, and it is perfectly surprising what a cheerful event even a shipwreck becomes under such circumstances.
We shall also have excellent We shall also have excellent opportunities
for sea-bathing for those dolls whose general for sea-bathing for those dolls whose general
make-up admits of such exercisc.-Wide Awakt.

## Good HEALTH.

Drunkenness not Hereditary nor a Dis
Recently, in Utica, New York, there was hel a large temperance meeting, and members
of the faculty of the New York Statc Lanatic Asylum, famous physicians, expressed their opinions upon drnnkenness as a disease. Dr.
Gray, the Superintendent of the asylum, said: "The idea of hereditary and transmission hav induced mon to blind themselves, and seek only gratification. It is not the father or the mother
who is to blame for the son's drunkenness, but the son himself. I am glad to see so many wo-
men defending this cause. How many defend men defending this cause. How many defend
their husbands and sons on the ground that it their husbands and sons on the ground that it
was born in them. It cannot be born
in them. A kind word from the mother in them. A kind word from the mother
to her boy may save him, where the
pretenseof hereditary may send him to ruin. pretense of hereditary may seld him to ruin.
Another point 1 am glad to see set forth-drunk
enness is a disease enness is a disease. The State has erected an
institution where the drunkard can reflect for time on his habits, and perhaps reform himself. and it is hoped with the present superintend
ence much good will be done. When a man has a flask in his pocket he lase, the disease. I it is gone, there is no disease.
Dr. Ford said: Inebricty but a self-provoked, temporary perversion of onr natural functions,
of sinful gratification.
Brain-workers often en gage to oo more than their physical strength
will sustain, and in order to asconplish thi task in a given time, they resort to brandy to quicken their flagging energies, though at an expense of that reserve force which no man re before long he finds himself luroken in health,
and with a habitual drinking habit formed and with a habitual drinking habit formed tive organization, a defect allied to imbecility Again, it is the logical result of a defective
training. It is not an inherited condition, but is acquired, and a condition for which the indi vidual is responsible. Second, drumkenness is
not a disease, nor is it produced by any disease not plysical condition. It is a noral ollisuity.
or
Alcohol is not a food, and is not a necessity to healthy men, while men that are weak by in ought to shun alcohol as they would a deadly malady. Third, alcohol intemperates and al.
ways produces deleterious changes in the mos vital organs of the body, from which spring the
most mortal disease, and it increases the fatal ity of ordinary ailnents. Fourth, it is the
amount of alcohol used, and not the form under Wrich it is ased, that determines the amount of
evil it will accomplish."

## Maladjustment of the Eyes.

In a late address before the Albany Institute, Dr. Geo. . Stevens, of Albany, presented facts nervous diseases, such as chorea, or St. Vitus dance, severe recurring headaches, and neuralgia, often hereditary, which seem to be
functional and not due to any morbid chance in the nerves, are very frequently accompanied by an often unsuspected maladjustment of the eyes, and that when this was propery corrected a way. Thus in the case of very far-sighted
young persons, the attempt to read or to sew young lersons, the attempt to read or to sew
requires a muscular adjustment of the focus of requires a muscular adjustment of the focus oli-
sight which is quite a strain on the most delicate orgauism in the body and the portion where the nerves in the optic nerve seem to be nost exposed. Let a young person put on his them, and he is made dizzy and perhaps nausea or vertigo is produced. But this is the constant condition of some far- igighted persons, and it is not strange that their nervous system is thereby shattered. A still more common and unsus. pected cause is what is called astigmatism, in
which condition of the eves they fail to form a definite image. The eyes bring, perhaps, the vertical rays ones, so that there is not a clear, defined mage. To test the eyes for astigmatism, draw ou a sheet of white paper parallel black lines. Cross them at right angles by similar black
lines. Pitt them on the wall and stand off at as great a distance as they can be secn and notice if the horizontal lines can be seen wimher would see them cqually clear at any distauce. Whether Dr. Stevens is right or not in supposing such disarrangements of "ision to be a frecites many cases to prove it-it is very important tha
glasses.

## Domestic Economy.

## Corn Bread.



Over-Eating.-If the food is wisely chosen Beard says : "It is a fallacy to suppose thrat people, as a rule, eat too much, and that most feeding. The truth is that among all decent or civilized people the tendency is directly the reverse. In this country, and especially in our large cities, far more are under-fed than over-
fed. Throughout our land thousands and thousands die every year from actual starvation. Some of those nnfortunates are little children whose parents are too ignorant or too poor to
give them what is necessary to sustain life. give them what is necessary to sustain ife.
But many of them are adults, whom hard poverty or sad ignorance has forced into a habit of systematie though undesigned starvation. Day and the face wan and dejected. Disease now teps in, attacks and carries by force some im portant citadel of the body, and death follows. The process is a slow one-sometimes very
slow-extending, perhaps over many years, bnt it is oftentimes as sure as it is slow. An inju-
dicious choice of the kind of food, either from dicious choice of the kind of food, either from
whim or avarice, may ,also produce results equivalent to starvation."
Treatment for Hard Wood Floors.-It is true, says the Journal of Chemistry, that the oak
floors of the old-fashioned kitchens, which lasted and looked well for a hundred years or more, were scoured with soaj, and sand; but
the labor was very great, and could hardly be had from the modern servant at any reasonable expense. A little more care in filling and
finish, suits the present condition of things better. Any soiliug from mnd can be removed with a damp woolen cloth, and dust with a dry one. Sweeping with a brush, followed by
wiping over with a dry woolen cloth tied over the brish, answers ordinary nceds. About very thin coat of shellac. No oil should be used on it before or after finishing. The great and especially where used in foors, and especially where used in floors, is the
amount of oil, wax, varnish, filling, and other gummy materials that are applied to and left on the surface. The beauty of all such finish is to have the wood show its natural color and is meant simply to prevent any greasy dirt from striking into the wood and causing a stain
that would require hard scrubbiug or scraping to remove
A Good Cleansing Flutid.-The following is commended for washing alpaca camel's hair, and other woolen goods, and for removing marks ounces ammonia, four ounces white Castile soap, two ounces alcohol, two ounces glycerine, two ounces ether. Cut the soaj finc, dissolve
in one quart water over the fire, add four quarts water. When nearly cold add the other ingredients. This will make nearly enght quarts and will cost about io cents. It must be put in a any length of time. To wash dress goods, take a pail of lukewarm watcr, and put in a teacupful of the fluid, shake around well in this, and wrong side whilc damp. For washing grease from coat-collars, etc., take a little of the fluid in a cup of water, apply with a clean rag, and
wipe well with a second rag. It will make every woolen fabric look bright annd fresh.
For Severe Burns.-If you cannot obtain hne water ready made, take unslacked lime and pour water on it. comes yellow and thick like syrup. Apply to burns at any stage, the earlier, howcver, the better. We publish this because we are conns
dent it the best application for severe cascs, as well as slight burns. It should be kept on hand always.
To Cure lloarmeness.- Heat well the whites of two cggs and two tcaspoonfuls white sugar;
grate in half a nutmeg, add a pint of luke-warm water, stir well and drink often. Kepeat the preparation if neccssary.

## PACIC RURAL extricosily

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 "Wilu Yor RR Kisp ro U "s?" Xo elass of business men
are more affected by "Iong dry times" than the publisliequal in volume th flush seasons, etc., etc. To eui our
seriptions and furward the cavhl for the l'pkess as early a
$\qquad$ right up to the mark during dry tines, aull now will you proaching: plenty:
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## Saturday, June 15, 1878

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 Fuod, 371 YKK YARD - Issessment of Mirrators








## NEW ADVERTISEMENTS <br> 

The Week.
Beyond the grain fietds, activity is now seen in
the orchards, for the fruit season is beginnins. the orchards, for the frnit season is beginnings,
Beyond the grain fiells, too, the clear air of the
loothills is resonant with the cow bells chime loothing is resonant with the cow- bells chime,
as the dairymeno of the e finins are driving their
cattle to their summer pastures on the mouncattle to their summer pastures on the moun-
tains. Ant the sungs of the workers minite to
form the lealing lart in civilization's music, form the leading part in civilization's music,
the clear soprano of full he hrted imd onstry.
 to rest. Wivery grove comtains its camp of rustiscared by dreams of tick, tarantula and scor
pion, sing, loud the eharnus oi out-door life in
Cialifornia; the country, fresh from the of the creator. country, fresh from the hands and cities, the loudlest cries are those of the
would-be constitution makers. All over the would-be constitution makers. Ant over the
state thies the candidate, nuld, with the voice of
the oriole, describes the prusierity which would the oriole, describes the, prusperity which would
follow his election, and, with raven's crouk, warns patriotic men ayainst the schemes of the
opposition. Such is the genius of the canvass, opposition. Such is the genins of the canverass,
and hei a wise man who hears them all, but
rests his tinal judruent rests his final jutwrent upon life and deeds
whiich merit his approval rather than upon
words, though they be linked in siluery elo which merit his approval rather than upon
words, though they be linked in silvery elo-
yuenoe.

Getting a Start.
L.ast weck we briefly alluded to the fact that a harvest's earnings, followed up by industry and frugality, would give many a homeless man a start which might lead to a competence. This
is true. Some of our best farners began their is true. on this coast with earnings which were very small. They saved every surplus dime. They
added more to the proceeds of the first jol of work, and then they soon hall enough tor make rayment or to secure a lease. Thus they hare gone forward until their right to lami
reaehes hundreds and sometimes thonsands of reaehes hundreds and sometimes thonsands of
aeres. This way to secure a home and its comn-
forts has heen shown practical hy the cxperi ence of men in every community. Therefore we ence of menin every coma, again, in the hope
would call the subjeet up a
that some remark which we may make may that some remark which we may mae may
lring purpose to some fellow mau who has
loitered for months in listiess idleness, a lurden to the cummunity and to himself.
In the tirst plaee it is plain that the prevail-
ing methoil of laloring in this state canuot ing methor of latioring in this
make the laborer his own master. A spurt o
work at harvest time and ten months idlenes
 Mith rare exceptions, perhaps, the price of in
dependence is six days' work in the wek and
about 300 days' work in the year. This being so it is continu wous lalar which must be hail to
give the state worthy citizens. The key to the give the state worthy citizens. The key to the
securing of continuous labor is $t$ wo foll, and its obligations rest upon both employer and em-
ployed. The employer who can and will arrange ployed. The employer whe can anld will arrauge certaiu number of men through the year,
IJoth a duty to perforni and a privilege to hon
Thi The laborer who can find an1 opllortmity
employ liis streugth and skill for a simile employ liss strength and shit or a simila
perioul, farfeits his clain to citizenship and i
nutrue to himself if he does not avail himself o it. So much for abstract propmsitions; let
see what arplications can be made of them. see what arplications can be made of them.
There are many ranches in all parts of
 viding lalor ean be hat at a reasonahle price
These developments and improvements. call These tevelopments and improvements: canc of the property or incrase its phoductive power,
and thins the extra labor can be made remunerative to the owner in one way or another. In
some localities there is waste lanul on the ranches whith is now aitogether unprodnctive,
and sometimes this waste land only needs a certain amount of laloor to bring it into profitalile
cultivation. At the rates of wages which arc now ruling it may he impossilhe for the land
owner to undertake this work, but if he could enlist men to to the work when other work was not to be hall, and could find meu willing to
share with him the burdens of the venture suatil the time of frofit cane, the improvement
untle be accomplished. There are many cases, which, in some way, would come under the
general classfication of improvements, and in which the landowner could cooplerate, with the mell who have the power and will to lator, and
could agree to support them while they turned zation. There might he many arrangenenents of this kind malle throughout the state, by whieh
the lahurer could realize a protit for his iuvestment of time and effort ly a share in the pro-
ceeds from the improvements. $1 t$ is of course inpossibie to specify ways in which this conlld
be doue in the gpace which we have for a general comuncnt upon the idea. Bach casc would suggest its own specitieations. What we woukd
urge uppon those fair-nininded landowners who
have pronerty which will repay
 come to them at harvest time, and when they come to them at harest ande, will to whork im-
see a man whose power and
press them favorably, see if there is not some undertaking in which they cau enlist him for the idlo months, and by autholding to him a fair share of the protits which his work may
brings, reclaim at once the man and the land. brings, reectaim at ouce the man and the land.
It is possilhe to give many a man $d$ start in this way. If he has the right stuff in him he will
work long and well so long as he has a show for Wrhieving his independence hy it. livery man
an whose lireast this commendable purpase is awakened is rescued from the ranks of the hopcless tramping brigade, and in the eud the
State will gain a worthy eitizen and bless the tate who gave hint his start in the letter life. We have spoken of the duty and opportunity
of employers, there are obligations on the othcr employers, there are obligations on the othly
side. Few landowners have lank accoults large cnough to pay for dine to pay for the
rates which they are willing to pay ingathering of a crop, nor would the work
warraut the iuvestment at the ruinons rates of interest at which money can he obtained in the
comutry. It is but fair that the laborer, in slack times, should he willing to carry his labor
as an investment in an enterprise whics as an investinent in an enterprise which eom.
mended itvelf to his judgment. He must either
do ingly low for cash, if he wishes his cmployer to shoulder the full weight of the empoypective
endeavor. Agricultural investments, speaking, pay but small percentayses, but they
pre reasonaliy sure of nultinate rete, are reasonably sure of ultimate returns if wisely
administerel. These things should be well eonsidered by the laborer, and he, ou his part,
should regulate his disposition aud require should regulate his disposition aud require-
ments accorlingly. In the system of farming
whicll largely prevails on this coast, the seasons
for labor are short, unless there are new ven-
tures to be undertaken. If a mann can get a stealy job, which will make a man of him the year rulund and promises fairly to give hin
start whieh will make limm master in the end, he will do well to begin low at first. Nost o before we walk upright. And eveu creeping on hetter than tramping upright from kitehen t kithen aeross the comutry nent toward a higher life; the other gression towards the lowest degredation of our state was greiter diversitieation in oed agrieultural proluction. It will be gained i the end if we ean largely. inerease onr ranks of urns now frumers. hats each1 man and makes himself a producer, not only establishes his own indcpendence, hut opens the way for a
loubled number of well-pail latorers, and doubled number of well- 1 laill lalurers, and
blesses the state not only with his own man hood, but hy opening a wider field for athers.
L.et thesc things occupy the mind when twilight


## The Fair Season.

The following is a partial list of the coming fairs. l e shall be pleased to ald to it if read
ers will send us the dates and locations of thei respective exhibitious:
Sin Francisen Menanics', lustitute, San Prancisen,






-th, inellusive distict fair, ne Coikhanu, september ath


 Suta Clara valiey fair, at San Jose, September 30tlo th


Folestry. We have received from (ien
Lel) hac, ('ommissioner of $A$ griculture, a copy of Lel luc, Commissioner of Agricilture, a copy of
report upun Forestry, prepared by Franklin B. Hough, of New fork. It is a massive re
port, filling over cipo pages, and is innhtless a on the subject of forestry. It treats of the orests of this conutry $m$ detail. It cites re climatic and other influences of furests. It gives many hints concerming the growing,
trimning amd transplanting of trees, hedges, etc. Dr. Hough, whom we long kne in in een-
trai New York as 2 student of this sullject, is perhaps the fittest man in the United States to prepare a report of this kind, and we hope the
work may fall into appreciatiug hands in its work may fal into appreciating hande in its
distributiont. There are of course some points introduced concerning which there may. le
some controversy, but the volume will be found a treasure honse of valuable facts and sugges

The lemow Veriena.-The lemon verbena grows luxuriantly in this, State, bunt we are not
aware that it is esteemed except for its leauty and fragrance. We read that "the Spanish lady knows well its value, and treasures and dries for winter use every leaf of it. $1 t$ is wel achies in the world. It cau be taken in two ways, either made into a decoction, with hot water and sugar, and drank cold as a refreseo
and tome, or better still, with the morning or evening enp of tea, thus-put a sprig of lemon and pour the toa upon it; youl will never sup and pour the ta upon it; you will never suff-
fer flatulence, never be made nervous and otdmaidish, never have cholera, diarrhea or loss of appetite. Sesides the flavor is simply deli-
cions; no one who has once drank their Pekoe with, will ever arink it withont, a sprig of
lanon verbena." This is ligh praise. If it be true, this plant has a value which we wot not.
Yetrrisary sirgerry.- In the last report of the l'clusslvania Board of Agriculture is
paper by our contributor, Horace J. Smith, paper
lihilalelphia. . It is called "a plea for veterinary surgery, and
favor of the liberal endowinent of a school of veterinary surgery in the University of Penn-
sylvania. The neels of better general nuler sylvania. The needs of better general nutler-
standing of the diseases of our domestic and farm anmals and the remedies for then; the uractitioners to take the place of the "cow doc tors" to whuse hands our best animals are often cutrusted these are clearly shown. We sincerely hope Mr. Smith may succeed in his of ary sclool in his state. It is a thing which we need in our state, and which we hope the near future may bring us.
Os Fn, - - "The Pumuelo," etc., T. II. MF.
Malva," etc., E. B.; "Wheat aud Chess," M. H.; "Taxation," R. L.; "Bce N.
"San Joaquin Notes," H. E. H.

Queqies and Rephes.

## Passiflora and Elæagnus Edulis.


 haps niore than 5,000 fruits and flowers this. mome
 ircty fleciiduoss shrub with bright grear. It is a very
are silvery white underneath, the sten belng light leather cos sivery White underneath, the stem, belng light leathe
colve. The thas sincthing of the eherry taste, and I
 The branch of edible passion fruit (Pussiffora ur eornows well the frniting proche whic the vine sent is three feet in length and has niue arge frnit, or me at each axilla. We have formerly spoken of the pleasant Havor of this fruit. We notieed a few wecks ago that some of the
fruit was placed on sale at one of our street fruit talls, hut we are not aware whether it finds
The Elornomus, as shown.
The Elrommus, as shown by the specimen sent
by . Ir. (irelck, is a very beantiful shrnb. The解解g the leaves is as handsome as any regetable silver plating we
ever saw, and the cffect of the leaves tossed by the hreeze, the leaves showing alternations of ful in then and silver sines, must be heauticolor, and the frnit quite like a small dark red cherry, spangled with small bronze spots. This spangling on fruit leaves and bark gives rise to
what botanists call "scurfy or leprous," which is characteristic of the whole order Eleagnacece. In this species the spotting is sofine and of such a handsome bronze colver that it deserves a is a natural order of exogenous plants, either ca and being rare south of the equator. They have en tire leprous or scurfy leaves, superior ovary and petahns flowers. Several species indigenons Persia and Nepai bear edme berries. This "huffalo berry" which grows near the uper Sissonri river and bears a pleasant acid frnit this and the Shepherclia connencusis and the Elcot/fnu* urgenten (silver berry of the Northwest), are the only known North American species. Mr. Cirelck's introduction of the foreign species of Eliragmus certainly gives us a very hand alue here as it loes in the iuterior of Asia a ell as in Japan it will have a two-fold claim pon planters.

## A Mastodon's Tusk

 as that, and in order to preserve it something will have
w lle done to make firn for Yon will freally olite me
Our modern dental anthorities do not trea on preserving the teeth of the Mastodon. If such works were extant in his day they have
perished. Were they burned in the Alexandriperished. Were they burned in the Alexandri-
an library? The best we could do was to seek he aid of an expert on "remains," and he tells sthat the best treatment he knows of is $t$ shellae enough is added to the alcoltol to make a thin varnish. This will exclude the air and very crumbly, this would not save it, and per haps it wonld not be worth while to treat it
further, as good specimens are quite frequentl further

Precocious Persimmons.
Eurons l'rass:-As a curiosity I may say only one year from the graft, for I grafted them only one year from the graft, for 1 grafted then
myself last year on the Italian persimmon ( Diospyros lotus), which I believe is a better liryiniana The grafts and buds take much easier. It seems to become a fine tree and the fruit very good for preserves. -F, Gpeles, Los Angeles.
liditors I'ress:-One of my J.apanese per
immon trees bought fron Shiun \& Co. is full simmon trees bought from Shiun \& Co., is full
of blossoms; it is only three feet in hight. It is of the variety known as "Die Die Mawru." Is it a dwarf? Who will explain? I don't ex pect the spring, thereby depriving it of the vigor necesssary to perfect
DERs, Kingsburg, Cal.

Hidrots Press:- Lours of the 3d iu regard jojoba seeds just receired. Aluch obliged for your attention to the matter. Just now the
erou is growing, and 1 do not know that I can crop is growing, and 1 do not know that I can at present procure the amount of seed necessary
to make the test which Mr. Kittle desires; but 1 wilh speak to some parties as they drop in to
see me about it. If the old seeds are not to be hai, will make an arrangement for the new
$\qquad$ Tobacco Growing



Will some experienced reader answer?

The South Pacific Coast Railroad.
There is no one agent which las done as much to render possible the rapid development of the westeru regions of the United States as physial Not only has it developed the physical resources of the minor regions, but by bringing into intimate personal acquaintance people from the remote parts of our immense country, it has done much to to away with sectional prejndice, and that whole class of serious so dangerous to the existence of our govern It is, therefore, with no little pleasure that we record each new move forward in this direction. Of late the narrow-gange system has done much to make possible the extension of railroad part of the those of the large part of the Pacific Coast. We of the vesy narrow gauge roads to our sparsely settled timber and agricultural districts, and for this reason devote som little space to the newest exampla in that direction, the Bay and houth P'acific Coast Jailroad. from Sair Francisco to Santa Cruz, and its route is shown in the accompanying map. The upper end of the road as far a Coast lasilroad, the Bay and of the road the the remainde Coast Rairo the bouth Pacific cers of the oad, though the ottipresent identical and the roads are practically one and the same From San Francisco the start is to be marde on one of the two Newark and ther ferry boats, were built for the company These vessels are to rum to
The Northern Terminus of the At the mouth of San Antonio inprovements of the Oakland Harbor Commissioners, there is an opportunity for a fine landing. A large whart has been built, turn table have beengine and sheds are soo been built, and artesian well 275 feet decp An been sunk and yields acep has ply of tine water. firmly and solidly built the piles being run through 30 feet of tough mud and then through two or three feet more of good hard at present at the wharf at low tide, and four dredgers are at work clearing out the bottom to the depth of 15 feet. An in teresting little feature of the engiueering is the utilization of the mud from the dredging for embankinent. Usually this is
removed by towng the mud removed by towing the mud dischargiug it, where it at least does no good, if it does not oe casion positive harn. The mud here is a very tough blue clay and the engineer in charge, Mr . W. P. Drumm, has built a rail. deep water, and has had the mud discharged from the dredger into the flat cars on which it is hauled to the place where it is needed on the road. It dries oat rapidly and makes a
very solid eunbankment.
Fery solid embankment.
From the creek landing the road runs across the marsh to the residence of Gov Haight then down through the town of the meda, and then along the coast through numerous sumall stations to

The Future Town of Newark to that of Site is very simila to that of Oakland, is almost perfectly level center for the surrounding fertile country At present there are built a round honse, built all the cars uscd on the road. Mr. employs frter has charge of this work, he cars which arc built from the wheels up. The which cork, with the exception of the whecls Francisco. The locomotives are built at Bald The Rolling Stock At present consists of 100 platform cars, 10 box cars, 8 locomotives, and is being constantly in

From Ncwark the road runs across the great marsh which forms the head of the Bay of Sa greater part of the road up to this point is not


MAP SHOWING THE ROUTE OF THE SOUTH PACIFIC COAS'T RALLROAD making connection here with Santa Cruz. The $\mid$ way. It is proposed to establish in this little track is laid and ballasted to this point, and a $\quad$ val. It is proposed to estation for that part of the conntry. through train leaves here at present at $6: 30 \mathrm{~A}$. Here comes the second crossing. From this n. daily, the trip to Alameda being made in 7:30 P. M. Los Gatos is said to prodnce the best flour in the state. It is the ceuter of sup plies for that part of the country. It contain a couple of hotels. The one near the railroad has recently changed hands, and under the man agenent of Mr. Vdrly promises to be a pleasan stopping place. The mountan work proper be bins at hos catos, and several hucs were run before the present and rasible onc wa carricd on under the direction of Mr F Mix, to whose kindness we are indubted for many of our facts. The road fimally selected continues up Los Gatos canyon until at its head it pierces the mountains in several quite exten
sive tunnels. These tumiels are of course ex pensive, but by this means a very moderate
of any special interest from an engineering
standpoint, as it runs along a perfectly level standpoint, as it runs along a perfectly level
country. But it is very solidly luilt, even across the extensive marshes. It is ballasted very thoronghly with gravel from Los fiatos creek ently of the most fertile kind, the grain wa almost everywhere on a level with the tops o the fences, and along the track the wild mus tard grew frequently over the tops of the cars

San Jose,
Where a neat and commodious station is built Thence it runs about niue miles up a gentle ncline to the foothins along Los (ratos creek to e pretty littl
os Gatos
grade of on an average 70 fcet to the mile $h$
been secured from Los Gatos to the summit been secured from Los Gatos to the summit of road runs along the creek for one and one quarer miles. Here it crosses the creek by a comination Howe truss of 87 feet span. Then folthe road. The track most ditncult work on high, shingly bank. In running the preliminary survey the men had to be lowered by ropes in order to establish their points, and of course on snch a steep incline the cut and fill are both extremely difficult. The town of Lexington is familiar to all travelers on the old antal ru\% road as one of the stage stations. It The next mile and a half is a blacksmith shop. The next mile and a half is on a fair level piece
the road has not been definitely located, though preliminaries have been run. The road will Cruz. It will probably on its way to Santa Cruz. It will probably run down Bean creek the spur which will necessitate tunnel No. 4 to about 1,200 feet, and theute tnnnel No. 5, o junction of \%yante creek and elton at th river. river.

## Felton

inus of the Santa Crnz and present the ter It is the center of the great lime industry and the terminus o The Tunnels
Of this road are so extensive that some special mention of them is necersary. We will tak order and recapitulate: Tunne cat; tumnel caved in, now an open nel No. $3,6,1 \overline{5} 5$ feet; tunnNo. 4, 5,800 feet; tumel Nome r, 200 feet, prob a hl No. 5 , ground in which they are built sems, as fal as yct opened to be of nearly the same nature, pened clay slate, firm when firs exposed but swelling on being ting very solid timbering.
The tumnel is arched at the top and its sides incline slightly from the spring of the arch to
the tloor. The distance from the rown to the floor is 16 fee arch is 13 feet. The win of the the floor is 11 . The width of The timber is feet four inches. tufi 'The arch is hy $12-$ inch pieces. Fach is three feet 10 inches on the top and three feet our inches on the hot three fee flat rod of iron rms throngh each of these joints, connecting eaeh set of timbers firmly with the adjacent ones. Behind the ying is placed all around hroughout almost the entir length of the tuunel. This is ture of the ground shing na is quite dry and the the tmmel tumel No. 3 is strongly of the bated with petroleum and one time the whole face of the unnel ignited and flamed up or several seconds. Large num bers of fossil shells have beet found in those excavations. They very much resemble the ham and periwnikle shells found They have been pronounced by Ir. ing to the tertiary period. Tun eet at the north or Santa Clara end is piving much tronble, the ground is full of water and very uncertain. A small drift, six by six feet, has been put in about 160 feet, and it is the in all reached soon as firm ground To. 4 only have been opene and the rest of the tunnel work sall in the future. It is ex pested that it will take at least ad that by the time they down the rest of the road ar down the rest of the road will only will have to be made.
The highest point on the road is the center of tumnel No. 3 level and 690 feet below the rest of the range at that point. The tunnel beds falls three feet n 00 each way from the cen er. The maximum grade on he road is 90 feet to the mile The average grade from Los Gatos to tumel No. 3 is 70 fee to the mile. The maximmo
There are several engineerin eatures which we hope to spea when the mountain work is in the flure when t
veloped.
From what we have seen of the road, we pre dict for it a we hisigg we its monntain scenery will certainly render it one of the most popular roads in the sitate, and we think it will secure all the passenger traflic to Santa Cruz, as well as do much to devclo the industrial resonrecs of this region.
The offcers of the company are as follows A. E. Davis, President and Trcasurer; B. B Minor, Secretary; Thomas ('arlec, Superintend ent; (i. H. IVaggoner, feneral l'assengt Agent.
Tue receipts of the May festival were $\$ 23$ penses, leaving most of the newspaper advertis ing bills unpaid.

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\end{aligned}
$$ Dark and Light Brahmas, Buf

$\qquad$ chins, White \& Brown Leghorns, DorkIngs, Pollsh Ham
burgs, Plymouth Rocks, Game and Sebright Bantams, Bronze Turkeys, Pekin Aylesbury and Rouen Ducks o Inferior Fowls Sold at any Price Satisfaction Guaranteed.
Oircular, to
GEO. B. BAYLEY,

## GRANGERS' BUSINESS ASSOCIATION

Incorporated Feb. 10th, 1875. Capital Stock, $\$ 1,000,000$. OFFICERS AND DIRECTORS.
 JOHN LEWELLING, (T,
 w. w. gray. I. C. STEELE. w. w. gray. thos. flint SHIPPING AND COMMISSION HOUSE Grangers' Building, 106 Davis Street, S. F.
Cousignments of Grain, Wool, Dairy Products, Fruit, Vegetahles, and other Proiuce solicited, and Advances made on the same Oriers, for Grain and Wool Sacks, Produce, Merchaidise,
Farm Implements, Wagons, ete, solicited and promptly attended to.
We do a Strictly Commission Business, and place our rates of Commission upon a faiz
nable the conntry at large to transact business through us to their entire satisfaction.
Consiguments to be marked "Grangers" Business Association, San Francisco." Stencils for marking will b DANIEL INMIAN, Manager.

BYRON JACKSON, Woodland, Cal., manufacturer of
Feeders \& Elevators for Threshing Machines, Horse Forks \& De. ricks, All of which are protected by U. S. Patents


The above Diagram shows the proper position for the Derrick, Separator and Enginc, and the best size Two medium sizad stacks with the Decrick betwee
Touly to be moved one-half the distance. Address
BYRON JACKSON, Woodland, or BAKER \& HAMILTON, San Francisco or Sacramento, Cal.

## IRA MARDEN \& CO.'S <br> BRANDS OF

Coffee and Spices Have no Superior.

## Twenty-Five Years Experience

in tie business on this coast enables then to place on the mariet the yery best

## Ask Your Grocer for Marden's Coffee and Spices.

## thoroughbred poultry.

116 Acres
devoted to
FANCY
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Unlimited Range. Healthy Stock Largest Yards on the Coast.

Brahmas, Leghorns, Plymouth Rocks,
ATS Safe arrival of Fowls and Eggs Guaranteed tan ATFAmphlet on the care of fowls--hatching, feeding, asases and their cure, etc, Ans.
Pacnic Coast. Sent for 15 cents.
Stamp for price list. Addres

WHITE LEGHORN EGGS,
\$3 Per Dozen. From 3 pens of 20 Hens and a
 $\begin{array}{ll}\text { or circular: Address, } & \text { C.P.STONE, }\end{array}$ 35 Mission Market, San Francisco.

DALTON \& GRAY,
Commission Merchants, All Kinds of Country Produce. $404 \& 408$ Davis Street, San Francisco nait Consignments Solicited
C. \& F. NAUMAN \& CO. Wholesale Commission Merch ints, ALL KINDS OF
Farm and Dairy Produce Sold on Commission. $\begin{gathered}\text { Buterer, Eggs, Poultry and } \\ \text { Game a }\end{gathered}$ 231 WASHINGTON STREET, San Francisco (Betwecn Front and Davis,)

DAVIS \& SUTTON,
No. 75 Warren Street, New York

## Commission Merchants in Cal. Produce

Reprrexce -Tradesmen's National Banc, N. Y.; Ell
wangr \& Barry, Rochestr, N. Y.
.

## GRAY'S MUSIC STORE,

No. 105 Kearny Street, San Francisco.

On receipt of the amount in postage stamps, any of th
following pieces will be mailed, post-paid:
POOR LITTLE CHLOE, (Ballad).......hy Luther, 35 ct
kiss the little ones gool night for me,
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OOD NIGHT, FAREWELL........ hy Kuttledge, 3 ets
my dear little home o'er the sea,
by Lavarnie, 35 cts
help the needy when you can,
by Ruttledge, 35 cts.
americus grand marcil. .....by laallenberg, 30 cts. THE LITTLE TORMENT, (Schottische) . Far West, 35 cts.
he republic grand gallop
by A II. Woods, 75 cts.

Send for our complete Crtaloguc of Songs, Duets an
Choruses. EAJ Say where you suw this advertisencnt.
PILES! PILES!! PILES!!!



 muento strcet, (up stairs), San Francisco.
ATP State in what aper you saw this noticc. ©®


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The best Beof Bull in America. The Herefords the For prticulars write to T I Miller, Beecher, Will County, Hllinos.
For Cotswold Sheep and Berkshire Pigs t. L. Miller.

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Breeder and Impurter of the "Crown Prince,"
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 PETER SAXE, Russ House, San Francisco and Los Angeles City, Cal.
\$25 EVERY DAY Is warranted usirg JLZ
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SPANISH MERINO SHEEP!
200 Extra Rams For sale. Yearlings and two-dear-
olls
unsurpassed, quality and condition unsurpassed. Also 100 ewes at
pricies to suit the times
cleus of this flock was from a pur-

 this flock lefore purchasinge elsewhere.
J. H. STROBRIDGE.

200 COWS WANTED.
I WISH TO BUY FROM ONE TO TWO
hundred first-class dairy cows for Jersey R. G. SNEATH.

423 California street


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NOT FAIL
Co send for onr
canaiowitit




MONTGBMERY WARD \& CO.,
2z\% \& 2z9 wabash Ave., Chieago, 112.
London Assurance Corporation, OF LONDON, ENGLAND.

Established in 1720.
Cash Assets
$\$ 14,993,466$
Western Assurance Company,
OF TORONTO, CANADA. Incorporated 1851.
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CROSS \& CO., Gen. Agents, San Franclsco

## CHOICE PIGS FOR SALE.

I have a few fine Lancaytershire pigg for sale, now stock. Address GRANT I. TAGGART,

Elghth Street, near Broadway, Oakland

How to Build Wooden Rails for Steam Roads.

As we have lately deserihed, there seems quite a disposition now to build wooden railways for stean locomotives in regions where
wood is pleuty, and the expense of iron eannot be borue. This has becn so far reduced to practice that lastern loeomotive builders are aunouneing styles of loeomotives which aro especially adapted to nse on woodnc rails. One of nent of the best timber to use in these roads ment of the best timber to use in these roads
and how to lay them. The kind of timber to an lies It is said tha the best wood is maple, laid with the heart 1p; form of wooden rail is a stringer cht in 16 to 00
feet lengthe, and of sineh cruss section as the feet lengths, and of sine cruss section as the
kind of wood or weight of cngine requires. Six inches square stringer is the size we would
generally advise, althonghl five inehes faee by seven inches depth is as good. Fonr inches
face by six inches depth, or tive inches siflare wood is good; still smaller sizes may he used feet or two and a halif feet hetween centers : for
large stringers, four feet between centers will answer. When worn out on the topl the stringer
may be reversed, and when again worn may be The ties. are easiest fitted and laid if made
uniform, and of a bont the same size lunber as mernorn, anct of abont the same size funber the rails; six inches square is heary enongh.
Any cheap lumber riot specially liable to deeay
will do. Ordinary hewn ties may be useci, but not being uniform are less con-
venient for entting out recesses for ails. They should be at least three feet longer than the width of the
track between rails. track between rails. The ties nust be cut ont accurate-
ly and nniformly to receive the rails. he recesses should be abont three inches deepl, and he at the top fice
of the tie au inel, and at the buttom of the reeess one and one half inch wider than the rail. The inner faces
of the recesses are perpentieular, und the distance hetween them ix
the gauge of the track. The lottom of gauge of the trank. The lothom
of the recss should le levcl, and or the striuser for the stringer.
or better, of ends of stufll left from rails, are driven on the outsides of
the rails. They are made of right shape to tit the space, left: the reason for making this space wider at the
bottom than at the top is to keep bottom thall at the top is to keep
the welges from workiug up, so that the rail may he held securely
in place. to break joints on the ties. Buth stringers shonld not hreak joint in the same tie; the stringers are sıme-
tines sawed off diajo tally instead of perpendicularly, oo as to be lappped
and spikeld together. The lunber ior a hard pine wr about 4.50 per mile.
With auother oadt the auother stringer is made of wooten
hemlock or any cheap lnmber, and a maple
strip four to tive inches wile and wo and oue-half to three inche spiked on to the stringer. By this pian without taking up the stringer. This maple strin may e replaeed hy a 1 iron rail consider-
bly lighter than would be required if laid direetly on eross. ties. We
thiis instead of strapi iron.
A woolen rail is very slippery when wet, and weather. On very bad eurves and steep yrade a wooden rail is impractieable, and iron must be used.
the power friction useful for traetion is less, and the flange
frietion is frietion is greater. Locomotives for wooden
rails require to he very strougly built and to be
evenly balaneed; the weingt should bo the drivers larger than for the same size eylinders on iron rall.
fienerally speaking we would dissuade any one form laying a wooden rail. 1 ln easess where
lumber is chesp, and ion very lumber is chesp, and iron very dear, it may be
andwisable to operate a wooden roal, as for instance where a eheap inprovement on an ordin-
ary comutry wayon road is needed. To do any considerable business on the very best wooden
road that ean be built, will in the words of one of our customers who has tried the experiubing animal powery for hauling ou a wooden
rail, if content not to greatly iuerease the load, may effect a very eonsiderable saving by nsiug a locomotive; but for transportation
upon a cale of any magnitude, wooden roads
are are very unsatisfactory aind almost fimpraetica.
ble.
Tuk (irand Jury of Ventura county have
found true bills for murder a arainst found true bills for murder aazainst sprague,
Jones, Carlee, Lord, Mcart, Hunt and Jones, Carlee, Lord, MeCart, Hunt and
Churchill for the killing of T. Wallace More, Churchill or the killing of T . Wallace More, The trials will commence on the first Monday
in July.

The King Patent Portable Engine. The use of steam for various agrienltural pu poses is continnally increasing. We present herewith a fine engraving of the King Patent Portable Engine, which is being rapidly introluced thronghont this coast, and which is beeoming very popular with all who are in need of a cheap yet satisfactory steam power
This eugine is peenliarly adapted to all the various industries to which small en.
gines ean be applied. It is so simple that gines ean be applied. It is so sinple that
lie eonmmon laborer can manage it, and yet so strongly constrncted as to resist the severe
abors and abuses frequently imposed upon it by ignorant persons who will not take the pains of beoome aeguainted with the nse and managcAs will be seen by Fig. 1 of the engraving this engine occupies but a very smail space. It
s made of four different sizes, ranginy from two
on twelve-horse power. It will be seen that the ngive is not eonineeted directly with the boiler, engiue is not emineeted directly the expansion or onltraction of the boiler. As the engine is ver-
tical, it will at once be seen that all side we is avoided. The Judson governor is used on
very engine, and so thorongh is every part of very engine, ande so tharongh is every part of is seenred at a very low price. By those who stated that for use in irrigating the farn lands f this coast this engine is almost indispensable. xperiment that a No. 2 King engine will irri gate 40 acres of orchard, raising water from 2.5


The infleence of Heating on Wbeat.Athough the wheat produneed in this State is so
thoroughly dry that there is little danger of the heating experienced in other eountries it the heating experienced in other countries, 1 rencl investigators as to the effeet of the heat which moist new grain stored in bulk, evolves. When new wheat is placed in an open vessel or
in heaps on the floor, a spontaneous heating will soon take place, and fermentation will be sin ; that kind of fermentation or ehemieal chauge which invariably precedes the sprouting
of wheat. A vinous smell will be disengaged, of what. A vinous smell will be disengaged, and this smelh win soon wecome acelic, woil we entirely spoilt and unfit for ordinary milling purposes It is therefore clear that in inost European climates it is impossible to keepnew wheat eithcr in lermetieally close vessels or in lreaps, with a constant aceess of air, before the water of vegetation or uncombined water which it eontains has previously been expelled. The proportion of this water of vegetation must of neeessity vary according to atnos mined pretty aceurately and luhme, ve dete some experinconts on the subject the reuld which is on the whole satisfactery Some two years'old wheat and some new whoat were submitted to the same treatment. They were first placed or a space of 24 hours in an oven heated to $47^{\circ}$ 5 C ., say about 10 above the temperature of the warmest summers. They both lost 1.32 , or tare of the of their weight. The tempera a portion of the laving been raised to was left duriug another 24 hours, and their respeetive weights were lessened by 1.16 , or
$0.062^{2}$. These wheats were then able ground. The new wheat germinated and grew well; the old wheat did not grow at all.
Lecture or the Olive, - We hear it re ported that Rev. Dr. Bleasdale, late of Anstra-
lia, and who prepared a letter on paeking grapes

## A INVENTS AND NVNS.

List of U. S. Patents Issued to Pacific Coast Inventors.

From oppicial Repaptg pog tir Minisa and Sciestipic
Presb, Dewey By Spectal Dispatch from Washington, D. C.

## ferk exdino May 28 th.


Buwen, Silver cily, I. T.
S.aw Mil Head Blocks, - James Brett and Bethune Perry, Albinn, Cal.
 Mop Wrivarrs. - William Hasa, Walla Walla, W. T.
Fritr Pimtive Machise - Augustus T. Hatch, Condia, Stwisa Mismine Tables. Samuel Hill, S. F.
Tirb setrers.- Johat A Miles, Kio Vista, Cal
Vextilaturs.-sulathiel s. Thompson, Sacramento, cal
Fire Escarks.-Ira D. Cross, S. F. Wrenow Srarks. George L. Reynolds, Oakland Tawn
ship, Cal Winpow, S.R
ship, Cal.

## Re.Issters

veralls, Jemiers and Garmests of Outwide Weak,
Berthold Greenebaunt, S. F. \& Carroll, S. F.

## Notices of Recent Patents.

Among the Patents recently obtained through dey Co. s Sclentific Press Amcrican and oreign Patent Agency, the following are worthy or mention:

Self-Tapping Can Fonnel-A. W. P. Ladd

the king patent engine. 60 feet, at an expense not exceeding 81 per day,
These engines are now being mounted on wheels,
so as to make them stiil more convenient for farning purposes
Yig. 2 reprcsents the loiler used by the King engine. Every boiler is tested at a pressure of
350 ponnds to the square inch, before being placed on the market, and every engine is steak-run in order to see that it is perfcet.
Taken as a whole the King engine and boiler are models of compaetuess, and for farm usc, for mining purposes, printing offices and all of the ighter work where steam power is used, it an
wers every purpose excellently. The ageney has recently been removed from 250 to 327 Market steeet, where the different sizes ean be
seen. Cireulars containing full deseriptions of this engine ean be had Ly aldressing, J. B.

Berkrliy Grmasiont- - The success of this selool during its tirst year has beeu very eredittory to the friends of good schools generally. was so well thought of by the community that 93 scholars have been en olled during the year The oljeject of the sehool is to furuish thorough preparation for the Uuiversity, without disre-
carding general instruetion for those who have garding general instruetion for those who have aim is alparent from the faet that 13 pupils inations to the tered the seientifie course, six the literary, and one the elassieal. One of the 13 was a young lady. The wide field covered by the institution is apparent from this enumeration.

WIE Territorial Enterprixc says that General announcement, be a candidate for the United resident of California.


BOILER FOR KING ENGINE
for a reeent issue of the Press, will soon de liver a leeture on the olive, probably at Mar lias been invi Costa county. At all events he and we hope he will consent. Dr. Pleasdale is fitted by his long residence upon the Spanish penimsula and his study of fruits grown there, oo give us praetical information contecruing existing facts and methods. He call give inter not in our lancuage and we hope the 3lartine invitation will draw him ont. We have long known of him by Australian reports as a leading authority upon fruit culture, as well as a mau of wide scipntific aequirements. The leis. ure whiel he inay have during his stay in this
State conld be employcd with nueh advantage to us it he would consent to lecture npon the topies upon whieh he is so well informed.
. Shasta Codnty-The crops ou the Reading raneh are very good, thus proving the eapaeity of the land in both wet and dry seasons. A party of gentlemen from Alameda county, including our eorrespondent, Mr. Shinn, recently risited the rauch and gave it a thorough exam inatiou. Thcy were highly pleased, and one geutleman purchased 300 acres near the town louse orchards, aro arriving daily in Shasts City: Mr. Ogburn, of Osburn's ranch, on the road to shingletown, has good ronnd fall ayples, of the Tulpelioeken variety, still in eating order. Give us mountain fruit
A monwamas robbel a man named Horton between Grass 1 alley and smartsville, and while attempliting to rob a second man was over
taken and eompelled to take to the bushes leaving his horse and aceouterments behind

## W

Whi, Collen Buyanf, the poet-editor, died F. This deviee, which the in ventor calls a self-tapping eau fun-
nel, consists in the eluployment of nel, consists in the employment of a
tapering or conical reeeiving vessel, laping a suitable diseliarge vipe or nozzle, aud provided with a eutter or picrcing device so that a can may be placed apoon it and its contents dischargcd into the funuel. It is
simply a sort of slallow dish, made simply a sort of siallow dish, made sort of nozzle of suitable size or shape to enter a reeeiving can. This funnel-shaped dish is set on top o the reeeiving ean, and has verical it. When it is desired to pour a of eoal oil for instance :nto the receiving can, the ean of oil is set down on the dish, when the cu:ter pierees it aud the contents run into ing can. The device the ruceirtapping ande cerice is useful for contain coal oil, turpentine, aleohol or other fluids that will flow through a funnel F. Mr. Hansens refer to that class of bels known as sofa beds. The invention consist in a norel coustruetion of a hinged seat and baek whieh nuford in op posite directions from the main porhaving its length transversely to the direction of the seat. The back hen folded up to form a sofa it maintains The arms on ond and forms a strong brace with reversible pieces to reeeive the upholstery, and these may be turned over, so as to prevent the upholstery from touching the floor when opened. One of the arins is pro vided with an extensible net to form a pillow at
the side, if it be preferred to make np the bed the side, if it be preferred to make np
in this manner instead of transversely.
GATE.-A. G. Rockfellow, Ashland, Oregon. The patent covers an improved gate, whieh can and elosed by hand or as a farm- gate, to be opened and closed by cords leadiug to aud over phlleys at a distance from the gate. The object
of the invention is to provide a gate with of the invention is to provide a gate with adjnstable bearings, liangings and tastenings,
which can be buiekly and easily which can be quiekly aud easily adjusted to the varying conditions of the gato in wet and dry
weather, so as to always preserve its freedom of weather, so as to always preserve its freedom ot
motion and operation. The bearings and fast motion and operation. The bearings and fast same time ornamental, so that the gate presents a handsome appearance and is convenient to operate.
Comaercement at the University. - The Comulencement exercises at berkeley on Jun Sth were largely attended and very interest-
ing. The essays and orations of the graduates were creditable. Formal transfer of the Law Colloge, founded by the beneficent gift of Judge
Hasti Hastings of this city, was made. The Judge the part of the trustees was made by Mr Bishop. At the alumni meeting an able ad dress was made by Samnel Willians, and a poem
was read by Mr. Barker. The new building e ing finely, and will soon be enelosed.

Rusr. - A gentleman lately down from Roberts island informs ns that the grain is
suffering somowhat from rust.

## S. F. MARKET Report.

$\xlongequal[\begin{array}{c}\text { Nort.-Our trade review and puotations are prepared } \\ \text { on Wednestay of each week (our publication day), and are }\end{array}]{\text { no }}$ not hatended to represent the state of the
urday, the date which the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE. ETC

Sar Francisco, June 12th, 1878 .
The dulluess of trade is the general remark. The dulluess of trade is the general romark.
Even the agricultural implement dealers are Even the agricultural implement dealers are
experiencing a lull from the hurry which has experiencing a hull from the hurry which has
pushed them for the last two months. It neeis pushed them for the last two monchs.
time to get the harvest in and to realize some-
what from its sale before the peopple will have what from its sale before the people will have
time or money for large purchasing.

Range of Cable Prices of Wheat
The conrse of the Liverpool qnotation for days of last week has been as recorded in the following table


To-day's cable quotations to the Produce Fxchange compare with same date in former years as follows:

## The Foreign Review

London, June llth.-The Mark Lane Express says: Speaking generally, the appearance of all
cercals is bulky. The tendency of so mueh moistnre has been to develop the Whcat plant at the expense of the grain-producing power, and,
however favorable the weather may be during however favorable the weather may be during
the next two months, appearances do not favor the production of more than a bare average The snpplies of English Wheat have becn moderate, both in country markets and Mark Lane to 2 s per quartcr, a reduction which growers to $2 s$ per quartcr, a reduction which grower have accepted with manifest reluctance.
Foreign Wheat has been coming to hand frcely. Trade having been very dull, most of this Wheat has goue into store, and a material in-
crease will probably be apparent at the end of crease will probably be apparent at the end of
the month. Aınerica, Russia and Germany the month. Ainerica, Russia and Germany
have been the chief sonrces of supply, and from the two countries first named we shall receive heavy imports for some time. India may also resnme her prominent place in the list of grain-
supplyiug territories. As regards trade there supplyiug territories. As regards trade thcre a stronger feeling in regard to foreign Wheat at per quarter lower on the week. Iuquiry is per qnarter lower on the week. Luquiry is
chiefly from conntry millers. Sales have been to a great extent in a retail way. Values have declincd for all varieties of cercal produce, now that the Congress is definitely settled upon, politics has ceased as a factor in the conrse of prices.

Freights and Charters.
There is nothing doing in Wheat charters. The rate on Grain to Liverpool is about $£ 210 \mathrm{~s}$. The ship Gov. Goodwin has been chartered for
Grain to Cork, with the Liverpool option, Grain to Cork, with the Liverpool option, to load Wheat, 22,764 tons shipping; loading general merchandise, 10,375 ; disengaged, $50,-$ tons.

## Eastern Grain Markets

New York, Jnne 8th.-Accouuts from growing crops leave little to be desired. Wheat harvest is making rapid progress in the north,
and the winter crop is said to be virtually safe. The uusettled coudition of the Grain markets, cousequent upon the varying phrases of the political situation, has interfered to some extent with the export trade, thongh tbere have been these bave caused a slight stiffening of prices. No. 2 Spriug Wheat ou spot has sold at $\$ 1.10$ @. 1. 12
for July and and August delivery. These prices are a little lower than for Wheat on spot. $46 \frac{1}{2} \mathrm{c}$ for export grades. Fiour has ruled steady at \$4.25@5.50 for export brands, with a fair business. Large shipments are iu progress to
Brazil ports, owiug to a partial failure of the Brazil ports, owiug to a partial failure of the
cereal crops of that country. Some Corn is also being shipped to the same destination. Chicago, June 8th.-Grain markets duriug out closing at decidedly advanced prices under slackened recipts and bad rainy which has discouraged farmers ou low lands July Wheat sold at 921 (6i 965 c; Corn sold, $33_{4}^{3}$ @37 $\mathrm{c} ;$ July Oats, 233.@24c; July Rye, 51(e) $2 \frac{1}{2} \mathrm{c} ;$ Barley, $46 \frac{1}{2} @ 49 \frac{1}{2} \mathrm{c}$.
 2

## Eastern Wool Markets

NEW York, Jnne 8th.-No signs of improve.
ment can be witnessed
short time be mucb lower than at the present. The opinion that prevails among dealers, bow-
ever, is that the bottom has been reached. California Spring has realized 30 c for a small quantity of extra choice, but this fignre is an ex Sales for the week include 106,000 the Spring California, 17@30c; 50 bags scoured Fall do, $51 \mathrm{c} ; 38,000$ ths Western Texas, $16 @ 22 \mathrm{c} ; 15,000$ tbs Spring Eastern do, $23<27 \mathrm{c}$; 40,000 ths bor der do, 18@21c; 14,000 lhs X and above Ohio,
$36 \mathrm{c} ; 3,500$ tbs coarse washed do, $32 \mathrm{c} ; 3,000 \mathrm{tb}$ unwashed do, $23 \mathrm{c} ; 2,500$ Ths super pulled, 36 c
Boston, June 8th. - Wool is dull, manufa Boston, June 8th.- Wool is dull, manufac
turers buying only for immediate wants, quota tions are almost entirely nominal and sales any extent conld only be forced at low and unarriving, but as most of these Wools come in high cost holders find it difficult to place them except at a loss, and but a comparatively small quantity has yet passed into the hands of manufacturers. Machinery is being stopped in all directions and manufacturers are determined to
reduce the quantity of goods on the marke This means smaller consumption of Wool and any improvenent in prices can scarcely be
looked for at present. Holders are anxions to looked for at present. Holders are anxions to
close up old stocks. Delaine and combing fleeces are quiet, and prices entirely nominal New Kentncky is held at $33(635 \mathrm{c}$, but thes prices are above the views of buyers. Sales include Pennsylvania and Ohio XX and picklock at $36 \frac{1}{2}(a .38 \mathrm{c}$. Michigan, Wi fleece, 322c; delaine and combing, 40 (1 41 c . washed combing, 25)(34c; unwashed fleeces, clothing, 25@2712 c, Oregon, 18(a.24c; Texa $16\left(12.5 \frac{2}{2} \mathrm{c} ;\right.$ Utah, 20 (a.25c; scoured, $53 @, 78 \mathrm{c}$
super and $X$ pnlled, 25045 c , California Spring super and $X$ pnled, $25(@ 4 \mathrm{c}$; California Spring,
$16(30 \mathrm{c} ;$ Fall, 171 @ 181. Sales of domestic for the week aggregated 739,900 nounds.

Domestic Produce.
The following table shows the S . F. receipts Domestic Produce for the week ending at
ooo to-day, as compared with the receipts of prev to-day, as
previous weeks

Flour, quarter sacks.
Wheat, centals...... - 4

Bheat, centals,
Barly, centals.
Bcans,
Beaps, sacks.
Corn, centals.
Oats, centals.
Oats, centals...
Potatocs, sacks.
Onions, sacks.
Wool, bales..
Hopss, bales.
to
BAGS-Prices are firin but unchanged. Sales to go to the interior are quite large. Stocks centration yct.
BARLE - The first lot of new Barley, 1,83sks, has arrived, during the week, from Santa Monica, Los Angeles county. It was fair qual
ity, but dark, and sold at 80 c per ctl. Anothe lot of new Barley from Hill's Ferry is reporter received at Vallejo, which is better yuality
than carly Barley generally. The approach o the new makes hoiders of old Barley anxious clean out, and prices are somewhat easier.
Sales: 1,200 sks Bay Feed at $\$ 1.02 \frac{1}{2} ; 300$ Coast at $\$ 1$; and 3,000 ctls Brewing at $\$ 1.05 ; 1,000$ ctls light Brewing sold at $\$ 1.02 \frac{1}{2}$, and 310 a slss choice Feed sold at $97 \frac{1}{2} \mathrm{c}$ per etl. BEANS-Beans are in good demand at tbe receut advanced rates.
CORN-There is still a demand for large lots for Mexico, and the supply comes chiefly from the Southern coast steamers. Prices are, about the same as last week. We note sales: 200
sks fair large Yellow at $\$ 1.97$; 250 sks large sks fair large Yellow at $\$ 1.97 \frac{1}{2} ; 250$ sks 1 arg 375 bags large Yellow reported at $\$ 2$ per ctl. DAIRY PRODUCE-The situation is un
changed and prices are stationary. Occasion changed and prices are stationary. Occasion-
ally a box is sold as high as 26 c , but the general trade is below 25 c
changed.
FLED-A decline of 50 c on the ton for Bran is the only change in ground Feed. Hay is unchanged. Cargoes of new Hay have sold at
$810 @ 12$ per ton. Two cargoes new Oat sold a $\$ 11$, and one of old Folunteer at $\$ 13.50$ per ton FRUIT-Our table shows a geueral drop on Fruit prices, as the novelties are bccoming
common. Morc Tahiti Oranges have come in making $2,590,000$ thus far reported this season Pinc Apples and Bananas are out of the market Apples aud Pears come by the basket, cheap and generally poor.
HOPS-Another drop is recorded in Hops, as finest California, now on band, are being bales at this rate ic Shippers bold their price a 4c. Emmet Wells reports the New York market, for the week endiug May 31st, as follows: time of year. The shipments abroad, this week, exceed the receipts by 280 bales. Shoul this eondition of affairs continue, the supply here will soon become exhausted and mor stock; but we are too near the new crop an give hope for a very marked improvement in values. Quotations: New Yorks, good to prime $8 @ 10 \mathrm{c}$; New Yorks, low to fair, 5@7c; Eastern $5 @ 8 c$ Wisconsins, 5@8c; Yearlings, 2@3c

LIVE STOCK-Live Stock are arriving in
arge numbers. The Butchertown corrals are full. The Cattle are generally in fair condition Most of the arrivals are purchased in the coun
try. There was $\$ 15$ a head two Thear-ollds, but the head bid on a lot of poor two-year-olds,
at last accounts
OATS--Oats are a sharlc easier and dull. Wै note sales: 175 sks good Oregon at $\$ 1.50$, 150
sks at $\$ 1.40,200$ sks light at $\$ 1.35,460$ sk and 60 sks do at $\$ 1.50$, 500 sks ordinary Feed light Feed sold at $\$ 1.32 \frac{1}{2}$ ti ctl. ONIONS-Good Onions from
selling to-day at $\$ 1.12 \frac{1}{2}$ ctl.
POTATOES 12 eti. arriverl and sold at $\$ 3.25(a \$ 3.50$ ctl. Early Rose and Halfmoon Bay are arriving more free-
y and have declined. The top price for Early lose have declined. The top price for Early
Rose is $\$ 2.50$, and that is for choice lots in PROVISIONS-Fresh Meats are quiet, with Our list of Hams, etc., shows a marked advance in sympathy with the jump upward in the East raised from le to $1 \frac{1}{2}$ cts
all new fow
WHEAT-Heceipts are very small and sales proportioual. Salcs: 100 aud 30 tous Walla
Walla, at $\$ 1.70$, and 50 tons poor smutty, $\$ 1.60$ ip ctl; $10,000 \mathrm{ctls}$ good milling, deliverable her iu 10 days, at $\$ 1.80 ; 4,000 \mathrm{ctls}$ choice milling do at $\$ 1.67 \frac{1}{2}$, and 400 ctls very poor at $\$ 1.62 \frac{1}{2}$ b lelivery iu July has been made at $\$ 1.65$, but we do not know anything about the transaction amount. There was sold $300, C 00$ ths, a straight lot of Northern, but the price is withheld.
Aside from this probably not 200,000 ths wer sold during the week. We hear of the follow ing sales: 17 bales doan Diego, 15 c ; 9 bales do, $10 \mathrm{c} ; 2$ husa, 1 cic; . bales do,
bacramento, 18 c .

## DOMESTIC PRODUCE



## RETAIL GROCERIES, ETC.



FRUITS AND VEGETABLES.


Gold, Legal Tenders, Exchange, Etc. Corrattod Weekly by Sutro \& Co .
 Gont



Signal Service Meeteorological Report.

## Week Ending June 11, 1878




 Total min duriny the semson, from July 1,1377 , 3518 in.

Farmers I Farmers 11
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ive than at present. Bcsides three lious already meuve than at present. Bcsides three lious already meu-
tioned, six mouster iiving alligators, seceral iguanas and a boa-constrietor have just been added. Now stars aro
constantly engagcd for the Pavilion exercises. Rates of
admission as usual.

Messhs. STEiswat \& Sons were honored by tho follow
ing resolutions embodied in tho report on pianos, at the ing resolutions embodied in tho report on pianos, at the
Yienma Exposition:- "In regard to thin Ancricandivision,
it is much to be deplored that the celebrated patis inaugit is much to be deplored that the celebrated path inaug-
urating frm of Steinway \& Sons, of New York to wbolu
the entire piano manuafucture is so greatly indobted, has
gin no entire piano manu
not ben represented.

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Porthille Einginfs. - Mr. II. W. Rice, inventor of Rico's Straw-burning Facincs, is giving his personal attention to machine manufacturing and jobbing, in S. I', as will he
sech by his altertisement in this paper. He disposed of his patent risht on the Straw-burning Fingine some timo
ago. in reiorence to the esgential iron work in the Stoinway
piano, the jury noted in their report, "highent pericction
finisll in workmmenthip, the
 the spluare centimeter, min mequal
tance to the pull of the strings, ete.
 they wish to dispose of, will pleaso addrens this office,
stating price, sizo avd conditi.ni.

Asiy Phomorkspukic havily a largo Camera Box for


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Volume XV.]
California Wild Oats.
EDrons PREss:- I send you hy express a sample of wild
oats which I selected from our stock range. We Whave several hundred acres of this kind of feed wiec stands as
high as the cattles hack, with a thick undertrowth of
 , May 6 tl
It is some time since we received the sample alluded to in the above note. We desired to pic California growth, and this occasioned the delay. The sample received was between seven and eight feet high, and there were 17 stems from a single seed, the stcms being considerably thicker than a lead peucil. Although the specimon as shown in the engraving is a fine one, it
is not au unusual growth for the wild oat when it has a favorable situation. The San Luis Obispo South Coast reported the other day the hight, and were not clipped very close to the ground either." In earlier days the growth of and lights are reported which a man, riding along on horseback, could not see over
Dr. A. Kellogg informs us that the wild oat is to all appearances indigenous on this coast.
Its wide distribution could hardly be otherwise accounted for. For hundreds of miles together in the early tines the country had the appear-
ance of a vast cultivated grain field. It reached ance of a vast cultivated grain field. It reached
from the eoast over the hills far away to the interior over the plains; extending even to the foothills of the Sierras. The growth of wild oats in the spring and early season presents to
the stranger one of the most strikiugly characthe stranger one of the most
teristic features of tlis coast.
The plant is admirably prepared for self.preservation and extension by the coustructivc
mechanism of its beard, its twisted and clockpointered end by which it burrows or travels to find cracks or crevices in stiff cracky, black
clay or adobe lands. Thus it secures itself against greedy enemies or more greedy consuming fires.
The wild oat is very valuable for pasturage and hay. It is highly esteemed for horse feed especially, and livery men are generally ready to pay an extra price for clean will oat hay
properly cured. The trouble is yencrally that properly cured. The trouble is gencrally that elover, etc., which horse feeders do not desire. The wild oat

Formign Wines.-Lividence accumulates that those who use foreign wines are dcaling with. a very uucertain quality so far as its purity is con-
cerned. We learn from the London Farmer that after sponding mnen time and trouble on the analysis of so-called "Rhine wines," offered
for sale by one of the largest houses in Cerfor sale by one of the largest houses in Ger
many, Dr. Tauchert, of Halle, has arrived at many, Dr. Tauchert, of falle, has arrived at the uncomifortable conviction that they contain grape. They are cleverly compounded of certain salts and aromatic chemical principles, together with acetic and hydrochloric acid in four times as large a proportion as is ever met with in natural wines.
Parlor and Porch.-Those who followed our description of the ground plan of the little cottage of which we gave all illustration last week, may have in that credic or an achitect ural innovation, in that the parlor was plaeed side the walls and in frout It is true that we have been in parlors so stiti and sellom opened that we should have been more comfortable out of doors, but we had no sinister designs in planning this cottage. The trouble arose from a
transposition of the fignres in the diagram. No 2 should have been placed in the front room, and No. 5 outside the walls and in the rear.

Tie Eytomological Report. - We learu from an Eastern exchange that Prof. Riley, the Government Entomologist recently appointed gaged during the present week on the last pages Commission reporer the Hayden Entomological bricf paper upon the sulbject read by the l'roecently met in Washington, attracted an attenforthcoming report.

SAN FRANCISCO, SATURDAY, JUNE 22, 1878
results with the grapes na
pleased to hear from them.

The Scuppernong Grape.


 The success of the Scuppernong grape is such that it had hetter be scit here exceeding growth an a miori indication of its failure under our systen of culture, but more than this the practical tests which have been made of it are the liquid tos fr. per cwt. and will take back

## CALIFORNIA WILD OATS-Avena Fatua.

uniformly unfavorable to it so far as we are in- the barrels and injectors; it also furmishes the fromed. (ieneral Neglee has hat the scupperor 12 years, and has given it every possible advantage to induce its success. He pronomnces it a perfect failure. In some way it is so illy
adapted to conditions here that he has not sccured wood on the vine thicker than one's hittle fiuger. If any of our readers have had different

Upon the subject of grapes we notice that the papers say that Governor Irwin has received
from Commissioner Le Duc packages of seed of the lenish grapes for distrihution in this State. We can hardly see what is the nse of sending go into experiments for new varietics.
chloride of potassium, the tonic for the vines, the rate of 12 fr . per ewt. This salt ought to be mixed with the ordinary manure, or with earth, and applied round each stem; $2 \frac{1}{4}$ ths. of that the winged bug has a winter egg, depos ited noder the bark, adhering to the latter and ing the vines, when not too young. This treatment prevents the products of the mial eggs from creeping rootwards in July, and does not affect the luxuriant vegetation of the vine, Another enemy of the vine is the suail. This voracions depredator is disposed of by powder lime.

Phylloxera in France.-Acording to
French correspondence the wail against the phylloxera increases rather than diminishes, and plans for combatting the insects abound.
The Geneva alleged cure for destroying the de vastating bug, where liquified sulphurous acid is employen, costs, with all accessories, about
16,000 fr. per acre ! The Paris \& Lyons Rail way Co . declares it has full confidence in the use of sulphiret of earbon; the iujections ought to take place at two periods, between December and Marcl, aud from the last week in May he liquid 2 of per ewt. and will take back


## The Timber Land Question

As there has been some complaint in certain sections of the country abont the policy adopted by Secretary Schurz for the protcction of the timber on the public lands, the Secretary has addressed a letter to Congressman Page, explaining more fully the views eutertained by the Department of the Interior upon that subject. $p$ to this time, partics cutting timber have bensureyed lands of the Government, ggravan garded as trespassers, and, in some While this nvolves, no doubt, a great deal of hardship, the letter of the law, as it now stands, leaves the public officer no alternative but to proceed circumstances under which these depredations upon the public property are committed. On this point, Secretary Schurz very properly may be attended with much hardship in the case of miners and scttlers, where the lands have not yet been surveyed, and timber cannot therefore be obtainca from the crovernment by purchase, still public officials cannot treat the only proper way for relieving these people existing chatition the law, adaphog which he has recommendel and which will be accomplished through the new enactment by Congress, of which we print a full copy upon another page of this

While this view of the question eannot be gainsaid, it would seem as if the Secretary might justly have claimed so much discretion in the premises as would have warranted him in which the farmer and miner take from the pubtheir own individual use, that is to say for fuel, their own buiding the construction for flumes, sluices, etc. Where partics have rone into lumsluices, eta. Wering, making merchandise of the Government timber, they shouk nnquestionably be stopped; more especially where they have conducted this business, as has often bcell the case, in a dcstructive and wasteful manner, nor should even the farmer or miner be permitted to help him-
self to this Government timber in a reckless way.
If the monntain forests possesscl everywhere the property of certain and rapid self-reproduction conmon to those of the their caremp preser atio is wot the case in the less moment. But this is not the case it will arid a very long time before the timber there can be replaced, the original growth being almost everywhere comparatively stunted and scat tered. Once across the Sierra and we see no more 'the thickly standing and stately troes characteristic of the scean-facing slope. The summit of the great snowy range marks the line where the forests begin to dwarf. Last of this the trees are smaller, more scattered, and the timber of at poorer quality. They are also of a slower growth. Broad valieys and vast treelcss plans intervene betwecn the found. The minon which alone any timber is found. Ther are the ing states and errorled sections of our entire mostly poorly only the regions of the I'latte and the staked plains of western 'Texas. 'The plan of protecting the forests on the fovernment domain should therefore he rigidly adhered to. The policy foreshadowed in the Sargent Timber Enactment is a good onc. Surveys sliould be extended as rapidly as possible in order that partics desirous of purchasins thes wooded ands may he able to do so. This accomplishcd, the Government shouk guard against Beyoud tresp it iss in give itself no further trouble. With this it nced give red to private possession, there will be an end to the wastcful use of timthere
ber.

Cxumbrors ay ine state Fair. - The atten tion of exhibitors is called to the rule adopted by the state Agricultural Society, that no entries will he received, either at the park or the pavilion after tive or the Fair of 1878 . This Scptenber 16 th, for the Fair of 1878 . Thi
rule we are informed will be rigidly adhered to.

Correspondence.
an Luis Obispo County Notes.-No Einitors Press:-Two years ago, Mr. S. 11 1)avidson and Mr. Plectcher (a neighbor) came to the conclusion that their dairy stock was not mproved stock becane a desideratum. A Bast, traveling throngll the States of Indiana, Illinoss, Kentucky, Oliio and Missouri, insyectiug some of the fincst herds of the different value of each for the purpmose desired. Th hreed that would yichd the greatest number of
pounds of butter of the best quality was what he sought, and after much observation and con-
sultation with goud anthorities, he finally dctermined upon the Jersey as more fully possessing the desired qualities than anything else

## In the month of March, ' 76 , he purchased

 from the fine herds of Messrs. Serviu, H. Bakeand Thomas T. Turner, of Missouri, briagin and Thomas T. Turner, of Missouri, bringing
 all of which we saw on the two rancles, besides is registered, No. 1397, in the herd book. The
oldest, named "Concha," a beantiful aninal of solid, dark color, dropped, Augnst 1st, 157.7 ,
One of the lieifers, "Askiah," is registered, 4007 , and is theee ycars in Aay. Her dam male 14, pounds of butter in a week when
The other three are unregistered.
The other bull is now two years
The other bull is now two years old, is named
"lied Buck", aud is unregistered. "Iled luck" is Ried Buck" and is unregistered. "Red Buck" is animals we ever s.aw. 1te is well grown and
remarkably well turned. "Concla" is older as well as larger, fawn color on the back, the re mainder of the body a dark or nearly llack color. He is beautifulty formed; the most
noticeable feature is the superl, set of the head upon the proudly shaped neck; it seems as i
he kuows that royal blood flows in his veins, so Cry proud is his beariug.
The cows are very docile, and evince the yreatest liking for petting. They are as beauti-
ful as deer, with small, delicatc heads and large, lnstrous lark eyes, and are deservedly great
favorites wherever known Mr. Davidson gives then no extra care, say
ing that if they camnot hold their own witl
other stock that they are not addapted to the cther stock that they are not adapted to the
wants of California dairymen. Sione buyer oljject to the Jersey ou acounut of their llenght
weight, saying that wheu they are past useful ness in the dairy that they anount to nothing
to turn off to the butcher. Mr. Davilson an. swers this by saying that if the Jerseys will
make from one-fourth to one-llalf pound mor
per day than other cows that he cun and give them away when through with them. To
ascertain the relative value of the Jo as comparcd with othler breeds, MIr. Davidson,
will take the four Jersey cows and make their performance at the pail, and record, in popunds
of loutter, the test.. Each cowws nilk will be daily weighed through the season, the mililk o and an accurate account kept, which, I hope,
will be sent to the llsks. for publication. 1 ,
will be more valuable thau volumes of unsup. portod opinion. Mr. 1)avilson is impartial
and if in his judgment they the requirements of a first-class stairy cow, ,
will alandon them and give some other brecd a
trial

the county, consisting of tyo acres of low hinl
or botton land , with the best natural feed.
 is furnished with good spriug water and a ccllar
or basement alove ground bunilt of blocks
soft sandstone. This is built sot sandstone. This is built around ons the
outside with loards, , caving space between and
romin for a bench andl tools. The Jerseys will be romin for a bench and tools. The Jerseys will he
miven no advantagc ly extra care, feed or range
the oljjeet leing to ol letcminc their absolute of practical yalue tow. Thany and experiment wenterll be to all, and we hope another season to lay its
results before the readers of the PREs.s.
Higher up the creck is the Higher up the creek is the 2,000 are ranch
of Mr. $W_{\mathrm{m}}$. B. Merbert, a former resident of Solano county, now engaged in dairying with
100 cows. Down the valley and over the hill we saw a
dairy of 100 cows, rented ly Mr. Silas Wil
liams, who make, liams, who makes a very tine quality of cheese,
Operations commence in lecenmber and cease
August 1st; makiny butter six wenks August ist; making but
months, and then cheese.
From Howey
over the hills to sianta Iollowed a bridle pati the stream and making a hasty trip
Over the Mountains.
The section east of the mountains comprises about two-thirls of the entire areamprises of the
county and is better khown as a stock country county, and is better known as a stock country
than or anything else. As in other parts, the
lest watcel, best timbered and choicest loca-
tion a ate fose the fanous Sauta Margarita rancl, the

Paso Robles, the Huer Huero aud the ranch of the
Giliroy Bros, cover many leagues in extent. A road from the summit follows the course of the Jose, ihine creek to its junction with the Paso Robles crcek a the northern boundary of the Paso Robles grant,
Ir. Hudson has recently purchascd 1,000 acre Mr. Hudson has recently purchased 1,000 acres
off from the north end of this rauch. A part o it, summer-fallowed, yielded hast seasou at the
rate of 2 i bushels per aere in wheat and 40 rate of bishels per acre in wheat and to
mushels of barley. North of the grant are many
hindred acres of goverument land, a small part of it only leeing ocenpied.
lirom this point we traveled north to san
Marcos, a distauce of 18 miles, through hill vergrown with oak and cheninisal, with here and there a patell of grcen grain ou a pre-emp.
tion claim, a rule calinn near the trail or running spring. The soil is a dark gravelly loam intil we approac

San Marcos,
Where it chauges to a light gray soil, full of a dull gray shale and gravel, from which in sum.
mer the light of the hot sun is reflected with dazzling intensity. The place is a small one ontaining two or three stores, hotels and s parently there is litlle population to support a
own, but hidden away in the mouutains nea by are mauy families engaged in dairyiug, stock rasing and farming.
The old Mission ile further Miguel stands a ha more than a century old, and is still in a gool tate of preservation. A
is
used as a store and hotel.
The Salinas was swollen by recent rains, the bed filled by shifting yuick sands. It is one o
the most treacherous in the state, and the for we crossed above town looked "poky" enongh
to precipitate a catastrophe through nervous. oo precipitate a catastrophe through nervous ness. Opposite the ford on the other side is the
mouth of the Estrella ereek flowing from the
eastward. A settlement of some 50 families eastward. A settlement of some 50 families
have taken up government lands between this reek and the sainas, and is kown as

The Estrella
The laud is very productive of cereals, and is dark gravelly loam with a slight adobe admix
ure, and on the salinas plains the soil change a red color. The average rainfall is 10 . 10 inches-some say 13 inches, and the greates
legree of heat explerienced last summmer wa
110 iu the shade. The trata arly in summer, modifying e winds blow regu extremely warm. (irain crops may be consid
red sure here in the driest seasons when sum ner-fallowed, as was demoustrated last seasonMr. Hiplle tells us that on his ranch, on the
istrella, a small piece of summer-fallow yielde .strella, a small piece of summer-fallow yielde neighbors report
results equally
favorable, Ordinary seasons, grain yields from 25 to 3.3
bushels per acre. Water is reached by digging bushes per acre. 20 ater is reached by digging
wells from 15 to 90 feet deep. Thousands of cres are open to pre-cmption near by. A part
of the domain unoceupied is much stronger more fertile than the portion settled, thougl in some places there is less water than near the
fiver. Vorth winds are very prevalent on the Salinas plains. It would sem1 that if a belt of
ucalyptus trees were planted on the norther cucalyptus trees were planted on the northern
bundary of caeh ranch, that the nischevions dfects sometimes wrought ly this wind would
be for the most part averted. oncurred in by several whon we consulted Plue gums grow rapidily here when carefully
planted. The county is more whinly woodel cast of the Silinas than ou the west. The
limate is very healthy, and, with uroper facil ies for transportation, this section should im prove very rapidly. A railroad is projected, to
run from Soledad south through the northerul part of the county and perlaps through it Six miles
amous

## El Paso de Robles

(the pass of oaks) hot springs, heautifully situthe Nalinas, at an elevation of 1,000 feet aloove the level of the sea. The curative properties tropical heat of the climate, almimirably tem-
vercd by the coast winds, the fresh mountain percd by the coast winds, the fresh mountain air and has made it one of the minest noted sanii-
sion, ariums on the continent. The proprietors, umerous cottayes close ly the springs, and a
arge hotal, furnished with ample conveniences or all chasses of guests. The handsome residence of Mr. James, a store of general merchanmall dwellings comprise the reoks, and a few ace. The hath-house lies betwecn the hotel baths, plunge laths, is titted up with private ers, free to the guests of the hotel. targe hot spring outside is walled up, with cight fect square and several feet deep. 1 lrom
the loototn of this spring. out of the sold roek the lottotn of this spring, out of the solid rock, taken ly conduits of masoury to the laths withiu, discharging, as we were told by an
attendant, 100,000 gallons of water per day The waters of the variorss springs haver per datay.
heat of from $95^{\circ}$ to $110^{\circ}$ the greatest degree of $95^{\circ}$. It is suid that $113^{\circ}$ i may be safely subjected, The hot springs o 18S, and are coolc:l Lefore being used. The springs are numerons :ndd in somne one or an-
other of them are nearly all the active miueral
remedial agcnts kuown in the most distant and
scattered localities, and whose therapeutic ef seatterell localities, and whose therapeutic ef-
fects, as here exhibited, in curing rheumatism gont, neuralgia, paralysis, erysipclas and a grea many more of the ills that the flesh of man is heir to, is simply benefite ly dsease or consumption are neve About thy bathing in the hot mineral waters About two miles distant is the mud spring,
which is tried when all elsc fails. These springs re reached in 21 hours from Sau Francise先ing by rail to soledad, theuce 93 miles by picturesque regions in the state. This resort is frequeute
the season.
Leaving Paso Robles, a path over the moun tains conducts us to the Corral de Mulas settle ment and Los Tablos, 10 miles distant, in
which are 70 families. Near by is the Wilder ness, another settlement of some 30 fanilies, all ocupying Government claims. Butter country is very broken, but fertile, well timbered, with numerous springs and the mos
charming canyons and valleys among the hiths
little east of thesc settlements are the great Sunderland and the Mahoney quicksilver
miles, 20 miles from the coast. The roal leads by a winding grade from the mines to the sumnuged liights, far above the giant cotton woor that rear their tall tops. high in air from th calley below. Near the summit is anothe quicksilver mine, the Josephine, owned by the ank on Californa, and now shut down.
H. E. Halletr
San Luis, April, 1578.

## Malva, Cheat, Nomenclature.

Ehitons Press:- There seems some confusion among your correspendents on this malva ques malva (Malva arborica, I presume), while others are meaning the herb malva, or mallow 13. rotundijolia, or boreatis of P'rof. Hilgard). either know a little of both of them an regard them.
Last year my cows, though by no meau starving, eagerly devoured, of the tree malva, inch in diameter or so, and then stripped of the succulent bark from the trunks, wherever they could get a nip at it. Mr. W. A. Sander was evidently speaking of this plant when he
spoke of its beiug allied to the holyhock. The wo tirst leaves (cotyledons) are hardly to be istinguished from those of the holylock. Th light green, a little glossy, and angular in form. did have had been planted for tempore hat ment, until other longer-lived trees could make
The herlb, malva. or mallow, does not usually xceed six feet in hight, has a small, insignitileaf, and large, tlattish-round seell (ealled by chillliren, I believe, in some parts, "cuck oo
breal and cheese"). It is true it is not de sirable fodder to confine any animal to, any more than pie is desirable as a staple food fo chickens all appear to enjoy a piek at it, and it makes fine shelter to hide young chicks from
Mr. Taylor speaks of its medicinal qualities It may interest your readers to know that it
derives its name, mallow, frum a word signify ing soft, or emollient; akin to mellow. I hav ancied it alleviated some kinds of
Yurther I tlink that by the close
eason there is very small remmant of the dry any mallow patch in a pasture where stock hav been running.

Wheat or Cheat.
Alexander, inl this week's issue, runs on the freedom from chcss sced of soil takent rom unplowed hillside. A little fact has come under my observation this past season that
would throw much doubt on Mr. A.'s experi Noult throw much doubt on Mr. A.'s experi
ments. Ay neighbor last season took advan hill land. The fire raged fiereely in the close
hin dre hil and. The fire raged hiercely in the close
high lrush, and the heat at the soil-surface must have been intense. This year much dant of which I have no recollection of seeing Ingle sample before in California
When one retlects on the fiery purification
ecded to rid eveu air of the myriad germs necded to rid eveu air of the myriad germs on to see how still more diflicult it would be t ree sinl from suclı germs; though, I
chess seed could be sifted or lurnt out.
May II seizc this oceasion to remiud your ion as to destroying fonl germs that quer man, worthy the name, should keep befor him. 1 allude, of course, to the destruction, a far as may be, of those 1oisonous germs o
typhus fever and diphtheria, which any con typhers hover apell of weather will probably set at work once more among ns. Let the Constitutakc under advisement the complinstructe lition of eesspools, enforcing the application o
the dry carth system in every
every house in the State. Let this poisoning
of our children by foul air and cesspool-tainted water be made a crime.
Long-Tailed Names

## Prof. Hilgard wants to have farmers adopt

 some more definite nomenclature for plants.Latin does not come natural to most of course as a universal language it no doubt has its advantages to scientific men. But would it not be easy for some one, Mr. Bolander or Prof.
Hilgard hinself, to translate for us the Latin 1iigard hinself, to translate for us the Latin
names of the more common California plants, and give us a string, with a brief description, we not talk of the northern, or rouvd-leaved mallow instead of Multa lorealis or rotundifolia? would fear being set down as pedantic in making use of them.
Monterey, Cal.
E. Berwic

## Draining and Its Appliances

Empons Press:-In your issue of June 8th under the above eaption, is an article signed by A. Roussean, that we think does great injustice to a machiue manufactured in C'alifornia, and nown as the Austin ditcher. The great necessity for ditehing and draining in California stimulated the mind of the inventor aud he has producel a machine, and we have witnessed its vorking in adobe soil and it has produced exellent results. This machine has some weight; it necessarily must be to hold it to its place while performing the work required of it, but horses to operate it that A. Rousseau says it does. From six to eight horses and three men are sufficient to operate the machine in all kinds of soil, and we will guarantee the machine to
work in any damp soil. Two horses will nove , This machine will cut to the depth of thrce feet or one-half the diameter of the ditching wheel, and make such a ditch as any ordinary man
may work in in the laying of drain tiles. We deem it unnecessary to answer in detail about the Austin ditcher, but we do desire, for the sake of truth and fairness aud for the pur-
pose of correcting the misapurehensions that may have been engendered loy A. Rousseau's article, to say that we have witnessed the operations of the machine referred to on different ranches in Sonoma county; and know from personal ousery
thoroughly.
As to the cost of the ditcher, anyone, we are satisfied, will admit after witnessing its operaand that it is worth all the mons nuch that it will do good, clear, he wo without the machine. The agent for this machine agrees that he will coutract to cut ditches from one to three feet deep in adobe soil for from 5 to 20 ents per rod, and in free soil for less money.
T. Derick, W. H. Nasil, E. T. WALL, J. H. Ahsorle, J. B. Claik,
[All right: the working of machines is a fair subject for diseussion and the better a thing is the better the discussion will show its merits. Nothing, too, is better adapted to call the attention of people to the vilue of drainiug their and than discussion of means and methods. So long as points are made courteously and honestly it is for the public benefit to have hem come to light. Einions Press.]

## The Cheat Question.

Enitors I'ress:--In your issue of the last month, I noticed an article concerning the origin and growth of cheat or chess in grain fielts, written by Prof. Hilgard. As 1 have had the opjortunity of observing the origin and devel. opment of this plant, 1 thought a few facts relatiug to the subjeet would not be amiss. I think that Prof. Hilgard is very erroneous in
his opinion concerning the origin of the plant. his opinion concerning the origin of the plant. it indigenons to any soil. But it has its origin rom the tamc cereals. It has been proven that harley, There are two kinds of chess-wheat cheat and barley cheat. There has been consideralle discrission on this subject in this seetion, the result of which was a trial, which was performed in this wise: A certain portion of which was entirely free from growth of an kind. A peek of cracked barley was sown on said ground and allowed to take its natural Guence was the grain grew and matured and there appe
In conclusion, I will say that I challange an prson to make such a trial and prove the falsit my statement, as I have witnesses to prove tatement

Durivg the month of May the Mint in Sam value of $84,240,000 ;$ s $, 740,000$ was in double agles and the balance in standard silver dol.

## Poultry Yaro.

## Notes on Incubation.

We tind in the London Farmer, some entertaining notes on incubation, drawn from a redescribed might be practicable in a time whin other work was scarce, for if a man can bring
out 1,000 chickens by three weeks' idleness it is certainly an advance on modern methods. We quote as follows: M. Eugene Gayot points out that have been made of late yearpi the pro cess of artificial incubation, the idea itself is very far from being a new one. Centuries ago
that which is a comparative novelty to us was that which is a comparative novelty to us was
well known and widely practiced in other counwell known and widely practiced in other coun-
tries. Siuce time immemorial there have been tries. Siuce time immemorial hatching stations in Egypt, on the borders of the Nile, where private individuals bring their eggs to be incubated under the care
of attendants specially trained for the duty of attendants specially tramed for the duty.
In the Plilippine Islands, the Tagal Indians have a custom somewhat clumsily describes as "human" incubation. Men are regnlarly their trade as systematically as carpenters or wheelwrights or turners may learn theirs.
This curious way of getting a living dates from This curious way of getting a living, dates from
very ancient times, and is said to have been very ancient times, and is said to have been
called into existence by the extreme fecundity called into existence by the extreme fecundity
of native ducks, which will go on laying daily for three years, time for the duties of incubation,
their default, are relegated to man.
their default, are relegated to man.
One of these Indians will "sit" on about a thousand eggs at a time. In order to attend properly to this numerous expected family, he process in a sinall beehive-shaped hut, built of straw, on a site carefully sheltered from the wind, and exposed to the full heat of the sun.
Into this select place of retirement he takes his stock of eggs, and the necessary appliances of his trade, a wooden box, some old rags, a quan-
tity of kiln-dried rice husks, and a linen or tity of kiln-dried rice husks, and a linen or cotton coverlet. The eggs are made up in packets
of ten each, wrapped in a rag with a certain of ten each, wrapped in a rag with a certain
quantity of husks, and placed in the box, the
bottom of which is covered with bottom of which is covered with a layer of the same material. Alternate layers of eggs and
husks are thus arranged till the whole tliousand are disposed of. An extra thick layer of ovar all. The "sitter" then stretches himself out at full length on the coverlet, and thus makes the box and its contents his bed, or
ratlier his nest. Every third or fourth day he unpacks and repacks the whole arrangement so as to give each packet of eggs an equal
elance of success, and to permit the access of eliance of success, and to permit the access of
fresh air. His food is brought to him daily and passed throngh a small window, constructed for the purpose into the hut, which he never

## The Apiary.

## The Uses of the Smoker.

Editors Press:-Have you ever seen any of our California box-hive beekeepers try to take
honey from a colouy of black or even hybrid bees? We dare say you have been present when such a beekeeper undertook to "capture" a "mess" of delicious nectar from oue of his
hives, which we do not hesitate to say is placed hives, which we do not hesitate to say is placed
alongside some old fence or rickety shed with alongside some old fence or rickety shed with
a southern exposire. Said hive or hives are generally surrouuded by a rank growth of malva, which attain, in this State, as you know the diminsions of good sized trees.
The modus operandi of these beekeepers, if
they may be called such, is quite a novelty to those that have not had an opportunity of being a spectator at their exhibibitions. We could
give a very amusing account of "how they do it," but for the reason that we would be tres-
passing on the reader's time, we will withhold perhaps for some other time.
As a general rule they fail
retire to intrenchments with somegether, and wounds. Of late, beekeepers have been quite successful in performing all the operations releast pain from stings. As is well known, a bee, when filled with honey, will not volun-
tarily offer any resistance. This we see while they are swarming. To have them in this con-
dition is one of the main oljects in apiaculture No person the least timid or susceptible of the
effeets of a sting, wishes to be tortured by the thoughts of being stung or the pain arising By the use of the new bellows smoker, in the made as docile as a poodle dog, or as gentle a a kitten.
The cngraving herewith givelu conveys a
tolerably fair idea of a little device by which toterably fair idea of a little device by which
beesa are easily subdned. $A$ is a suanll bellows
made in a neat and substantial manner; $B$
shows the tube or fire barrel. This tubz is it and one-half inchcs in diameter, and is so con-
structed that no solder melts off. $C$ is a nozzle
inserted. At the lower end of the tube is sinall opening for the admittance of air, whereby a draft may pass through the chamber and the fire be kept burning when the smoker is not in
use. As soon as the bellows is compressed, a use. As soon as the beriows is compresse, a
self-actiug damper working in a grooved follower seif-actiug domper working in a ghow, shut off the (these are not shown in the eut), shat of the bellows is made to pass through the barrel and ie nozzle $C$
with the fire cha of metal, which falls and closes the air passalows is expanding, any fire or smoke from entering the inside of the bellows, which would in tine render it useless.
At each puff a little cloud of smoke is sent At each puff a little clorge or smoke is sent
forth. The fire tube is large enough to admit of all kinds of material, such as rags, pieces of decayed wood, corn cobs, peat, droppings from subduing bees with when used in the smotor but we find that the latter gives the best slnoke Four or five strong puffs of smoke will soon
send all the bees in a hive to filling themselves with honey, and when gorged they are as geod natured as a newspaper reporter is after a free lunch.
Nor,
Nor, not only is this little contrivance useful in the apiary, but in the house it answers to
start a stubborn fire in the kitehen stove on a cold winter's morning. Iu the greenhouse an in the garden it should always be seen, for by
throwing in some tobacco stems the former may be thoroughly funigated, and in the latter plants and trees infested with grcen flies, etc., When honey comb is stored away from moths in tight boxes it no longer becomes necessary to get a red-hot stove cover and place it in the
box and pour sulphur on it, but simply place spoonful of it on a few live coals in the smoke and insert the point of the nozzle in an aper-
ture of the box and puff away, and the operation is soon finished.
The price of these little and indispensable a
low figure that there is no longer any excuse fo


The Bellows Smoker
being afraid of lees. They are made by A. .
King \& Co., of New York, and we believe the
King \& Co., of New York, and we believe they ared agents for the Pacific coast. $\quad$ U. K. L.
izer

Microscopic Examination of Bee Stings
At a recent meeting of the New York Micro-
se pical Society, Mr. J. D. Hyatt, President, gave an accouut of his investigations on the sub,
ject of stings. These studies have extended ject of stings. These studies have extended
over a period of eight years, but only recently
have some obscure points been made out. The geueral form of the stinging organs. of the
honey bee is well known by microscopists. It consists of a horny sheath, within which there are two stings, and these, when in use, are
thrust out. There is a poison lag which discharges its contents into the sheath. This is a point well known, but it appears that the pre
cise method by which the fluid makes its way cise method by which the fluid nakes its way
from the sheath into the wound has not heretofore been properly explained. AAcording to
the generally accepted explanation, the poiso the generaly accepted explanation, the poison
is supposed to flow in a channuel formed between the two piercers or stings and in this way makes another hypothesis and believes that he has positive proof that he is right, having dissected positive proof that he is right, having
and exauniued upwards of 1, ooo stings.
After long and patient investigation the ex part of the sting these channels open into the sheath, and just in front of that opening,
attached to the stings, is a sort of valve which attached to the stings, is a sort of valve which
projects into the slieath. When, in the opera tion of stinging, the piercers are thrust out,
they carry forward this valve so as to close the they carry forward this valve so as to close the
front of the sheath, for which purpose they are front of the sleath, for which purpose they ar
armirably adapted, and the poison thus con through these openings in the stings. When
 common explanation. Cross sections of the strengthened in certain places by internal deposits. The form of the stings is such that
nin channels can be formed between them to conduct the poison.
Barreling Honey.-The Los Angeles Bee keepers' Association met alay Isth. The Com-
mittee on packages presented a report and ex
nibited sanıple barrels made at Anaheim, 15 and
substantially made with iron hoops, and the
nds of the barrcls painted, costing respectively

round, five 1 pounds per $100, \$ 10$; round, two
pounds per $100, \$ 6$. The latter eans are with-
out screw top and are soldered. The additional
cost of waxing the barrels will be cost of waxing the barrels will be from 20 to 25
cents. After much discussion pro and con cents. Auter much discussion pro and con,
Wm. Muth Rasmussen offered the following: Resolved, That the beekepers be requested to
adopt the barrels this seasou. Adopted. J. E.
Pl Pleasants stated that the beekeepers of the
Anaheim district had adopted them this season and that freight we lese muney in barrels than in cans.-Los Angeles s

## THE STock YARD.

The New Trespass Law.
In answer to several requests we print below the full text of the new trespass law as it wa adopted by the Legislature last winter

Section 1. It is unlawful for any animal, the
property of any person, to enter upon any land property of any person, to enter upon any land
owned by or lawfully in the possession of any person other than the owner of such animal.
SEc. 2. The owner of, or person who is in the lawful possession in, any land trespassed dicti by an the juris diction, from the owner of, or person in posses
sion of, or person ehargeable with the care of, reason of such trespass, together with costs of
SEC. 3. For the purpose of allowing the any judgment he may recover in action brought provisions of the Code of Civil Procedure of this o such actions, subject only to the tious hercin contained, to-wit: Instead of filing
the affidavit on attachnent required by sections 538 and 866 of said Code, the plaintiff is entitled to thie issuance of a writ of attachment against
the property of the defendant, upon filing his complaint stating a cause of action, verified ac
cording to the law eoncerning the verification of pleadings.
Sec, 4. No animal is exempt from attach-
nent or execution, levy and sale, to satisfy a ment or execution, levy and sale, to satisfy a
judgment that may be rendered against the
owner of such animal for trespass, committed owner of such animal for trespass, committed
by such aninal. Sec. 5. When it is not shown by the party
injured to whom the trespassing animal le. longs, then and in that case the trespassing
animal or animals shall also be lialle for all animal or animals shanl also be liatie for at
damaze done by such trespass, which liability
may be enforced in the following manner: The party injured may briug an action in rem. in the District Court of the county directly against the trespassing animal or lot of animals trespassing same or different marks or brands. The com-
plaint shall describe the defendaut animals to a common certainty, and by marks or brands, if marked or branded, and in other respects s
state a cause of action, and shall be verified.

The summons in action in rem nus be directed to the defend ant animal or animals
by like description as in the complaint, nust be signed by the clerk of the court, issued under its seal aud must contain

1. The name of the plaintiff, and a designation of the defendant by like description as in brought, and the county in which the complaint filed.
general statement of the cause of action. must be made to the complaint on file within 10 days after a copy of the summons is posted at A not-house door in said county.
2. A notiee that nuless the defendant so
uswers, the plaintiff will apply to the court for auswers, the plaintiff will apply to the
the relief demanded in the complaint. SEC. 7. Such summons shall be servel by the heriff of the county, by posting a copy thereof the in which an answer on the part of the defendant animal must be made is any time within ten days after such service by posting as aforesaid, and the effect of such scrvice of summons shall be that all owners of and any person having any interest in any of such defendant animals are to be as conclusively bound ly all the proceedings to be had in the case, as though
all such persons lhad been made parties to the sit and personally served with summions. Any person interested in any property sued may
appear and defend as to such property, provided hat the name of any such person so appearing plaintiff recover judgment against such property, and the sane does not sell for sufficient to pay the same, the unpaid batance may be dock-
SEet. 8. If no answer is filed within ten days
ser after the day on whicli the summons has becn posted, then the clerk of the court shall enter
the default of the defendant animals so failing, the default of the defendant animals so failing,
upon proof being filed of the fact of posting sumnious by the retu
thereon to that effect.
SEC. 9. In direct act on against trespassin 50 , and the valuc of the property thau said sum of $\$ 50$, and the complaint in the case is verified, and the dcfendant makes dealways open for the purpose of entering judg
the coun such dcfault, though the judge of the court may be absent from the county where the action is pending or presiding iu another
court in a different county, and upon such verified complaint, return of sheriff, and sum mons, certificate of entry of default by the clerk, and deposition of witnesses on the part of plaint, after be tak before che clerk of the conrt, atter posting noticc of taking such depo-
sition two days at the court-house door, the court slall, upon application of plaintiff, if the court is satishied that from the proof the plaia-
tiff is entitled to recover, render judgment,
within two davs after receipt of within two days after receipt of papers in the
case by the judge, for such amount as may be just, in favor of the plaintiff, and transmit the saruc to the clerk of the court, who shall enter
it in the judgment book of the court, and there after the plaintiff may cause an execution to issue upon the same. If the court has any reasonalle doult as to the merits of plaintiff's
case, it shall he his duty to order the same to be continued for a hearing to sucly time as the be continued for a hearing to sucl time as the
court may fix, when the same can be tried in regular term, with the witnesses in open court. Sec. 10 . The plaintiff may procure an at.
tacliment against the property of defendant in an action in rem under this Act, in the same manner as in cases where the owner is sued, and
the undertaking on attachinent shall inure to the benefit of the property of defendant if plaintiff fail to recover in the action.
SEc. 11. When the plaintiff recovers in an action against the trespassing animals, the judgmont of the court shall fix the amount due the plaintiff for damages and costs, and if any person has appeared for the defendant property,
the name of such person, and shall direct that the defendant property be sold according to law and the proceeds thereof applied to the payment of the expenses of such sale, the amount due plaintiff, and the costs in the case, and that any Sec. 12. Any such overplus so paid in to court shall lee paid to the party in pood con-
science entitled thereto, upon an order of the court made for that purpose.

Any person injured by a violation
this Act, may at his optlon distrain of Sec. 1 of this Act, may at his optlon distrain
nd take into his possession any trespassing aniand take into his possession any trespassing ani-
nal or animals, and keep the same two days without instituting any legal proceedings under this Act, so that he may have proper time in Which to make the necessary inquiries as to the whicl remedy given herein he is entitled to; property in the animals distrained, shall be entitled to the same upon tendering to the dis-
trainer the amount of damage done, or an undertrainer the amount or damage done, or an under-
taking, with two good and sufficient sureties, in double the amount claimed by the distrainer for he will pay to the distrainer all the damages he gether with a reasonable sum for care and feed of the animals while distrained, and cost of suit; and as between the parties tendering and $r e$
ceiving such undertaking such tender and ceipt is conclusive evidence that the party ten-
dering is the owner of the animals distrained and legally chargeable with any danage it may have done to distrainer
sec. 14 . In all other matters than those in ourse of procedure prescribed in the Code of Civil Procedure shall prevail in suits brought
Ske. 15. Whenever any animal is lawfully distrained under sec. 13. of this Act, then tho able compensation for care and feed of such animal during the time of such lawful distrainment, and in actions brought under the provis-
ions of this Act, when the plaintiff rccover, then a reasonablc sum for keeping any animal levied upon by attachment process or under ex ecution shall he allowed as costs of suit.
SEe. 16. This Act shall Sec. 16. This Act shall apply to all of that
part of the county of San Bernardino lying part of the county of San Bernardino lying
south of a line drawn due east and west from south of a line drawn due east and west from
the Colorado river, to the western boundary line of said county, on the township line between townships two and three north of Sa all that portion of Salmond Falls township in El Dorado county lying south of the south fork of the Anericau river, and to the eounties of ing west of the sacranento river, and south of Red Bank creek. Humboldt, Mereed, Solano Santa larlara, San Joaguin, San Luis Obispo
and Sacrannento, and to the township of White Oak aud Meed Springs in the county of El Dorado.
Sec. 17. All Acts or parts of Acts in so far herely repealed. after its passage.
> peaker of the Assembly
> President of the Senato
> Approved Mareli 7 th, 1878
Irwin.

Dun'r co Therk.-The United States Consul
at Bucnos Ayres, the capital of the Argentine at Bucnos Ayres, the capital of the Argentine
Republic in South America, warns people in the United States not to come to that country with much expectation of bettering their condimoncy crough to get home with in case the
do not find some employment or business.

## Patrous or flosianpry

The Duty of the State as an Educator
The folluwing address was delivered, some Temescal Grange. Its publication has been navoidable delayed until now
Just where to draw a liue which will equita ter of the education of her childreu has been subject which has seriously concerned many
carnest and thoughtful mimis. There are, in act, many points to be taken into consideratio in the solntion of this problem. Admitting the
free-school system of this country to be as good
as any ever desired for the educatiou of the as any ever desired for
masses, the question arises
breadth of such education.
That it is the duty of the state to give to
ach child withiu its horders sufficient education for all the practical duties of our competitive
progressive life, mnst be admitted by ever eflecting nind. Whe that is done, we thind the State has performed her duty in that direc
tiou, for while we admit that onr public schools re the nurscries of the State aud guardians o our liberties, nevertheless, the rights of the
citizen and taxpayer nust be cousidered. Whil it is universally conceded that moncy must be
aised for the naintenance of onr public schools, he impression very extensively prevails that the maximum amount per capita has beel
reached. Not that it is claimed that our schools cannot he very much improved, but that money sufficient is now raised, if judiciously expended, esired for it.
ounty and municipal, heyond which it will he difficult if not impossible to go with safety. Already than's mind, for althongh the aggregatc tax levy is continually increasing from year to year, our dchts, state,
eounty and municipal, are increasing more
rapidly. Hence, the couvictiou is gaining rapidly. Hence, the couvictiou is gaining done in the number and remuneration of its employces, and the nust and will be reduced. Of all departments of the service, that of our future rcceive the greatest consideration and indulgence and its welfare will ever be guarded
with a jealous care. Money has been given without stint for its maintenance, but the line between frugality and lavish expenditure must
be drawn, and it should be drawn with a conrehensive view of all the interests at stake. the State in the education of her children, which
should be dctermined by the average time which experience has denonstrated is devoted to study in our public schools. Taking five
years as a basis, which is above the average time alloted to school, the question arises what good citizcnship, can be mastered in that time ? thoronghly understood in the time given is altogether below the number named by the State
Board of Education. Then, if they cannot all
Ber he successfully studied, which are the most essential and practical?
Now, the most essential studies are those
which will enable the student to acquire the which will enable the student to acquire the
grcatest annount of practical knowledge in a
given time. The essential given time. The essential clements of a good
English education should ever be uppermost every cducator's mind, for this is eminently a
ntilitarian age, and the state cannot afford to pay for nor the student afford to spend his time matiou which can be better learned from a few well selected studies.
fessioual educators has been to of professioual educators has been to adopt the he ad rances. If intellectnally unable to do so, he is compelled to make a pack-mule of himsclf school, and daily go through the formula of
trying to digest them, whieh eventnally ends in trying to digest them, whieh eventnally ends in
mental dyspepsia, death or a grown-up simple
ton, dcroid of any well defincd principles o ton, dcvoid of any
practical knowledge.
There is so much $v$ by education in and out of the school-roome fored wisdom. It is this principle cropping out which
stimntates the make a great show of books in the school-rooun. Parents are flattered into the belief that their precocions children are in great need of another pride themselvcs ou the number of their studies. quarters to cngraft foreigu languages on to, and not so much because of their intrinsic werthon, utility as because it is fashionable to have a
smattering of anome foreigu tonguc; because it smattering of anne foreigu tonguc; because it
sonnds well for a teacher to be able to say I have a "French class," or a "class in fierman,"
or for a student to be alile to say that he is
$\xrightarrow[\substack{\text { studyin } \\ \text { French } \\ \text { FFxh }}]{ }$
Fxplerience and olscervation have fully demon-
trated that willere children undertake the
 seglect of the king's Finglish. That not more
thau one in every 20, whio undertake the stud
the
 because of the time squandered in the endeavo
Then instareal of the thintroduction of foreigl
 money and tine employed in the prosecution o sunh tudics are worse than thrown away,
cause the precious years so squandered tial to a good English elucation.
The English language has no superior, and sthe duty of erery educactor to nse earrucst en
savers to improve and impart it in all its essen leavors to improve and impart it in in illitr essen
ial elements, for one of the greatest glories of

 come the frrst in ant the worla. other language thau her own, for the noney of The maxy cannot in justice be taken to edncate
he few in branches of study wlich are not essential in the development of an en elice
sufficient for all the practical duties of life. We frcely admit the gre:t tacocomprishinent cou erred by a thorough knowledge of the moder or classical languages or of in struneutal musio
and their study sllould be fostered and encour and their slu why shour be supteriod and encour
aptitude fo then; but they are beyond the province of the Every individual educated at the expense o the state should be taught to fully eomprehend
thre duties and responsibilities of citizenship, and Clie duties and responsibilitites of citizenship, and ion of all prosperity. The state cannot afford t educat drones and imbecies; that departunen
an well te left to the fashionalile collegcs and suminaries, which from their fruite
sit
The pullic schools have a more atio them the consereaty child within the nation are educated. Avery child within the
ininits of the Republie should be educated either voluntarily or by compulsion in thal
practical way which will emable him or her when the diploma of the high school is received to go forth into the world with sulticient
breadth of mind, industry and self-reliance to
 and in consequence of which every avenue o service which can he filled by superficial men-
tal culture is glatted and overtlowing with egoKistical imbecility.
The defense, security and prosperity of the
aation depends
upon the direction and and of our pullic schools. The time is not distait When they will boe so directed and their
strength soo utilizal that they will thru ont men and women, with sufficicnt moral worth
and practical meutal leave school for the workshop, for the hield, or for the performance of the domestic duties of a
household, as if it was a legacy left them by the State, and in its cheerfill acceptance they
will do honor to themsel ves, and therely add houor and dignity to labor, and glory and pros. perity to the nation.

## Taxation.

Edrors Press: :- More or less has been written in the Rivral. Press ly the many dif.
fcrent correspondents in reard needed anconcondments, which should appear in our new constitution. Some are in favor of taxing all evidence of indebtelness, whether it be in uotes, mortgages or written agreement of
any kind. Others cry out against taxing money loaned, but I never heard any of them give a good reason why such exemption should be made in their favor, and why the money lender
of California, who obtains twice cent. for his money as is received in any other
State in the Union, should be buther by an exemption front tax, when in all other
States they receive less interest and their is taxed, no matter in what manner it is in invested. As the law now is if a man has $s t, 000$ of his
own and $\$ 4,000$ of borrowed money invested in a mill or a farm, he will have to pay tax on
s8, out, that is, he will be taxed on his liabilitics his debtst the same as if he owned the money
instead of the money lender, and the banker or moncy lender, with his big piles of money
hringing him ive from

 is a enveyance, the mortgager reser viing omly
南e re right to releem within a certain time.
thel ought to be remedied. If hy misfortune
miscalcullation

 if by accumulation of misortunes we arnum, and and
to make the payments agreed npon and redeem
our property, why let the money lender take it
(as he will), we will not complain, for such was
 1.et the law be so amendel that all real-estate hall be taxed to the possessor therofof, less any
ccorded mortyage or mortgages which shall be assessed to the mortgagee, and that county
recorlers shall not cancel nany mortgace from lis records suntil the tax-collector's receipt has against said mort gage has been paill
Let every man bea assessed ou all solvent If thise due him exeeceding his own indebtedness, law, some would not escape
If the withont paying any tax, while others pay
donble. In fact every man would
liay on what he is worth and no more ; and where is the honest ohjection to such a law?
Of all the cruel, nnjust, tyrannous laws that Were ever imposed on a forbearing people, this
Construction of our California laws, which ex empts the money lender from paying any tax, is much benefited by the election of state and county ofticers as anybody else? Then, wh the election ? Do they not nise our civil courts to collect their clains, do they not apply to our tolen? All this their decline to pay their share of the expense of
maintaining the laws which they use for their maintaining the laws which they use for their Let mene illustrate this cril hy a comparison TWo of my neighbors lose their dwellings by
(ire. One of them has kept his house insured in a good company for half its value. The quently has no policy of insurance against the company. Rut suppose he goes to the office of the insurance company, and asks them to pay ras insured; and the insurance agent says the him, your neighbor pays ns a per cent. on the
ralue of his property to pasy us for the protecpay us anything and yous your property was not pro S 1 reut my howse and lossid hat the enan says P rent my mouseg without paying the usual per cent. on my prop rrty. The law exempts me from paying any
ax on my monov which is loancel out at interest nd I receive all the lenefits of the law, and
 The exemption is just as absurd in one case a ional Convention will re hope the Constituinquitous and absurd law. R. hrow.

## Agricultural Notes.

## California.

colusa
Prosprects, -- Sum, June 1. Ileaders are runnins in all directions, clip ping
arich crop of gold from the harvest fields. This
and conty has in wheat, this ycar, some 233,000 aeres of wheat that will be cut. The average
of this would have ben between 20 and 2.5 bushels to the acrec ladd it not heen for the rust that inade its appearance just as the wheat was
beginning to fill, but we do not think it would
now be safe to place the average at over 13
bushels. Nany fields, not so bailly affected
will turn out 35 and 40 hushels, and thus help up the average But 230,00 areses at 1.5 bush.
els per acre will give ns $3,450,000$ luastiels of wheat, and of this we will have $3,000,000$ bushcols to sell. The rust has caused a loss to the
county of at least $\$ 1,000,000$. It is worse the lower end of the county, and along up the foothilll as far as Anteloje valley.
the early sown Sonora and Proper enc earyy sown Sonora and Proper wheat ha
escaped it entircly, but it is more or less in 90 of the wheat area: Thcre will be, therefore mucl shrunken wheat on the market, and o,
course there will be differences in the prices. FRESNO.
Dallicy- - E.ppositor: We were favored with a Baird of Patterson of Bairds. Patterson and have recently purchased property iu the Washtarting an exteusive dairying establishment Cheese making will he their especial line. They intend to go at the business thoroughly, introin cheese making Thern improvements usel them experience, energy and capital, and, pos sessing these, their enterprise is sure to sncceed.
Enterprises of this kind are what are needed to make an agricultural section prosperous, and we shall therefore look after this one with un-

LOS ANGELES
Army Wormi-Ganta Ana Tirnes: The army vieinity of Orange. several fields have already been destroyed by this pest. It is said that in the lields where there are plenty of weeds it does not trouhle the corn at all, but strips the weeds of their foliage entirely to the ground.
Hobticultral Pavilios Located. - E.t. cultural Society was held in Union hall this The main 11 oclock and was largely attended. location of the pavilion. Early in the procecd-


#### Abstract

ings it bccame evident that the mecting wa heartily in favor of the Beaudry property About $\cong$ o'clock this afternoon a resolution offered by Mr. Trantum, to accept the Beaudry property, came to a vote by a call of the roll, and was adopted by a vote of 134 to 57 . All . parties secmed well satisfied with the result, the huilding of a pavilion as vigorously as they have worked to secure a lot. Wre congratulate society will now action this day taken. The little expense, aud will take strides in the future that will be in entire keeping with movements promoters of the enterprise.

\section*{MONTEREY} in the Inder, I uue 13: Nowhere the valley do crops look any hetter than on the sand hill and lower Salinas valley. On the Sand hill, especially, a larger yield will he garnered this season than has ever before been free from mustard, and. The land is entirely or wild turnip is seen, and that will all be cleaned out in threshing. There is no sign of rust anywhere in the fields thus reviewed, and latter part of neel ond the uplands the in the "dough" there is no fear of any damare " Con\%al.es. - Farmers are rather uneasy in regard to rust, but, as yet, no one ean tell how ficlds have been affected, the adobe lands escaping as yet. Farmers of 20 years experience in California say that, if the present cool and favorable weather continue, the damage from rust will be but slight and that a big harvest inay be expected. SAN JOAQUIN


A Trayeling seipabatok. -The success of the combiued header and thresher of $\%$. devices to accomplish the same puruose An ordinary separator is being prepared at the to travel through the fields in company with the header, threshing and stacking the grain as header-waston it. It takes the place of the header on an endlcess draper that carries it to the cyluder. The apparatus is appareutly though it ought to work well. We are not nformed as to the cost of rigging up old
hreshing-machines for this purpose, hut should not consider it very great. SANTA BARBARA
Messel Slocich.-EDitors Press:- Being a senstant reader of your valuahle paper, and
so correspondence from the "famous" Mussel slough country, I thought a few lines from here would not come amiss. Our harvest has begun and the whistle of the steam thresher
echoes through the valley early and late. The yield of wheat comes fully up to expectations
so far as heard from, turning out from 30 to 40 so far as heard from, turning out from 30 to 40
bushels per acrc. Barley runs fron 40 to 80 bushels. There will be more early sown grain badyy rusted owing to too much water and im-
nense growth of straw. There is quite an verage of summer crops being planted, such as corn, beans and pumpkins. And, Oh! wouldn't yon and the boys like to flop your lips over nelons I see growing here?-W. H. Stuart. SANTA CLARA.
Gilloy Crops. - Cor. Mercury: The elatter of the header and reaper is again heard in this vicinity, and to which the long, golden-tinted To say that our crop prospects are flattering is o say that our crop prospects are flattering is plump and rust is unknown with us this season The yield in bushels will, from all indications, be the largest ever garnered in this end of the

## SIERRA.

Sierra Valley Hoppers. Reno Journal oppers in yesterday of the myriads of grassent danger the crors were in. Another gentl man tells us that there is a mile square in the center of the valley which is completely covered with the young insects, which have appetites
like crosscut saws. He suggests that the farmhike crosscut saws. He suggests that the farn with heavy rollers, kill at least the major por-
tion of them, for should they all survive, they will not gratefully spare the green acres around them. The crops never looked better and the farmers have only this one thing to fear. One has no idea of the magnitude or destructability
of this plaguc. Flyiug in clouds so thick as to of this plaguc. Flyiug in clouds so thick as to
darken the sky for an honr at a time, they leave the country over which they pass as bleak
as if a fire had swept it. Nillions may b killed, but like the war with China, there are 10 to take the place of every one that falls. It use. We hope our Sierra valley friends will escape the impending danger.

Tan Agrictlo . The prospects for the coming fair are fa brighter than those of any which the Agricul-
tural Association has yet hcld. We learn that a very geueral interest is taken throughout the interior in the affair, and there will be a more been seen before. This is almost entirely the
and ability which distinguishes all his business
efforts, and has done more real work than was
ever done before in the Society's whole existence.
Dry Creek Items.-Healdsburg Enterprise,
une 13: Wheat will soon be ready for the sickle. The late rains have wrought wonders than was anticipated
eavy it is straw-fall
the promise forn is doing finely, and seems to be all right. Peaches will make part a crop. Last spring the indications were un an entire failure; but many of the farmers will have enough for home use.
District Fair. - Democrat, June 15: We are in receipt of a copy of the "Speed programme
of the Sonoma and Marin District Agricultural Society" fair, to be held at Petaluma, Sept.
$23 \mathrm{~d}, 25 \mathrm{th}, 26 \mathrm{th}, 27$ th and 28 th. An entrance fee of $10 \%$ will be charged on the purses, and in all instances must accompany the nomina-
tion and be paid to the Secretary. All horses nust have becn owned in the district since Apell as party making the entry, must be given. armined on an investment own profit, but for the benefit of the people of Santa Rosa and the grape growers of the county ecessary Mr. DeTurk made up his mind to the erection of a winery, on the site of the old one,
that would meet the wants of this portion of the State, and on Saturday night closed a con tract with Mr. T. J. Ludwig for the erection of 18 feet high-two stories-of capacity greatly xceeding the ore des ly the first of be don ber proximo.

## tehama.

Editors Press:-The barley harvest has be gun and wheat will be ripe iu about two weeks. han it ever has been, although Tehama count never fails to produce good crops.-N. Mer RILL, M,
Tue Rust.-Mail, June 15: The reports of damage done to wheat by rust in Yolo county duce the figures of the probable yield heretoffre
given at least one-third. The summer-fallowed and early sown will not be seriously affected, but the late sown grain has been badly injured.
Much of it will not be fit to cut at all, and from the gencral reports froin all parts of the county and particularly from the "Egypt country" ly
ing west and south of Woodland, the total crop ing west and south of Woodland, the total crop
this year will not average over 15 bushels to the acre of wheat sown. We hope this is not the case the State over, and are inclined to be-
lieve it is not, for the farmers of the San Joa-
quin valley have about concluded one of the quin valley have about concluded one of the
finest harvests they have had for 10 years. There are some parts of Yolo county where this
rust is not felt. It seems to lave covered wide streak of country, beginning at Winters
and continuing to Woodland, in width, about 10 or 12 miles. In and around Cottonwood, it is not so bad, but has damaged the wheat some.
On the north side of Cache creek, in West and On the north side of Cache creek, in West and
North Grafton there is some damage, but none so bad as that in the section of country
three to ten miles southwest of Woodland.

## Nevada.

The Nevada Cricket.-Tuscarora Times:
For days past, people comiug from Cornucopia have warned us of the approach of $\approx$ vast bod of dreadful crickets, and this moruing the ad-
vance guard of the destroying host entered the vance guard of the destroying host entered the
city. People unaceustomed to this aunual visitation of desolating insects can form no concep.
tion of their frightful ravages. The Nevada
. greedily devours every living thing in the vegetable kingdom, from a sagebrush to a pumpkin
vine. Nothing green escapes him, aud as he travels with cousiderable celerity, he rapidly the country. At present the iusects are no more than one-third developed and are therefore comparatively harmless, but by the first of
July they will attain to the size of half-grown mice, and then woe to the gardeuer whose
premises they invade. The crickets cannot fly
however, and for this reason are less to b dreaded than Kansas grasshoppers.

## Colorado.



The New Timber Law.
Annexed is a certified copy of an act for Oregon, Nevada, and in Washington Territory, Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That surveyed
public lands of the United States within the States of California Oregon and Nevada and in Washington Territory, not included within military, Indian, or other reservations of the United States, valuable chicfly for timber, but unfit for cultivation, and which have not been
offered at public sale according to law, may be sold to citizens of the United States, or persons who have declared their intention to become such, in quantities uot exceediug 160 acres to any one person or association of persons, at the minimum price of $\$ 2.50$ per acre; and lands
valuable chiefly
for stone may be sold on the same terms as timber lands: Procided, That nothing herein contained shall defeat or impair
any bona-fide claim under any law of the United any bona-fide claim under any law of the United
States, or authorize the sale of anv mining claim, States, or authorize the sale of anv mining claim,
or the improvements of any bona-fide settler, or lands containing gold, silver, cinnabar, copper, or coal, or lands selected by the said states under any law of the United states donating lands for internal improvements, educat.
poses: And provided further, That none of the 1866, entitled "An act granting the right of way to ditch and canal owners , over the public lands, and for other purposes," shall be abrobe subject to any vested and accrued water connection with such water rights, as may have been acquired under and by the provisions of said act; and such rights shall be expressly
reserved in any patent issued under this act. Sec. 2. That any person desiring to avail himself of the provisions of this act shall file
with the register of the proper district a written with the register of the proper district a written
statement in duplicate, one of which is to be statement in duplicate, one of which is to
transmitted to the General laad Office, designatng by legal subdivisions the particular tract of the same is unfit for cultivation, and valuable habited for its timber or stone; that it is nuin nents, excent for ditch or cangl purposes, where any such do exist, save such as were made by
or belong to the applicant, nor, as deponent verily believes, any valuable deposit of gold,
ilver, cinnabar, copper or coal ; that deponent silver, cinnabar, copper or coal ; that deponen that he does not apply to purchase the same on spcculation, but in good faith to appropriate it
to his own exclusive use and benefit; and that he has not, directly or indirectly, made any greement or contract, in any way or manner which the pitle which he might acquire from
the governinent of the United States should the governinent of the , to the benefit of any person except himself; which statement must the register or the receiver of the land-office within the district where the land is situated and if any person taking such oath shall swear
falsely in the premises, he shall be subject to alsely in the premises, he shall be subject to
all the pains and penalties of periury, and shall forieit the noney which he may have paid for
said lands, and all right and title to the saine; and any grant or conveyance which he may purchasers, shall be null and void.

That upon the filing of said state act, the register of the land-office, shall post a notice of such application, embracing a descrip
tion of the land by legal subdivisions, in his office, for a period of 60 days, and shall furnish the applicant a copy of the same for publication, at the expeuse of such applicant, in a newspape published nearest the locatiou of the premises, Ior a like period of time; and after the expira
tion of said 60 days, if no adverse claim shal have been filed, the person desiring to purchase shall furnish to the register of the land-office
satisfactory evidence, first, that said notice of the satisfactory evidence, first, that siate not aforesai
appication prepared by the register as a was duly published in a newspaper as herein re guired, pated ountemplated in this act, unoccupied and with eitheir mining or agricultural, and that it ap parently contains no valuable deposits of gold, silver, cinnabar, copper, or coal; and upon pay ment to the proper offficer of the purchase
money of said land, together with the fees o the register and the receiver, as provided for in case of mining claims in the 12th section o
the act approved May 10th, 1872, the applicant the act approved May 10th, 1872 , the applicant
may be permitted to enter said tract, and on the transmission to the General Land Office o
the papers and testimony in the case, a paten the papers and testimony in the case, a paten having a valid claim to any portion of the land, patent to lands so held by him, stating the na patent to lands so held by him, stating the na-
ture of his claim thereto; and evidence shall be taken, aud the merits of said objection shall be shall be to appeal, as in other land cases. Effect act by regulations to be prescribed by the Com-
missioner of the General Land Office. missioner of the General Land Office.
SEC. 4. That after the passage of this act it be cut, or wantonly destroy any timber grow
ing on any lands of the United States, in said ing on an
be removed, any timber from said public lands, with intent to export or dispose of the same sel, or owner, director, or agent of any railroad, shall knowingly transport the same, or any limviolating the provisions of this section shall be guily of a misdemeanor, and, on conviction, shall be fined for cvery such offense a sum not
less than $\$ 100$ nor more than $\$ 1,000$, Provided That nothing herein contained shall prevent any miner or agriculturist from clearing his land miner or agriculturist from clearing his lan preparing his farm for tillage, or from taking the timber uecessary to support his improve
ments, or the taking of timber for the the United States; and the penalties herein pro vided shall not take effect until 90 days after the passage of this act.
States and Territory for violating section two thousand four hundred and sixty-one of the Re vised Statutes of the United States, who is not
prosecuted for cutting timber for export from the United States may be relieved from furthe prosecution and liability therefor upon pay
ment, into the court whereiu such action pending, of the sum of $\$ 2.50$ per acre for all be cut timber, or removed or caused to be removed the same: Provided, That, nothing con-
tained in this section shall be construed a granting to the person hereby relieved the title
to said lands for said payment; but he shall have the right to purchase the same upon the srovided hereinbefore in this atct: And fursonsther
pron roviced, That all moneys collected under this
act shall be covered into the Treasury of the United States. And section four thousan
seven hundred and fifty-one of the Revised seven hundred and firty-one of the Revised
Statutes is hereby repealed, so far as it relates to the States and Tlerritory herein named.
SEr. 6. That all acts and parts of acts
sistent with the provisions of this act are hereby

## Approved, June 3d, 1878 Department of State, W

S79-A true copy. Sevelion A. Brown.

## News in Brief.

There were 91 deaths in San Francisco last
There are 40 pupils in the Art School of DeThe late Prof. Henry made 22 inventions, not one of which he patented.
GRASSHOPPERS are raiding in Smoky valley, Lander county, Nevada.
Lefal Tenders are firm in San Francisoo at
as buying, and selling at par. There is to be a camp meeting at Calistoga prings, commencing August 8 th.
TuE late dry weather has been
The late dry weather has been disastrous to
he potato crop around Point Arena. THUs far about 15 whites have been killed The preparations for the Dutch expedition to The army worm is still operating amoug the ops in various sections of Inyo county.
The estate left by Gcorge Grant, the English lonist in Kansas, is estimated at $\$ 700,000$. Thex have had several lively earthquake The Colorado heetle is said to have appeared in two cantons of the French department of the Vosges.
$x y$ has been formed with a capital
40,000 to bring water into the city stock of $\$ 340,000$ to bring water into the city Col. Frem Grant has been sent on an ex-
tended tour of observation in the Rocky mountains by Gen, Sheridan. The late severe storms have killed most of Lake valley, Lassen county
The purchasers of the Eureka Con. flue dust calculate that the 6,000 tons contain precious metals to the amount of $\$ 250,000$.
A PROJECT is on foot to build a narrow-gauge
railroad between Eureka and Beowawe. The cost of the road is estinated at $\$ 600,000$.
cently placed by his countrymen on a sand-bar in the Sacramento river and there left to die. ailures occurred, the liabilities being more than ailures occurred, the liabilities being more than
$\$ \overline{5}, 500,000$, and the assets less than $\$ 1,000,000$ Johy Taxlok, a young man, was killed at Avery's sawmill, near Einigrant Gap, Place
county, last week, by a heavy log rolliug upol The Senate Cominerce Committee has report. ed favorahly on Mitchell's bill appropriating
50,000 for the construction of a first-class lighthoise on Tillamook Head, Oregon.
Because of the favorable news from Cuba the Spanish government has granted an amnesty
to all press offenders, and ordered the liberation of the Creoles imprisoned for rebellion.
The Irishmen !of Pittsburg (Penn.), and cinity are raising funds to employ counsel for he defense of the five Grannahans and two
Haggerty s , whose trial for the murder of Lor Leitrim in the County Donnegal, Ireland, be gins at Dublin, July 25 th.
OF 75 meetings of opcratives in the Black
burn region (England), 50 have resolved to burn region (England), 50 have resolved to go nd four reached nn iecision. A large number sumed work at the full reduction rates of wages,

Ex-Minister Washberne is now visiting Ex-V IC

## visit to Californi

Tifere were 190 mar
an Francisco last month.
 rigaied sage lands of alfalfa will be cut on the requent in the past in Oregon have been more ore.
Qurie an immigration, mostly Germans, is
going into the Butte creek country in Jackson
At Virginia City, Nev., Cherry, the little daughter of Mr. and Mrs. Coleman, was ThomAs McDoNALD shot and killed Alexander Nixon, at Bodie, in a drunken brawl.
Nixon was President of the Miners' Union. Nine men who had been found guilty of in citing a rebellion against the government of
Chile, were recently shot to death at lalpaJoin EDen, ased 22 years, a native of Scotbeating out of the harbor the other day and was drowned.
The Mechaniss' Union at Virginia City, Ne thought the miniug companies will consent to pay them.
Cuver's island are supplying liquor to the Indians, and two murders have already resulted
An Indian abducted a girl of seven or eight
ears old from the house of her sister, in San years old from the house of her sister, in San
Benito county, but was pursued by two men Benito co
and killed
The increase to the Mormon population o which 10,000 were from Europe, and the-balance from births, etc. who is again sufferin scverely from rhenumatism, has gone to the
Steamboat springs in Washoe county, Nevada to make trials of their curative virtues.
A sov of the late Lieut. George H. Derby
and author of "Pheenixiana," and other humorous
writings, and well-known among early dents of the Pacific coast, stands at the head of West Point cadets just graduated.
Numa Dutere
son of Numa Duperu, of this city, while, oldes son of Numa Duperu, of this city, while spend
ing the vacation with friends at Noya, Mendocino county, fell from the cliffs while hunting Two privates of Company M, Fourth Artil oute from Fort stevens to Vancouver, on th 13th inst., and were drowned. A private who jumped after them was also drowned.
ON the 17 th inst. a report received in Berlin from Vienna of a meditated attempt on th life of the Crowu Priuce Frederick William
caused some sensation, and lead to the arrest of caused some sensation, and lead to the
130 Socialists in the German capital.
The New York Socialist labor party have passed resolutions repudiating every endeavo to make that party responsible for any at
tempted assassination of the Emperor of Germany; condemning the capitalistic press of the
country as inimical to culture and progress, and as against the spirit of the republi
 ithout cause, when the citizens immediately yanched Setright. Colonel L. M. Taylor, prominent citizeu, was murdered at the sam
lace and time, supposed to be by the friends of Jace and time, supposed to be by the friends of is now in custody. Colonel Taylor was an im portant witness for the prosecution

Englini Ray or Rye Grass.-We received during the week a packagc of grass from Mare island accompanied by a note which stated, if we remember correctly, that the grass laad introduced itself and covered quite an area, and asked its value. We forwarled the note and speciman to Prof. Hilgard for determination and the note inust have been lost in transmis received " $n$ good looking sample of English ray grass, and asks whence it came, etc. Although
the note was lost it matters little, because the specimen is described as English ray-grass, which is a synonym for Euglish rye-grass (Lather its probable descendant, the New Zea-
rater land rye-grass, were proscnted bcfore the meet-
ing of the Dairymen's Socicty last fall by Mr. Sneath, in a paper which was printed iu the Rushat of November 17th, 1877, and the ryc-
grasses in general were considered under "Qrasses in general were considered under Wether this growth which has appeared at Mare island is a chance seeding from abroad or rye-grass, which grows in several locations iu either case the grass is desirable; especially for green feeding. The wild rye-grass has becn
successfully cultivated by Mr. Mailliard, of successfully cultivated by Mr. Mailliard, of Marin county, and perhaps ly others. It was
favorably mentioned by Mr. Sherman Day, in his paper read before the Dairymen's Socicty at
its last meeting. If our Mare island correspondent has farther notes of interest concern

pearancc. He gave mea most cordial welcome, or rather a luncheon, called Nannie, his
mother, and a man to go for my trunk, all in inother, and a man to go for my trunk, all
one breath, and seemed really rejoiced to se Presently a slendcr girl, with a truly "be-
witching" white dress, trimmed with dashes of witching" white dress, trimmed with dashes searlet ribbon, and smonthyy hrailecd hach
hair tied with scarlet bows, came dennurcly in to the room and was intro ever, iu that first hour could the wildest imag
ination havc picturel Nannie sitilman waling ination have picturect annie half-shy, half-dig nified company manner soon wore away, and Nannie and I were fast friends beforc dimner.
She sang for me in a voice as deliciously fresl? the sang for me in a voice as deliciously rets,
as a birds carrol: she took me to sec her pets, the new horse that was her last birthday gift from ""papa," the ugly little Seotech terrier with
the leautiful brown eyes, the rabhits, Guinea hens, sand the superannuated old pony, who hens, sand the superannuate
had preeeded the ncw horsc.
In a week 1 was as much in love as even most bewitching maiden I had ever met, child. mike and yet womanly, frank, bright, and full of girlish freaks and boyish miscliief, and yet welf
educated, with really wonderful musical gifts, educated, with really wonderful musical yifes idol in the village, her friends and neighbors thiuking no party conplete without her, whit
the poor fairly worshipeal hcr.
John allowed her an alnost unlimited supply of pocket-money, and she was lavish in all harity, from blankets for old woncen, tobacco for old men, to candics or the children, and
rides on horsclack for the urehins. And she lad a way of confcrring favors that ner
wounded the pride of the most sensitive.
We rode togethcr every morning; we walked
in the cool evening hours; we spent much time at the piano, and discussed our favorate anthors, and onc day when I asked Nannie to be my "ife, she said, coolly:
inderstood long ago." I was rather amazed at such matter. of.fact
the result. Hoo could I' expect any soft, , ,Ifsshing speeches? 1 suppose I ranked just where John
grandmother did in her affections.
But one morning, when Mrs. Stillman was snipping her geraniums in the sitting room,
and Jolin was reading the morning's newspapers, Namnie burst in, her heautiful face all aglow, her eyes bright with delight, crying:
"Oh, grandma! Waalt has come home! I aw him from my window riding up the road.
"Confound Wait
"Who is Walt?" 1 naturally inyuired.
"Walter Bruce, the son of one of our neigh "Walter Bruce, the son of oue of our neigh-
bors. He lias been like a brother to Nannie all her life, but went of to Europe two years ago, when ho came of age. They wanted to turued up again.
nut that John was terribly vexed tall, handsome youns fellow, inproved tpoiled by travel, just haunted the house. He was generally off with Nannie as son as
he arrived, and blind to Mrs. Sillman's illconccaled calkness, and John's sarcastie
speeches about boys and puppies. speeches about boys and puppies.
As for me, by the time my sle
As for inc, by the time my slecpy eyes were
opened in the morning, Nannie hall taken a openg ride with Walt, was at the piano when 1 long rite with walt, was the pain walking
cime into the room, and Wat was walk
beside arrived.
And the very demon of mischief possessed the ing to imperil her life, riding, driving, boating, and I fairly shivered sometimes at the pross my task to try to controle this quieksilver temperament.
But onc day, when 1 was in the summe house, a very ruen to my sile.
"Walt is,
"Yes, and he says I'm a wieked flirt," with
choking sob; "I thought 1 would ask you about it."." "that ",
"Our getting married. You know papa told me " was to marry you ages and ages ago." And I knew it was all right if he said so a wife who is all the time thinking of somebody else."
else. And you know I can't help it. Walt has
been my friend ever since we were always together. And when he was in Europe papa wouldn't let us write to each other, but 1 kissed his picture every night and morning and wore
his hair in a locket, and thought of him all the time. And
"Well, not exaetly," I said dryly. "Y'ou'll have to stop thinking of hime then.
thonght I'c tell you, and perlhaps- perlaps you will tell papan we don't carc about being mar sedate and grave like an oll lady, and of course I ought to be if $I$ anl to be an old man's wife."
"And I am so rude and horrid, I know I an not like nice city girls, and I 1 an altogether I rather agreed with Walt, as she stood in shy
confusion beforc me, her eyes still misty, her
lyut I was not quite an idiot, and said, gravely

But your father
But then his storms hell make a real storin, you would tell him that you have changed your mind. You have, haven't you?

## "Yes; the last half h

Iny matrimonial help suiling, and the next no. ment two arms encircled my neck, and a wa
kiss fcll upon my cheek, and Nannie cried: "You arc a perfect darling, a perfect darling, and I shall love you dearly all my life
fitted away presently, and I gave myself a good mental shaking up, and concluded ny fool dertaken to make and "old lady" out of Nan dertaken
nie.
Joln's wrath was loud and violent. Hc ex hausted all the vituperative language in the
dictionary, and then sat down, panting and furious.
one, now," I said, "what is the objection to young bruce? Is he poor?" "No, confound him! He inherits his grand father's property, besides wlat his father will prolably leave hin.

## "Is he iummoral:

"Incver heard so.
'Nothing, but I have set nuy heart on Nan nie's marrying you," "Well, you see she has set her heart in another direction, and I strougly obje
"Hho is in love whith sent the pupey
"What on earth sent the puppy home?" you won't be iny father-in-law, for 1 will not we can jog along as usual, the best of frieudswe can
look!
I po
I pointed out of the wiudow as I spoke. On
the garden walk, shaded ly a great oak tree, Walter Bruce stood, looking down at Namie with love lighted cyes. 11 er bcautiful face all do meet his gaze, and both her little liands were fast prisoned in his strong ones.

## row misty, and presently he said

"Aow happy she ind not cloud her hen happiness, John, I answered. "This is right and fitting, Nannie is too lright a May tlower to be wilted by
being tied up to an ofl December log like me., neing tied up to an ohl December log like me."
no So when, half feariul, the lovers came in,
they met only words of a:lection, and Nannie's they met only words of a:lection, and Nannie'
face lost nothing of its sunsllinc.
fhe was the loveliest of brides a few months later, and wore the diamond parure I had or dered for my bride at her wedding. And shc is the most charming little matrou imayinable, cheerfulncss, and her husband is ay roud, happy man, while I'm Uncle Lawrence to the children and the warm friend of the whole family
Reptiles and lanects in Aestralia. - The reptiles are really beautiful-croeodiles in the north and smakes, lizards, scorpions aud centipedes in the south. 1 slall not readily forge the scnsation 1 experienced when one night hugen my neck with his horrible 64 legs and made his way to my fcet leisurely much to my disgust, and though lie was probably only a fev museum at Adelaite, with all the whisky he can drink. Insects are wonderfully prolinicThe native children are sometimes hardly re cognizalle, so completely are they covered with tlies, filling their eyes, noses and mouths. Then eating, it requires cexterous mancuvering to get a piece of tlies. Spiders are very com mon, as also are ants, the tarantula being the most formidable of the former, and the billtlog. ant the worst species of the latter. These ants are an inch or more in hight and about two sting is not at all to be desired. They catch holi of your skin with their nippers, bend the body under like a scorpion and put the sting sting itself. When camping near a nest of them, which has the effect of keeping them at home.
Lecture by Jesse Young, the Explore
B.itLoosisi:-Mr. W. B. Woodbury has recently proposed an ingenions idea for tahing photographs of an enemy s works from a balloon,
without necessitating the preseuce of an aero. naut in the car. Electrical wires are run along the cable by which the air ship is held eaptive lasteal of a car a box is provided, inside of which another box is pivoted, so that it wil kecp horizontal. In the inner box is the pho
tograplic apluaratus, and over the lens is an tographic applaratus, and over the ent ons one the
ebonite shutter, moved by the curreut, to open or shut instantaneonsly. There is also a sen sitized tissue, on rollers
trolled by the current. What the ballon is trovated to the required hight, the lens prop erly focused and the tissue in position, the shut. instantaneous exposure. A photograph is thus ol tained, and, by further controlling the elock work, fresh sensitized surface may be exposed

## Naming the Camp Baby.

Among the many pleasant episodes of the te Dio Lewis Excursion, so unfortunately brought to a termination hefore fairly begun, by the illuess of the doctor, was that of the naming of the Camp Kaby; for, he it known, we had such a strauge personage in our party a sweet, little, always good-natured girl baly
only four months old, the danghter of Mr. and only four inonths old, the danghter of Mr. and Mrs. J. T. Dille.
It was in that last camping ground at Alum decp glen in the mountains back of San Josc, that the naming of the laby was resolyed upon - as usual for such grave natters in com-
mittee of the wholc, seated around a large fire. intree or the whinc, seated a round a large ire
Mr. Warner of Oakland, a venerable oll gentle man, hitherto conspicnous for silence, rose an good feeling that at once all ears were engaced of the wide circle of 40 to 50 persons. "My friends," said the speaker, "there is a subjec
to which I am requested to call your attentio and 1 know you will all be glad to hear of it a duty which I know you will be glad to dis charge before we are compelled to break up this pleasant party and separatc. There is one leep interest ine woun all love all strive to a deep interest, one you all love, all strive to car mean our baly our sweet little gipsy. It parents, recognizing the romantie propriety of the thing request that those who have show such our interest in their ehild from the first of have the privilege of naming the bahy. What shall be nits ne concluded. Scveral voices called on the botanist of the party to suggest a botanioal name, the euplony and per
tinence of scientific names having been recently the subject of a botanical lecture to them. He prononnced a number belonging to the flower about the camp and explained their adoption to the "new species" lefore them, espeeially urg ing the name of Levisia redicira, based upon its peeuliar signifieance, as commemorating both the Lewis party and the carious plant of that name found the day before blooming on the summit of Mt. IIamilton. The parents ac. cepted the name, and for a time it scemed to be pugnance which Americalls fecl towards the signiticant nomenclature of science-so opposit to the European sentiment on the same subject then burlesque expressed, first by puzzled looks, tered protests, which caused its instant with drawal.
priateusa was next suggested, and its appro priateness argued as being the femininine of and was near being adopted, when Dr. Knowles hastily incuired of Mrs. Dr. Lewis, whose good face lit up by the tall camp fire beamed upon us with more matrouly grace and kindlines, "Helen," she softly replied. "Helen! Helen! rang aronnd the circle, as all rose to their feet "Helen Dille it shall he," said the delighted Mr. Waruer, resuming his seat. "May be Miss
Helen will not marry soon, so she ought to be given a second name now," spoke up a timi but evidently thoughtful lachelor. "Agreed, ly delates, "and since this is about the middle of the locautiful month of May, let's give the laby the nidule name of Nlay." This proposi ing "Long live Helen May Dille!" "Now, said the Chairman, wiping his moistening eyes, "let us give the child a substantial token of our interest in her welfare," and moving over to the side of the circle where sat the father with the crowing chikd upon his "nee, he slipped a coin
into his hand, saying, "This to lelp you educate our little 'picadilla.'
Others followed the good example, and the passed ay autographmp for signatures, to be saved and given to the child at the proper time And thus the canp, baby was ehristened; thu begins the romantie grlhood of our dear little
pet of the Lewis exeursion. May all the ene mies of childhood be unable to conquer ou Lewis long live to help educate and be comfort ed by her littlc namesakc, Helen May Dille.
Alameda, May $22 d$, 18 īs.
The Fasiest Way to Drown.-Dr. R. S.
Tracy, in the Popular Science Monthly, says that if death by drowning be inevitable, as in shipwreck, the eascue ration, facc. A person who had the courage to do mnconscious and never rise to the surfacc. As ings of chilliness and pain would cease, the in describable semi dclirium that accompanie anarsthesia
while he wonld seem to hinself to be gently siuking to rclightful of dreams.

Did you ever notice how surprised you were
when you put your foot on the next stair and when you put your fo
found there wasn't any

UnWelcome settlers: those that offer ten ents on the dollar.
When is a railroad-track like a ship? When you see a cargo on it.
Boys in possession of sound thumbs had bet-
ter make the most of them now. The Fouirth approaches.
"How nicely this corn pops!" said a young man who was sitting with his sweetheart befor
the fire. "Yes," she respouded demurely. " It's got over being green.
A cittue deaf-mate boy was asked to show his sliill in the use of the English language on his slate, and he wrote,
A asked by the superintendent if his father was a Christian. "Yes, sir," he replied, "but he is not working at it much.
AN Irishman who stood near the third base, watching a game of base-ball, was knocked
down by a foul ball, as he hearl the umpire call down by a foul ball, as he hearl the umpire call
it. "A fowl, waz ut? Faith, I thought it waz a mule."
A visiror at an art gallery being asked whether he preferred pictures to statuary, said
he preferred the latter, as "you kin go all round he preferred the latter, as "you kin go all round
the statoos; but you can't see only one side of the statoos; the picters."
"I shouldn'T think there would be such word as 'breakfast,'"' remarked a young linguist to his mother the other morning. "Wny not, dear?" asked she. "Becausc, ma," replied the
boy, "it ain't natural. Thiugs never breakfast boy, "it ain't natur,
-they break loose."
The little bit of girl wanted more and more buttered toast, tile she was told that too muc would make her sick. Lorong sher a moment, she thought she saw of of her difficulty, and exclaimed: "Well, give me annuzer piece, and send for the doctor
There was a little fellow who knew Mother Goose better than he knew his Bible. One
Sunday he was asked in his class: "Who were thrown into the fiery furnace?" That was too much for him. The question was passed. The answer came promptly: "Shadrach, Meshach the little fellow; and when the next question
came "Who put them in?" he answered with a came, "Who put them in?" h
juinp: "Littlé Johnny Green!

Death of a Very Old Woman. - News June 8th, that Dona Eulalia Perez de Guilen, reported to be 143 years old, died at her resilight that morning. A short biography, pr pared by Col. J. J. Waruer, and published in the Herall, states that the old lady was born
at Loreto, Lower California, but in what year is not known. She came to San Diego with her husband, who was a soldier in the early days of that Mission, where she remained a couple of years, when they came to the Mission
San Gabriel. The old lady has been a resident of Los Angeles county ever since. Col. Warner is unable to state the number of her descendents or to give her exact age. Some o tennial, but an injunction was sued out by other members of the family, who objected to their aged relative being exhibited as an object
of curiosity. She has lived at the Mission sinee, where she has been visited by all tour ists.

## Keep the Head Cool.-An interesting paper

 was read at a recent meeting of the Royal So-ciety on "Experimental Researches on the Temperature of the Head," in which the writer Dr. Lombard, showed that mental activity will at once raise the temperature of the head, and effect in a less degre This is curious sult, as appearing to show that anything of the nature of volition involves a waste of nerve tissue which is not involved in involuntary perception and observation. There is no differthe sleeping body and that of the waking bod or between that of the waking body and of the head, so long as no act of effort is involved. But if even the least intellectual effort raises
the temperature of the head above that which the temperature of the head above that which it reaches in amused and idle observation, it volved in volition which belongs to uo so-called itself a fact of no slight significance.


## Young Folks' Column.

## The "Athenians.

A Story for Boys
Hallo, Fred," said Hal Dayton
"Hallo," replied Fred.
"Tore you going in sneh a hurry
Com Sedgwick's," and Fred haulted a mouent while he hunted his inside coat pocket to
see if he had forgotten any important papers,
"It's our Athenian meeting, and I have to make the opening speech."
"Cau't youl let a fellow in
"You ain't a member, but I'll propose you to-day, if you say so, and if you don't get blackyou'll have to quit swearing

What's that for?
"One of the rules-tell you about it some ther time can't, stop now, Want to join?"
"I don't know," said Hal, hesitatingly. "I) "First rate. Well, I'm off."
After Fred left, Hal stood leaning on the gate, thin not wish to stop swearing; that is, he knew it would be difficult to stop entirely because he had got so into the halit of it, and
habits are hard to break. So he could not decide about it.
was watching for Fred Whitney in the schoo yard.
"Well," said he, how's the society?"
"First rate," said Fred; "I'm to be Secretary his quarter, and it gives me lots of scribbling to do."
"Do you like that?" said Hal.
"Well, yes; it will be good practice, because 'm rather a poor writer for a boy as far along "Did you propose me
other thing as 1 am.
id you propose me ?" asked Hal.
Saturday, if you are in earnest.", "I
"Want to know what you do there first."
"Why, we speak pieces, and some real essays or selected pices. The hardest is to
speak your own piece, that is, one you made u yourself; but you don't have to do that till
you've been in a month or so, and got acquaiutAfter the first time it ain't so hard."
"What's the good of boys like us making making speeches, I don't see.'
know how after gen to it, so you'll know how after you grow up. Don't you re-
member that Mr. Hill that was in our room ouce and got cp to speak, aud how he stuttered boys snickered and got kept in at rezess. Well, rof. says he's one of the sinartest men in
town, but he never learnel to speak when he was a boy, and now when he gets up in a meetbecause he ain't used to it. I don't like to speak any. better than the rest of them, but I'm
going to do it every time I'm put on, so I'1l get going to do it every time I'm put on, so I'nl get
used to it. Prof. says we won't miud it a lit aster a while."
"Is that so? I'd like to try if I thought I could. What do you mean by being black "Walled?
"Why, you see that's when we vote if some marble and a white, and when the bag come round if you want the boy in, you put the round if you want the boy in, you put the him you put iu a black one. Nobody knows about it. That's the way men do in some of their societies, only they have balls instead of "Then

Then if you propose me and they all put in white marbles I can join."
"Yes."
Put what will I have to stop swearing for ays anything vulgar, he's fined two bits ever time. It's s mays and and ever time. It's mean, anyhow, and a fellow ongh
to be fined. I never did swear much, only when I got awful mad; but I don't now since I belong to the society
"Do you meet at Tom's all the time?
No, sometimes go to Ned Barker's and
sometimes in the Park if the wind don't blow." "Does Prof, go everytime? I shouldn't want " 0 , you won't mind him; he's splendid, just like one of the boys. He most always reads something funny or makes us laugh when he
speaks, and we all like to have him in. Bespeass, and we all like tolls us how to do, the same way they do at the college societies. He can't come every time, though. Well, mother 'My mother told me to come home early, ", but I a an't a going to go
"old you to.".
me or not. She don't mean what she says half the time; mothers never do.
said Fred, with a comical sort of smile of that,"
said Fred, with a comical sort of.smile. "I got
into a way of staying when I went after. yeast,
and mother said I shouldn't have anything but the next time I forgot and stayed too long she
sure enough, and I was awful hungry and want-
ed some of the strawberries and other things. You don't catch me staying late again. I'm too fond of my supper for that. Good bye," and off he went.
Hal was
Hal was proposed at the next meeting, and as
no black marbles were found no black marbles were found in the bag he was considered duly elected, and prepared himself
to attend the coming Saturday. Perhaps some to attend the coming Saturday. Perhaps some
other time we may hear how he gets on as an other timne
Athenian.

## Good Healty.

## Effect of Sea-Water in the Ears.

As it is the season for sea-bathing and the surf at the favorite resorts is full of swimmers,
$t$ is timely to talk of a possible ill effect of salt water. If you don't wish to run the risk ol becoming deaf, take a handful of cotton put plugs of cotton in your ears. This may
save you from earache and perhaps from more erious trouble. Dr Samuel Sexton, surgeon in-chief to the New York Far Dispensary, in a estimates that a thousand people of New York ity are sent to their physicians, to be treated or ear ciseases, every year, whose trouble has
arisen from getting water in their ears while arisen from getting water in their ears while
bathing or froin catching cold at such times by

## exposure or neglect. It appears from th

salt water is peculianly doctor's researches that salt water is peculiarly irritating to the delicate
structures of the inner ear. V ery cold water of
the the freshest kind may, however, be equally
harmful, and there is a short list of cases resultiug from the Russian bath, two of the patients being themselves physicians. A few
instances are cited where the trouble came from using the so-callcd " nasal douche;" water having penetrated the the car by the passage
from the back of the mouth. But these are unimportant compared with those where trouble of the last named cases intlammation occurred. in 57 it was acute. A variety of subsequeut
damages may accrue when the trouble spreads damages may yaccrue when the trouble spreads
ermanent deafuess is not anong the least o these and life itself may be endangered.
Surf bathers are especially exposed to such injuries, since a breaker may strike them on the
side of the head and drive the water into the ear; the same result may cnsue if the bather sets a sudden mouthful from an unexpecte ware, the water then being forced Mrough
from the mouth to the inncr ear. Man, the
dector Animals fitted for aquatic life are provided with various arrangements for keeping the water brane in the ear, which closes and shuts out fluid. The muscles of the water-shrew are competent to shut the ear-passages. People
who are blessed with very small openings of their ears run the least risk in bathing. A mau
should never dive, says the doctor, if he wishes should never dive, says the doctor, if he wishes
to preserve his hearing. Wheu in the surf, he to preserve his hearing. on heu in the surf, he "closing his mouth and nostrils;" though how not state. But the pledget of cotton for the ears is essential and every bather should be
provided with it. Temperature and Light in Sickrooms William J. Larmer writes to the Herald of quote a few paragraphs: In order to keep the varions impurities from accumulating iu dan yerous quantity, each person in a room sho per
be supplied with 3,000 culic feet of air per
hour ; and this should be done, where possible hour; and this should be done, where possiblc, nervous irritation induced by drafts is liable to produce internal imflammations.
The temperature of the sickroom should be kept at a uniform hight, the best average being
from $65^{\circ}$ to $70^{\circ}$., except for infants or very old people, who require a temperature from $75^{\circ}$ to to guard ayainst changes, and kecp it as unito guard against changes, and kecp it as uni-
form as possible. All cases of fever require a temperature lower than the average, as from $50^{\circ}$ to $60^{\circ} \mathrm{F}$., to assist in reducing the high
tcinperature of the body; but when the fever subsides, and there is much debility remaining, the temperature should be raiscl somewhat above the average. As a patient can bear a
greater degree of cold when in bed than whei out of it, convalescents from sevcre diseases, fevers especially, should havo the temperature
of their rooms higher than that maintained during the hight of the attack. Diseases of the air passages, as croup and diphtheria, rc quire a high temperature moist the sickroom is by the open grate fire. ing the sickroom is by the open grate fire. blinds, except where there is discase of the eycs, with photophobia, or when the patient is very restlcss and cannot sleep, then stroug light must bo excluded. Otherwise the sunlight should composing the noxious gases, and thus purify the patient under a scrong, unconnfortable glare of sunlight, nor in suminer to allow the sun's rays to shine into the roonn and raise the tem
perature too high. Artificial light has no nsefut

Domestic Economy

## A Budget of Home Recipes

 receipes for the use of your realers, If every one is as
successful as she h has been, 1 slall be well content. C . S . conomy to use cream ways found it just as good economb o use cream in cooking as to expend
the labor necessary to make it into butter and then use that.
Corn Bread-I give a recipe for making corn
bread: Three eggs, well beaten, tablespoon heaping full sugar, teaspoon salt, small teaspoon soda, coffee-cupful sour cream, tea-cul
corn meal; beke in shallow pan, with quick fire corn meal; beke in shallow pan, with quick fire Corn meal swells so much in cooking that one Corn meal swells so much in cooking that one
is likely to spoil the bread by putting in too Crahain Muffins-Two eggs, teaspoon salt small teaspoon soda, tablespoon heaping full sugar, coffee-cup sour cream; thicken with the batten quite thick. If you like them, rich, leave it thinner. Bake in the iron gem-pans and heat them on the stove before you put you Light P
Light Rolls-After your bread has risen once when you are putting it in the pans for baking,
take one quart of the dough, oue egg, one cup (tea-cup) sour cream, two tablespoonfuls sugar, one teaspoon soda; mix very thoroughly; ad flour enough to ellable you to make out your
biscuit, but no more. They will reguire a little longer to rise than the bread, on account of the
flour aud other materials added and a little more care in baking, as anything having suga For Cooking Corn-As the time for green corn is not so very far off, I will, while giving
some recipes for the use of cream, add one more: some recipes for the use of cream, add one more:
After husking and silking your corn, take a sharp, thin-bladed knife aud cut off a very thin ce from the outside of the grains; then, wit rittle practice will enable one to do this readily or one dozen ears of corn, put in the skille
one tea-cup sweet cream and a little butter and salt; stir very often and cook about 20 minutes. need butter. If yon use milk, you will want a piece of butter as large as an egg.
city people, but for farmers, who have a right live well if anybody has. I think dishes prepared by using cream more hcalthful than
where butter is used, and, as I have said before, Where butter is used, and, as 1 have said before,
no inore extravagant.

## Uses for Strawberries

Preserved Strawberries. - Three-quarters pounds of sugar. Put the sugar aud water iuto a porcelain kettle and boil from seven to teu minutes, according to thickness; then add the
fruit previously washed and drained and boil our minutes; skim out the fruit; turn the syrup into tin pans and set in the sum, adding
the berries as soon as it is cool; let stand in the un-protected from insects-the sunny part of two days; put into glass jars and screw down;
it is uot necessary, however, to have them airtight.
Strawberry Jam.-To six pounds of fruit Strawberry Jam.-To six pounds of fruit
allow fonr pounds of sugar; remove the calyxes; onc-half hour over a moderate fire, stirring constantly; remove from the range and add the sugar; mix the sugar with the fruit, and again
boil 20 minutes, stirring as before. To tell ohen sufficiently cookel, take out a teaspoonful on a plate, and if no jnice gathers a,
and it looks dry, it has cooked cnough.
Canned Strawberries.-Fill glass cans with fresh, whole strawberries sprinkled with sugar
in the proportion of one-half pound of sugar to a in the proportion of one-half pound of sugar to a
quart of fruit; put on the tops and screve lown at quare as tightly as possible; fill a wash boiler with cold water, previously placing some old to fit my boiler, which is a great improvement upon old plates, etc.- -and stand in the jars. The water should be within two inches of the aps; when the water boils, note the time and
oil 20 minutes ; draw to the lack of the store; akc out the cans and stand on a picce of flamel; screw down again and as the cans cool, causing
contraction of the glass, turn down again and agaiu until air-tight.
Strawberry short Cake.-sit two heaping tcaspoonfuls of baking powder with one quart
of flour: add one half teacupful of butter and lard mixed; one fourtl teacupful of sugar a
 roll out quite thin and bake in two pans, which should be large enough to allow of thic cakes being cut in half, so as to make four laycrs when done; crush the fruit if large and spread each layer, which shonld be buttcred plentifully with berries and powdered sugar. Eat
with cream and sugar flavored with vanilla. Also, onc quart of flour, a piece of butter the size of an egg; onc teaspoonful of soda and two of crean-on-tartar; sweet milk to mix. Sift the creanl-of-tartar with the flour; rub the butthe soda in the milk; mix soft and bake in a Hat tin; when done, split open, butter and sugar or berries and sugar only; spread fruit over the top or cream and sugar.

# PAC <br> exprisoults 

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## SAN FRANCISCO:

Saturday, June 22, 1878

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301.


## NEW ADVERTISEMENTS



## The Week.

As we write on Wednesday the issue is culminating. Speaking agriculturally, the fnture affairs of the State may be said to be incubating in the ballot boxes, and whether the chickens
which come out to-morrow will be birds of goord or evit omen none can tell. We have, however, such confidence in the sound idea of right whiel
rules the minds of uprght citiecns, in the high destiny of this glorious State of ours, and in the "Divinity which shapes our ends, rongh-hew
theml as we may," that we do not feel the pall them as we may," that we do not feel the pall
of dire disaster with which some timorous folk are cnshrouding themselves. A friend of ours lately deinvered an able address on the benerits
resnlting from contlict in the ideas and material affairs of men, and we believe that whatever
may le the anticipations and sensations which the immediate future may have in store for ns,
the contlict of ideas which is now in progress will in the end ilit us to a h highor plane of truth,
justice and enlightenment. F tis too late in the justice and enlightenment. It is too late in the
centurise for barlaric discord to prevail or for
glituring fallacies to ussurp the throue of shining glitering fallacies to usurp the throue of shining
justice. Anl, to eap, this shusf of eloquence, justice. And, to eap this shiwif of eloquence,
we can but say that the darker the cloud of
danner which may arise, the stroner ribled danger which may arise, the stronyer ribled
will be the unbrella of protection which a de-
termined people will rise owe thir thrent termined people will raise over their threatcncd
prosperity. prosperity
The day red ruin of rust in our grainfields is procressing tull rapldly enongh without undue help fronn the elements. Harrest work is swinging for-
Ward. It is a time of perless activity in the
conntry as is shown by the dro Ward. It is a time of peerless activity in the
country as is shown by the drop of dullness on
the city. The reaction will cone as soon as the the city. The reantion will come as soon as the
reward is realizell, and abnudant coin brings, to rural minds the neel for new comforts and homo
improvements.

## Notes on Wheat.

Naturally men's minds turn to the market when the grain is being gathercd. It is plai ow that there will be no such tremendon ield of wheat in this State as those intereste readers against leing unduly impressed with thesc extravagant reports and estimates, nor do The chinin any particular forcsight in the matter grain is growins, which may at any time hazari
ields, especially when the crop is conning for ward with umnsually rank growth. The eflect
ond of these influences is now to be seen in the ruin
ryst, which will largely reduce the prodncts of seve of "Agricultural Notes," this weck, may vorthy local authorities. Everything prove that our estimate of the crop at not more
than 15 bushels per acre on the averave is fully than 15 bushels per acre on the atverage is fully
as high as it will stand. When people with a interest to serve talk on a hasis of or 30 or
more bushels to the acre, as it may indeel be ound in some favored spots, they conveniently leave out of sight the thonsands of aeres which
will yield little but clicat and disappointment will yiele thousands which are reduced by rust Notwithstanding these guards against over
estimates, it will he true that we shall have good amonnt of wheat to sell and we shall le now that there will be no sensational events to iutluence the trade. The assembling of the peance congress in tharope promises to patch nip
the tempers of the rival nations and to arrange peace. Whatever demanl there is will spring
from the soler every-day connmption of tht pieople, and the anrount of available supplie
will decide the question. At last accounts it seemed that another unpropitious grain year must he lint down for silglaud, which win partial failure of the home wheat crop. This
promises that her large draft npon the produc rromises that her large draft npon the produc
ive capacity of other regions must be continned In France, the crop is siffering in some of the departments froun too much moisture, thongh
on light soils it is looking micounmonly well.
With he whole very favorable. The reports of the creal crops from (iermany, Hungary, Italy
 Russia and the Dannbian districts the acreage
larrely ery well. In Algeria, where early in the sea son there was 1 rominse of one of the larges
rops cever raisel, there has been great injury ver half a crop is expected. The nost nun favorable reports come from ligypt, Chile and
India. The latest Loudon advices from the latter country, without giving any precise
nformation, indicate that the crops, especially in the సorthwest provinees, are again deficichit and that there are evell fears of a contil
of the faninc, owing to a sinall rainfall.
Thus it appears that there is no great increase Those which are nentioned above as enjoying dly find use for all the grain they raise genel yreatest competitor, Rinssia, is convaleseent ironl her struggle and will hardly do full work
India is still feeling the effect of the late faml ine and fear of another short seasou. 1 it is
worthy of note, too, that we have all the advan tage in the matter of price in the linglish mar.
ket. Our last advices from the linglish markets say that Chicago wheat is being offered a 53 per qr. Odessa Chirka wheat is as low as wheat, with whieh it is ordinarily on an aver age. ('heap Rnssia wheat is oflered for 38 ss,
aud cheap Anlerican wheat at 46 sper gr. For Calcutta wheat alout to be shipped, from 47
cid to 48 s 3 d has been paid. While these fig


## per qr. An

 pon the eonsumph will exert some intluence ew months is the famine in thina. This fainrious character. During the months it has beel in progress, several millions of people haveperishecl. Although rain has now fallen and a uew crop of rice is being put in, it will be ahout
three months before anything can be taken three months before anything can be taken
rom the fields, the people must be maintained n some way during the summer, and the
world's supply of rice will be still farther re worlds supply of rice will be still farther re.
ducel. Already tlic price of rice lias increased oue-half in this market, advancing from six to nine cents per pound. This alvance will do
somucthing toward turning our local Clincse Population to the consumption of "Melican the flour shipments from this port to China, althongh np, to this date they are no greater han the year. Aside from the furnishing oo will turn people all over the world to the con sumption of flour and thns inflnence its market value to a certain extent.
 A.; "," M.; "Minuie's Golden Flower CIarden,"
W. W. W.

Agriculture in Oregon.
The coming of the annual publication of Ste Agregon Statental Socicty fair at Salem will begin on Thursday October 10th. There is a full list of premium offered in the different branches of production and an excellent showing of the industrial interto the nsual tabnlar lists of premiuns awarded ast year and offered for this year, there are a ew pages of reports concerning last year's ex the productive achievements of our northern the reports are from those who competed for premiums, and conseyuently the reports,
me cases at least, should not be taken

## asual lint rather as exceptional doings,

bunty, - hite lelgium carrots in drills, threc feet apart, in sanly soil, hoeing once and cultivating twic planting yellow lanvers onions in sandy soi in drills, thrce feet apart, cultivating twiee an oeing three times, he obtained l,06s bnshel hrce feet apart, in sandy soil, cultivating
wice and hoeing twice, he obtained a yicld $1066_{3}^{\prime}$ lushcls to the acre. With orange mange wurzel, he reports 37 tons to the acre, and
with rutabagas, 43 tons and IS0 ponnds to the
A. l. Miller, of Last l'ortland, sowed buckbitained frul innd, broken $n \mathrm{p}$
W. T. Newly, of MeMinnville, planted from the 9th to the 2tth of Juue, 1877, one and three quarter acres of sugar beets, also oue acre of irst variety was $\$ 3$ tons and 1,040 pounds, an onuds per acre. The soil upon which the were grown, or a large majority of the same, is
mndated bottom loam, hot is never flooded by head waters and has never been manured except by the anmual innndation. The remainder of heep. The cultivation was thorough lefore planting (or to say three plowings and sufticient lanting, only two hoeings. The beets wer The bottom land seems to have a slight aulva ade in yiell over the well-manured upland.
I. M. Smith sowed white Betoian day of May, harvested 20 days of Angust, with header. The oats will mature in ?o days, hine measare, from three quartcrs of an acre bishel. Dimmick, on beaver-dam land, at Hul)
J. 13. Din ard, Oregon, on the th day of May, isi that was plowed in the winter. After harrow ing once, the seed was put on at the proportion two-horse cultivator, afterwards run ove with a clod-masher. Cut on the lst of Augusi, ug measure, which areraged by weight, 5 bushels and 32 pounds. Ou the 7 th day May, $18 / \mathrm{T}$, Mr. Dimmick sowed five acres to bushels per ace. The ground was plowed and as harvested about the loth of september, and when'threshed, the yield was $3: 99$ bushels, heaping measure, with the avcrage weight of $4 ;$ pounds,
bushels.
A somewhat melancholy seedling apple
ceported by Chas. IIowe, nurseryman at Dora
Coos county, Oregon. The apple is ealled the land, standing at the grave of Mr. Howe. The "Tree a good bearer; young shoots red, older nes, yellow; fruit very large, about the size of loug, tapering a little at the eye; stalk short, in a deep, wide cavity; calyx iu an open, shallow basin; skin rissetty green, uearly eovered with
deep red, crimson streaks, marblings, oily, aud Flesh, light yellowish, very rich, sulacid, vin Flesh, hight yellowish, very rich, subacid, vin
ons, agrecable flavor. The richcst apple known "perfeetion at Christmas.'
Mr. 1., M. Waite, Salcm
ociety, is descrving of credit for securing thes notes of operations from exhibitors, and w hope he will be alle, this year, to largely cxten
this branel of his report.

The Window Gardex.-Our estecmed eon f $\mathrm{l}: 11$ Dorado, has written an able pamphlet o Vindow rardening, which is published h eorge II. l'ark, of Mt. Vernon, Ohio. Mr practical way, and his pamphlet will prove a window the thons that delichtful home art which brings floral treasures within the reach of this little treatise eren a rod of gronnd. With plants and seeds and a love for their culture, even the city prisoner may breathe the fra

Queries and Replies.

## Alfalfa and Dodder.

Evitors Press:- Your correspondent, Gen, Shields,
brings ome tanl igyres to bear on the alfalfa question.
flaving arrived at middle ace, 1 mix a very lar



 Ifalfa seed to market without labeling It as a mixture.
I perecive we hase not yet arrived at Homnsy nillenial
and
 It is quite likely that the dodder will hug the rofitable life. in many parts of the world. There seems no remedy save 11 burning or in fecding so close seeding with clean secu. We shonld like hear of a good practical cure for dodder. No
one seems to know anything, but what kills the clover too. It is wrong to sell alfalfa seed We have had a bouquet of complaints of it this to sowing Terhaps men will have to come dow themselves and know to be clean. If they es. ing they can keep clear of it afterward, al. though saving the seed may he expeusive and
Mucilage and Paste.

Fidrous 1'ras:- Will you please insert in your nexl
Prans a recipe for making glue from slarch and ome for
 We presume onr querist has reference to the an uncrystallizable translucent solid, resembling grim arabic, and is used for its adhesive propertics. Clue, properly speaking, is not a protrine from starch, there are several methods. 'hander's article in Jihnsou's cyclopedia: - Stareh (potato stareh is preferable because o tempera) $300^{\circ}$ Fa sheet-iron trays to formed into transparent yellowish-brown lumps, which are couverted into pale yellow powler by grinding between millstones. It is sometimes drums. Another nethod is Payen's process:
By the action of nitric acid. Take 1,000 parts By the action of nitric acic. Take 1 , acid parts citic gravity, 1.4) diluted with 300 parts of temperature being finally raised to between pleted in Fah. The transformatiou is com tratel solution of dextrine in wrer is adhesive.
The lest paste we know of for scrap books is made by dissolving gun iragacanth, which can
be had at the drug stores, in water. It should be made quite thick; say, as boiled flour paste,
and a fuw drops of oil of cloves stirred in to prevent fermentation. This paste does not make the paper transparent, but
and leaves the priut as clear as ever.
Pritore l'kess:-1 aml glad to see Mr. B. F. Stevens' inquiry about the presurvation of Mas
todon's tusks. The best way of preserving fossil bones, tusks, etc., is to immerse them in a solution should not be too warm, hut if passible be kept liquid for some time, say half a day, so as to let the liquid penetrate to the interior of
the tusk. lt is partly the disintegration of the gelatineous matter which nakes fossil boues and
tusks crumble when exposed to air. Every specimen of this kind should be carefully preserved, as it certainly constitutes at least a
word iu the look of nature, the pages of which are as yct so in
Fisen, Fresno, Cal.

## Precocious Persimmon

liditons l'ress:-1 see in your last isque, at early age in Los Angeles and Fresmo counties. I have a tree planted last Febrnary in which dropped of, but the balance will mature. Mr Kent, of loss valley, has a tree which matured
fruit last year. In answer to Mr. Sanders question, about the fruiting of his dwarf tree,
I would remark that the cause is probably to be found in the fact that the cion was grafte Loomis, San Rafael. $\begin{gathered}\text { Sending Cions by Mail }\end{gathered}$
Editons Press:-Last Mlarch I got from Trance pear and apple grafts, new varieties. potato, or rather a cube of potato. All the grafts are growing and the potato too, which I
set out just for fun.--Felix fillet, Nevada City.
Tuerf were 1,900 passenger arrivals at San rancisco by sea last month, including 1,693 went to China. For the same month last year
the arrivals were 3,029 , including 2,222 from China, against $1,2 \% 0$ departures, of which 449
went to Clina.

The Stride of a Trotting Horse. Photographing a Horse while Traveling Forty Feet a Second
We had the pleasure of witnessiug on Saturday last the sueeessful accomplishment of a feat in photography which has never been ex celled, and which marks an era in the art, viz, taking a series of photographs of a trotting horse while at full speed, so as to illustrate the in view have been made by Muybridge, the photographer, at the instanee of Gov. Leland Stanford, and the trial on Saturday showed how perfectly the work could be done. The experiments have been conducted at El Palo Alto farm, Menlo Park, where Gov. Stanford has established a stoek farm for breeding thor ough bred horses, and where there is
ver whieh the liorses could be sped.
Some five years ago Gov. stanford asked Muybridge if it were possible to take a photo graph of a trotting horse at full speed, but at
that time it was considcred impossille. About a ycar since, however, the experiment was tried
and a photograph of "Oceident" was trien and a photograph of "Oceldent" was taken
while the horse was traveling 36 feet per seeond. It was a single picture, however, and ex eited morere ridicule than praise, as nost people ng it possilule for the picture to be taken, and not believing the position of the horse to
be natural. This initiatory attempt has been
followed followed up, however, until on Saturday last a series of 12 pictures were taken in less than
half a second, while the horse was traveling 40 cet per seeoud. 'These pictures illustrate the stride of the trotter precisely, and although they upset many preeonceived theories and opinions nay be regarded as decisive. The method of taking the pietures is by no means complicated,
and when onee understood will be seen to be perfect, but several different ways
before a successful one was fouud.
Ou one side of the traek a large screen is rom the perpendieular the of about 0 degree ered with white cloth and having vertieal line formed across it 21 inches apart, which show black against the white cloth. 'The spaces between these lines are numbered from one to At the bottom is another low white sereen with horizontal lines four inches apart, to show the hight of the horses feet above the ground front of the sereen so as to make a perfeetly driven. On the opposite side of the traek from driven. On the opposite side of the traek fron front, and on a beuch or table were placed 12 eameras, numbered in order, so as to take 12 Enghish manufaeture aud constructed with an improved double slide, so that the exposure
could be cut off instantly, one slide noving could be eut off instantly, one slide noving
each way aeross the lens. The slides were held open by a catch connected with au arma ture in the side of the camera. A battery of eight jars was placed in the shed and each cam era had an indcpendent set of wires. These
wires were led across the track under the ground until within two feet of the background or screen, where they were raised so that one o the sulky wheels would pass over and strik cal lines on the background, and as the sulky ing the eatch of each separate instrument r leased the eateh and the slides cut off th exposure of the eamera at the iustant, so that As the wheel passed over without any blur the different pictures were taken each 2 inches apart, illustrating perfectly the stride of The trot
The trotter "Abe Edgington" was brough out on Saturday, and after being warmed up ready, he was put to a $2: 20$ speed past the sereen. He came down the traek in splendid As soon as the wheel struek wire No. 1, eamer No. 1 was elosed by the means deseribed, and
the first picture taken; when it struek No. the second eamera had the secoud pieture, an so on until 12 pietures were taken 21 inches
apart. The arrangement insured accuraey which was unquestioned. The horse was trav eling about 40 feet per seeond and there were 1 of 21 feet, eaeh in an inappreeiable part of second. The sound of the slides closing like a continuous roll, so quickly was the feat aecomplished, The negatives were perfee It would be inpossible to deseribe the variou positions of the horse's feet at different points
of the stride, but there are positions which one would scarcely imagine, but whieh could not operation. At one point all four feetare off the ground, the two nearest being eight inches
above it. Some of the positions are very curions, indeed, but one needs to see the photo to mount the whole 12 on one earl on a small Morse's gallery.
Morse's gallery.
In photographing a running horse the wires
could not be usod in the same way for manifest
the traek, 21 inches apart, and conneeted so
that the armatures would release the slides as that the armatures would release the slides as
before. The racing mare "Sallie Gardner"" before. The racing mare "Sallie Gardner, handsome animal, was brought out and the
threads placed so as to strike her breast as she threads placed so as to strike her breast as she
went by. The instruments were made ready, the signal given, and she eame rushing down the traek like a whirlwind. As the threads suceessively, ly the means described, released the eatches and elosed the slides, the 12 pic-
tures of the runing horse were taken. tures of the running horse were taken. When
the mare broke the eighth or ninth thread she the mare broke the eighth or ninth thread she became aware of something across her breast,
and gave a wild bound in the air, breaking the saddle girth as she left the ground. This gave a enrious pieture of the mare with her legs wildily spread and the brokell girth swinging in the air just as it is separating. This series of pietures are also very interesting but difficult of
deseription. They show, however, the gait of fore impossible. A long description even would fore impossible. A long description even would
bc unintelligible, while the photographs show Whe whole stride at a glance.
the trotting horse the motion of each and aeenrate measurements taken by the aid of the vertieal and horizontal lines. It is curious to notice that the propelling power of
the horse seems all in the hind legs, while the
etc. There are also a group of buildings for the laid-out track hostlers, ete. A handsomely which the passes near by the stables, on The Governor has over 200 head of blooded stock. The horses were all brought out on th ing and our visit and showed careful groomexception, thoroughbey al, without cost pretty long prices. The Governor's idea is that this climate is the best in the world for breeding thoroughbred horses, and he has probeing satisfied the could find to breed from native of California. He is using every will be a to improve the breed of our horses and expresse its olonoxious faude desire to see the turf freed o its obnoxious features, so that its standard will be sneh that its patrons may once more take a
pride in it, which is not at present the case

## Manufacture of Bisulphide of Carbon.

Prof. Hilgard, of the University of California, reently suggested, in the eolumns of the Reral
Press, the use of bisulphide of earbon for the destruction of ground squirrels. It had be successfully used iu the sewers of Paris for the
externination of rats, and from the reports we

## 

## Fig. 1 simple apparatus for making the bisulphide

front ones seem only used to support the body. sulky was only on the ground about half the The ground was perfeetly smooth and
ven, having been earefully rolled, and the powdered lime sifted on gave an excellent surface for observation. The track made by the wheels show they were moving in short boonds, as if the spring of the felloe between the spokes
direw the wheel off the gronnd at the spokes. The wheel would make a mark for about six iuches, anll then none for about four inehes, and
so ou with eonsilerable regularity. Gov. stanford has gone to considerable trouble and expense in having these experiments,
conducted so thoroughly, and Mr. Mluybridge, onducted so thoroughly, and Mr. Muybriage,
who is an euthusiast in his art, has earried them ont skillfully. The eleetrical portion of the app.
 highly satisfacorory, and eannot be caviled at. Quite a number of gontlenen withessed the ex.

have had, it seems equally useful in its new
mission. The great objection to its use is mission. The great objection to its use is the
cost. The present prices of the purified article
is 40 cents a pound. The is 40 cents a pound. The crude article imSt. Louis, costs 25 ceuts a pound. Now, it
seems to us that if this remedy proves to be what it claims to be, that it would be a great saving to the farmer and a profitable thing to
our owners of sulphur fields if the artiele wer our owners of sulph
manufactured here.
For this reason we give a short aceount of the properties of the sulstance and the best way
manufacturing it. Bisulphide of earbon is, its name indicates, composed of one atom carbon and two of sulphur. Its formula
$S_{2}$. It eontains $15.8 \%$ of carbou and 84.2 of sulphur. At the ordinary temperature o refractive power and an agreeable etherial odor (when pure). It is heavier than water, it
 evaporation and loss by covering it with a layer
of water. Its boiling point is varionsly stated


FIG. 2. APPARATUS FOR WORK ON A LARGE SCALE
applieation of elcetrieity as an adjunet to the pect, and the pictures were as aceurate as pos spect, and the pictures were as aceurate as pos
sible. The series of photographs will be of great interest to all having any interest in horses, as they show couclusively how the stride is accomplished at high speed, a subjeet on which there has been a wide difference of opinion. These pietures, however, settle the matter conelnsive
ly, and many will have to give up their ancient prejudices
We would like, did space permit, to give
some deseription of Gov. Stanford's mag some deseription of Gov. Stanford's mag
nificent place, but it would require several colnmns to give even an idea of it. The raneh the S. P. R. R. Aronud the residence are thighly cultivated and ornamental grounds, kept in the neatest order possible, with handsome large stables for the house-horses and earriages, numerous outbuildings, etc. Smooth grave roads and paths run in all direetions and there is a pleasant mile drive up to the large stables where the faney stock are kept. "Here is a very a fine box stall by himself, with all the stable Ephianding neeessal for eomfort and health long row of low buildings, divided intc box are divided up, so as to leave pastures for the yearlings, the mares with and without colts,
as being from $104^{\circ} \mathrm{F}$. to $113.4^{\circ} \mathrm{F}$. $\left(40^{\circ}\right.$ to $80^{\circ}$ C.) It is volatile at the ordinary prcssure and dinary ether, and the vapor is very inflam mable. Carbonie acill and sulphurous aeid are formed by its combustion. Mixed with air the vapor forms an explosive mixture. Even the pure vapor is an anæsthetic as powerful as
chloroform, but the crude vapor, containing many other substances, and possessing, by the way, a very disagreeable odor, is a powcrinl
poison, especially to all the lower animals. It has also the property of dissolving large quantihas also the property of dissolving large quantisulphur, phosphorous, iodine, ete
for a rapid review of its properties.

## Its Manufacture

Is easily attempted on a small seale by the apparatus shown in Fig. 1 of the aceompanying engraving. A small furnace is inclined, as in the figure, and an iron tube as a gun barrel, a glazed porcelain tube is placed in it. The
end, $b$, is fastened by a lute tightly to the adapter, $r$, and the upper end is capable of being stopped by a tight cork. This tube is
filled with coarsely powdered chareoal and the filled with coarsely powdered chareoal and the of the tube have arrived at a good red heat, a the aperture is then elosed The vessel and the aperture is then elosed. The vessel, "l,
appear and condense to drons, whieh will soon beneath the water. This product is the sink substanee. It contains sulphur, sulphydric aeid and other things in solution, which give it a very disagreeable odor. It is purified by
shaking with carbonate of soda or quicklime and redistilling.
Such an apparatus is not adapted to manufaeing description quantity, and we take the follow ing description of an apparatus bettcr adapted
to the purpose from Dingler's Journal, 120, 192 to whieh we refer for further details, 192 Fig. 2.
A eylinder of east iron, $A$, six feet high, one nches thameter and a little more than two within and without with a lute of clay. This rests on a massive east-iron block, $B$, and is surrounded by masonry. The cover of the eyl-
inder is provided with two short tubes, $E$ and $E^{\prime}$, in one of which a poreelain which runs to within three or four inchastened, bottom. It rests here por a layehes of the coke. The remainder of the space is then filled through $E^{\prime \prime}$, with porous charcoal, and it is thu replenished as often as necessary during the operation. At the side, at $H$, is cast a short bisnlphide. This has tightly fitting to it, by the ball, a tube, $I$, which conveys the vapor to the balloon of stone ware, $J$, where it partly
condenses. This runs at will into a vessel, $L$ where it sinks beneath the surface of water when it flows to the level of the siphon tube, $M$, pleasure. The vapors which are not condensed pleasure, The vapors which are not condensed iquic out at the worm, ?, and the condensed off as it fills. As the jar, $S$, where it is drawn a constant eirculation of water inust bc kept up
in the condenser, the cold water entering at $U$ and the hot running off at
The operation proeeeds in this wise: The cyl
nder, $A$, being full of porous chareat it inder, $A$, being full of porous charcoal, it is
heated up to a good red heat and small lumps of sulphur are dropped into $E$ from time to time. As the charcoal is consumed it is added through $E$, but time is given, after adding
charge, to let the charcoal become heated up to charge, to let the charcoal become heated up t to avoid the distillation of sulphur with the bisulphide as much as possible. The chareoa is kept in excess to avoid this also.
Sneh an apparatus as is here deseribed is sai to distill daily 250 pounds of the bisulphide It is usual to work only during the day time
and to leave a low fire on during the night, and to leave a low fire on during the night,
without any addition of sulphur. The chief item of expense would be the consumption of eylinders, as orre lasts only from five to eight ays, being attacked by the sulphur. A fusibl sulphide of iron
destroys the vessel.
Supposing the article to bring 25 eents pe pounds, $\$ 6250$ for have for a prodmetion of 2 ing a market, would eertainly allow the priee to run down to 12 cents or 15 cents per ponud and still leave a marginal profit.
There are certain cautions, however, which it would be well to add. The gas is poisonou even to men whell inhaled in quantities. It is
very inflammable and yields, with air, an ex. very inflammable and yields, with air, an ex
plosive mixture. The products of the combus plosive inixture. The products of the eombus-
tion, carbonie acid and sulphurous aeid, are also irrespirable and very suffocating, so that in case of an accidental fire, there is uothing to do but to let it burn. The vapor also, it must be air, and so, if allowed to cseape, it easily flow into the fire and the explosion ensues. To avoid this, it is neeessary to have an intelligent trustworthy man, who will see that all joint. are tight and that the eondenser is kept cool It is also well to have the fire-place scparated
from the condensing apparatus by a brick or from the
iron wall
In transporting the licquid also, eare must lo taken. The vessels, if of glass, must be sufli ciently thiek; and, if of iron, mmst be tight
enough to prevent leakage and the whole must be kept cool.
We would remark that for the particular use mentioned, purifieation is not neeessary, as the than the pur
We have not space for any further remark hope that "a word to the wise" will be suffieient.
Since the above was written we learn that the price of the bisulphide has, owing to the
increased demand, gone up to $s 1$ por pound.

A Grbat Eximbition in 1879.-England has decided to have a great show next year. It will be an agricultural exhibition. The expense is cstimated at $\$ 150,000$. The Lord Mayor of the suphort of the be under the auspices of the Joyal Agricultura Society. Agriculture is dectining in Grea Britain, and there is some hope that the exhibi tion may arrest its downward course. The numbr of eattle and the acreage of wheat and half the population of the United Kingdom i now dependent for sustenance upoin imported food.

A movement is on foot in this city to form eolony i
Sonora.

THE PACIFIC RURAL PRESS.

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Shate Them Fown

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acres of barley, all looking sicely and a nice vegetable
 number one cows, two calves, one work teann, harness,
old bugky and two dozen hens. The ranhe is one mite
wwest of the liverale postotice. We have a good schol,
one store and preaching every two weeks of the South
 Fresso, and 15 miles from the Central California colony.
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ranch if sold soon. Price, $\$ 2,500$. $\$ 1,500$ gold coin down,
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 lionse, one wool house, large store house, wood house and
otiner smath buildings complete. Two gond wells of pure colld water and a larre spring of never failing water run-
ning antont one mile throu th the ramel. The house is ning abont one mile through the ranch. The house is
surrounded with shade and ornanintal tres. Al the
find surrounded with shaile and ornancental trees. All the
frming utclusis and about 5 ot ons of hay will be thrown
in if purchased sornh. Any one wishling io engaye in the in in purchased som. Any one wishling to engake in the
dairy, or stock busincso of any kind, cannot find a better
location in the State. Price, 8.50 per acre, one half down location int the State. Price, b7. 50, per acre, one halif down
and the balance to suit purchaser. For further particu-
lars, apply to Junies W. Good, Colusa, Elk Creek DANIEL JOHNSON,

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50 cents ane Our Rates．－Six lines or less inserted in this
50 cents a line per month，payable quarterly．

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BARRETTO \＆CO，Downey City，Cal．，breeders o

thoroughbred Jerseys．Bulls and Bull calves for sale A．MAILLIARD，San Rafael，Marin Co．，Cal．， | PAGE BROTHERS， |
| :---: |
| （or Cotate Ranch，near Petaluma，Sonoma Co．），Bratis | ers of Short Horns and their Grades．

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M．EYRE，Jr．，Napa，Cal．Thoroughbred Southdown Shecp．Rams and Ewes， 1 to 2 years old，$\$ 20$ each
Lambs，$\$ 15$ each． LANDRUM \＆RODGERS，Watsonville，Cal．
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T．A．FREEMAN，San Jose，Cal．Pekin Ducks for Also，egys in their season． WILLIAM NILAS
and Breeders
of hatching
MRS．L．J．WATKINS，San Jose，Cal．Premium Pekin，Ducks，et
A．O．RIX，Washington，Alameda County，Cal C．P．STONE，San Franciseo，Cal．，Importer and

## swine．

ALFRED PARKER，Bellota，San Joaquin Co．，Cal Inporter，Breeder and shipper of Pure Berkshir
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J．M．KERLINGER，Elis，San Joaquin Co，Impor
ter and Breeder of Berkshire Pigs and fine Poultry．
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N．S．AMES，Napa City，Cal，Inporter and Brecter
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Queens Imported from Europe of Italian Queen Bees，Queen，
$\$ 10$ each．Tested Queens，$\$ 3$ ．
J．D．ENAS，of Sunny Side，Napa，Importer and
Breeder of Italidn Queen Bees fron the best districts Breeder of Italian Queen Bees from the best districts
in Italy．Light or dark，tcsted or untested
homeens，
homed Nuclcus，three franncs if desircd Addiress homebred Nucleus，three frames if desircd Address
as above．

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No． 105 Kearny Street，San Francisco．

On receipt of the amount in postage stamps，any of th
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POOR LITTLE CHLOE，（Ballad …．．．by Luther， 35 cts kiss the little ones good night for me， by Ruttledge， 35 cts． GOOD NIGIIT，FAREWELL．．．．．．．．by Ruttledge， 3 cts． my dear little home o＇er the sea，
by Lavarnie， 35 cts．
help the needy when you can，
AMERICUS GRAND MARCH，．．．．by Ballenberg， 30 cts
THE LITTLE TORMENT，（Schottische）．．Far West， 35 cts． THE REPUBLIC GRAND GALLOP，

Eend for our complete Catalogue of Songs，Duets and Choruses．RJS Say where you saw this advertisement．

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EMORRHOIDS or PILES instant relicf in all cases．By means
of this new appliance the Piles hav Willentirely disappear if the Truss is worn and the Rem
edy applied as dirceted．For particulars call or adaress
MAGNETIC ELASTIC TRUSS CO．， 609 Sac－ RTS State in what aper you saw this notice．


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Incorporated Feb．10th，1875．Capital Stock，$\$ 1,000,000$ ．
OFFICERS AND DIRECTORS．

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JOHN LEWELLING，（Treasurer） JOHN LEWEL
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106 Davis Street，S．F．
Consignments of Grain，Wool，Dairy Products，Fruit，Veretables，and other Produce solicited，and
Advances made on the same．Orders for Grain and Wool Sacks，Produce，Merchandise，
Advances made on the same．Orders，for Grain and Wool Sacks，Produce，Merchandise，
Farm Implements，Wagons，etc．，solicited and promptly attended to．
We do a Strictly Commission Business，and place our rates of Commission upon a fair
ble the country at large to transact business through us to their entire satisfaction．
Consignments to be marked＂Grangers＇Business Association，San Francisco．＂Stencils for marking will
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The best Beef Bull in America．The Herefords the siller，Beecher，Will County，Hlinolis． For Cotswold Sheep and Berkshire Pigs nquire of T．L．MILLER．

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THOROUGHBRED
SPANISH MERINO SHEEP！
200 Extra Rams ヨヨHS and ay be reached by rail from San Francisco，sevent thines daily．Parties desiring choice sheep should see
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CHOICE PIGS FOR SALE．
I have a few fine Lancastershire pigs for sale，now bont four wecks＇old．Bred frons choice］imported

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MOHTGOMERY WARO \＆CO．，
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DALTON \＆GRAY， Commission Merchants，

All Kinds of Country Produce． 404 \＆ 406 Davis Street，San Francisco ana Consignuments Solicited
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 Yor sale．Yearlings and two－year－
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farmer and ruralist should take it．It
en DEWEY \＆CO．，Publishers，S．F．

BURNHAM＇S
 WARRANTED BEST \＆CHEAPEST Aiso，MILLING MACHINERY PRICES REDUCED APR． $20,{ }^{1} 78$.
1＇rmplets free．OFFICE，YoRr，${ }^{2}$.

SHEET

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The Strongest Barrow Mad
An sizes kept constantly oul hand．
Lap－Welded Pipe，all Sizes，from Three to Six Inches．Artesian Well Pipe．Also，Gal vanized Iron Boilers，from Twenty five to One Hundred Gallons
Iron Cut，Punched，and Formed for making pipe on ground，where required．All kinds of tools supplied for
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In consequence of spurious imitations of
LEA AND PERRINS＇SAUCE， which are calcnlated to deceive the Public，Lea and Perrins have adopted $A$ NEW LABEL，bearing their Signature，

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which is placed on every bottle of WORCESTERSHIRE SAUCE，and without which none is genatine． Ask for LE A \＆P PERRINS＇Sauce，and see Name on Wrapper，Label，Bottle and Stopper． Wholesale and for Fxtoort by the Proprietors，Worcaster，crasse and Biackezen，

To be obtained of CROSS \＆CO．．San Francisco．

## IRA MARDEN \＆CO．＇S

 brands of
## Coffee and Spices Have no Superior．

## Twenty－Five Years Experience

Ask Your Grocer for Marden＇s Coffee and Spices．


The Resources and History of Shasta County.-No. 1.

Shasta, the Keystone county of the state, has, for many years, remained almost unknown. Her placer diggiugs were supplyosel to be nearly looked, aud many of her wealthy and enterpris. longed, aud many of her wealthy the scenes of their former trials ing men left the secnes of ther entermprise to invest in ond build up other communities. The same return-
iug wave, however, which came to Butte, iug wave, however, which came to Butte,
Placer and other mining eonnties, is leginuing Placer anct other minuing eountes, is iveginuing
to roll in upon Shasta, and the many inquiries malle have deternnined the issue of this article. Shasta County
Witlu 7,000 inhabitants and ncarly 5,000 squar miles of mineral, timbered and farmiug lands much of it still open to pre-emption, is in need
of more men, and offers a wide field for industry aud for men of small means. He shall first speak of the towns: theu of the eading interests, mincs, lands for sale; then1 of
the opening for settlers, markets, cost ,ff travel

The prescut county seat is
Shasta City
One of c'alifornia's oldest and wealthicst niming
dollars were collected to give him a lift. The miners in the Argonautic days, were swift to
award, and swift to condemul. If they were pleasel by the singing of a little chill, at some pleased by the singing of a hythe chin, ang upon school exhibition, the heavy goir rang upon
the stage to prove their delight. But if they the stage to prove their certing or desperado, they role as the Anglo. .axon rides, with death in his grip.
The m
The mining storics still told "ljeneath the sladows of Shasta," are full of suggestion for
novelist and poet. The prospectors that still novelist and poet. The prospectors that still
climb the lonely ravines, and pick at ledge and boulder: the lonely mincrs searching for "hockets," or washing the old claims again; the early settlers who live more in the past than in the present, all these are literary material similar to that whicl gave Bret Harte his earliest, best inspirations.
One of the Charms of Shasta City At prescnt, in its quiet and yet hopetul days, consists in its society. The people are kind hearted frienls. The pullic school is under the charge of Mrs. D. M. Coleman, County simperintendent, a lady of rare tact, patience aud ability, who has done
much to imurove the schools of the county. With decided popnlarity she has becu repeatWith decided popmlarity she has becn repeat.
edly elected to ther responsible office. The

## Training Schools.

President Filliot, of Harvard University, has well said that "the welfare of the miversities depenis upon the welfare of the trainiug schools." Our State cannot yet boast of a stalwart university. One maniest reason that the schools which furnish the students for the Uuiversity either do not take time enongla
to do their important work well or else lack the qualifications to accomplish what they atterpt The signs of the times indicate that these oundation defects in the higher edncation will soon be eliminated. Foremost among the ageucies quictly at work solving this all-important problem is, as it occurs to us, the Golilen Thate Academy at Oakland.
This institution has just completed the seventh year of its history. Its years and its work entitle it to rank annong the permanent
educational forces of the state. The first class of pupils prepared within its walls has just of pupils prepared withited from the State University of California. Next year, Sale, Amlerst and Dartmouth will graduate others of its students. It claims to do foundation work in education according to most approved standards. With equal diligence it aims to expand the claaracter nizo the highest type of noble manhood. Recog.
$\int_{0}^{0} A$ TENTS AND NENTIONS. List of U. S. Patents Issued to Pacific Coast Inventors.
 AND Forkion Patcint Agrata)

By Spectal Dispatch from Wabhington, D. C. Werk Ending Juns 4 til.

 MyTiobin of
burg, Ogi.
ovp.-Charles Rowell, S.

San Joaquin Valley lamestrifs. -The edition of the Stockton Daily Independent of the lith inst., is a most praiseworthy publication. It contains an exccedingly interesting and well ritten article, giving an acconnt of the past article and present condition of Stockton. The article contains a great deal of statistieal information in conncction with the grain-raising interests of the State. It is, in fact, one of the

the midst of timbered lills, and is full of quaint reminisccnces. It was founded in the year
18.0.), and was for a time known as Reading's springs, luat the stately dome of Slasta gave it atterwards a more fitting title. Iu carly years the Indians were often troublesome, anil the otid corral whieh two men defended with sucecss, is At first a few minery had it their own way, lut som The Rush Came,
And up gulch and creek, toward Horsetown, 1go, Kagle creek, Whiskstown, Mal Mule,
Buckeye, Cluum creck, and other diggings the miners found their way, building up? lusy camps, all tribut iry to shasta. In these flush times the poppulation of Nhasta. City was fully large and costly brick huildings were erected. Lumber mills began work in the Sierras, and roads were eut everywhere. Major Reading
led a ararty over the mountains to Trinity; and mined on ticading's bar, near Douglas (iity. Others followed, and the new mines added to
the business of shasta. he bisiness a hasta. these early pioneers leel. The strangere amonich them received a welzome, the sick were cared for as if by brothcrs; luat the cleat and coward had short slift and little mercy. If a miner's "luck" was lad in one camp, and he grew
downeast, sone one would pass his old cap, and full of gold dust, until often screral hundred

Business is decidedly improving, owing to th discovery of many fine quartz ledges and ne diggings min the vicinity. It can hardiy be is as yet undeveloped, and, accordiug to the
hopes of its citizens, only awaits the tion of capital to briug back the golden days oll. the immelliate viciuity of shasta City, but ther are many extremely rich garden spots and choice little orchards aud vincyards. Many spots now neglecterl and open to pre-emption, could he made pleasant little mountain homes hy a few years or wisely direeted labor. The U. S. Land Offlce

Is in .hasta City, and information can there be had respecting the whole county. One of the
land-marks of the eouuty is Carter's Shasta Courier, which has been a part of its history for cars.
Shasta County Officers
Judge W. W. Hopping; supervisors, Jas. D. Blair, Wm. Davidson, J. W. Ciarden; theriff, 1istrict Attorney, Clay W. Taylor; Assessor 4. N. Atkins; Treasurcr, J. Van Schaick; Supt Rullie Schools, D. N. Coleman; Admr. and Coroner, C. Leutz; Surveyor, George Silver-
.
Tur. P'eace Congress will be in session several
opment and to the best fruits of such culture in life, it has provided a well-equipped gymnasinm
for daily exercise and a brief military drill, to emphasize the method and system whieh should characterize the true student. Its instructors model of comfort, convenience and architectural clegance. The founders and guardians of this academy are many of them graduates of the famous Phillips' Academy, of Andover, Mass., which has recently so worthily celel)rated its centennial. It is their purpose to make the Golden Gate Academy like uuto this "fore most of Vastern training schools." May the completion of its centcmary be as greatly hon-
ored. - Aryonaut ored.-Argonaut.
The Rio Vista cannery
To to 1,200 salmon per day

## "WiLц Yoc вк hisd to l's!" "o

are inore affected by "long dry times" than the publish-
ery of agricultural newspapers. Our expelines run on squal in wolume to fush seasons, etc. etc. To cut ever little sermmn short, we ask all who can to remit their sub scriptions and forward the cish for the Paxss as early an possible. We have worked earuestly witha kludly regard or the interents of every subscriber to keep the pape right up to the inark duriug dry times, and now will you not kindly feel fir
praching plenty?

Joaquin valley and its agricultural, business and industrial intercsts. lu connection with it is published a large and replete map of the sai Joaquin and sacramento ralleys, drawn by Mr.
las. D. Schuyler, one of the cditors of the paper. Anybody who wants to know anything apor. Anybory who wants to know anything any matters connected with them, should get this number of the Independent. The edition is one of the most commondable we have seen and adils another point in favor of one of the lead有 Bosk. - The roar of the great Ma musical festival will not drown the sweet mel ody which is poured forth by the musical cask. ets of 11. P'aillard \& Co., 120 Sutter street These little gems of harmony, made by a brauel Francisco by the makers, are unequaled in their construction and performances. They are elegant articles for prescuts to iriends, and the are charins to possess for oneself. They amuse instruct by the faultless execution of the finest musical airs. The excellence of the instrunent is sufliciently attested by the high awards which have been made to them by world's fairs and to all exhibitions, and they commend themselve aud cadences. M. Yaillard's establishment at 120 Sutter street, slonld be risited by all who 120 sutter street, slonld be visited

## S. F. MARKET REPORT

## Nors.-Our trade review and quotations are prepared on Wednesday of eech week (our publication day), and ar not intended to rearesent the state of the market on Sat

 on Wednesday of each week (our publicnot intended or represelt the state of t
urday, the date which the paper bears.

Weekly Market Review.
DOMESTIC PRODUCE. ETC.
The election is engrossing men's minds. The exchanges hold no meetings. the banks are closed, and most of the large houses were open
but half the day. There is little to say about trade except as will appear in special notes below. The foreign Wheat market has lost a few
points during the week, as may be seen by the following:

Range of Cable Prices of Wheat
The course of the Liverpool quotation for days of last week has been as recorded in the following table:

## 



To-days cable quotations to the Produce Exchange compare with same date in former years as follows:

##  The Foreign Review.

London, June 18th-The Mark: Lane Express
stays: says: Standing crops are all suffcring from
continued wet and cold, and the excessive hacontinued wet and cold, and the excessive hu-
midity of the past six weeks has seriously compromised agricultural prospects. Until within the last few days, growiug crops in Scotland
did not suffer as much as in England. Now, however, matters havo changed for the worse. Floods have occurred in many of the lowland
districts, doing vast damage. Deprived by districts, doing vast damage. Deprived by
holidays of the principal market day, the London Corn trade has been very quiet, transactions being mainly retail. Any elements of
strength, which, under ordinary circumstances, would have been apparent, have been totally eliminated from the trade by exceediugly heavy
arrivals from abroad, and values have conscarrivals from abroad, and values have consc-
quently evinccd a declining tendency. Indeed, quently evinccd a dechining tenidency. Only been salable at a reduction of fully 1 s in the fortnight, nor has the concession attracted any improvement in the denand, as buycrs do not appear to think the lowest point hased from purchasing, excepet in such quantities as immediate
needs dictated. The necessity of rapidly clearing grain-laden ships in port has therefore ing grain-laden ships in port has therefore cansed are rapidly filling up. The augmenta-
which an
tion of stocks will probably be considered as immense, shipments of Whiat and Maize from America are flooding the market just at a time when buyers scem least disposed to operate.
Political influences having ceased to affect trade, an index as to the future course of prices must be looked for in the legitimate action of supply and demand; and although at the momeut great depression prevails and values may possibly recede, yet healthier trade, no doubt at a low range of values, may be confidently expected when the bulk of American shipments is received and peace settled. The floating cargo trade for
Wheat has been dull at about ls dccinne. Maize had given way fully 6d; Barley is fairly steady.

Freights and Charters.
Grain freights are still lifeless, and the rate for Liverpool is 50 per ton. The Loch Doon,
786 tons, just in, was chartered soine time since for grain to Cork at $£ 3$. Shipping in port loading Wheat, 25,094; loading general merchauing Wheat, 25,094 ; loading general merchauthis port, 198,000 tons.

Eastern Grain Markets.
NEW York, June l5th. - The market has
been depressed and prices of Wheat have debeen depressed and prices of a heat have de-
clined an average of 5 c , with a corresponding clined an average of 5 , with a corresponding
fall in Flour and Corn. As the foreign inarkets rather moderate and chiefly speculative shipments, induced by low prices and a possibility of short crops on the other side. The advent
of fine weather seems to have dissipated all apprehensious of serious damage to home Wheat rops, and a decline in price is one of the first
eesults. No. 2 Spring closes at $\$ 1.08 @ \$ 1.10$,
 ments of Flour and Corn to Brazil continue on a large scale, the famiue in the northern prov-
inces being, nore serious than at first supposed. idces being more serious than at first supposed.
Chicaco, Juue 15th. -The grain markets this week have been generally active, but unsettled
and irregular, and have tended heavily downWard, o keep down the deliveries of grain, although even now they are far above the average.
July Wheat sold at 903 @ $96 c$, the lowest price
today, the highest Monday. July Corn sold at


Barley, 48@48.2. Provisions were irregular,
unsettled, active and higher throughout, with only one heavy break, which was temporary. Lard, July, \$6.60@\$6.80. Alcohol, 332@38c fide sales at $\$ 7.04 \frac{1}{2}$ for cash, and $\$ 5$ for nex week. Closing cash prices-Wheat, 93 c ; Corn,
35 c c Oats, 231 c ; Rye 52 Jc c; Barley, 48 c ; Pork,


Eastern Wool Markets.
NEW York, June 15th.-The market pre-
sents but few features that are new sents but few features that are new. Shearing
is now general throughout the West, but all reports received agree in the statement that nowhere does the least excitement exist. The miter buyers in Ohio appears to be a shade
under 30c for straight lines, and in Michigan 26 c , while farmers are still firm at a fraction above these figures. The receipts of Texas continue large, hut the sales consuminated ar Yew, bues Southern Wools are slightly easier,
views.
resulting in rather more business. California continues in light supply, purchasers bein found ready to take current receipts at figures holders are willing to accept. Sales are: 81,
000 Hbs. Spring California, at $21(a 251 \mathrm{c} ; 2,000$ ths. scoured Fall do., 50 c ; 10,000 ths. old Spring Colorado, $16 \mathrm{c} . ; 135,000 \mathrm{tts}$, Spring Texas 18,500 ths. unwashed black fleece, 28 c .
Boston, June 15th.-There had been but lit tle doing in Wool the past week, and a larger some weeks previous; but the same indifferent feeling noticell for a long time was evident, Holders are still disposed to close up old stocks at current rates, but sales can only be made a concessions. It is considered doubtful if the lowest point has yet been touched, as most o the new Wool on the market is still held above
the vicws of buyers, and offers for old Wool the vicws of buyers, and offers for old Wool
have been generally from 1 to 2 c under recent have been generally from 1 to 2 c under recent
prices. Combing Wool is dull and prices quite prininal. California moves slowly, transactions for the week comprising 232,000 ths spring and and above, 34 @ 36 c ; Michigan $\mathrm{X}, 35 \mathrm{c}$; tine Ne Hampshire 36 c ; New York, Michigan and Ohio, $30(\mathrm{a} .35 \mathrm{c}$; combing and delaine, $35(a+2 \mathrm{c}$; Kentucky combing and delaine, ordinary Texas, $15 @ 28 \mathrm{c}$; Fastern and valley Oregon $21(\Omega 28 \mathrm{c}$; super and X pulled, 27@40c; scoured
$33 @ 7 \mathrm{c}$; Spring California, 18(a30c; Fall Cali 33@75c; Spring California, 18 @.30c; Fall Cali-
fornia, $16 @ 19 \mathrm{c}$.
Total sales of domestic for the week, $1,028,000 \mathrm{lbs}$.

> Domestic Produce.

The following table shows the S. F. receipt
Domestic Produce for the week ending Domestic Produce for the week ending at
noon to-day, as compared with the receipts of noon to-day, as
previous weeks:
$\frac{\text { Arncuss. }}{\text { Flour, quarter 8acks.. }}$

| $\left.\right\|_{\text {Wекк, }} ^{\text {Mау } 20 .}$ | $\begin{aligned} & \text { WeER. } \\ & \text { June } 5 . \end{aligned}$ | $\left.\right\|_{\substack{\text { Wunc }}}$ |
| :---: | :---: | :---: |
| 17,237 | ${ }^{31,705}$ |  |
| 35, 11.35 | ${ }_{1}^{15,4,36}$ | 9,8, |
| : 91 | 3.51 |  |
| ${ }^{1,1152}$ | ${ }_{2}^{2,501}$ |  |
| ${ }_{4}^{+1,188}$ | ${ }_{5}^{5,794}$ |  |
| 3,825 | 4,115 |  |
| 1,28\% | 1,2 |  |

BAGS-Prices are unchanged. There something going on among the holders, but we
cannot learn to-day what it is. During the week sales laave been larg
easier feeling was reported
BARLEY - Barley
BARLEX - Barley sells within our last wcek' range. The market is very quiet. Sales 1,000 sk new Feed 150 sks poor at 85 ctl .
and
BEANS-Prices are firm and the demand good for immertiate u
last week is still held.
CORN-The export demand has fallen off Supplies are small, and there is little doing in this market. It is reported that Corn is pass-
ing throuch from the Western States to Mexiing through from the Wester
DAIRY PRODUCE-The Butter market is 1c lower $\ddagger$ tb all around. The price given for fancy brands is only reached by an occasional
box. The situation is unchanged, nor does there appear any new light upon it as yet. Cheese is easier, and a good deal of low quality

## EGGGS

FEGS-Eggs decline le ${ }^{\text {E }}$ doz
Hay ranges from si to vances $\$ 1$ ton. Ne old is firmly held above this figure. Some sales are being made of cargo lots.
FRESH MEATS-The markct for Fresh Meat is quiet and prices rule lower. Supplies are anple.
FRUIT
ing. Our price list shows a general change in es during the week
HOPS-There is nothing new in the local trade. The New York market is reviewed by
Emmet Wells for the week ending June 7th as follows: "Under the influence of less favorable crop reports from the interior, our market has a somewhat firner tone. The receipts show a considerable increase over last week, while the
export trade has considcrably fallen off. That the growth of the vine has suffered by the recent cold snap, no one pretends to controvert;
but whether it has experieuced any serions or lasting injury is a question of more importance. While the growth has been checked, the vine
may have been gaining strength all this time,
larger growth of Hops than it would had the
warm weather of April continued. days and warm nights will tell the story; and before speculating too strongly upon the chances of a heave or light crop, we had better wait and ee what the next few weeks will do. Th see what the next few weeks will do. The
Coperstown papers report the appearance of
lice in some of the yards. As the chances of au export trade with England is not very Hlat tering, the Hop louse or some other pest may
be required to help rid us of our surplus crop of
LIVE STOCK - Receipts of all kinds of stock per head, 30 days credit; one car-load Calves, $\$ 10$ per head; one lot small Cattle, $\$ 25$ per Oad. ully up Oats are quict, but sales have been ks light Feed at $\$ 1.30$, and 100 do at $\$ 1.35$ per ONIONS-The supplies of new Onions are chiefly from stockton, and the ruling rate is ow 87a per ctl.
POTATOES-The Rose in boxes is now $\$ \$ .12 \frac{12}{2}$. There are stil some lowa Potatoes in market, which are held
at $\$ 3.25$ per ctl. Pother upward-Cured Meats have takel another upwara step. A general advance ha
occurred in Eastern Hams. VEGETABLES-Our list
changes in prices.
WHEAT-Holders of wheat are firn and millers are forced to their views. We note
sales of about 3,000 sks at $\$ 1.80$ per ctl Merchants are still talking ahout $\$ 1.65$ as their price for the new crop.
Wool-There is abo
WOOL-There is about 1 lc counted off on Southern Wool from our last quotations. North
ern Wools are being held at full rates. We rear that lare being hots of Uregon will be shipped bids at Portland. Our list of prices now in cludes Nevada aud Oregon. We note sales: Colusa at 231 c ; 14 do do, $23 \mathrm{c} ; 8$ bales poor

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which fill the beholder of the michty chasm. Biersudt has painted it, and others have photographeici it, and
these, as all writers say, sive the nearest idea of the these, as all writers say, give the nearest idea of the
majesty of the seenc to that of being prescnt at the
reality. As to the faithful, the admonition "see we and die," so to the traveler, "see Yosenite, the last of
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Volume XV.]
SAN FRANCISCO, SATURDAY, JUNE 29, 1878.
Number ${ }^{26}$

## Close of Another Volume.

Again we come to a breathing place in our work. Anotber volume has been filled, indexed and placed among its predecessors upon the sbelf. It is proper to say to our friends that the six montbs now closing have been months of earnest labor upon our part; labor which has been ligbtened from time to time as we received evidence that our efforts were regarded of value to those whose interests we serve. We have been cheered by kind words; nor can we com. plain that the ring of something which meets our expenses better than words has not been heard. The firm foundation which our journal has secured in the public favor leads us to regard it more and more with pride, and to work the harder that its reputation for value and usefulness may be eealously maintained.
thiuk the closing volume may be conside some respects hetter than those which preced in it, and we shall spare no effort to make this progressive im
We nave a high pride in agricultural journalism. All about us the fields are full of earnest
laborers. Our readers are the advance guard in the triumphal marcb which agriculture is making in this growing State. There they are
many thousands of them; each of them endeavoring in his own way to build up his own prosperity and that of the State by developing in every way the resourecs which are within his
reach. Ours it is to minister to each and to all; to lubricate the grating wheels of practice with the oil of understanding; to aid each progressive
worker with the fruits of a geueralized experiworker with the fruits of a geueralized experi-
ence; to catch the rays of light which flash from thousands of individual experiences and to reflect them so that each may apply them to bis needs. This is a work which excites our fullest zeal and to which every thought of our mind is loyal. Not to our pens are given the stirring paragraphs of tbe political writer, nor the gentle and entrancing pages of the writer of polite literature; neither can we enjoy the rarified air which surrounds those who labor upon the hights of science nor the fancy's glow which gilds the peaks of the sensatioual. Our work
lies in the valley. It does not win the loud plaudits of the multitude, uor does it admit of the ambitions for the gratification of which most
men strive, but it fills our heart with zeal and our mind with incitemeut to know that, though there may be literature which is higher, there is none which is truer to the cause of humanity; none which is more closely connected with the
comfort aud well-being of the people than that whicb follows the pen of the competent and conscientious agricultural writer.
Thus high is our ideal. We must issue a paper which embodies it in some degree, or we
will publish nothing. Sometimes our friends will publish nothing. Sometimes our friends We can only reply that a paper like the Pacific Roral Press cannot be made at a less price at present on tbis coast. Our circulation is large
for this coast, but the total agricultural popula-
tion tere is small tion here is small compared with that which is tributary to our Eastern agricutural coutempo
raries. We could make a cheaper paper, bnt it would have to he more than proportionately poorer, because it would forfeit people's respect, esteen and co-operation. We could make a paper which we could afford to give away, but it would be worthless in its reading matter; debasing and deluding in the claracter of its adable its original matter, the morc inviting the work of its mecbanical departments, the more more it costs to make it. The higher and purer its tone, the farther it is removed from the profit which may be found in catering to the whis tastes and degraded mental appetites fron a hair of our firm stand against this style of journalism, nor abuse the confidence with wbich our paper is welcomed to the homes of of our paper and increase our own profits in this way. No, dear friends, you have given us backward steps in the Rupa Presse ${ }^{\text {no }}$ have enabled us to reach the high position
which our paper bolds bere and ahroad. You have supported tbe paper and it has been true
to your interests, it has devoted the fruits of your patronage to improvement in all its departments. It has given more than was prompaying its by increasing its editorial and trim ming its pages-these and other items of in creased cost, because your patronage has made
the outlay possible. We are assured that all these improvements have met your approhation. The resnilt is that yon and we have an agricult
ural journal which is pronounced without superior in this country.
The future is full of opportunities we do not rest. The your aid to possess them. Without tit, we are nothing: with it, our faces are to the fore When the time comes in the agricaltur


PUMELO IN BLOOM AT TWO MONTHS OLD.
growth of our State that we need less from each
of you, we shall be quick to make the anof you, we shall be quick to make the an-
nouucement, because it is directly to our interest to reduce the price of the paper when it can he safely done without cudangering its quality and character. Until then, give us your suh. scriptions to pay our hills; your thoughts and experiences to enricb our columns. , Give us your words of approval, your recommendation to all who should join our ranks of readers. Let theppast of the Rural Press be surety to you that your favor will be well bestowed.
The West side canal.- The following is from the stockton /ndependent of Thursday
The prospect for the completion of the West The prospect for the completion of the West tering. The Commissioners lave met and advertised for hids for the $\$ 2,000,000$ in $7 \%$ bonds which they are anthorized to issue, the bids to be opened at Grayson on the first Tuesday in August. As they cannot negotiate them for less than 90 cents on the dollar, the genetal opinion seems to prevail that no capitalists will througb.
stand until the grain bas matured, which is often as necessary during this time, and the cultivator wades around and pulls out all weeds and grasses which the water does not kill.
When the grain turns yellow, the water i drained off as thoronghly as possible. The rice is cut with sickle or cradle. It is laid on the stubble for a day or two to dry; then it is
bound and shocked like wheat. It is tben drawn to the barn-yard, threshed, winnowed and sacked."
It would be doubtful whether much profit could be realized from small cultures of rice,
hecause there is no machinery, that we know of now running in this State, fitted for removing the husk from the grain. If unnistakable success should he had in growing, perhaps the
capital for a rice-pounding mill could be enlisted. What have any of our readers accomplished with upland rice? It has been grown with suc cess in other parts of the United States, and is a staple crop in some Aslatic countrics. W have descrihed its qualities and the method of its culture in former issues, and we believe

The Pumelo-A Lusus Naturæ
Writen for lural Press by T. Hart Hyatt The pumela, or Citrus decumanu of the botan ists, is known to but limited extent in California I have seen specimens raised in this State, and they are generally passed off as huge samples of tbe orange or lemon. They are called Shaddock in the West Indies from the fact that Capt.Shaddock, of some merchant ship, brought the first specimens from China or the Eas Indies. Tbe fruit is generally from double to trehle the size of the orange or lemon. I hav raised them in China, and had matured frnit on small trees three feet high. But it remains for California to furnish an example of precocity, a
most remarkahle lusus nuture, such a freak of nature as puts our ideas of the knowledge of the habits and eccentricities of plant creation The little non-plus.
The little trec, of which I send you a photograph, was raised by my daughter, Mrs. George
North, of Marysville, in this State, from seed planted in Fehruary, and was but two months from the time it showed its head ahove ground until it put forth its first hlossom.
The tree is ahout three inches high, and the blossom, the size and appearance of an ordinary orange blossom. [Our artist has enlarged
the plant, so that it is about one and one-half times the natural size.-EDs. Press.]
Mrs. North has ahout 100 trees from seeds planted in a bed at the same time, but none of
the others have showu the precocity here exthe others have showu the precocity here ex-
hibited. They are to be transplanted to my hibited. They are to be transplanted to my, Yolo county, about two miles west of the town of Winters, where they have already quite a
plantation of orange trees and other semi-tropplantation
The fruit of the pumelo is coarser than the orange or lemon, hat is very juicy and of pleasant flavor. The outside rinds are very thick has to be taken off carefully when eaten, or it will destroy the pleasant flavor of the fruit. They are used in China, especially by foreigucrs,
to make an excellent kind of tonic bitters. It to make an excellent kind of tonic bitters. It
also makes an excellent conserve. The trees grow to the size of the common orange or lemon, and from present indications are likely to come to hearing maturity in California at a much earlier age than either of the other fruits; and California. From this precocious little scedCalifornia From this precocious hittle scedling may spring an earlier fang family than has ever hitherto been

The Marysville Appeal of May 30th says "About the first day of February last, Mrs. George North planted a quantity of pumclo number germinating and coming up was onc which is the subject of this item. A few days ago this young secding, which is about four inches iu hight, and the stem or body abont the size of wheat straw, showed signs of a fruit bud, and it was watched with much curiosity as to the result. fragrance peculiar to the orange. Mr. North regrance peculiar the seedling to a small earthen pot, and yesterday had a photograpb taken of it. lesque upon the 11 and 12 -year-old trees, 14 and 15 feet in hight, without a
Vacaville, Cal., June 4th.

Congratclations.-Taking up a pencil laden with the perfume of orange blossoms and the fragrance of wedding cake, we haste to extend our congratulations to a young gentleman in our sparates uothing from everything. Our es teemed bookkeeper and accountant, Mr. W. H. Thompson, has so far advanced in mathematical accuracy that he has proved that one and one make one. The one in his case, or at least the better half of it, was Miss Kac an accomphished young a cosy home as Mrs. Tho is now ensincerest wishes are for their Thompson. Mrspiness May our associate's balances always be on the right side and his bills never grow longer than his coin bag.

## Gorrespondence.

The Application of Manure. Eurrons Presss: $^{2}$ - Your correspondent, "Uncle Josh," gives us "A Talk About Manure" in
your last issne, in which he tells us of some of your last issne, in which he tells us of some of
the wasteful ways California fartuers have adopted in disposing of their stable manure, all of which I agree with him. But he leay
us to infer too much. After telling us in
 tho apply it, It thiuk he ought to have told us
this or given us his idea abont it, especially as
 late in the Press, without any of the writers,
so far as I caun rentemher, having deterrinedel so far as cain rememhcr, having deterninea,
cither by theory or practic, hhich is the lest
time and way of applying manure to land in

 conteuded, as 1 still do, that stable manure can
he used ton har
tin any other int the world. in any other in the worll.
In the tirst place the



 if sone of the manure does harrow out and is
lefft on the top, perhaps it will do as mueh good

 My own in ractice is to put the manure on the
land during the spring months for the mangold crop. Since the tirst of Nay., I have hauled out
over 200 wagon-loads and plowed it in witl the
 Iay and the remaidider on the 12 th of Juue.
There arc alout 11 aeres in all, and from them
 effectso of stable manure applied, duriug the
mouths of May aud June, to land that is anymouths of ..ay aud June, to land that is any-
thing but natront boist being upland in the
stricest sense of the word. strictest sense of the word
WThatever of the grouid is clared of man.
nolds up to about the tiddle of December
 which goes on using up the manure left unnsed by
the mangolds, they being taken off the land
隹 the manyolus, they beil
only as they are fed out.
What Wever gromind is not sown with grain is
 guano per acre.

Making and Keeping Manure. Now, a word about making and keping
manure. Mine is nearly
,nll 1 applied as what is called "grcen manure;" in other words, in.
rotted tmanure, because
t think it is better to let it rot in the exrount, where all the gases
will be absorbed by the carth, than to have it


 I have a manure pit large enongh to hold ald
I make iua year A hol alont thre fect depe
is dug out of the side of a liill. A slopiug is dug out of the side of a hill. A slopiun
plationori, up which alt the manire is wheeled,

 Thus hy coutiuaully wheneling each manare dy
manure over the oliler mannte, its solidity
is manure over the oller manure, its solidity is
insured, and all the manure made on the farm
tand has so go up the said platform. After the cow
stable so elenene out out he ilimhtest of the manure
fore from the horse stable, bull stalls, ete., or any
other albsorlient, is putt behind the cous, thu
the insuring arivenular pryitit betyind the tho eows, thuy
 being kept in a large tin, which, when full, in
emptied into the fowl-house, and all goes in the manure heap together. But to add to th
ashes and make them stil more valuabte, al
linee or

 from the stable run iuto the manure pitat and
that the corerec calf fans are eleanel out one a yuar, very rarely twice, ${ }^{\text {a }}$,
hauled direvetly on to the
and






## Irrigation by Artesian Wells.

 Eurrors Press:-- Passing rccently with friend from Hills' Ferry, via Dover, to Mereed, we saw for the first time sonne results of irriga-tion by an artesion well, tlat arc worthy of

Those familiar with the settling up of San Joaquin valley will remember with what high hopes of successful farming quite a number of industrious people settled, in ISES, on the sandy, salt-grass lands around Dover, a point on San Joaquin river about eight miles above
the month of the Merced. It was thought then that Dover would some day be quite a flourish ing town. We recall with regret, too, how
want of sufficient rains for successive winters defeated all their efforts, broke them up, and drove them to seek homes elsewhere. Apera Dover, except one family, disappeared, and
did the settlers for miles around, so that, during for many miles east of the San Joaquin, between
the Nerced and Bear creek, has heen abandoned as a farming region, until

The Only Hope
bc obtained. During that time it has remained a deserted, desolate looking region.
Knowing that the Farmers Canal, designed to irrigate much of that part of Merced county,
will soon be completed, and having heard of will soon be completed, and having heard of ew years at iutervals all the way from the Mariposa, and even the Chowchilla, a distance of 30 or 40 miles, I was glad to have an oppor-
tunity, as one acquaiuted with that rcgion since IS68, to form some idea of its future prospects by aid of irrigation from canals and artesian
wells.
Results.
There are already at least four of these wells
long the lower Merced, one about threealong the lower Nerced, one about three-
quarters of a mile east of the Joayuin near
Dover, two on Bear creek 10 miles below Merced an: mimmanm while others are being bored. They vary in
lepth from 175 to 300 feet, are cased with s-inch depon casing in temperature and taste-the more shallow ones
usually furnishing a cool, pure, tasteless, soft water. One on Moagland's place on the Mariealled the "California Ciant," is given on the maps as allording that much water, and I supthe estimate. From some of them a very larg stream certainly flows. One 1 saw on Bear creek is
stream was flowing rapidly in a narrow ditch,
was a foot wide and six inches deep, and was was a foot wide and six inches deep, and was
only part of the water from the well. But the

$$
\begin{aligned}
& \text { Irrigation Near Dover, } \\
& \text { of these wells, and its effe }
\end{aligned}
$$

From one of these wells, and its effects, which
I carefully examined, is what I wish to call es pecial attention to here.
Three quarters of a mile from the river at Three quarters or a is found who is makiug doned, cheerless region, for miles and miles around. This is about ten miles southwes rom C'ressey's station, and at least 20 miles
west of Mcrced. Here Mr. J. S. Pike has a ne artesian well bored last November, $2 S 6$ feet
deep with an 8 -inch anger. It is on a slightly raised point in a tract of loose, gray sandy land
covercd with a thick growth of salt-grass. He overcd with a thick growth of salt-grass. He gallons per minute. If this is correct, it af
fords about 115,000 gallons cvery 24 hours. Ie has some 30 or 40 acres cheaply fenced with
 over the entire tract by a little careful manage ment. He finds that by running the water in
trenches about 50 feet apart, it thoroughly ir igates the intervening space. Ilis planting egan in

Chiefly as an Experiment
He has tried the following with great suceess and five acres of wheat still green, heads of ay, just and plump; four acres of oats fo cut for feed; two acres, Chinese sugar eane ow from two to three feet high; a patch of Egyptian corn; a gardeu filled with varion
vegetables growing well; a young orchard of 50 mixed fruit trees, including oranges:
watermelon and muskmelon patch. In othe words, he has irrigated successfully abont 2 acres of this salt-grass land already from the
one well, everything he has yet planted has
grown thriftily, and wherever he has irrigated rown thriftily, and wherever he has irrigated,
he grouud a half-inch below the surface thoronghly wet. This well cost him for the 100 feet, \$1 per foot: for the last sf feet $\$ 1.50$ ver foot; or in all $\$ 30+$ for boring; casing eost
145 delivered, or total cost 849 . Between
$\$ 40$ and 8500 is a safe estimate for the cost of uch welts in a large part of Merced couuty In a low place from which he has just $r$ potatoes by the 20 th June, and will contiuue planting beans an
summer and fall.

In taste this water is very brackish, and in
temperature not far from $70^{\circ}$ Fahr. Yet from habit Mr. Pike uses it for drinking water without any inconvenience.
From this recital of facts we see what can be done by aid of a single bored well on land, Which has the reputatiou
of the poorest character. of the poorest character. A fact that no doubt aids this irrigation by lateral seepage on the
land in question is, as Mr. Pike informs me, land in question is, as Mr. Pike informs me, from the surface. It is a pleasure to inform the Merced, which can soon he irrigated from the Farmers' ('anal-to be described hereafter in your columns-that their most sandy lands, as is the case of Turlock also, are very much like these Mnssel Slough lands, which produce such uable the irrigation by artesian wells, we must not be understood to advocate them as a substitute for, hut to aid irrigation by canals.

## Tulare Co.

Lectures on Special Cultures at the University.

Editors Press:-The following circular has just been issued from the College of Agriculture The regular schedule of studies in the Agricul tural conrse at the University of California em braces, as stated in the Register, lage 62, a ful conrse of instruction in the details of the sev f husbandry; such as dairying, sto. $k$ brceding, horticulture, fruit culture and the mannfactures nnected therewith, the growing of grain, for ge, textile and other field crops, general fapm studies from the simpler to the more complex the discussion and study of these subjects comes in ufter the general principles upon which their practice depends, have been mastered by the student, during the previous years of the course. In other words, they constitute the professional Lecture courses designed to filfill
lecture courses designed to fulfill this portion during the session of $1874-75$, by inviting lectrers specially promin of the slight interes then taken in these courses (as manifested in the attendance of but four students), and the great expense involved, they have not been re peated during the two last sessions. Bint it ustify the renewal of the experiment during the coming session of the Uuiversity, the mor as an appropriation specially desigued to pro-
mote the efticiency and uscfulness of instrinc tiou in the Agricultnral department was made by the last Legislature.
is therefore intended to engage as lectur sons, residents of this eoast, thoroughly familia with the peculiar eircumstances, practice an needs of Californian agriculture, It will thus be possible to provide a course of instruction
that will be intelligible and useful to any peron of fair education and intelligence, who nas hoose to attend; especially with the incrase means of demonstration that can now be pro are not as complete in many respects as conl hereafter, it would be absurd to assert that systematic presentation aud discussion of agricultural practice in its various branches, wil not be eminently useful to the future, or pres in the case of those who have previonsly purned the full three years' conrse
Of the latter class there is at present in th there are three who will reach the same point year hence, being now members of the second or junior class. (It should be understood that students do not usually announce the special
ourse they will pursue nntil the middle of the ourse they will pursue until the middle
econd or sophomore (third elass) year.)
It does not secm reasonable that the heav expense involved in the appointment of special
lceturers should be incurred for the sake of a sinhe student, when so many other pressing need the same department remain unpegarding th heeds and wishes of the ayricultural populatio in the direction of the instruction now offered I it hoped and believed that these wishes are a reality, and that previous eircumstances, not
needing discussion here, have been instrumental in preveuting an attendauce commensurate with the urgent necessity for a better under tanding of the principles, merits and dignity ing generation. If the large body of intelligent farmers who hold and have avowel their lelief that "the amount produced is commensurate with the intelligence and knowledge passesse faith by sending tlreir sons to be instructed in the principles and practice of their future eall there can be no such lack of students in the courses now in contemplation, as would render it necessary to defer them for another year. course, be made until a snfficient mable the a tendance of such number of students as will
justify the expenditure, and detinite arrange justify the expenditure, and detinite arrange-
ments with lecturers. Applications for admis-


## San Joaquin County Notes

Euitors Press:-If water can be procnred in any way, at a reasonable cost, for the purpose of irrigating a portion of each ranch in San incalculable value. Were each rancher enabled to irrigate but 10 or 12 acres, the gain would be large, and to those on small ranches of 160 acres, it would make, many times, all the differ ence betweeu profit and loss. The gain would be iu the stoppiug of many expenses wholly or in part; as for instance the meat bill, vegetablc reen and dried fruits. The greater part of the area irrigated should be sowed to alfalfa; ha cut upon part of it and the balanee pastured by
the ranch teans and oue or two cows and calves, and a few hogs, the remainder being devoted to fruit and vegetables. The season ideness between the two pcriods of activit for the eultivation of these products. In addioubly the money saving, home worid be made ings, which, together with the planting of
handsome shrubs and trees, would exereise vast refining inflnence on the young folks, driv ing away those forbiden saharas, in many places now creeping sometimes beyoud the ery door and ex Iren are pleasant home. In after years when stern lif egins and disappointments are experienced he memory like a caress, forming an additional ncentive to contiuned and to stronger effort The people of San Joarquin connty, with few
exeeptions, fully realize the advantages of irrigation and are slowly moving in the direction its accomplishment. The Hokelumne ditch ditehes ion llarin county, while anotler will whole from the Stanislaus for ir rigating a large tract in the southern part of the county.
lu order to get flowing artesian water a well has to be bored many feet in depth in this county. The artesian well which supplics eet in depth, though it is alleged that a good and sutficleut strean of water was struek in the same well at the depth of 520 feet. It is not penetrated in all farts of the county, but boring by hand involves so much expense that evy one has been desirous of some one else to conuty last January, we In a trip over the Nightingale bored by hand under the direction reached the depth of 300 feet without reaching permanent strean.
most favorable points, the Calaveras, at the from the stream for irrigation, and over the whole county shallow wells and windmills supply the most stringeut want
waition getting of water everybody has leen but when we reached the thriving Mahomet, W. L. Overhiser, we found active preparations
in progress for transporting Mahomet to that desired elevation. As is well known to that hiser has one of the dinest herds of Durham eattle in the State: a good alfalfa pasture for then, to lessen the expense of keeping, was a consumwas never felt more than, through the dry year energy, he set about solving the problem, and
hit upon a method whieh he is sanguine will
sipply his wants.
on the barnyard, which is the highest point formation of he commenced cxcarating for the and 180 feet in diamcter The earth is excavated to the depth of two and a lialf feet, and in hight aud 22 feet loase; the bank will settle two feet, the reservoir, when full, giving a distance, near the tank-house, is the site chosen for boring the well. Mr. Overhiser has determined to bore fou
in depth to abont 130 feet, the well in the tankonse making the fifth and standing in line
To draw the $w$
power San Jose King engino will he ased, and ind andion to pumping water it will be used to
ther purposes. A line shaft running from the
water from each well, at the same time th
water beiug conveyed to the reservoir throngh attached to the line shaft at different angles or at equi-distant degrees at the five points of
circle, thus giving a regular, smooth and e motion. Overhiser believes he will be able to
Mr. raise sumcient water in thas way to irrigate five
acres of alfalfa a day; he also thinks it not unlikely that by continuous pumping the botton and in time the five wells be united in one large underground reservoir; the water is designed to
irrigate 90 or 100 aces of alfalfa and a bearing vineyard of several acres.

## Well-Boring Machinery

The apparatus used for loring these wells was the ingemionsssteam well-boring machine,
invented by Messrs. Haas \& Manning, engi neers, residents of Stockton. The machine works something after the fashiou of the Dia inoud drill, and we believe it was from that
that the idea was first caught. It has performed that the idea was first caught. It has performed
admirally wherever tried mnder favorable circumstances, and is destined to revolutionize the manuer of wald place deep weils cost to the minimum and place deep wells and plenty works at a rapid rate in good soil. A well bore
in Stockton last summer was sunk 210 feet four hours and 15 mimites. Tlie gearing for lifting pipe and turuing the anger in boring is attached to a derrick 30 feet in hight, whos
base is a triangle with sides 15 feet in length The power used was a 10 -horse Wood's en gine, 1 unning under 40 pounds of steam. In
boring deep wells and throngh hard material, two steam jacks and two anchors are used t steady the derrick, A windlass on the derrick, connected with the engine and controlled by
levers, is nsed to raise and lower the pipe an auger lyy means of a rope. The anger is turned by means of a system of cogs connceted with th engine and pipe by a tall upright shaft and
short horizoutal one. The augers are of variou diameters according to the bore desired; the one we saw was a hollow cylinder about five feet in length and mine inches in. dameter, open a one half inches in diameter and several feet i length; this is fastened by means of thread an screw to another pipe 14 feet in leugth an buoyed by a wooden rod, and this in turu screwed onto a similar pipe, a new pipe being
added at every succeeding depth of 14 feet dided at every succeeding (lepth of 14 feet.
The rods are six inches in diameter. An iron cap fitting onto the top of the pipe has attached pipe, the engine pumping water through thi ing to the bottom of the well, softening the auger; the dowuward pressure of the descending stream of water forces it up again between the
wooden rods and the sides of the bore, carrying with it the earth cut out by the auger, flowing from the mouth of the well a thick, muddy
streann. The upward flow of the water strean. The upward flow of the water is
strong enough to carry up fine gravel and pebbles, and for coarse gravel or stones, the size of ne's fist, a steam siphon a nserum.
tones loy the exhaust of vatur
When it is desired to shat off the water, oock is turned in the vacuum chamber and ai pumped instead. The apparatus is com
pletely under the control of the engineer, assisted by two men.
The machine was working down at a moder ate rate of speed when we saw it, at the rate
of $\$ 0$ feet per day. We timed two lengths (of 14 feet each), and the time occupied
in boring that depth was respectively 28 and 3 ? in boring that depth was respectively 28 and 32
minutes; this was near the surface, the mate minutes; this was near thie surface, the mate
rial growing much larder as the auger de cended. One well had alrealy been bored betrike our arrival, the depth reaten.
Mr. Haas' terms are 50 cents per foot in good soil for any depth, decreasing the cost as con-
pared with hand boring fully $75 \%$, and in deep wells much more.
When it is clesired to case the wells, the cas Mr. Over hiser's wells are cased for only the first 14 feet, the material being so hard the rest of the way from 60 cents per foot for six inch, to $\$ 1.10$ per oot for nine inclı casing.
The inveution of this steam and hydraulic well borer will prove of great value to the
farmers of California, and we hope that Nlessrs farmers of California, and we hope that Messrs.
Haas \& Manning will reap) a handsome profit through the fruits of their genius.

[^29]
## Wheat and Cheat. <br> Editors Press:--Having just read Mr. Alexander's article on wheat and cheat, in the June Sth number of the Press, allow me to tate the experience of an old farmer on the subject, who has come to the same conclusion <br> cheat under certain circumstances, <br> In a small field, protected by a levee, ou one year and harvested as clean and nice a crop year we plowed and sowed the same field to wheat again; but in the spring the levee loroke

and the field was covered for a day or two with center of the field was a low place of perhaps an acre or more, on which the water stood conWhen we came to harvest the crop, I found the ow place all cheat, and the balance of the field all wheat. Now, if, as Prof. Hilgard says, wheat will not turn to cheat any more thay professor to tell us where the cheat came from, and what became of my wheat.
We have had a very wat winter, and it is quite likely the excess of moisture has caused us to reap cheat largely in place of wheat.
San Francisco, June 18th.
Emitors Press:- -I am informed by John S Carter, of San Jose, that he has rased cheat ieves-notwithstanding the statement of scientific men-that his wheat turns to cheat, will
plant a little cineat seed, he will be able presplant a little cneat seed, he will be able pres-
ently to state $\begin{gathered}\text { ss Mr }\end{gathered}$. Carter does, that he has rown cheat from cheat seed
I. C. Woods.

Mission San Jose, June 23 d

## Horticulture.

## Fruit in California.

The American Pomological Society has issued its biennial report, containing the proceedings of the meetings of 1877. This society, under the guidauce of its honored President, Marshall . Wilder, of Boston, and with zealons members among the forcmost fruit growers of every State, is pre-eminent among agrimiltnral organt it accouplishes. We find its reports of constant value for reference, and they will always stand monument to the ability and zeal of the la nented Willard C. Flagg, late Secretary. this time is fur the purpose of presenting to our readers the greater part of a report on fruit rowing in Califormia, prepared for the society y Dr. John Strentzel, of Martiuet, assisted by
Messrs. Garey, of Los Angeles; West, of Stock on; Shinn, of Niles; Rock, of Nan Jose; ant by Messrs. Howe \& Hall, of San Vrancisco. What we shall quote from Dr. strentzel's tions which we receive from realers abroad, and will be interesting to our own people:

Species of Fruit.
It can be truly said that all the fruits of the temperate zonc, and many of the semi-tropical
find a congenial home in California, and are rown in great perfection and abundance; here
are many homesteads surrounded with an endtess variety of growth. Cherries, applcs, pea and plums thrive side by side with olives oranges, dates, pomegranates, figs and cacti,
locust and pine trees, with the eucalypti, grevileas and arancarias. The climatic conditions and topography of our state afford locations varieties than others; thus correct judgment is equired to select the best adapted for certain ises. The long dry summer renders it imperlemented by proper cnlture to make such enerprises pecuniarily profitable, but with these adequate conditious, endless crops of fruit can
be raised to supply the principal narkets of the world.

Varieties of Fruit.
The foothills of the northern part of the
State, and thic couuties bordering the Bay of State, and thic couuties bordering the Bay o
an Fiancisco, are well adapted for aud produce large quantities of apples, pears, plums,
peaches, cherries, पuinces, and sinall fruits and peaches, cherries, thences, and of those hills shelercd from the ocean winds, more or less exempt from the slight frost of our winters, are finest foreign varieties prospering most. A merican varieties are little in demand, but the Isahella is doing well; the Catawloa is poorest in
Havor. Figs, pomegranates, olives and the citrus fanily are taking possession of the laud
-here the dwarf banana, date palm and pineapple will find some abiding spot. Over this great extent of country, grapes, when once rooted, do not recfuire irrigation even in the driest
of seasons. Fruit trees of all varieties in ycars of average rainfall of 20 inches do well without artificial watering; in dry years the growth of
Wugh soaking of the ground and subsequently plowing. Berries and small fruits generally
must be irrigated to secure good crops. Up the San Joaquin river and down the coast, with
scantier rainfall and more sandy soil, a few spots are found in dcep glens surrounded by spriugs,
affording choice locations for orchards, but most of said region neods irrigation to produce anything leyond a scanty growth of grass during
the winter months. Wven with this, the extremc heat and dryness of the air precludcs the favorable for the production and curing of risisin grapes, and many semi-tropical fruits. Near-
ing the Colorado river, the banana, pineapple,
and probably the coffee tree will reign supreme Grapes raised in this southern belt of the coun-
try are very rich in sugar, but deficient in acids -good for brandy, but not for fine wines. The region about Los Angeles 'is now the center of
the orange culture, which promises well to sup the orange culture, which pronises well to sup-
ply the demand of the Western States and comply the demand of the Western States and com-
pete in European markets with Italy and $\$$ pain. The growing and bearing trees dotting th Angeles, attest the practicalility of snch being Wolskill, on Putah creek. Solano cangerics Vallejo, near Sonoma; the Alhambra gardens, near Martinez, Contra Costa county, and other sheltered places, produce as choice fruit-that
on Putah creek ripening earliest-lringing
higher prices in the San Francisco market than higher prices in the San Francisco market than
the leest of Los Angeles growth. The large bearing trees are all seedlings, reproducing
themselves, vigorous and little affected by slight themselves, vigorous and little affected by slight
frost, and if properly cared for the fruit is of frost, and if properly cared for the fruit is of
good size but rather thick-skinned, fine flavor and keeps well, specimens often remaining on the trec two years from the blossom. Some
seedling trees bear extra tine flavored and heavy fruit, and these are now selected to propagate from by graftiug and budding. The importcd
grafted orange trees are decidedly lacking in stamina, and so far as tricd the fruit is often
inferior to our seedlings. inferior to our seedlings.
The lime reproducs
The lime reproduces itself from seed truly,
and is a precocious bearer. Lemons show mor and is a precocious bearer. Lemons show more est quality identical with the Sicily, and of the
The banks of the Sacramento river are cov ered with extensive peach orchards produciug
immense crops of large sized, early ripening
frnit somewliat deficient in tlavor luit aforded so cheaply as to keep the monopoly of supplying the San Franciso market.
The strawberry trade centers around Jose, in Santa Clara county, owing to the albundance of artesian wells most conveniently located for the cultare of berries.
Alameda county,
Alameda county, over the stretch of arable
land faciug the bay, swept ty cool ocean breezzes,
is studied with currant and is studuied with currant and gooseberry bnshes
without number. A pples--Growers are now curtailing the numlee of varieties, planting only the best and most
marketalic; large, showy fruit, even if lacking marketantc; large, showy fruit, even if lacking mand. Cool, low sites, with rich soils retentive
mand. of moisture, produce apples in great perfection

- juicy and leeping well. The following varie-
ties are most in demand: Yellow Newtown ties are most in demand: Yellow Newtown
Pippin, Esopus Spitzenberg, Yellow Belltlower, Early, Strawberry, Peck's Pleasant. Varieties
extensively cultivated: Astrachan, Alexander, extensively cultivated : Astrachan, Alexander,
Jonathan, White Winter Pearmain, Ben Iavis,
Rhode Island Grecning, Smith's Cider, Early Rhode Island Grecning, Smith's Cider, Early
Harvest, Roxxury Russet, Ramb, Nickajack,
Maiden's Blush, Northern Spy, Holland Pipppon, Pears.-A Ancient pear trees around thc old ted and neglected, yet look thrifty and are overloaded with fruit-assuring us of the longevity of that tree; and the younger orchards produc-
ing fruit of the finest quality, of our alility to supply our neighbors without stint. Bartlett
and Wiuter Nelis meet with a readly demand and other varieties are more or less a drug in the
market.
Cherries, -- Cherrics are largely cultivated. The trees succumb easily under harsh treatment ly the pruner, plowman aud the gnawing goby the Monstreuse de Mezel, Napoleon Bigar-
reau, Governor Wood, Mayduke, and Areh-


## Peaches. - Peach trees are very hardy, neithe

snbject to the yellows nor the peach tree borer
Negunig. The favorite varieties are: Priggs
proyn, Tillotson, Large York, George iV, Alex
May, 'Tillotson, Large York, ('eorge 1V, Ale
ander, Crawiord, Strawlerry, Ward's Late.
Apricots are, produced in great abnundance:
Peach, Royal.
Ncetarincs.- Very few raised.
Plums are very proific. Most varicties
Plums are very proific. Most varicties d
best budded on the peach; fruit perfect.
Quinces. -The Portugal is the largest fruit, Quinces. - The Prrtugal is the largest funt,
but the tree is sulject to black-knot. The Ap ple quince tree does well.
Figs are most easily raised, producing enor mous crops if properly irrigated. The Mission
fig is most palatable; the White Marscilles best for drying.
Pomegra
fruit well.
Nuts.-Aluonds succeed well in locations not and good cultivation to raise large nuts. Engalnoud; sulject to suuluru, of the young annoud; subject to sumburn, of the young
growth. The Pean, now ou trial, pronises to seedlings grow rapidly without requiring much extra care besides copious watering. The olle
trees look very thrifty, and are of symnetrica and landsome appearance. Within the last 10 years ellorts have been made to raise the chestseries under the name of "Italian and J apanese" grafted chestnut. They begin to fruit the thiri year from graft. So far the opinion is prexail.
ing that the dry and wanm climate of central California is unfavoralle to their growth. The tree, and, given a modienu1 of care, is a rapid Grapes.--Scveral hundred varicties
best European repute are cultivated. The
dreaded phylloxera has admittedly made it appcarance in Sonoma county, evidently intro duced from Europe on imported vines; it does not make much headway. There are often
found spots amidst our most luxuriantly ing vineyards where owing to an int growhard clayey soil or barren sand, the vines dwinIse without making much wood, and the frui is small, insipi.
of phylloxera.
of phylloxera. The best metable varieties are: Chasse Alexandria, Seedless Corinth, Damensens, Black Allexandria, seedless Corinth, Damasens, Black
Prince, Flanue Tokay, White Malaga, Black Ferrara, Isabella - enabling us to pick ripe
grapes from the vines during six months of the grapes from the vines during six mon
year. New Native Varieties.
The desire to excel in poomology remains ae tive, stimulated by the well cultivated taste for
the best of a kind, anil finds recompense in the best of a kind, and finds recompense in libsuperior quality, causing new frnits or improved varieties to be eagerly sought after and tried Thosc originated abroad and persistently her rated and by no means to reach the standard o the best. Especially is this the case with the new named peaches. They are all too small,
with earliness as the only desirable point, but eveu this is entirely eclipsed by a native seed ing under the appellation of Briggs' May peach one to two weeks aliead, in the market, of its
competitors. Shinn's lareripe promises well. competitors. Shinn's Rareripe promiscs well
Besides these, there are many fine clance seed ling peach trees of superior merit, but so far no becn made.
county, has the only claim among apples
Seedling pears come nearer to the parental
tock, often blending the desirable qualities two varieties, but none have been sufficiently We
Mported at $\$ \widetilde{0}$ for dolden Champion grape, proves itself a minserable failure.
Synonyms.-The staudard
Synonyms-- The staudard nomenclature of
fruit is rigidy observed with but a few deviations, of which the most noticeable are: the
Black Prince grape is called here the Peru; the Red Lombardy is Flame Tokay; most white or yellow plums are called in the marke Green Gages, and black cherries all Tartarians Clean, mellow culture is imperative. The
waste of the constituents of the soil mist b replaced, and the renovating system of pruning
assiduously followed, with the removal, whil assiduonsly followed, with the removal, whil
young. of all superabuncant fruit. Any kind of alkaline washes, consisting of lime, potash,
salt, etc., are of decided benefit in destroying ralt, etc., are of decided benefit in destroying mosses, fungi and insects on the stems or root
of trees. The good effect of one efficient wash of trees. The good effect of one efficient wash.
ing of the stem may be observed for years in
the cleanncss and brightness of the bark as compared with the unwashed.
Storing. - Large quantitics of apples and each respective tree, and they keep fully as well as those under roof, the rair doing no injury out frost.
Packages. -For apples and pears, 40 to 50 ih
boxes ; for stone fruits and grapes, 20 to 25 th

## Orange Culture

Onr advance in orange culture furnishes an instance of the energy and entcrprise of our
people. The impression prevailed in 1850 that oranges conld be grown in a few farored spots
around Los Angeles, the San Gabriel Mission bcing the center thass favored by public opinion ty, greatly assisted by the indonitable zcal of ing and propagation of choice varicties of the chous ind incased amnually to many hundred figures of consignments of Los Angeles and San Gabriel oranges received in San l'rancisco

## 

Over 40,000 hoxes of raisins were cured last year and the product in most instances com-
pared favorably with the best imported, but owing to the reluctance of leading merchants to patronize the home article,
profitalle to some producers.

Poisonous Tollet Powber. Tho London Letruet says that for some time past there has
been an epidemic anong younu childreu in the neishborliood of loondon, ending in many case in the death of the chikd, and tho disease presenting every appearanco of crysipeclas. A per
sou whose child was thus attacked, suspected the violet powider in use in the nursery, and
sent a packet to a firm of analysts for chemical cramination. It was found to contain
white arsenic. This poison, it secm
cheaper than starch, of which violet powder is sually made. That the casc was not an isolated one is lroved by the fact that the
aualysts subsequently purchased several packets
powder themsclves, and on analysis dis
overed the same poison in the same amount Their analysis have, moreover, bocn confirmed by the medical men in the neighborhood.

## Patrous or flosirypry.

Worthy State Lecturer's Appointments.





Rise and Growth of the Grange. The following address was delivered some time ago before Indian Springs (irange by Bro,
T. Z. Drace, and is published by request of the Grange:
That the growth of the Grange has been without a parallel iu the history of our country is admitted by every ohscrver. The condition of mind which existed, the prevailing feeling o
distrust towards the organized interests every kind, the common indignation against the injustice of the unfair distribution of profits,
the prevailing discrimination agaiust agricultural the prevailing discrimination agaiust agricultural
labor which was, year after year, constantly
kept alive in the minds of the farmers by the kept alive in the minds of the farmers by the
fast decreasing profits, buying goods sold at a heavy margin, paying burdeusone taxes brought upon them by unscruputous rings, which hav
stolen and squandered the public funds, whil the result of the year's labor have shown a loss,
are rcasons which have brought thc agriculturist to the neeessity of organizizing for protection,
mutual advantage and support. It is useless for theorists to try to prove to farmers that
there is nothing the matter, that this movement there is nothing the matter, that this movement hinking men, whose careful busiuess operations show even one per cent. upon labor anll investment, are not easily quieted by specious and
superficial rcasouing. $1 t$ is true that for many
reasons there has never existcd among farmers organization or co.operative effort.
Farmers who have been willing give the management even of their affairs int the hauds of those who have stood ready to take
the results of their labor, but are at last awak. ening froun their long slcep, to tind themselves
ent
living lives of isolatiou, without husiness habits and with few social, advautages. They are
asking, why we should not assist each other, why may we uot co-operate and secure for our
labor lhetter returns? ,hall we not break up this isolation and meet whore our families may
have a scason of enjoynuent and recreation? have a cason of enjoynient hid recreation? has met with ridicule and has been the soure excite indignation. The iitea of farmers lcarnmanner, or that they should presume to say what they will do with the products of their indignation among the busiuess interests, whose
profits have bcen made by this neglect and proats have been mace by this neglect and
apathy on the part of the producres.
It is useless to discuss the form of organization adopted, viz, the Grange. This suljeect
rests upon the self-evident proposition, that feats upon the self-evident proposition, that
farmers, as every other industrial or professional class, have a right to organize for their owu
interest and to selcet such forms as may scem to them best. This movement has liad not only a areat influence for good anongy the agri-
culturists, but upon the condluct of public affairs, from the national capital on down
through State legislatures to townships. It has secured greater cconomy, closer suruting as to tax levies aud disburscment of pulhic moneys
The chauge wrought in neighborhoods something wouderfut. The Girange, recogniz-
ing woman as man's equal in all things, gives
an influence in its educatioual and social workan influence in its educatioual and social work-
ing of very great vatue. New social ties are Cormed, and in the discussiou of subjects per
taining to the social and educational wilfare of farmers, a higher and hroader culture will ensue Libraries are being fornned, more reading and a thousaud fold repay the cost of organization,

The Grauge recognizes that education, good morals and a higher culture are essential to its permanent success and highest uscfulness. In
all the deliberations of the National Grange, the state Granges and Subordinate organiza tions, the most advanced aud progressive
rcforins in education, tempcrance and gooid rctorins in education, tempcrance and good
morals have received full sympathy and sup. morat have receiven s phase of the Grauge a
port. In the husines
new cducation is giveu the farmers. The sulb. new cducation is giveu the armers. (he sup and
ject of co-peration, purchase of supplics and
materials, sale of produce and stock are recciving attention they should have gotten gencrations ago. Millions of dollars have hecn and
will he saved to the Patrons of Husbandry whil he saved to the Patron11 of insbandry
through their co-operative efforts and purchasthrough selling through their business agenciess.
ing and inflent break up the oppressive,
This infuence will bor graspiug comhinations and result in a a greneral
grood. Never before was the adage, "lu union there is strength," so clearly demonstrated as it
is in the farmers' movement. Our power is hcing felt and land. The giant hand of monopoly that has ening its hold; and very soon, if we stand tirm and united, and let wise councils prevail, we
will succeed and conc out more inau conquerors, asserting our manhood, free and inde-
pendent, as God destined that man should be when he created him. But in order to accom-
plish the great objects of our Order we must be prudent, not too exacting, remembering that
pthers have rights as well as ourselves. There is a alsc impression that prevails to a cousider-
ablc extent among those outside of our Order, able extent annong those outside of our oraser,
that we are waging war against other classes,
and if we should get the power we would encroach nupon their rights, as we claim they have
upou ours. Not so. The farmers and working upou ours. Not so. The farmers ald working
classes are noble and generous, and will not ask
for tbemselves more than they are willing to for tbemselves more than they are willing to
grant to others. The cardinal principle of our Ordcr is equal and exact justice to all; special
privileges to none. Hence wo make no fight privileges to none. Hence we make uo fight as such. only so far as they discriminate against
uns, making us pay tribute to an amount wholly isproportionate to the comparative values of
lioncy and labor. All we ask is equal protecInoncy and oabor. Ans we ask is equal protec-
tion with other interests, that labor may be

It is apparent to all, that the opposition without our gates will be impotent to distract or disorgauize us. This can only be affectod by our
own internal dissunsions, and to avoid the introduction of any question that might either unlapyy result, should be the duty of every good Patron. Uniforinity in our ritualistic
work, as well as a strict conformity to our Con stitution and hy-laws, is essentially necessary to our harmony and prosperity. The responsiclosely scrutinized from without and within-
our foes to make capital for themsel ves our foes to make capital for themselves; our
friends hoping and expecting much for the good of the Order. To this end, then, let us culti-
vate every virtue, improve every ineans vate every virtue, improve every means of
diffusing knowledge, interest and harmony among oursclves.
And now, brothcrs and sisters, may we not of seeing the Patrons of Husbandry inteclligent. prosperous and happy, so that this great move
incnt, which has its basis in the affections and understandings of the meu of the furrow and
harvest field, be cherished, and, in the language of Webster, when laying the corner-stone
 arliest light of morning gild it, aud the parting
day linger and play on its summit",

## Sonora Grange Pienic.

Evirors Press : -The 15th inst. found a gay and happy throng of Patrons and Matrons, with and yellow pine, near the hoonestead of Master Soulsby. The morning was clear and cool. The rouuds were well selected aud tastefully pre
pared. There were sings, bowcras, tables, foot arl, and all the surroundings necessary, for fun,
frolic, comfort and social pleasures. The feast was, enjoyed by all on the ground. Music
and daucing was in order. A short address was given by the writer. One feature of the picuic
was appareut. There seemed to pervale all was appareut. There seemed to pervacte ah
minds a peace which seemed to create a happiful. The majestic trees seemed alive in the hearts of all present beating in unison. The abseuce of all intoxicants gave to the place an
ir of uuusual sweetness, the fragrance of which remained until the shadows of evening crept
ver the scenc and sent away, reluctantly, the happy Graugers and many friends. The ground were set apait and dedicated to pienic purposes,
and will hereafter he known as "The (irangers" picnic grounds.
Master Soulsby owus one of the best moun "Surprise oats" is worthy of mention. One
stalk measured seven feet four inches-an aver age being about six feet six inches. I eame from an oat-growing aud oatmeal-eating coun-
try-Scotland-but 1 never witnessed such a growth. Wheat and barley were also superior viting, nestled in a beautiful valley-high
enongh towards the Sierras to be cool enough
for comfort. In the coming Constitution.
In the couning Coustitutional Convention the qucstion of land will be one of the questions of vital importance to the farmer. Many minds
and interests will hold different views on the subject. Equity, instead of policy and monop oly, should govern the action of the Convention. The Grangers will have an influential body o men to represent them, and we may trust hem monopolists to arrange matters, the thousands
of uncultivated acres-hcld for a rise in the of uncultivated acres-hcld for a rise in the
market-will still remain as a waste. But i market-will still remain as a waste. But rim ing or disposing of the same to those who could. That system of taxing land would only be jus large did a means of cutting up some or indi viduals. If the grade system should be adopt ed, the Assessors must be practical farmers o
açuninted with the productiveness of soils. The question of taxing land is one of importance nd will demand carcful consideration from the Chinese Camp

## Agricultural Notes.

## California.

## alameda.

The Froit Cror.- Wiashiugtou Independent 2ne Strawberries, currants and cherrie those are hardly as abundant this year as usual Raspberries and gooseberries are also few, but
blackberries will he more numerous. Many of blackberries will he more numerous. Many o
these last grow wild in the hills near here. the larger fruits the prospeat for peaches and apples is the best, thoughl apricots, pears an
plums promise pretty well. Figs will be as nuplums promise pretty well. .igs will be as nu
nerous as usual, and grapes will he very abun.
dant for the talle as well as for wines and raisius. No kind of fruit is likely to be so plentiful as to fail of yielding a fair price for the producer,
nor will any lee so scarce as to be beyond the reach of the average consumer on account of
high price. The orchardist and the purchaser high price. The orchardist and the purchaser
will neither of them have just grounds of comBUTTE.
Crop Prosprcts.-Register, June 2: The
reports from the northern agricultural counties as to the crop prospects are not so encouraging as they were some weeks ago, ou account ot
rust making its appearance. In this county the tate sowed grain will be seriously damaged lands and hate sowing are affectod in the lands and late sowing are affcctcd in the same
way. This being the condition of things in the counties named, we are fearful that the same causes will produce like results elserthere. The the crops in quantity, is that the effect of the rust will be such as to render the quality so in-
ferior as to be cntirely unfit for milling purposes, which in conscquence invelves a consid erable reduction in its markct value. The old
saying that misfortunes do not come singly, is saying that misfortunes do not come singly, is
fully exemplified in Butte aud other of the northern counties the present season. The remainder turns to cheat, then comes along the rust and reduces the value of what is left at least one-fourth.
The Agricultural Sochety--Recorl, June
2: At the last ineeting of the Upper Sacra mento Agricultural society it was deternined to hold the anmual fair in the week beginning
September 9th. The Directors are about to cose negotiations for a piece of ground close to to attend, and at the same tinne it will be splendid, place for the live stock exhibited rom and quarters cone assurances of participa
ion, and the idea is rapidy gaining ground that the fair of ' f 8 will be the nost successful eve COLUSA
Tue Wheat Yirld. - Sun, June 22: Fifteen
bushcls to the acre of the wheat that will he cut is pretty good. Newspaper men. generally lave a faculty of putting things too high. They
all scem to want to make their county the best Colusa county, one year with another, wi will have a better crop this year than most then, but we will not get 15 bushels for the
ground sown. We placed the estimate, last weck, at 15 for the ground cut, which is quite a
difference. Both this connty and Yolo had arge acreage drowned out hast winter.
LAKE.
Lake County Wool.- - Bee, June 20: The
spring wool clip of our county has been shoriu nd niarketed, and we ean now speak adviscdl of the sanne. Owing to the copious rains of th past season and very early feed, the spring clit
was of unusual excellence. The wool was ceedingly clean aud withont seed or burscausc of cleanliuess, being frec from dirt, grease weight the flocks did not average much more
hau one-half the yield of the spring of 1877 . thau ono-half thc yi
The prices realized o the growcrs. Last spring
to 30 cents per pound, while this spring the
highest price paid was 23 cents. Chemisal Lavds avd Frutr.-Lower Lake Bulletin, May 20: The extensive tracts of
chemisal brush constitute a feature of Lake chemisal brush constitute a feature of Lake
county landscapes that invariably attracts the county landscapes that invariably attracts the
attention of strangers. In the vicinity of Lower Lake, in the Uncle San region, about the head of Big valley and elsewhere, are thousands of acres of this brush that is known upon the maps simply as "waste territory." That it will can be little doubt. I)r. Baylis has demon strated by his expcrience with Angora goats, that in its present condition it is jnst the place
for them. Large strips of land can also be ound that by clearing may be made available for poor people, who wish to avail themsclves o exceeded. Six Gcrman families, last wiuter, head of big valley, and are confident of abreat success in raising vineyards. The most of this fruit ranches may, before long, be added to th other evidences of prosperity furnished by our county
LOS ANGELES
Fruit. - Santa Monica Outlook, June 19: L. rop of the present ycar promises to be most The orange yiehl will he very large, and the解 of this scctiou have been introduced upon an wines and brandies will be the source of a large revenue.
Rusr. l'roof Wheat. - Anaheim Cíazelte, June Vednr. John fiwin bronght to our office, on vednesday, a sample of wheat of the Odessa
variety. The press of this county should try to impress upon the farming community the importance of sowing this kind of wheat. It has heen tested now two seasons, and ha
grown, ripened and matured without bein touched in the slightest degree by rust. This applis apphed.
ruined by rust, this field of Mr. Giwiu's is untonched. Farmers abont here concede that it is the only safe variety to plant, and nex almost utter exclusion of "Sonora wheat"
NAPA.
A Prolific Cherry Tree.-Register, June 1o: W'e dropped in at J. N. Bassford, Sr.'s, cherry orchard, three miles northwest of town,
Tuesday. He has only a small portion of his cherry crop gathcred, this variety of fruit no ripening quite so early this ycar as con . It hang full of the luscious fruit. One in particu sizc aracts attention hy reason of its immeuse hoxes of enormous yield. Sixty-four 10 -pound year: there are still some 60 pounds on the tree This tree is $25 y$ cars old and probably the larg est cherry tree in the land.
Alvonns.-J. Lewelling, who has orer 2,000 the Calistorion that the almond crop will be very light this year, and attributes its faikure to the extremely wet weather of the past winter and spring.
SAN BERNARDINO
Honey.-Coltou S'pmi-T'ropic, June 22: After likely to be produced, we find that, althongh解 hive, that the aggregate num ber of of pouuds will not be much, if any, greater thall the crop of two years ago. This is stands of bees starved to death last year, very materially diminishing the number of stands in should not advise our bee men to rush their sweetness upon the market. Prices now are we are misinformed as to the amount of the
crop. The denaud for first-class California honey is increasing, and we believe a margiu of profit may be realized by holding on for a while.
SAN JOAQUIN. Tall Alpalfa.-Indepeulent, June 22: Patrick Breen, who lives in the southern part of
the city, hrought into this office $y$ esterday the tallest stalk of alfalfa we have ever seen. It inches), and has a stem like a whip stalk. He last the patch in which picked out most of the seed, leaving but few to grow. This one alfalfa will grow in good soil in a few months.
New Rye.-Two carloads of new rye were
received from Turlock yesterday moruing hy J.
1). Peters. It was of excellent quality. But or the reduction in freights and the abolition of the wh.
Stockton Fair. -The Board of mauagers of Society, is as follows: President, 1. U. Ship pee; Vice. Presidents, John E. Moore and N. urer, A. W. Simpson; Dircetors, J. R. W, W,
Hitchcock and IR. C. Saryent. At the Society Hitchcock and IR. C. Sargent. At the Soriety's exhibition for the year 1878 , to be held a
Stockton, September 24th to 2 th inclusive
offered than ever before by this Association.
In the speed programme nearly $\$ 2,000$ mor In the speed programme nearly $\$ 2,000$ more
money is to be competed for than was ever of
fered before in Stockton, and the purses offered fered before in Stockton, and the purses offered are free for $\$ 00$ each, and $\$, 300$ worth of purse the State. A particular feature of the fair is bitions of cattle, sheep, goats and swine, and $\$ 1,000$ will insure a large exhibit. Sweepstake premiums for cattle alone are $\$ 200$. A matter that has received much less attention every-
where than its importance deserves, will be tion and premiums offercd to encourage th training of horscs to walk fast, with or without load. During the week of the fair there will of two horses hauling 6,000 pounds in wago walking one mile in the quickest time. And tion, as much from professional horsemen a from the farming community, another premium of $\$ 75$ is offered for the draft-stallion weighing
1,300 pounds or upwards that walks one mile in the quickest time, it being placed at the op tion of the owner whether the horse goes in the attractions that the socicty will offer.

## SANTA BARBARA.

English Walnuts.-Press, June 15: Any person wishing to see what can be done with
the English walnut should go to Dr. Brinkerhoff's block between Cota, Haley, Chapala and De la Vina strects. The trees there are about 12 years old, and the branches literally bend to the earth under the load of nuts with which
they are covered. The success of the nut in they are covered. The success of the nut in hing as to the character of soil best for th SANTA

Gilpoy Grain.-Adrocate, June 22: In com puting the number of cultivated acres and the probable in Gilroy township, we have, with the
vestuable help of Deputy Assessor Brock, ascer
valual valuable help of Deputy Assessor Brock, ascer-
tained that it will not be wise to count on more tained that it will not be wise to count on more
than a total yield of 120,000 bags. We have seen several samples of grain touched with rust swampy places. Rust appears on the surface of the stem and blade in many grain fields, but we may reasonably expcct dry, warm weather barley from the surrounding fields.
SONOMA.
New Cattle Disease. - Healdsburg Flag, Junc 20: We have to report the appearance on
Upper Dry creek of a hitherto unknown disease among cattle, which has carricd off several tine animals, notably onc of Mr. Upson's, two of Ira seem to be at once inexplicable and incurable. go suddenly dry; they are then attacked by pains in the breast and throat, and in a short time become entirely unable to swallow their reported to us no cause could be imagined, the animals appearing perfectly healthy up to the sudden cessation of the fow of milk. Any ex
perience or knowledge on the subjcet from read ers or exchanges will be gratefully received.
The Dis'rict Fair.- Petaluma 21: Liberal premiums are offered for best ex It is none too early for all who feel an interest in the coming fair to commence preparations
for the same. We have noticed that this has already been done by many, and are glad to learn that such is the case. For several years
past our annual fairs have been superior in many respects to any held on the coast, and there is now no reason to doubt that this year
the exhibition will be fully as good as usual in the exhibition will be fully as good as usual in fair will open on Monday, September 23d, and tions received by the officers of the Society and other sources of information, we conclude that there will be a larger number of visitors and exhibitors from abroad than ever before. Let the that they are not outdone by outsiders. dairies the-Making.-Quite a number of simall of the largergh the Santa Rosa valley, and somc Lawrence ranch, near Valley Ford, aud Upton's on Point Reyes, have discarded the churn for the cheese-press. So far the change has proved charge of Long \& Haskins, both experienced cheese-makers from the Western Reserve, has been in successful operation since December
last. They have used the milk of 900 cows, making on an average about 70 cheese daily. the cheese is marketed and returns made to the patrons every month. Everything has so far worked to the advantage of all parties. As one pounds of milk, or about two and one-half from the milk required for a pound of butter, onr dairy friends can figure out the comparative
profits in a season when the price of cheese has not fallen below 12 cents, and much of the time
has been close on 19 . The capacity of the To-
malcs factory ean readily be increased to 2,000 has been close on 19 . The capacity of the To-
malcs factory ean readily be increased to 2,000
cows, and the prospects are that the enlarge-
ment will have to be made. The factory at
Bloomfield has not been equally successful. The Bloomfield has not been equally successful. The was closed in the middle of the season, some o the patrons going into the business on their own the factory being opened next season under more favorable anspices.
STANISLAUS.
Improved Wheat and Barley.-Stockton ndependent, June 3: A wcll-kuown farmer o Oakdare brought to our office on Saturday two
remarkable varieties of wheat, which he has produced from a few grains sent by a friend nown as the Algicrs wheat, the other as Co logne wheat. The former has a large head, heavily bearded and thickly enveloped in chaff. ary whent, and is so heavy that it will weigh 0 pounds to the bushel. It will yield ordi narily about 70 to $S 0$ bushels to the acre. But
handsome as it appears it does not seem to conhandsome as it appears it does not seem to con-
tain a proportionate amount of flour, and is herefore more valuable for fced than for mill ing purposes. The Cologne wheat, however,
yields as well as the Algiers, and is rich in
lour, It has a very broad head, likewise heav ily bearded, with large kernels. It is probably the nost valuable variety. He will have about a peck of seed this year, the first time he has been able to save any considerable quantity
rom accidental destruction, and he hopes in a year or two to be able to make a very good
showing of results on a large scale. He also has experimented with six varieties of barley. Tarieties, closely resembling the Chevalier Both varieties carry two rows of grain, and are very prolific. The Nepaul barley shells out
ike wheat and differs from the bald barley. It is excellent for table use as pearl barley. He also has the Chevalier barley, which commands the greatest price ior brewng purposes of any
barley in the market. By careful hybridizing he is trying to produce from these varieties a
brewing barley superior to anything heretofore

West Side Crop.-News, Junc 21: The rain crop of the west side is undonbtedly spotfields will give forth magnificent yields, whils
thers will be quite light. This condition, how others will be quite light. This condition, how rally is from the fact that a large amount o there is scarcely ever a season that a large per centage of our farmers do not, in a manner,
make a failure on parts of the lands by sowing too late for the grain to mature even under the most avorable circumstance, which was cer grain was put in the ground previous to the lst
of March, the yield is at least a fair one. TULARE.
Excess in Irrigating.-Cor. Della: In our to an excess, and injure them. It is pretty off the soluble salts, or carries them deep into the subsoil, beyond the reach of vegetation. which was formerly subject to overflow. The soil looks to be of the best quality, but it never
rewards thorough cultivation with more than rewards thorough cultivation with more than years ago, the region around Farmersville wa the granary of the valley. That region has
virtually monopolized the watcrs of the Ka weah river since that time, and now much o the land formerly so fertile produces on
half a crop. I have heard of 2,000 acres grain, on what is known as "the sink of old though the land presents to the eyc the most in the repowned Mussel Slough am told that that have been thoroughly Hooded three or four times are much impoverished. In other cases I what is called "alkali," from keeping the sub soil so thoroughly saturated as to canse ex soluble salts being brought to the suriace, and then deposited by the water, is constantly vaporating. The successful application of great care.
YOLO.
Blight.-Mail, June 22: D. N. Hershey informs us that he has onc large field of whea yield of not less than 40 bushels to the acre put the header into it a few days aro, and after cutting about half of it, he discovered that it would not pay the expenses of cutting, and so left it. He says there is no rust on it, save in it was destroyed by some kind of blight, proba bly from a scald produced by steam from the rapid growth.
Harvest Prospects. - Democrat, June 22:
Mr. S. L. Monday, from the Hungry.Hollow district, brought a blump of eneat in effectually silences the assertion that the grain in that particular locality is nearly a failure. It is the Chile Club, and the heads are remarkably
made its appearance, but the grain having had
so much the start has almost crowded it out
There is a little rust but not enough to materi There is a little rust but not enough to materi
ally injurc it. On the other hand we are in
formed by Mr. Nathan Grayson that his grain
is shrunk so badly and is so affected by that he cxpects to realize no more than a third rust and shrinker localities report damage from county we think the crop will be less than an average one.

News in Brief.
Ex-Governor Pacheco is now a stockFIshing in Lake Tahoe is reported very fine Mercedes Clisarise the lungs. Comedian The Free Lth ins
the Free Labor exchange found places last The thermometer in Tulare eek, run up to 101 in the shade. John O'Shea, an old resident of Lake county, was drowned while bathing in Soda bay, in that county.
The condition of the Emperor of Germany is
atisfactory. His power of moving his left arm satisfactory.
is increasing.
VANCE, ex-member of Congress, has been
djudged insane, and taken to Athens for conner
ports that there is no cause for an Indian alarm n Wisconsin.
having their headquarters ncar Baxter Springs, have been arrested. A young lady, of Sacramento, is dangcrously Hion to bleach her hair.
Higinio Cima, a real estate agent, in this
ity, fired thrce bullets into his head last Monday, causing fatal injuries.
Twelve thousand
Twelve thousand tickets for the Union Sunday School picnic at Woodward's Gardens have
been sold, and more are wanted. The linssians have 52,000 sick in the Balkan peninsula, and of the recruits raised in 1877 for
he Armenian campaign, $25 \%$ are dead. 'I're Bear River ditch compauy, of Placer county, offer free water for five years for the ir-
ication of orange or lemon plantations. A trouble has occurred among the Trustees
of the Mechanics' institute, in this city, which may possibly postpone the contemplated fair. THE works of a plow company on Passaic
iver, New Jersey, have been burned, throwing
many nien ont of employment; loss $\$ 100,000$. many neen ont of employment; loss $\$ 100,000$.
On the 2 lst inst., Edmund Hanrahan killed his wife Mary, and Michael Sheehan, in San
Fraucisco, with an axc, being actuated by jcalousy.
A mamoth bark is being built on Puget
sound for the San Francisco lumber trade. Her earrying capacity is to be $1,000,000$ feet of
Del Norte county bids fair to become the
reat butter county of the State. This county shipped, during the last season, $\$ 50,000$ worth of butter
Madame Bonaparte, of Baltimore, who is about 96 years old, is in the enjoyment of fair Thack of illuess.
The decline in rents at New York, this year, of the Astor property and of about $\$ 100,000$ a year on the Stewart property. priest, died in this city, last week, from fracture
f the skull, but whether it was a case of assas sination or suicide seens doubtful
Ninety-six pounds of ice per man is daily
consumed in the lower levels of the Consolidated Virginia and California mines in cooling the drinking water for the miners.
THE whalc fishery at
The whalc fishery at San Simeon, Cal., has whales have been captured, while but three whales have been captured, while in former
years as many as 23 have been taken in a siugle

President MacMahon, upon the recomPendation of his Ministers, has deci of the pardon 800 communists on the occasion of the the exhibition.
Desiderio Poderca, second in command at San Elizario, who commanded the firing party,
in Dceember last, that executed Howard, Atkinson and McBride, was arrested on the 6th by State troops.
A TERRIBLE Great damage was done to the crops, bridges, hogs and poultry drowned.
hogs and poultry drowned. Howard attacked the Iudians at Curry creck, 45 miles from Harney, Col. Robbins and two oldiers were killed during the engagement. The Indians were repnlsed.
On the 22d inst. cloud bursts occurred in the mountains northeast of San Buenaventura, causing the Ventura river to pour down such a volume of muddy water that the o
colored for a distance of six miles.
Ir is reported that farmers in various parts of
Ohio are receiving notices signed, "Whork ing Ohio are receiving notices signed,
ing them against buying labor-saving machinery, and especially self-binding reapers. Threats are made that every such reaper will be deis made to use them. No cases of violence is made to use them, No case

There are 146 convicts in the Nevada Friso The lea
Tre leading hotels of Oakland are crowded with guests.
Mosi of th
oin the heshones in Nevada refuse to join the hostile Indians.
Plynouth Church hat
communicated Mrs Elizabeth Tilton.
walks round is well again, and has resumed his THERE were last week 400 births and 462 deaths in New York city.
The Empress of Germany is reported as likely Ten tho usaud orange trees have been planted in the vicinity of San Jose, this spring.
Four young men were drowncd at Halifax on the 26 th inst. by the upsetting of a boat.
The entire expense of Americans going abroad Oyme in Sver 150,000 young shad have been received

The estimated annual loss to agriculture in the United States from insects is not less than $\$ 150,000,000$.
and "gDISON aw foing to Pennsylvania to rest, Cardinal Antonell's estate, sometling
like the Ward property, has shrunk from like the Ward prope
$\$ 2,000,000$ to $\$ 120,000$.
The trotting-horse, "Hiram," owned by H mento on Saturday last.
T. V. Roy, a converted Brahmin priest, in tenced to three months' imprisonment
There is a rumor of gigantic land frauds munterfeiting the great seal of James G. Fair, of Virginia City, is at th Palace hotel, his health having been much im-
proved by his latc visit to the Steamboat springs in Washoe.
a Paris
A Paris publishing house is preparing an cdition of the Lord's Prayer in 1,200 languages
and dialects. The book will be dedicated to Pope Leo Lin .
The famous stallion "Cognac" (the man
eater), whose leg was broken about 10 day since from a kick by a mare, died on Sunday evening last at Petaluma. Charles Ellis, aged 15 years, was dragged to dcath by a horse to which he had thoughtlessly tied himself with a rope.
Three car loads of
excursionists left Salt Lake City, on the will take in the sight, for of Can Francisco, expect to be absent a month.
ir is ascertaiued that $2,748,000$ sheep perisher
in New South Wales last year fromi want iood and water, caused by the protracted William Solen has recovered $\$ 15,000$ dam ages from the Virginia and Truckee Railroad Company for injuries sustained from being ru
 walked out of the Municipal court-room in Sa Francisco while on trial some months sin Jonn B. Crowell, one of the head men in the factories and tannery of Holden \& Co., at
Napa, committed suicide by cutting his throat with a razor. Temporary insanity was the
Andreas Jacobsen, a lad 17 years of age
while driving a horse in the bark-grinding mill While driving a horse in the bark-grinding inil in Wick's tannery, Petalnma, was kicked iu that he died.
Four large boilers in the mills of the Chesa the 25th inst. with tremendons force, killin one man, wounding badly four others and tea ing the inills to pieces.
n-law, fought in-law, fought a duel lately at Forest depot,
Va., with carving knives. Sliey was killed and ecently been married.
Tue estate of the late William C. Rhcinlande is estimated to be worth about $\$ 50,000,000$ owners in New York city. By his will his vas property will be managed by executors for the they shall see fit.
Relief Work of the Youths' Impectory tory, No. 1417 Howard street, is a free home and Intelligence Burcau, maintained by the citizens of San Franciseo for destitnte and
friendless lads secking cmployment. stitution is open to all classes of children in need, and there is no charge for benefits de
rived from any of its departinents months coding May 3lst, 1878, the Superin tendent reports: Number of meals furnished 4,359 ; number'of lodgings furnished, 1,827 ; num
ber of boys placed out in the city, $1,58 \%$. num ber of boys placed out in the city, 1,582 ; num
ber of boys placed out in the country, 1,629 number of girls placed out in the city, 117 applicants for relief dismissed, unable to aid applicants for relief dismissca, unable to
them 1,103 ; receipts from all sources, $\$ 631.25$ disbursements for all purposes, $\$ 631.25$. For
services faithfully rendered by boys and girls, in all branches of industry, the wages now paic rule lower than last year. Discarded articles of wearing apparel and provisions of every kind
are earnestly solicited by the Direetory, "for are earnestly solicited by the Dir
the poor we have al ways with us."

## 6x c

Bryant's "The Time to Die. William ('ullen Bryaut, the grand old Amer iean poet, diell ou the mornius of Wednesday,
June 19th. Thus was his wish, as he expressel June 19th. Thus was his wish, as
i\&, in the following lines fulfilled.


 A eal wishini the frazen mould,








## 







## A Tree-Agent Treed.

The July Scribner will contain the conelnding
 cidents of this last sketch is quoted below, The profrietor of lunder Grange, returning
from a drive with Euphemia, his wife, linds a tranp in one of the trees and a a tree., gent in in
anothor near by, witl h his savaze dog Lord anothcr near by, with his savage dog. Lord
Bilward, plying between. The following seene


## maid Ihhould think so," said 1 , as I caughit sight










 mitat thationain ifies.


 "ree sen



 "Yes," said Pomona. "I seen them in the No tree couldn't hold such pears as them, Here Euphemia reproved l'omoua's forwardout of the tree.
dog is loose. If you will kindly chain him up, I ing get my book, and show you specimens o
some of the fiuest small fruit in the world all imported from the first nurseries of Europe-
the Fed-gold Amber Musent grape the

## "Oh, please let him down :"

I slowly walked toward the tramp.tree re volving various matters in my mind. We, had not spent much money ou the place during the
winter, and we uow had a small sum which we winter, and we tow had anmanded to nse for the advautage of the farin,
iutended
but had not decided what to do with it. It hebut had not decided whal.
hooved nue to be careful. 1 told Pomona to run and get mue the dog
hain, and $I$ stood under the trce, listening
 Euphemia, and paying no atteition to the im. passioned entrenties of the tramp iu the erotech
above me. When the ehain was brought, I hooked one cud of it in Lord Elwarl's collar, and then
i took a tirin grasp of the other. Telliug Pomona to hring the tree-agent's book from the
monse, I ealled to that individual to get down honse, I called to that individual to get down
from his tree. IIe prompty obeyed, and, tak-
fom the ing the bot from Po
pietures to Fnplemia.
"I can't hold this dory, sery lons." And in "I ean't hold this dog very long. And in
deed, Lord Edward had made a run toward the
agent, whieh jerked me very foreibly iu his agent, which jerked me very foreibly iu his
direction. But a novement by the trann had quickly brought the dog lack to his more desired victinn.
"If you w the agent, "and come this way, I would like to show you the Meltinagua pear-dissolves in
the mouth like snow, sir; trees will bear next
" "Oh, eome look at the lioyal "parkling lituby
grape", eried Euphemia. "It grows in the stun like a gem."
"Yes," said the agent, "and fills the air with fragrance during the whole month of Septem-
her-" "I tell you," I shouted, "I ean't hold this dog another minute! The eliain is cutting the
skin off my mands. Itun, sir, run ! I'm going to let go!
"Thnin!
your life:
"The The ageut now hegan to be frightened, and
shut up lis book. shat "If you ouly could see the plates, sir, I'm
sure-" sure "Are you ready ?" I eried, as the dog, ex-
eited by Pomona's wild shouts, made a bolt in his direetion Good-day, if I must " said the agent, as
lhe hurried to the gate. But there he stoppell.
"There is so improve your pluee as a row of the Spitzen.
berg siweet-scented Balsam fir along this fence. 'Ill sell, yon three-year-old trees "Ile's loose !" I shouted, as I Iropped the
chain.
In a second the agent was on the other side of the gate. Lord Edward made a dash toward
him; but, stopping suddenly, flew back to the hinl, but, stoppin,
tree of the tramp
"It you sh2uld conelude, sir," said the tree
those firs aloug here- "My gool sir," said I, "there is no row
firs there now, and the fence is not very ligh.
My dog, as you see, is very mueh excitel, and My dog, as you see, is very muel excited, and
caunot answer for the consequences if he takes it iuto his head to jump over."
The tree-agent turned and walked slowly

Fidmity to the: Oregen Girlis-Council man Simon, of Portland, to whom the letter from a young lady in Syraeuse, N. M., asking
the Mayor for iuformation concerning the demand for unnarried women in Oregon, was re-
ferred, has prepared a letter for the young lady, ferred, has preparect a letter for the young lady,
which should make him a lion amoug the young ladies. 1le writes to her that there is no partieular need for young women iu Oregon, that
those here are so far in advanee of the general average of their sex iu wit and beauty that only
those partieularly favorell by fortune could hope to compete with them in the husband
market. We expect Mr. Simon to he deluged with slippers, pineushions, "beaded, purses,
handkerehief eases and other "women's fixius."

New Music.- " "'ll meet you, my Lore, with
a Kiss," is the pretty title of a mice sons by H . a Kiss," is the pretty title of a nice song by H. P. Danks, and has au appropriate compunion in
"My sailor Love," hy Diehl, which has a deal to say about the lony sailor lad. "Two little
Lives," is a dainty ballad about a lark aul Lives," is a dainty ballad about a lark aucd a,
daisy, ly Molloy. "Johnny Morgan Gialop,"
by Fernel by Fernald, includes au air from the "Mau in
 stein, may be commended to any, ly thinte nity in need of graceful exercise. All these
pieces are recent pullications by Oliver Ditson Co.
TriE other evening, when four or five young
roselnds, which gnllop o'er the hearthstonc of a Cass avenue family, became to uproarious, the mother ealled out: "I I have to speak to
you again. I shall punish some of you., The
youngest of the lot youngest of the lot slid off the lounge, reflected "Well, then, 1 'd
speak." She did.

## A Telephonic Novel

Some of the seusational novel writers have alrealy iutroducel the telephone as a nost im portant element in their stories. A reeent
literary nagazine contains an artiele by Mark Twaiu, in which he introduees to the reader the young lero, Alonzo, as sitting in his parlor at Bastport, Mlaine, while he converses by teleaunt rcceives company, a young laly, and intro dues her nephew by telephone, when the sation, whiel cnds in a love mateh. Here the writer displays his talent iu writing severa pages of tender cxpressions, whieli
the imagination of our readers.
the plot. A rival in San Franciscou come ore with the young lady, one day orerhears the telephonie couversation, and makes up his mind o stop the engagement. He travels hy rail
eross the continent, arrives at Eastport, dis zuises himself as a elergyman, who pretends to have given up preaching so as to devote him
elf to improvements iu the telephone, whieh self to inprovements iu the telephone, whie
he is ready to place at the disposal of Alonzo who is very anxious to learn them for his own ise. There is some delay, however, in the arrival of the instruments. in the meantine
the rival, during the absence of the hero, obthise rival, during the absence of the hero, ob
tains, ineidentally, a elane to talk through the telephone, imitating the voiee of Alonzo
He thus gets up a misunderstauding then quarrel and at last despair ou both sides. The
lady leaves San Franeiseo, and all traees of her Iady leaves San Franeiseo, and all traees of her
are lost, while Alonzo travels all over the conare lost, whine Alonzo travels all over the con
tinent, attaching his telephone to all telegrapl ires, in the hope of some time hearing he hears faintly the sweet strains of "The Sweet hears faintly the siweet strains of Mese to sin
By and By, just as his laly-love user it to him by telephone. He looks around and tain. He at onee speaks some endearing words, wheu the answer comes faintly but distiuetly,
Oh, say those precious words again, deat Oh, say those precious words again, dear
Alonzo."
The rest we leave again to the Alonzo. ing?" the answer eame, "In Honolulu, Sandnee. The lady was ou the point of marry a the rival, who had followed her, but when the telephonic correspondence with her old love ind ordered a elergyman. Alonzo did the same in New Work, aud the next day the Honoinlu
Advertiser containcd the following alvertisement:
ment
ing, at


 The New York Times of the same day con-
tained this notiee ince this notiee


 The aunt afterwards brought the bride $t$. Fastport, where she met the hushaud she liad
ncrer before seen. The rival who so cruclly attempted to separate the loving eouple, fell he could be rescued, and so liad his deserts.
Fasinosable Wiwes.-The fashionable wife
looks on her hushand's money as spoil- some looks on her husband's money as spoil-some
thing which he wauts to guard and she to seize. It is no joint property whieh it is much her interest as it is his to save and use wisely, but
nul euemy's possession whieh it will he her gain to loot. As for counpaniouship - toujourrs parnird alone as the ne plus ultere of deadly dul ness. Personal love for him has died out, if even it once existed under the guise of passion
becanse of uovelty; and, whatever she may be to others, her hushand finds her uniformly colid and repellent. Motherhood is her bugbear; children unvelcone intruders; and there is no
more miseralle woman extant than the fasli ble wife with a baby, that hinders her from joining in the season's vulgar pleasures. Fssentially sclfish and shallow, love has as little ylory of sacrifiee, and those who know her stand aside in a kind of wonder at the schenre of creation, which ineludes, among its offsets, a
being without uses and without virtucs-a being without uses and without virtucs-:
woman with presumably a soul like any other woinan with presumably a soul like any other,
absolutely destitute of the love whicl saves the world from worse than death, of the reality Hess of aspiration and all righteousness of life, a woman whose gol is pleasure al
sole religion fashiou.-London Truth.
Whint a litrle Gifle Thovgitt of Farmer's (CiUb.-The Central New York
farmer's club lately met at the home president, Honl Nainuel Camplell, of New of tork
Mills. At lialf past oue p
 grandchild of Mr. Campbell, ahout three years uf age, sat at one of the tables enjoying her iee-
eream anl strawherries. Mr. lyon quizzingly asked her if she had ever seen so many homely no, hut inmerliatcly
plied yes. When as
at the socus (circus)

## Wyoming's Mammoth Cave

In the early part of May, a herder discovered very remarkahle cave at Tahle Mountain onch, in this Territory. The entranee, instea of heing horizontal, is perpendicular. Having ing hottom. He theu dropped down a stone or wo, and, from the reverherations, concluded it of us sot togetler with ropes, a windlass, lau erns, etc., and proceeded to examine and ex-
plore it. Having fixed a strong wiudlass and plore it. Having fixed a strong windlass and attached a stout rope, a man deseended with
lantern, his feet in a loop of the rope and hold ing on with his hands. It is a sheer deseent of 82 feet perpendieular, to where an ineline of 45 ahout 100 feet more, becomes vearly level and branches off iuto various rooms, vaults and apartments. The sensation of descending is ottom, I entered one of the vaults for a dis tance of about 300 yards, when I cane to what 1 supposed to be the end. But on a close enough to admit me, and, through a partition $x$ in thickness, emerged into a vault mmeuse dimensions. Here the ceiling is full 60 fect from the floor, and was studded wit mall icicle to a foot in diameter and from a few inches to 15 feet in length. The floor is also studded with cones and stalagmites, like in erted icieles, and presenter a weird and pictur esque perspective. In many places the stalae of huge hour-glasses, and forming a number of pillars from floor to ceiling, adding to the gro ahout 400 yards into this vault, from whie other vaults and apartments led off from eithe side; but, fearful of getting lost, I proceeded no farther in that directiou and can ouly conjeeture its length. Alembers of our party lirections, and from their deseriptions, I con lude that the greater part of the Tale moun-
tain is fairly honey.eombed by this cave and its numerous ramifieations. All the passages radi te from wherc the incline eet long aud four fect wide, but enlarges as on lescends, being bell-shaped. It put me in mind Washington, at the top aud descending to the Washington, at the top aud descending to the looking upward, it leing nearly eireular and gradually narrowing from the floor to the apex. Bones of a large varicty of animals are strew fearful pit years and ases ago. Buffalo heads, and those of elk, deer and antelope are numer ous, while bones of smaller ruminants, carnivora also found supposed to be those of human beings, but in fragmentary seetions.-Cor Grand Rapids, Mi-h., Eagle.
Trees tirat (inow shirts.- llumbolid says shirt trees so feet liigh. The Indians cut off eylindrical pieces, two feet in diameter, from which they cut the red and fibrous bark, with out making any ongitudinal iucision. This bark affords them a sort of garment, which re-
sembles a sack of very cuarse texture aud withsembles a sack of very coarse texture aud with-
out a seam. The upper opening serves for a out a seam. The upper opening serves for a
head aud two lateral holes are cut to admit the arms. The natives wear these shirts of Marina arms. The natives wear these shirts of a the ponchos aud mauos of cotton which are so com As in this elimate the riches aud beueficenee of nature are regarded as the primary causes of say in showing the sliirts of Marina, " in the forcsts of Oroonoka, garment are found ready made upon tho trees

Creat Pyramin of Egrpt.-An English
architeet, Mr. Tite, has beeu "figuring up" the cost of the . The, has nal dimensions at the lase were 764 square feet and it has a perpendicular hight of 480 feet ground. It consumed $89,0^{2} \mathrm{~S}, 000$ cubic feet of stone; and Mr. Tite adds that it could not now be luilt for less than $\mathbb{C} 30,000,000$ sterling. The so tine the large casing blocks of granite were thau paper; and thely perceptwas so adhesive that the stones in some eases hroke through their substance rather than give way at thei jointing. The cost, therefore, of this structure, order sixge enough to bnild and put in ruming New York on the Atlautic and San Franeisce on the Paeific.


Lord Nelson,- Human nature is very frail.
No man ever had a stronger sense of it No man ever had a stronger sense of it under
the influence of a sense of justice tban Lord
Nelson. He was loath to inflict punishinent; and when he was obliged, as he called it, "to
endure the torture of seeing men llogged," he
came out of his eabin with a hurried step, ran into the gangway, made his bow to the general,
and, reading the articles of war the culprit infringed, said, "Boatswain, do culprit ha
The lash was instantly duty." admiral, forgive me!" On such an occasion,
Lord Nelson would look around with wild
anxiety, would say, "What! none of you speak for him?
wout sime suffering eulprit", "Jack, in the day of battle future. A poor man was about to for landsman-and few pitted him. His offence was drunkenness. As he was being tied up, a
lovely girl, contrary to all rules, rushed throuph the offiers, and falling on her knees, clasped Nelson's hand, in which were the articles of war, exclaiming, "Pray, forgive him, you
honor, he shall' never offend again." "You face,", said Nelson, "is a security for his good
behavior. Let him go; the fellow canmot be bad who has such a lovely creature in his care. This man rose to be a lieutenant
William Pye.-II istoric Scrups.

Loss of Nose and Ears a Mark of Subjec-Trov.- Recent accounts from the East, stays
Herbert Spencer, in Popular. Science Monthy,
prove that some vaquished men prove that some vanquished men deprived of their noses by their conquerors, either while obviously alive or when supposed to be dead, sur-
vive; and those who do so remain identif thereafter as conquered men. Consequently, the loss of a nose may become the mark of a slave; and in some cases, it does this. Con Herrera tells us that they challenged ueighboring peoples when "they wanted slaves, if the ravaged their country and cut off the noses of the slaves." And describing a war that went on
during his captivity in Ashantee, Ranseyer says the Ashantees spared one prisouer, "whose head was shaved, nose and ears cut off, and himself made to carry the king's drum." Along with loss of nose occurs, in the last case,
loss of ears, which naturally comes next to be loss of ears, which naturally comes next to be
dealt with. This is similarly interpretable as having originated from trophy-taking, and having in some cases survived; if not as a mark of
ordinary slavery, still as a nark of that other ordinary shavery, still as a narkk of that orther
slavery whicb is often a puuishment for crime.

Carlyle's Wife.-Carlyle's wife is described by Miss Stebbins, in her newly published bio-
graply of Charlotte Cushman, graply of Charlotte Cushman, as a clever,
witty, calm, cool, unsmiling wonan-a description she obtained from Miss Cushman, who
knew Mrs. C. well. Whenever Carlyle himself got to talking at tea, with no indication of ever renew his cup, aud sometimes drop a judicious word elgeways to flavor the conversation; but
when she was alone, and herself the entertainer says Miss Stelbins, "one became aware of all the self-abuegation she practiced, for she was
herself a remarkably brilliant talker aud the herself a remarkably brilliant talker aud the
stories of quaint wit and wisdom which she stories of quaint wit and wisdom which she
poured forth, the marvelous memory which she displayed, were, in the minds of many, quite as remarkable and even more entertaining
than the majestic utterances of her gifted hus-band.-Independent.
(Eentlemen.- - Perlaps a gentlemen is a rarer man than some of us think for. Which of us Whose aims are generous, whose truth is cou-
stant, and not only constant in 1ts kind, but elevated in its degree; whose want of meanness nakes them simple; who can look the world honestly in the face, with an equal manly sym-
pathy for the great and the small? We all know a hundred whose coats are very well made, and a score who have excellent manners, and
one or two happy beings who are what they call in the inner circles, and have shot into the very center and bull's eye of fashion; but of gentlemen, how many? Let us take a little scrap of
paper and each make out his list.-Theckeray

Woman's Love.-Man is the creature of in-
terest aud ambition. His terest aud ambition. His nature leads him
forth iuto the struggle and bustle of the world. Love is but the establishment of his early life, or a song piped in the intervals of the acts. He
seeks for fame, for fortune, for space in the worls thought and dominion over his fellow the affections. The heart is her world; it there her avarice seeks for hidden treasures. fection, fection, and, if shipwrecked, her ease is hope-
less, for it is bankruptey of the heart.- Irving. Professor Gray,--Professor Asa Gray, the distinguished botanist, has a face which is thus
deseriled by a Washington correspoudent of the ommercial of Cincinnati: "The professor's head bowed, not by age, but because he has solong
ookedd down in the faces of the tiny flowers;
is countenance reflects only the delicacy and ooked down in the faces of the tiny flowers;
his countenance reflects only the delicacy and
purity of the wild birds, with their fresh flush

## Young Folks' Column.

Minnie Golding's Flower Garden.
(Written for the Rural Prisss by Wixnie Wistrr.
Minnie Golding has a pretty little flowe garden all by itself in a corner of the larg Hower garden at Evergrecn Gardens, where she lives. Minnie's fatber and mother take great delight in flowers, and they are anxious to in still into Minnie's mind a love for them also, a to purity of which bears an intimate relation and so their flower garden is filled with the rarest plants and shrubs and has playing founains, viue-covered trellises and rustic seats in it. Minnie's own garden has a cunning little rustic bower in the center and a pretty foun tain near by, with gold and silver fish swimming about in tbe water Minnie is only eight years old, but she cau her garden; wben they bloom and where they came from. She also understands the care of them, knows how to sow seeds, plant, graft, prune and perform all the operations that are incessary to make them vigorous and fruitul sbe could put to blusb many older persons who
pride themselves upon their knowledge of such pride the
matters.
It may seem strange, but it is nevertheless frue, that Minuie was taken out into the only one week old, and it was her privilege take baby for a peep at the beauties that grow and blossom there; and a considerable part of ber education thus far has been in connection Evergreen.
Evergreen (tardens are open to the genera public two days in every week, but no visitor are not used for mere private gratitication, Minnie, also, has one morning each week in which to receive and entertain her little spent in this way. On one of these mornings Ninnie was toa sick to entertain her friends and Katie Beams, a playmate, was appointcc norning had passed aner and all the visitor were gone, katie came into the house to see
Viunie, and found her lying upon her bed weeping, and with childlike sympathy she put
her arms around Minnie's neck and began to ry also. Shortly afterwards Mrs. Golding came in and found two tear-stained faces and
two little hearts sobbing as if they would break. She was very 1 mad thed, bu ond said, "What is the matter with my little Katie?" Minnie crying and she could not help doing the
Then Mrs. Golding looked inquiringly down in Minmie's eyes but did not question her, fo
Minnie had been taught to open her heart to manma without being asked; but Minnie wa ninutes before she could speak and then said Dear mamma, Minnie has been a very
naughty girl and does not deserve that yoi should love her. She was anxious to go out in the garden this morning, but when you said it sure that you knew best and tried so hard to be patient, aud when the naughty thought
would come she shook her fists at them an kept saying, "'go away you naughty thoughts; vill be a good girl! Aud she felt happy be cause she knew she was doing right heep ing sound of merry voices from the garden came i at the window and she forgot about trying t be patient and thought how they must be
joying themselves out there and why could joying themselves out there and why could no was unkind of mamma not really sick, and i then she began to be very unhappy and cried for vexation uutil she fell asleep. When she then she cried for gricf until Katie came in Dear inamma, Minnie is very sorry and she will try so hard not to be naughty again; but she must be punished and cannot go into the gar den again for a whole week, and so Katie must

## guests.'

Mrs. Golding's eyes now had tears iu them, and she said, Mamma is very much grieved t of such a fault, but hopes she is sorry for it and will strive to be more watchful in the future she not only destroys her own peace of mind but makes others unhappy also; and mamma wishes her particularly to remember that lettiug carefully guarded against. Mamma leaves the matter of correction entirely with Minnie, but wishes her to understand that the chicf virtue but in the power it possesses of impressing the thing up
tten." "
It was a hard thing for Minnio to stay away ${ }^{\text {saw }}$ of inf
from her garden for a week, and many times
mamma saw the silent tears stealing down ber cheeks, but she bravely kept her promise and
on next visitor's day her little friends made a large handsome bouquet and sent it to her with their love, and this made her almost as happy
as if she had been with them. On the follow. as if she had been with them. On the follow-
ing day when Minnie went into her garden she found upon the table in her bower a beautiful book of flowers, and on the fly-leaf was written From Mamma to Minnie-remember Minnic and resignation are great virtues.
Fountain Dell, Juuie 17th.

## Good HEALTH.

## Resuscitating the Drowning.

Dr. Howard appears, as medical officer of New York harbor, to have had much to do with ently drowned, aud bis method has received the approval of the New York Academy of Medi
ine. It has already received the national prize of the American Medical Associatiou, and has een adopted by the Life-Saving Society of

1. To Pump and Drain Fluids from Lungs and Stomach.-This is done by placing the ing, so that the pit of the stomach is the highest oint, whilc e he moth the west. Th operator supplements the pressure of his hands necessary, with all the weight and force at his
command. 2. For Artificial Breathing.-The patient,
whose clothing is ripped open from the waist, aid upon his back, and the pit of the stomacl is made the highest point by a hard roll of owest part. The wrists are crossed behind the head; these a second person, if present, pins to
the ground with one hand, while witb the other the tongue is held forward by a piece of dry
rag. The greatest possible expansion of the chest is thus obtained. The operator, kneeling astride the patient, grasps the most compressi-
ble part of the chest, on each side of the pit of the stomach, and, using his kuees as a pivot, weight, until his mouth nearly touches the face of the patient. Then, by a final push, he
throws himself back to his first erect knceling position. By the suldden removal of the compressing force, the elastic ribs spring back to
their original position, and by this bellows action the air rushes into and is forced out of
the chest alternately, as in natural breathing the chest alternately, as in natural ireathing.
Success may attend this process in a few min.
utes, but hopc of a favorable result ought not tes, but hope of a favorable result ought not
o be given up under an hour. be given up under an hour.
In addition to its apparently superior effect-
iveness, Dr. Howard claims for this method the
ind conspicuous advantage of unequaled simplicity When he had the medical surve eillance of such nost noted facts connected with cases of suffocation and drowning was the probable absence
of medical aid at the critical monent. Now, experience has shown that this method can where, with or without a doctor

Infletence of Gaslight on the Eyf. - The issued a report on the influence of gaslight on the eye. The conclusion arrived at in this
report-the result of frequent conferences with well-known physicians-is that no evil results follow a moderate use of gas, if the direct
action of the yellow flame on the eye is prevented. For this purpose screens or shades are
employed. Very grave objections, however, employed. Very grave objections, howevert
exist to the use of zinc or lead shades, most evils affectiug the eye being traceable to them. ess or inllammation and other harmful effects The milky-white glass shade is the best, as it distributes the light and has a grateful effect on he eye. The burner should not be too close to headaches result from the radiatell heat. The glass plate below the gas, enployed in some
places, is espccially useful for the purpose, as it causes an equal distribution of the light-neces sary where anumber are working at one burnersteady illuminatiou by shielding the flames from currents of air. In cases of highly-infamed eyes, dark blue globes can be very this kind, no evil effects from the burning of gas need be feared.

Rusty Nail Wounds.-The Stockton Inde
pendent says: Every little while we read of some one who has stuck a rusty nail in his foot or some other part of his person, and lockjaw
nes resulted therefrom. All such wounds can be healed without any fatal couscquences fol lowing them. The remedy is simple: It is only to smoke such wound, or any wound or
bruise that is inflamed with burning wool or woolen eloth. Twenty minutes in the smoke nfla

## Domestic Economy

## Recipes for Hash.

Rissoles.-A delicious dish of hash can be made out of cold beef, mutton, lamb or veal, by chopping very fine a large coffee-cupful of small oniou. Season high with pepper and salt. Beat one egg to a froth and stir it into
the mixture. Roll a hard cracker to a flour the hands the hash and roll it into the shan quantity of dip it into a little milk or a beaten gem roll then roll it in the cracker crumben egg and Indian meal can be substituted. Cut three o four thin slices of pork (if they are freshened in skim milk for two or thrce hours, they will be improved); fry them to a light brown; put them on a hot platter; put in the rissoles and fry half a pint of boiling water into the frying-pan stirred thin, but without lumps; boil up a few stirred thin, but without lumps; boil up a few
moments and turn the gravy over the rissoles; garnish the platter with slices of pickled beets
and sprigs of parsley, and serve hot. Then see f your family will despise the day of small things
Baked Hash.-Take any kind of cold meat and half a can of tomatoes; season with pepper nappy; cover with a plate aud bake an hour.
Remove the plate and let it brown bandsomely French Hash.-Cut any kind f meat i thinnest slices; dip each one into flour and place in a yellow nappy; lay over the slices a
small onion, cut in rings, and three small potatoes, cut as thin as possiblc; pour in all th water; season with pepper and salt; cof boiling a plate and bake two hours. Tomatoes improve

## Leg of Mutton, Caper Sauce.

Clara Francis gives the Prairie Furmer he ple thing to do, and so it is, but the flavor and tenderness of the meat may be ruined by im in the world wbether the meat is put in cold or hot water, but the best way is to put it into neither, but into an empty kettle. Set this on tbe stove, and from the tea-kettle pour boiling water straight onto the meat, when the surface will be immediately seared and all the juice sary. Let it boil steadily nntil well done, ad ding salt after it has cooked about an hour the meat, and if the lids fit closely it will re quire no more; if it should, be sure and add

Caper Sauce.
Melt a tablespoonful of butter, and mix white pepper and salt, keep it on the stove,
and by degrees stir in almost a pint of hot milk. When the sauce thickens, add capers, or if you have none, use pickled nasturtium seed. If the milk, using in its stead boiling water. Whe the sauce is takeu from the fire, stir in th lemon-juice - about a tablespoonful - beaten
with the yolk of an egg. Although caper sauce is the proper thing for boilcd mutton, it is ver good with a plain drawn butter, substituting in The liquor in which the mutton was boiled lent broth. Let it cool, and remove the fat from the surface before usin

Wasming Fading Goods, -For washing soap. Soiled ncckties may be made to look spirits of hartshorn to a teacup of water; wash well, and if very much soiled put throngh second water with less ammonia iu. Lay it on clean white cloth and gently wipe with over it and smooth with an iron not very hot.
If the colors fade it will all come back to it ori If the colors fade it will all come back to it
inal hue. Use no soap, and do not rinse.
green arnish for Metal Articles.-A green varuish for metal articles may be thus prepared: Put as much red arsenic or mastic it, then dilute the solution with water, and ad salt of copper (vitriol or acetate of copper.) The green precipitate should be washed Ufied, nately, mastic is too
used for all purnoses

Incombustible Lamp Shades. - Lamp shades paper with two laycrs of water-glass of $16^{\circ}$ to paper with two layers of water-glass of $16^{\circ}$ to
$20^{\circ}$. The paper becomes transparent, and is in many respects preferable to wax paper

Apple Brown Bread,- Work equal parts of corn and rye meal into stewed apples until the above. Or, thin with water to a batter, and bake on a griddle.

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Saturday, June 29, 1878.
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 GOOW HEALTH.- Resuseitating the Drouning; in-
fineure of Gasight on the EEce; Kusty Niil Wounds,
 Yarnish her 3letal Artiteces; Incombustible
Alple Brown Bereau,
NEW ADVERTISEMENTS.

## 

The Week.
Bright sunshine day by day las pushed for ward harvest operations on the early interior of the coast valleys. Happy is the grain-grower whose crop is a length ahead of the rust in the
race which cereal and fuugus are now running race which cereal and fuugus are now running
in many parts of our State. Steadily grow the piles of hay bales in the fields, and the baling crew laboring from four in the moruing until eight at night, often find that a large pile of
bales weigh but little because of the long rank stins which the abundant moisture has sent forth. The fruit season is advanciug. Our city
fruit stands are beginning to give the streets the appearance of a prolongcd pomological exhibi
The smoke of the election is clearing away and the result seems to be as follows: Non-par-
tisan delegates, S.i; Workingmen, 50; Republi. cans, 9; Democrats, S. l'eople are descending frou the pitch of canvass excitement and await-
ing the assembling of the Convention with patient expectancy. The next excitement will be thie "glorious suly Four, for which prepara-
tions are being made near and far. So far as the con old-fashioned carnival of racket, attended by
the charms of music and the tlowers of patriotic the charms of music and the Howers of patriotic
oratory, will dclight the holiday makcrs. The season is too busy to admit of universal partici-
pation in the colebration, but let all who can efresh themselves with the gentle joys of the of recreatiou for a day. Hours of toil will be plishnient for the refreshment of a rest.

EL Dorano couxty is employing a large
number of boys in preparing for the caunin and drying season. In one single establish
ment, $\$ 13,000$ will be expended for matcrial ment, $\$ 13,000$ will be expended for matcrial
and labor.

Agriculture at the University A communication from Prof. Hilgard, printed elsewhere in this issue, makes au interesting
announcement conceruiug the course of study in the Collcge of Agriculture. As may be seen by Prof. Hilgard's description of his plan, which we hope all will read, it is proposed to sccure
special instruction in the form of lectures upou the several special cultures which are comprised in our agriculturc. These lectures, if compewould present in coudensed form the results which have been reached in the application of
cientific research to the understanding of the laws, forces and materials which are involved in the practice of these spccial cultures. It bave becn demonstrated by the effort of the
scientific investigator or lave becn crolved from scientitic in vestigator or have becn a man com-
ycars of "practicnl experience." A mat petent to instruct in industrial science should
have all sources of truth nuder tribute. With have all sources of truth under tribute. deuse into a course of lecturce a fund of truths who are, or intend to be, enlisted in the practice of a certan branch of industry. He can
inculcate, by statement and by illustration, the principles which underlie successful practice
He cau impart truth which will be of dire He cau impart truth which will be of direct
practical value, and of practical value indirectly, practical value, and of practical value indirectly,
in that his exposition of the present state of experimental kowledge in ani industrial branch
will enable all, who listen attentively, to retain, adant and apply it in all the ways which thcir
necessities or intentions' may demand. For nese and othher reasons, we believe that
thenrses of lectures lyy men who are abreast of the progress in the science and practice of the
iudustrics which they represent, will be of to all who arc laboriug or contemplate laboriug in the different lines.
By courses of lectures it is possible to lead
lasses of listeners into ripee ficlds, in which th plowing and sowing lias becn clone at other to those workers who have not the time nor the money to pursue the regular course in the
scliools. In all the cultures of the farin ther are certain facts, methods and sequences
ause and effcct wlich can be best learned cause and effcct which can be best learned a
home, and into a knowledge of which a farn boy grows as he grows into long coats and
trousels. These be earries with him to the lecture room, and as he secs that which he nows woven into the fabric of the science of
his industry, he is ready to preive new significance in facts he alrealy knows, and to think, as he never thought before, of the adap-
tation of means to reach desired ends. Thes are just the points which a matured worker in any field, be he young or old, ncels to enable
him to understand the inaterials with which he is working and to improve his use of them. H anl well afford to give a few mouths time to
the consideration of these alvanced points practice, becausc he can think in a business like way about them and turn them to his immediate profit. These points many a prac can reach them without pursuing the routin of the class room, which lie has outgrown, and
which lie can never now sccure, no matter how which lie call never now sccu
valuable it might be to him.
We are glad Prof. Hilgard has planned these courses of lectures on agricultural topics, be-
cause we believe they may be made of direct and practical value. But, as he says in his an will be uselcss to undertake them unless our agriculturists ssteen then highly enougb to
engage attendance for themselves and their sons. As the University is a State institution, and its instruction is free to all who show dis position and fitness to enjoy it, there will be n
charge for attendance upon the lectures. course the rules of the institution concerniug dis cpline and other iuternal regulations, must be
bserved in these as in other exercises of the institution, but there is nothing in these which he earnest seeker after truth will find irksome. There will be nothing formal about the lecture room beyond the behavior required at all dig.
nifiel assemblages. The lectures aud their sur nified assemblages. The lectures and their sur
roundings will be simply earnest expositions scince aud practice, illustrated and demon the means of the Univerity will allow. He seems to us, as Prof. Hilgard intimates, will give an opportunity to all to show how far there is a denand for open and free instruction in agricultural science and practice. They will
be direct in their bearings apou agriculture. be direct in their bearings upou agriculture
They will be free from arbitrary standards ualifications. They will be both unshadowe and uuillumined (as the reader pleases) by What has beeen called the "tendencies of the he College of Agriculture, and their scope anc ist, and for those who have agricultural aspira
Prof. Hilgard states that it would be unwis
Pres. to speud the state money for these lectures unless thcre is a body of students enrolled which He is right. Unlegs a created, the money had better be expended in and which are really necessary to our ag icult-
nral progress. But we have hopes that the call
for volunteers will be well responded to by
numbers who desire either for themselves or numbers who desire either for themselves or
their sons the advantages which may thus be their sons the adrantages which may thus be
secured. Let all who think the attendance upon the proposed courscs would benefit and interest them, apply at once to lrof. Hilgard, as he invites them. As we have said, we be
lieve there is a chance for a real and lasting benefit in thc proposition, if the lecturers can have a good hody of earnest inquirers to pro-
mote their efforts and to turn their demonstra ions to account in the practices of the farm.

## Queples ano Reples.

## Dodder.

Editors Press:-The doddcr, spoken of in nemies to alfalfa and several other useful plants. On the reclaimed lands on Sherman with it. You speak of $t$ the though it would kill the alfalfa also and make reseeding necessary. This certainly should not, be the case if the alfalfa is well rooted, and no
nore fire is uscd than is needed to kill the dodder. Although the sced of the dodder germinates in the soil, the youug plant soon fastens upon any congenial growth which may be within reach and becones a true parasite. Its rootlike suckers penetrate the substance of its vicfor it. There being no use for the root of the lodder, that part dies, and the plant is left clinging to its new sulpport. With the strong
roots of the alfalfa to teel it, the dodder grows roots of the alfalfa to teed it, the dodder grows sightly gaps in the field.
If taken at the riglit time, after the original moderate fire should eseed lias been dropped, lodder. A forkful of straw in a place, worked in with the dolder aud alfalfa as they stand, so that the tlame will lave full play on it as it
rises, should make clean work without injuring seriously so hardy a thing as an alfalfa root. In some spots where the pest has made minah
progess, it would be well to cut the alfalfa close to the ground with a scythe or grass-hook and put the straw under
There are about 80 species of dodder (Cuscuta) known to botanists. six are known to occur in may be found. I Isall be obliged to any on
mate sendiug me a specimen where it infests alfalfa or any otter useful plant. Those not familiar with it, will recognize it as a yellowish or red-
dish, thread-like plant, without any proper leaves, aud bearing clusters of small white flow ers. Cuscuta salina is common on our salt marshes, and causes the bright orange spots 1)winelle, Berkcley, Junc 24th

The large figure in the illustration in this col umn shows the common dodder of the Nortleru


## Common Dodder-Cuscuta Gronovil.

States (Cuecutu Gronorii), as described by Gray.
$A$ is the coiled eubryo taken from the seed, moderately magnified. $B$, the same in germin the upper into a thread-like, leatess stcm The dodder is widely distributcd over the country. We latcly receivcd from I. C. Woods,
of Mission San Jose, a spccinen found growing of lission San Jose, a spccinen found gr
wit at the headwaters of Alameda creek.

## Starch Paste.

Editors Press:- In your last issue is given a ecommendation of gum tragacanth for scrap hook laste. A good paste can be made by stiring starch in coll water and then pour in strain it througl a cloth This makes a maste excellently adapted for scran books, as the thinnest paper can be pasted with it without coloring it or runuing the printers' ink. When
dried it is dried
land.

A Point on Patents.
EDIToRs PREss:- Please settle a dispute through your
columus. If here is a pent

He las not. The law grants to the patentee or a termi of 17 years, "the full and exclusive
right and liberty of making, using and vending oothers to be used the invention and discor-

Ray Grass-Treatment of Lawns.
EDitors PREss:-1 send with this a lundle of grass
which has interested tue here very nuch You may
 its name and nativity: A About three vears aga chere was
about a sulure rud planied from seeil which was rent Admiral Rogers, and it has now sion read to several ancess
The land on whiel it grows had a crop of wild oats and Other native grasses, which was cut for hay. After tha
was



Editors Press:-The grass you send me is a fine specimen of the Lotium , perenme, commonly "ryy grass," since it has not the lcast resemblance to rye, but is a very close relation of the "poison darnel"-so close that it might le reas.
onable to imagine that it might be "transormed" into the latter by unfavorable scasons, were it not that it is a perennial, while the bearded darne is annual or bien, merits known to need repeating hcre. It is one of the most highly esteemeil pasture grasses, and is equally esteemed for hay, provided only that the growth is so dense as to keep its stems thin, and come hard and unpalatahle, like its first cousin the darnel. It is extensively used for lawns in of itse, and the fact mentioned by Mres at Mare 1sland would seem to indicate that it is better adapted to the California climate than the "blue grass," upon which so much water and trouble
is hestowed - not to mention the rhenmatisn and malaria brough about the daily water ing of that delicate nurscling. With a view to the abatement of this nuisance to lovers of a hine other without reaching eatisfactory results. The ray grass is reputed as requiring quite as much moisture as the blue grass, and nearly as rich a soil; but from Mr. Hyde's statemeut it would color is slightly re bluish than that of the over-watered blue grass of our city lawns, but would doubtless satisfy most persons, especially
if it could get along (as it probably would) with only one good watering a week. And by the lawns and flowers, apart from its costhness, is an improvement (?) upon nature's practice in every clime outside of Oregon and Patagonia and is respousible for many failures now consid ercd incomprehensible. One good watering once or twice a week is better for nineteen tinual sprinklings, whose water chictly evaporates from the surface, compacting it and keep ing the soil permane coll. It would be de with the ray grass should communicate their impressions and results for the general bemefit Whe know of course that it does well when irri gated; but few have thought that it conld live F. W. Hul.aind, Cniversity of Cal., Berkeley.

Grain Dressed with Sheep Manure. Enuors Prass:-1 send herewith specimens of Mediter-
ranean wheat and of black oats which 1 eut, while still green, at iny rauch in Pope valley. There are sbout 30
geres of each, of which these are fair averame specimens
The a light dressing of sheep manure. The rest of the wheat
field not so prepared furnighes good strong growth of

The samples are very tine. They are six feet in hight ; straw, bright and clean, save marks of rust too slight to do injury, for the heads are heary with plump kernels. Both wheat and The evidence, as shown by them, would be in The ef the as shown by them, as described. Similar expericnces have been noticed elsewbere, as, for instance, strips of heavier grain across the tields following former sheep paths. In the use of sheep manure there the application to the ground. Perhaps a light dressing is at the same time the most economical Mr. Maxwell's experience is of much interest What is the observation of others on the point

For the Yosemite. - Our devoted publish ers, Messrs. Dewey and Ewer, have left their cares behind and chartering an express wagon and team have taken the overland route for the Yosemite, on a camping expedition of three weeks' duration. We bespeak them a kind greeting and a warm spot on the grounds of our need the rest, and they have earned it, for their labors have not been light. May they return refreshed and invigorated.

Indiana State Fair.-Alex. Heron, Secre. tary of the State Board of Agriculture of Indiana, sends us a panphlet and premium list for 1878. The fair will be held at Indianapolis, week. Ten thousand dollars are offered in week. Ten

On File.-"The English Sparrow," J. I. B.,
"The Farmers' Canal," J. W. A. W.; "Rural

## The Pear Slug.





The pear slug is one of the oldest offenders among injurious iusects. In 1799, the late Prof. Peck was awarded a premium by the Massa-
chnsetts Agricultural Society for an essay describing the insect and its work, and since that time the pest has kept alive its own hateful reputation iu the different parts of the countryIts prevalence in this State is of recent origin, and perhaps the pear trees in some regions have
not yet been attacked. Therefore we shall not not yet been attacked. Therefore we shall not
only cite remedies, as requested, but shall give some description of the insect and its habits. The insect is closely allied to the sliny slug which was abundant in Europe in the time of
Linneus. To entomologists it is known as Selandria cerasi, Peck. The slug is the larval form of a saw- tly which is described by Harris in these words: "This ty is of a glossy black color, except the first two pairs of legs, which
are dirty ycllow or clay-colored, with blackish thighs; and the hiud legs, which are dull black, with clay-colored knees. The wings are some-
what couvex and rumpled or uneven on the upper side. They are transparent, reflecting the changeable colors of the rain-bow and have a smoky tinge, forming a cloud or broad baud across the niddle of the first pair; the veins are
brownish. The body of the female measure brownish. The ody of the female measures
rather more than one-fifth of an incl in length; that of the male is smaller.
These flies appear early in the spring in this climate; earlier than iu the East. They lay
their eggs, one in a place, in little their eggs, one in a place, in little incisions in
the lean, generally out the under side. The eggs
. the leat, generally on the under side. The eggs
hatch in 14 days and the slngs soon make their
presence known hy their evil work uno the presence known hy their evil work upon the
leaves. Harris says: "At first the slugs are white, but a slimy mater soon oozes out of
their skin and covers their back with an olivecolored sticky eoat. They have 20 very short legs. The largest slugs are about uine-twenti-
eths of an inch in length when fully grown. The head, of a dark chestnut color, is small, and is eutirely concealed under the forc part of
the body. They are largest before the body. They are largest before and taper
behinud, and in form somewhat resemble minute tad-poles. They have a faculty of swelling out the fore part of thc body and generally rest
witl the tail a litte turned up. These disgusting slugs live mostly on the upper side of the
leaves of the pear and the cherry, and eat a way leaves of the pear and the cherry, and eat away and the skin beneath untouched. Sometimes 20 or 30 of them may be seeu on a single leaf,
and sometimcs thcy have been so abundant in and sometimcs thcy have been so abundant in
Massachnsetts that small trees were eovered with them, the foliage cntircly destroyed and
the alr around the tree charged with a disagreeable and sickening odor.
"The slugs come to their full growth in 26 days, during which period they cast their skins
five times. Aftcr casting their last coat they five times. Aftcr casting their last coat, they
are not slimy, but have a clean, yellow They also become longer, and their heads and the marks between the wings are plainly to be
seeu. In a few hours after this chang the leave the trees, and, having crept or falleu to the ground, they burrow to the depth of from oue inch to three or four inches, according to
the nature of the soil. The worm forms a cell or cocoou of particles of earth, and in 16 days
after the descent of the worm to the ground, the fly comes forth from the surface, Hies to the leaves and lays its eggs for another generation of slugs. In the fall the worms which go into
the ground remain there duriug the wiuter, and thus provide for the appearance of the fly the following year
Such is the life history of the pear slug, as it who find their trees affected would examine the pest carefully and let us know whether the slugs, as they find them, agree with any of the forns which we have described. II is possible
that some of the orchards are infcsted by other that some of the orchards are infcsted by other
larve than that of the Selandria cerasi, and if so, we shall be pleased to receive specimens at once from any pear grower.

The remedies for the pear slng are simple, easily applied and quite effective if diligently
used. Oue is powderiug the leaves thoroughly used. Oue is powderiug the leaves thoroughly
with air-slacked lime. This can be done by attaching a flonr-sieve to the end of a pole, filling it with the lime dust and shaking it over be done when the dew is ou them. As the slugs feed mostly upon the tops of the leaves, slugs feed mostly upon the tops of the leaves,
they are easily reached by the lime. Another good treatmeut is to drencl the trees with a
solution of two pounds of whale-oil soap in 15 gallons of water, applyiug the wash with a
garden pump and hose, with a "rose" spriukliug nozzle. Much good could also be insectiverous birds, to whon the slimy slug good results from . We should also expect urchard at the time when the slugs are falling from the trees to burrow in the grouud. When their worst is over and the slugs have done the soil in the winter with a cultivator would hibl up their cocoons aud destroy many of the are obtained with these prescriptions or others

## The Rust in Our Grain Fields.

The evil of rust to which we have alluded in ingly. It seems probable that some of the dis astrous experience of former years, when men gained but a few sacks of shrunken grain from fields which promised bountiful returns, would be repeated. Our "Agricultural Notes" in this
issue contain the latest information from the grain-growing counties, and the reports of de crease in estimatcd yields are saddening in the extreme. Last ycar iu the northern countie we had in April a wide-reaching visitation of
mildew which, however, accomplished but little injury on the whole. This year, with the abundant prospect which a full rainfall outheld to the farmer, we have a much severer affliction in the rust, which will not be gentle in it ravages.
The minds of readers naturally turn to what this rust is aud what are the conditious which call it forth. Last year we presented points in this comnection, but as rust was not then abuntante as now. Was not of such present impor subject and add some new notes with regard to


VITT'S PATENT GRAIN TOLLER
the fungus. Our engraving in this column gives is seen in nature under the microscope. No. 1
shows a fragnent of a leaf in which the mass of the rust (Trichobasi out through the cutiele of the leaf. No. 2 is an enlarged transverse section of the same leaf, showiug how the growth and multiplication of
the pseudospores ruptures and uplifts the cuti the pseudospores ruptures and uplifts the cuti-
cle of the leaf, and how the ramifyiug rooting


Grain Rust, as Seen with the Microscope (mycelium) works its way down through the cells of the leaf substance, and saps the foundation of the plant's life. It may be remarked the stalks of the plant, and thus its growth is the stalks of the plant, and thus its growth is
doubly ruinous. No. 3 shows the pseudospores of the rust (trichobasis), or, as they are called by some authorities, unilocular uredospores of puccinia, and around them niay be scen the zoopuecinia or foilocular brand-spores. In this connection it may be noted that the trichobasis
is considered as one of the phases of puccinia. It is not known just how the grain becomes that the pseudospores are examination shows eaf through the stomata Their brandar the tents if endowed with reproductive powlar con ibly may be taken up through the roots and lodged in the geueral structure, or by effecting n entrance through the breathing pores of the eaf, in either case only wait a favorable combination of circumstances to give them an opportunity to germinate iu a plaut thus infected; or pseudospores carried by the winds to the
leaf, finding favorable climatic conditions, may leaf, finding favorable climatic conditions, may
there vegetate, and the mycelium searching out there regetate, and the mycelium searching out
the stomata, no doubt euter and commence it parasitical life. When it is remembered that from a particle of matter not the two thousandth part of au inch in size, a good sized puff-ball or mushroom will grow in a night, and that a few r "potato blight" to do its work, the sudden appearance of the rust in a field of wheat wil be understood. Grain standing on rich ground in a sheltcred position from winds, particnlarly our drying northers, infected with the germs of moist atmosphere and sunny days after foggy moist atmosphere and sunny days after foggy though it is fortunate that the exact condition
favorable to the development of the fungus are
comparatively rare. Were the spores favored with but a fraction of the opportunities give the grain which furuishes them a habitat, good not nearly all fields attacked are uecessarily ruined.
Without going too far into the history of the rust fuugus as it has been laid down by scien tific investigators, it may be said that the life part of this life is passed upon some other plant than the grain upon which its effect is mos ruinous. The passage of germs from the bar
berry to the grain has been clearly shown both by the experience of farmers where the barberry grows, and by scientific study of the fungus appearing on each. The spore of the one year to another is called a "teleutospore,"
and it is developed from the uredo spores which are shown in No. . of the engraving. Th telcutospore, as shown by Mr. B. D. Halstead in au address before the Massachusetts Horticultural Society, usually bears from five to ten sporidia; and allowing only one of these to find
the barberry leaf, there may be from one to fifty clusters as a result In carryiug out hi fifty clusters as a result. In carryiug out his estimate of the rapid increase of the fungus,
Mr. Halstead supposes that only one cluster i formed, and a very low estimate for its contents would be 250,000 recidium spores, and if the grain stalk and each brings forth its 250 ,000 fold, there would be uuder sush circumstances $62,500,000$ from the single one from which we started. Takiug the same telcuto. spore, and supposing every spore in all the
stages found its place tn fill it, the result would stages found its place to fill it, the result would be $1,562,500,000,000,000,000$ (one quintillion
five hundred and sixty-two quadrillions five hundred trillions) spores, which may be looked hundred trilhions) spores, which may be looked giving each inhabitant of the glohe lis equal giving each inhabitant of the glohe his equal have nearly as many as
the whole human race.
There is no specific for overcoming or pre
cuting the occur: ence of rust. There is no
variety of wheat which has been tried under all
enough to be accepted as rust-proof. arieties seem less liable than others, and such should be tried persistently to discover how much trust can be placed in them. There is no treatment of the soil which can be universally
prescribed. Drainage has been put forth as a prencrea, and although it seems to accomplish good results in some cases, it is often physically and financially impossible. It is universally acknowledged that the disease is so much controlled by atmospheric conditions that, so long as we grow plants liable to its attack, we can
do nothing but sow our fields at the time which do nothing but sow our fields at the time which generally yields us best crops and abide the results.

## Patent Grain Toller.

The annexed is an illustration of an improved mechanical grain toller designed for use in custom mills for the purpose of taking the toll accurately and without trouble to the miller. It may be readily adjusted to any proportion of toll as may be agreed upon.
$A$ is a couducting tube, through which the grain passes down upon the slightly concaved revolving disk, $B$. The latter is lowered by the pressure, and the grain gradually escapes between the lower end of the tube aud said disk, and enters the annular casing receptacle, . The tnbe, $A$, Fig. 1, is slightly increased down with less friction on the sides of the grain and consequently to enable it to exert more pressure on the disk. The latter has a central tubular portion, which is connected by a coup-
ling pin in the shaft, $D$, which is rotated. The upper part of thic tube is closed and a spiral spring is provided therein, so that the disk may frecly play up aud down while revolving. The and automaticall to the pressure of the grain ontlet, according to the quantity of grain coming in at the top of the machine. The spring, by yielding, allows the disk to work as well
with an irregular as with a regular How, and can be used equally well in tolling the grain from an elevator or from a hopper.
The casing, , is arranged with two vertical partitions, one of which, $E$, Fig. 2 , is movable, index along the graduated scale on plate, and index along the graduated scale on the exterior
of the casing. The partitions, when adjusted to the proper distance, take up a certain fixed proportion of the circumfercnce of the disk, and receive, by the uniform dropping of the ing proportion of the the disk, a correspondtube, $A$. This forms the toll agreed upon be-
tween the miller and the customer, and it is tween the miller and the customer, and it is
conducted through an exit spout, $F$, to a suita. ble receptacle. The main portion of the grain passes along the spirally inclined bottom to a
second exit spout, $G$. The first model. ventor has been in practical made by the in Nills, at Union, Mo., over a year, without requiring any attention whatever, doing its work qatisfactorily to both miller and customers. The toller is is about 18 inches high, and the base about $10 x 5$ inches. For further information address the inventor, Adol
Franklin county, Missouri.

Spotted Fruit.-La Science pour Tous says that $M$. Duchartre presented recently to the
Academy of Sciences at Paris a paper by M. Academy of sciences at Paris a paper by M
Prillieux on the dark spots which appear on the kin of apples and other fruits, giving the re sults of observations as to whether or not these and the cracking of fruits were due or not to parasitic fungi. He finds that there is "unique" proof that disease is due to the presence of a fungus, which not only penetrates the epiderm, but also the solid tissue of the fruit. The fungus attacks the leaves and branches, as well a the fruit, and thus travels by means of propa gation by drafts. And this is the chief reason of fruit. The name of the small fungus is Cladosporium dentriticum of Wallroth. M. Duchar porium dentriticument to allroth. M. Duchar
tre pays a compliment to address to the Po mological Association at Chicago, in 1875 , by Mr. Thos. Meehan, of Philadelphia, and con tends that the observations there noted correspond with the recent researches of M. Prillieux, and which prove, he says, that on both sidcs of the Atlantic "microscopic
these morbid appearances."

Steam Road Wagons.-In 1877 the Wis consin Legislature passed a bill offering a bounty of $\$ 10,000$, for the best practical steam road wagon, and lately a commission of two Govers and one engineer was appointcd by the mitted. The day fixed upon for that purpose was June l0th, and some half-a-dozen machines were entered for competition. As a tcst, each n ratc of five miles per hour. The result is not yct amnounced.

Mussel Slougir.-Our "make-up" was so
far off his geographical fcet on last week that e put a piece of correspondence from Mussel lough under the head, santa Barbara county tis in Tulare county, as our readers will soon learn farther from one of our correspondent who is traveling in that regiou.


## A WORLD'S TRIUMPH.

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## STEINWAY

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Have increased to an extent, necessitatiug the establishment of Warerooms in London, Fngland, and connected with it is a Coneert Hall, thic whole combined making the most elegant Piano Wiareroms in Europe, and stands there as a monument of Ameriean genius and industry. umphs of this energetie firm. They stand foremost as iuventors iu Piano building in America umphs of this energetie firm. They stand foremost as iuventors iu Piano building in Ameriea, and in that respect, no sual compliment to their inventions is the undeniable endorsement of all
threir eompetitors, as shown in their imitative efforts. Certain principles of the Stcinways, are, however, so completely protected, that no imitation or substitute is attempted at alls-and the shallow, niethod of erying sneh inventions down are resorted to and relied upon.
The Steinways desigued and perfected the Overstrung and Iron Frame systems. The ap-
plication of the Agraffe Arrangements to Nquare and Upright Pianos. The Patent Juplex Seale, plication of the Agraffe Arrangements to Nquare and Upright Pianos. The Patent Juplex Seale, creating the most beantiful treble tones, (the I)uplex seale is of reeent invention and only to be found in Pianos sold recently). The improved louble Dampers. The later idea extending the Agrafes to every string in the liano. The highest fimish to all parts of the instrument, inclueharaeter, that the employment of large eapital and experience alone permits. factory record of is years' trial on the Pacifie Coast, in itself assures the purchaser that the investment is no speenlation, but one of perfeet seeurity. The oft-repeated story of rival makers elaiming
should have no weight with purchasers. An immense manuiacturing business like tne Stemway is divided into departments for the various elasses of work, and
superintends that alone, and eannot be perfeeted in other details.

The Stcinways (a numerous family) are the inventors and designors of the principles of the pianos, and are alone responsible for the thorough execution of their own ileas.

In the Jlachincry-Department at the late C'entemial Exhibition, Steinways were awade a speeial medal for an iuvention for testing their iron franes under a pressure of 5,000 pounds to the square centimeter. (This award was distinet from their medal for the best pianos exhibited. The iron frames in Steinway pianos are the only ones so tested, and while other makers rely on castings from an ordmary foundry, the Steinways maintan their own foudry, and manufacture a frane of composite metul, which adds greatly to the resonant qualities of the instrument in general. It often oecurs that the attempt is made to raise the charaeter of pianos constructed on less costly principles to the rank that the Steinway maintains, by naming a price, the same, or astonishing discounts for eash, or extremely long eredits; systems not entertained in to mak elass business. In selling a siteinway piano, a guarantee of worth is given protecting the pur efiaser for five years, aud catalogues issued by the Paeific Coast Ageueies have an uniform rate of prices in gold, and where desired a liberal installment plan is offerel to responsible buyers, with an additional eharge of simple interest on deferred payments. Catalogne mailed on ap plieation to

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OFFICERS AND DIRECTORS.

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 tion, and soodern Languages are practically talyitht. The diselinline is excellent, and its system1 of Actual Business
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ted for pyerators, both by sound and papier.
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olis. In size, quality and combition

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stock. Addre
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wanger \& Barry, Rochester, N. Y.; C. W. Reed; Saera
mento, Cal.; A. Lusk \& Co. Sin Francisoo, Cal.

The Resources and History of Shasta County.-No. 2.

## Shasta City.

Whatever the future of sliasta Ciity is, her former sons and later friends will remember with truest affection

Thisis cily, whienee of old
A tluod of reansure rolled,



 Reading.
This thriving town is the terninus of the California and Oregon railroad (northern branch of the (. P. 1R. R.), and is situated on a table
land, 6.3 feet above the Sacramento river, which Hows past on the north and east. Numbers of tine oaks beautify the town site. The sotile a
reddish loam, deep, and, when properly tilled, reddisht loann, dep, and, when propery ine ine ore planted last winter, and are growing admirably, The town site was chosen in $15 \% 2$, and the suc ceeding years have only confirmed the faith of
her founders. A fire, which consumed the business portion of the town, set matters back
for a time, but Reading fully recovered long for a time, but Reading fully recovered long
ago aud is steadily inproving. The principal Business of the Town
Embraces two leading hotels and several lolg. ing houses, four drygood and groccry stores, ${ }^{\text {a }}$ minor slops. There is also a brass band in minor shops. There is also a brass band in
town, a Gool-Templar lodge, Odl-Fellow lod ge, a school house with two departments, two black smith shops and a carriage shop.
The teaming business of the
large, all the goods for Trinity county, Modoc
and half of Siskiyon being hauled from this point, so that matters are particularly lively all Of Bush \& Johnsoundry is Business
Of Bush \& Johnson, is one of the commercial
features of Reading. Here may be seeu heavy features of Reading. Here may be seeu heavy
castings for the mines, tons of thonr and gro-
ceries, over a humilred miles of territory, also wool.
mohair, hides and ores fur slinunent to wan rancisco.
Reading
Reading is at present reasoualily well supp
plicd with artisans, althrugh there is room for more men of industry.
There is certainly good openings in particular ways. A miller is wanted, with a calital of mought from Tehama, ("hico and evenr is nov sonth, but the farmers in the county can rais enough wheat to supply a mill on the railroad
line. A carcfui estimate, gained from the leal
ing business houses, makes the anount of flonr ing business houses, makes the amount of flom han
Thirty-Five Thousand Centals Annually.
There is a chance for of late years. ing upe wool, hides and cattle by means of gents, and thus intercepting a trade which, owing to the lack of purchasers, goes 3.5 mile mill may be found profitable. There are so whal small stores iu the mining camps that a ucceed well.
One of the charms of Reading is iu its Beautiful Locality.
The clear, blue river winds around the great bluffs and sparkles out of sight. The trees
shadow and arch above the fair town. Always in sight-beyond river, beyond forest-are the pale mountams, cast and west, in two clasping ward, old Balley, black and barren; northward, the pure dome of that grand mountain, Shasta ool and the heat is never so the nights are urther south. Reading is laid off regularly, as
shown in the map, and there is room on level ground for a good-sized city. Two ferries con part of the county. Reid's, on the upper side Anderson.

Donkey Caterpllatis. -The reason a donkey eats thistles has been found by the ancient ay of caterpillars which choose a similar diet The Sutter Banner announces that thousands o caterpillars have attacked the wilderncss o
thistle stalks allowed to stand in varinus por tons of luba City and vicinity, and has no doubt that were their destruction possible, Along the ohl railroad track, just east of the lough, the Banner says their working made of the weeds disappeared before their onslan ht like magic. There is a fear, however, that whell the thistes are exhausted the worms may make thing valuable.

Petroleum Oils as Lubricators.
Those who are developing our petroleum re sources in the southeru counties will be inter-
estel to learn the estimation in which these oils ested to learn the estimation in which these oils
are held. Oils from petroleum, says Sarrard's Cor ncarly Journal, are now produced snitabie for neally every have heretofore bectin used, not ex-
animal
cepting those intended for cylinder purposes. cepting those intended for cylinder purposes.
A serious objection attaching to the animal oils A serious objection attaching to the animat oils
is prosent in petroleum. If, through the exhaust steam, some of the oil be carried into the boiler, foamming or primang is the conscquence,
but the same thing happening in the case of but the samm is rather a benefit than otherwise, for petrotennis does uot cause foamiug, but it pre. deposit, and this aids in the prescrvation of the boler, and is perhaps the best preventive of
bepe
the mauy evcrywhere sugesested the many evcrywhere suggested.
Often, in removing the cylinder-hcad and Often, in remowing the cylinder-hcad and
plate covering the yalves of an engine, we see vidences of corrosion or action on the surfaces, difiering entirely from ordinary wear, and the
engineer is generally at a loss how to account for it. According to the general impression, grease or animal oil is the preservative of the the canse of its general disintegration. The reason of this is that vegetable and animal oil consists of fatty acids, such as stearic, magaric,
oleci, ete. They are combined with glyeerine oleic, ete. They are combined with glyeerine
as a base, and, under ordinary conditions, are ueutrals to netals generally, and on being applied they keep them from rusting by shielding them from the actiou of air and noisture. But In the course of time the influence of the air causes dceomposition and oxidation, the oils be they act on the metals. What happens at th ordinary tempcrature slowly, goes on rapidly in the stean cylinder, where a new condition reached. The oils arc sulbected to the heat of
high-pressure steam, which dissociates or frees
these acids from their base, and, in this condi-

## Mount Shasta.

Although losemite is reckoned the most wonderful natural phenomena in California, it is surpassed, in many respects, by Mount Shasta, which stands at the head of the Sacra mento valley. Shasta has an elevation of i4, 453 fect; that of Mount Blane is but 15,739 feet. Mount Shasta once contained an aetive volcano, the crater of which is still visible. The riew from the summit takes in the whole of California between the Coast and Sierra Nevada ranges of mountains, and from away beyond the Oregon boundary to the Bay of San Francisco, a distance of about 450 miles. As a vast and maguificcut panorama, it is doubtful that this view is surpassed in the world. The whole country is frequently filled with grcat rolltng nasses of fleecy clouls, which hide all bint the tips of the high peaks of the Coast hange and ummit moder such circumstances is wird beyond description. The is grand and mento valley seems buried in piled up dritts of leecy snow. These drifts, undcr the sun's ays, shine with an intense clitter. Onc of the argest living glaciors on the Pacific coast is onnd ou the summit of Shasta.
In his report on the "(ieology of the Sicrra Nevada," Prof. Whitney says: "It is hardly possible to exaggerate the beauty and grandeur Flat, so that those who do not feel equal to the task of ascending to the summit will find then selves amply repaid for visiting Strawberry Flat, by the nearer view of the mountain itse rom that place, as well as tho clear water, coo air and magnificent furest vegetation, which are so grateful to the traveler who comes, during
the summer months, from the hurnin' plains oi the summer months, from the burning plains ot
the Sacramento valley or the alkaline deserts of evad.
The be


VIEW of MOUNT SHASTA. THIRTY MILES DISTANT.

Tion, they attack the metal and hence destroy nnimal origin, lish or spermo oil inclucled. Pe. toleum and oils derived therefron (gcnerally
called mineral oils), are entirely free from this bjection. l'etroleum contains no oxygen, and bence it cannot form an acid, and therefore can oo bland that it may be and is used mediciually as a dressing to wounds and badly abraded sur as a dressing to wounds and hally abraded sur
fices where cerates of ordinary dressing would sive pain.
Large Experience With the Widney Transplanter.

It is well known that the Central and South ern Pacific railways are making extensive plantations of trees along their lincs. We havo recived thc following letter from the gentle








shefp for the Morntaiss. - The Tuolumne Yndependent says: On Sunday last 5,000 sheep
belonging to James Hamilton, of San Joaquin belonging to James Hamilton, of san Joaquin,
arrivecl. On Thursday, $, 3,400$ belonging to H . 3,000 belonging to Mrs. Hitchcock, of Cala 5,000 belonging to E. D. also arrived. Up to June 1 Ith of Calaveras, 22,600 ha:
passed over the Big Trees road.
of Nount Shasta is in the months of July and August. Before July the snow is hardly gone rom the canping-ground, from which the ascen
to the summit and the return is to be made iu one day; and, after that month, the incessant fires in the surrounding forests till the air with moke and take away all distinetness irom the
distant view. The plan allopted loy thos astant view. The phan1 alopted hy thos at Camp lioss, near the line of perpetual snow and from that point to start the next morning
sufficiently earrive to keep always on the hard sufficiently early to keep always on the hard frozen sonow, the heat of the sun by mid-day softening it ncarly to the summit, 80 as to mak
climbing almost if not quite implossible, while climbing almost in not quite imp10ssibe, white
the ascent on the frozen surface is very easy specially if one has the soles of his boots wel rovided with nails. Our party started at $3: 30$ others not encumbered, as we were, by barometers and instruments of various kinds, would be able to make the ascent in considerable less is regards their climbing nowers. Of course. night near the full of the moon is preferable for this expedition, althongh the nsual bright star light of the summer in this region will answer,
to enable one to pick lis way over the snow.,

Persimmons for Esflasid.-The distribu ion on Japan persimmon trees from this coas
is embracing a wide area. Rev. Heury Loomis has lately heard from a bundle of trify Loomi Dr. Arowsmith, of Kent, England. He sent 14 trees and the letter reccived says that 12 of them have leafell out woll and the other two
are filling buls. They are greatly adnuired, and zest is lent to the culture from the fact
that Dr. Arrowsmith's gardener, Mr. Hay that Mr. Arro wsmith's garicicner, Ar. Hay first fruit of this kind in England. Mr. Mc which he sold in southern California last seaso are all reported doing well.
Woodward's Gardens were never more attract


## S. F. MAFKET Report.

 not intended do reprosentet the stat o of th
urday, the date which the paper bears.

## Weekly Market Review

## DOMESTIC PRODUCE. ETC.

San Francisco, June 26th, 1878. Trade is quiet generally and transactions
mall. There is a difference of about 5 c ti $\mathrm{ct1}$ on the prices asked and bid for grain for de livery within 10 days. Soune considerable lot are offered at $\$ 1.65$, and $\$ 1.60$ is the shippers mark. The English markets take a slightly uarters. There are, howe ver, two siles to all these re wo and wo thens, as yet, for weaken crops are still iu the fields, and therefore liable

Range of Cable Prices of Wheat.
The course of the Liverpool quotation for Wheat to the Protuce Exchange during the following table: following table

## Thursday. Eridad. Siturday:.


To-days calle quotations to the Produce Exchange compare with same tate in forme years as follows
1876
1877
1878
 The Foretgn Review.
June 25th.-The Mark Lane Ex. mess says: Despite the somewhat conflicting nature of agricultural advices, the present situa. tion of cereal crops is highly critical. Nothing but a continuance of normal weather can preunproductive, unremunerative seasons. With the exception of France, where the Wheat country, eontinental advices promise a fair average yield; but in Fastern Russia, thousands uccession of unusually heary hail-storms. i heliveries of English Wheat in the principal prowincial markets have shown a decided falling off. Offerings at Mark Lane are also light,
which tend to prove a depletion of stocks in which tchid to
farmers hands.
Depresscal by heavy prescint and prospective supplies, and Hooded with continned offers fronl America, and Russia, the foreign Wheat prices, havin! receded fully a shilling on the weck, with Ponly a most linitcd consumptive demand at that. The contineutal demand for
caryoes of Wheat off coast has been the most caryoes of Wheat off coast has been the most
noteworthy feature of the week's trade. Mlaize note worth
is stealy.

Frelghts and Charters
Whent freight, says the Commercial Nows, are entirecy
offered recently at $f_{2} 10 \mathrm{~s}$ to Liverpool, canceling date, October 31st, but was unable to secure we believo warranted by the facts, that there are enough ships now in port and to arrive shortly to accommodate the wants of exporters in July and August. Rates are expected to be
low during those months at least. Opinions low during those months at least. Opmions differ as to the prospects have row. At the close we have h6, 9,0 tons in port now loading and 51 ,-
load Wheat, $7,4.3$ tons miscellaneous and 5 , 126 tons lisengaged. The total tonnage on the way is 214,635 tons, against 200,616 in $18 \% 6$.

Eastern Grain Markets.
New York, June $\%$ 2d. - Tho Grain trade has been less active this week, and Wheat, Corn nargely Spring Wheat is 9 acce 81.10 , and still lower for August delivery; Corn, 40 (e 46 c ; shipping Flour, st(15.25; and matting Barley, 60@(.85c. Though exports of Grain during the harvcst year, eommencing with last september, ariug about onc-third greater than they were durug
the preceding year, there are no indicatious of the cxhaustion of the surplus of the last erop, a ycar ago, with a harvest of unilaralleled magnitude inquending and nearly all Europe in a more or less needy to be little probability of a further deeline in prices, since the crop reports from Western
Europe are in the main bad and the great bulk f deficiencies there will have to be marle goor from our own granarics, Russia being practically out of the list of heary exporters. week's Grain markets have shown no new features and clos. Thg prices are about the same as last Saturday: and caused a good speculative business. Whea

 and have averagce nearly 50 c higher for Porl


|  |
| :---: |
|  |  |


 boms cheerful.

## Ha Wool Markets

New Yome 22d.-New Wool has eomyet iu any guantity. A parcel of 50,000 yet iu any grantity. A parcel of 50,000 Sales have yade of new unwashed Indiana
at 27c, and d Pennsylvania at 34@35c. In the coubuyers are still proceeding eautiously, some sections of Ohio there is talk of brispetition, which has resulted in price down 'Here the demand is a trifle better, thoure is still a feeliug of uncertainty regarhe future, and it is with diff. culty that of any consequence can be placed. In the goods market does not warrant libirchases, and until a change is witnessed i quarter no activity need be looked for ool. Spring California is in better supd finds fair sales at prices
which shotater steadiness. Receipts of Texas contirge, and in the absence of demand at thres at which it is held, stoeks Carpet stockglected, though prices are not 10,000 ths Hifornia at $16 @ 17 \mathrm{c} ; 80,000 \mathrm{tbs}$ Spring do, lc; 17,000 tbs Western Texas, $18 \mathrm{c} ; 128,0$ (ppring do, 20@23c; 6,000 tbs
new unwasledium Indiana, $27 \mathrm{c} ; 3,000 \mathrm{tbs}$ new Pennsse, 34@35c; 2,000 tbs old do, $33 \mathrm{c} ; 6,000$ shed choice new Fleece, 35c.
Boston, $22 d$. The Wool market genBoston, $22 d$. -The Wool market gen-
erally is uned. The demand is still quiet erally is uned. The demand is still quiet cautiously fly at low prices. There is no improvemenemand or prices, and a very unsettled feorevails at the present tim
For new is difficult to realize cos Sales comp and XX Ohio at $35(\Omega 36 \mathrm{c}$ Michigan a isconsin Fleeces, 34 (a35c;
washed, Cou and Delaine, $3 \check{5} @ 40 \mathrm{c}$; Kentucky Counl30@33c; unwashed Combing, 23@30c; Ut Jvada and Colorado, 17@27c; Texas, 16 Oregon, $20 @ 27 \mathrm{c}$; scourerl,
$42 @ 78 \mathrm{c}$; sul
was more indor pulled, $22(44 \mathrm{c}$. There was more infor Califoruia Wool, sules of the week colgg 352,000 ths Spring at 22(a30 c , and 90 , Fall at $16 @ 18 \mathrm{c}$. Total sales
of domestic for the week reached 1,268 ,500 tbs .
ostic Produce.
The folloysble shows the S. F. receipts
of Domestic uce for the week ending at of Domestic uce for the week ending at
noon to-day, npared with the receipts of
previous wed previous wee

| Artioh | WeER Tunc 5. | Weer. <br> June 12. | WEEK. <br> June 19. | 26. |
| :---: | :---: | :---: | :---: | :---: |
| Flour | 31,705 | 30. |  |  |
| Wheat, cent | 27,971 | 12,954 | 27,317 | 37,945 |
| Barley, cental | 15,436 | 9,812 | 18,479 |  |
| Beans, sacks. | 351 | 250 | 168 | 365 |
| om, centals. | 2,501 | 2,622 | 5,785 | 2.003 |
| Oats, centals. | 2,848 | 8,554 | 3,523 | ${ }^{6,167}$ |
| Potatoes, sack | 5,794 | 7,220 | 8,004 |  |
| Onions, sack | 886 | 626 | 1,350 | 864 |
| Wool, bales | 4,115 | 4,254 | 1,343, | 856 |
| Норs, |  |  | 150 |  |
| Hay, | 1,25 | 1,355 | 1,26 | 1,7 |

BAGS-A -A ination is reported to have been affected design to advance prices, but grain bags eqought to-day for $11 \frac{1}{2} \mathrm{c}$ cash from formens. Large lots are moving into the inte
BARLE ety-two and one-half ets. is now about th for bright new Barley, and sales: 500 sly, $90 \mathrm{c} ; 350 \mathrm{sks}$ old, $95 \mathrm{c} ; 1,000$ $91 \mathrm{cc} ;$; 1,000 .wo-year-old Brewing, $\$ 1.10$

$$
\begin{aligned}
& \text { in small lots. } \\
& \text { CORN - ide is small. Three carloads } \\
& \text { of Iowa havt arrived. The shipment to } \\
& \text { Mexico contin reduced amounts. }
\end{aligned}
$$

DAIRY IfCEE-Butter is still arriving in full lots, e trade is unchanged. Unexfancy dem aches $24 @ 25 \mathrm{c}$. Cheese is un-
EGGS
ET1@-Cia fresh Ergs havs advanced to $27 \frac{1}{2} @ 30 \mathrm{c}$, and other descriptions in
proportion.
FEED - $d y$ gives way and is nominal in price. The is rumning on new stock at a range of $\$ 104 \nmid \forall$ ton for fair to best. We tons at $\$ 10.33$ ton; a cargo of poor stock FRUIT -
change of pror nearly all frints. Hale's Early Peache in from Briggs' ranch., A new plum e "Silva's Konig, Claudie," reation has bell received and sold for 2 ac , and strawbeas the pricc falls within their views.
weaker on --Supplies are large and price lower, but ps pronounce it still too high
for them to te. HOPS-healers report no change. Emmet Wells ss the New York market for
the weck elune l4th, as follows: "Our market this has exhibited iucreased firm-
ness. Prighough not quotably higher,
show a strong tendency to advance and holders
of fine goods have withdrawn their samples of fine goods have withdrawn their samples
from the boards, expecting soon to realize bet-
ter ter figures if crop prospects do not improve. Fly has made its appearanco in the Euglish
plantations, causing increased firmness in the plantations, causing increased firmness in the favorable for a large crop. Included in this week's exports are 500 bales of 1876 's. Crop
reports from the interior this week are less reports from the interior this week are less
favorable. The cool weather hangs on and the vine is making little or no progress. Quota tions: New Yorks, good to prime, 8@10c; New
 consins, $5 @$ Sc; Yearlings, 2@3c; Olds, all
growths, 1@2c; Pacific Coast Hops, 10@12c." growths, $1 @ 2 \mathrm{c} ;$ Pacific Coast Hops, $10 @ 12 \mathrm{c}$."
OATS-Oats are dull and prices are unchanged. We note sale of 650 sks fair at at $\$ 1.33^{3} ; 100$ sks good Washington Territory 50 do at $\$ 1.37 \frac{1}{2} ; 100$ heavy Humboldt at $\$ 1.4$. ONIONS-Price for good Onions is now ruling at 75 c per ctl. Supplies are received from Pockton and Sacramento river. POTATOES-Potatoes have fluctuated somewhat during the week, owing to variable
receipts, but to-day are just at the marks made receipts, but $\begin{aligned} & \text { week ago. }\end{aligned}$
PROVISIONS-Provisions are firm and the advandees in California Bacon shows fractiona VEGET + PLES Tomatoes and advance in Marrowfat Squash are the main features of the trade. Cucumbers are now at pickling prices, 50 c for a large box.
WHEAT - The market is still in statu qu The export trade has not yet begun and nothing certain will probably transpire for the next few
days. The top of the market for old Wheat is days. The top of the market for old Wheat is
found in a sale of strictly fine old milling at $\$ 1.80$. Sales of new are reported as follows: 2,040 ctls old milling, at Vallejo, \$1.65; and , 000 etls good new shipping, at Vallejo, at
$1.60 ; 760 \mathrm{ctls}$ choice milling, delivered at Oak land, at $\$ 1.85 \geqslant \mathrm{ctl} ; 4.000$ etls ehoice old mill ing, at Vallejo, at $\$ 1.70 ; 10,000$ ctls new good shipping, at Vallejo, at $\$ 1.60$. So far as we are new Wheat for export was 130 tons on Wednesday last, at $\$ 1.65$, to go aboard the St. David.
This was classed as good milling, and shipped This was classed as good milling, and
by J. D. Peters, from Stockton.
WOO WOOL-There is rather more Wool selling.
but no change in prices. Good Wools sell frcely at quotations, and will probably all clean than 1,000 bales on haud, whieh is much less than usual at this time of the year. The falling fully one-third. We note sales of 300,000 ,

## DOMESTIC PRODUCE.




FRUITS AND VEGETABLES.


RETAIL GROCERIES, ETC.


Signal Service Meteorological Report. Week Ending June 25, 1878.




ATENTS AND INVENTIONS.
List of U. S. Patents Issued to Pacific Coast Inventors.
 By Special Dispatch from Washington, D. C. week Endino June 11tit McGlew, F .
 Spaak Extivocisiners. - Jolin Johason, Bloonfield, ©al Hay Pressks. - Jacob Price, Soln Leandro, Fal.
 Soda and Crfam of Taratar.-Charles R. Burrage, S. F.
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[^18]:    THOROUGHBRED POULTRY.
    

    Unlimited Range. Healthy Stock Largest Yard on the Coast. Brahmas, Leghorne, Plymouth Rocks, Bronze Tu teriesaje Ducks, Guinea Figs, Etc.
    बत्र Pamphlet on the care ar diseases aud their cure, etce, $A D A P T E D$ wspecialiy to th
    PACIFIC Coast Pacific Cosst. Sent for 15 cents.
    Send stamp for price list. Address
    M. EYRE, Napa, Cal.

    CARBOLIC POWDER

[^19]:    202 Sansome Street, San Francisco.

[^20]:    

[^21]:    The famine now prevailing in the northern rovinces of China, and which must continue at least six months longer, is being marked by fcarful horrors. In one town a man opened a shop for the sale of human flesh, and did a good the local Mandarin cansed the shopkceper to be arrested and beheaded.

[^22]:    BONNEY'S PATENT Adjustable Grain Lifter for Headers.
    

[^23]:    Our Headers took the First Premium at the State Fair, held at Sacramento in 1874, and the First Premium Gold Medal in 1875, and in 1876, and the First Premium at the State Fair in 1877. Send for Circulars. Address, early

[^24]:    Our Headers took the First Premium at the State Fair, held at Sacramento in 1874, and the First Plemium Gold Medal in 1875 , and in 1876 ,

[^25]:    Tlis paper is printed with Ink furnished by

[^26]:    S. D. BURBANK OPTICIAN, Special Attention to Fitting Eyes. office-xicholl block, sistil street,
    (Betwery Broadway axd Washivaton,

[^27]:    In Memoriam.
    Rasina Grange, Central California colony,
    lay 18th, 1878
    Whereas, It has pleased the Almighty in is providenee to take from this life our wellbeloved brother, Dr. Chas. R. Watson, ample of energy, industry, hopefnlncss and charity.

    That in his death this Grange has Inst a worthy member, this Order a most zealous rociety a most estinable man and his family a most affeetionate husband aud father.
    Resolvel, That this Crauge tenders its sincer-
    est sympathy and condolence to the bereaved family
    Resolred, That these resolntions be placed upon the minutes of this Grange, that a copy
    be sent to the family of the deceased, and that copies be furnished for publication to the couuty papers, the Paciric Reral Press,

    > Frencir Horse Feel. - We read that the ploys several thousand horses in its daily work, and which has been trying for mauy years to
    diseover the most efficient and cheapost means of feoding the animals aud of keeping them in ion thatsis and linsced cake mixed will best fulfill the requireinents.

    > Latest adviees indicate a pacific turn in the cousenting to lay the treaty of San Stefano before a congress, to meet at Berliu June 11 th.

[^28]:    A JOB PRESS WANTED.

[^29]:    an Rafael, May 6th, 1878

