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SIMEON FRANCIS, EDITOR.

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The New Year.

Man should never be satisfied unless he is in a way to benefit himself or others. This doctrine is simply that of *progress*,—a doctrine that should ever have an effective influence on every rational mind. To no class of society can it have a more useful application than to farmers, in the broadest understanding of the term.

Probably more improvements have been made in farming within the last few years than in any other profession. Men have not been satisfied with the old routine of Agricultural operations. Land has been worked better—seed has been provided with more care—crops in their growth have received more attention—causes of failure as well as of success have been ascertained, and the farmer now feels that if he does his duty, in nineteen times out of twenty, he will be well rewarded for his labor.

And so of stock. He finds that his stock can be improved, with great profit to himself, He seeks better stock of cattle, horses, hogs, sheep and mules, and finds a great benefit in the change—besides, he feels a pride in progress, in a conviction that he is not lagging behind when all his agricultural brethren are going ahead with improved stock.

He is also improving his farm by erecting the proper and convenient buildings in good taste—laying off his fields in suitable sizes and forms—planting out his orchards and taking care of them—his gardens, his yards—and he sees to it that there are no unsightly places about his farm to destroy its beauty; and if there should chance to be, he has still plans for improvement which will be carried out in due time.

The New Year! And what of it, brother

Farmer? The old year has passed. It is a good time to ask yourself what mistakes have you made in farming the past year? When you entered upon that year, did you mature plans for cultivating and improving your farm? Did you determine what lands to give to certain crops; how they should be cultivated; whether they should be drained, if they needed it; whether you should follow the old system of shallow plowing, half cultivating, and get half or no crop, or whether, as poor Richard said, you should

“Plow well and deep,
And have corn to sell and to keep.”

Have you made up your mind that your success was caused by particular attention in working your grounds, or your failure, by neglect? Have you cast your eye over your neighbor's grounds and noticed the success or failure of particular modes of cultivation? These are common questions and common thoughts, but they are those which can be made most useful. There is no magic in farming. Good farming is brought about by industry well directed—we may say directed by judgment and knowledge.

Every advantage gained by new modes of cultivation, by changes of seed, by changes of stock, by new implements of Agriculture, should be seized as *new positions* from which you are to originate and practice other plans and improvements. We believe every intelligent farmer is wiser in his profession than he was one year ago. We hope, at least, that none of our readers have LOST A YEAR!

We have now entered upon a new year—Editor, Readers, all. We trust it may be a year of prosperity. Much depends on ourselves. “God helps those who help

themselves." The employments of Agriculture are the most inviting conferred on man. All the virtues are enjoyed in its practice. We can look over the broad expanse before us and mark the crops, the herds, the fruits, the forests—everything that can delight the eye and rejoice the heart; and looking up to the Giver of every good and perfect gift say, in truth, "My Father made them all."

Reader, we give you our hand to do the best we can to add to the interest and success of your calling for the present year.

Legislative Aid to Agriculture.

We have a few thoughts that we desire to give on this subject. Politicians of every name are in the practice of commending the profession of Agriculture, and of representing that farmers are the "muscle, bone and sinew of the country." This is mainly done, as we are forced to believe, to obtain the use of this "muscle, bone and sinew," to elevate themselves into power. We have too long listened to these compliments without reflecting on their objects. It would be well, even now, to examine the matter, and learn whether this great interest of our State—without the success of which, with all the inherent richness of our soils, our fine climate, our easy access to markets—has been duly and properly represented in our government, and received that attention from it which is really due to that great and leading interest.

The farmers, mechanics and working men comprise an immense majority of our population. And of what material was our last legislature composed? There were in that body forty-three lawyers and thirty-two physicians, beside other professional men; and there were ten mechanics and thirty-two farmers in the same body. While, therefore, the support of the government, to a very large extent, is taken from the landed interest, that same interest had but little more than one-third of the legislative and executive officers of the State, leaving the entire control of the public welfare to professional men and non-producers. Is not there an error in this policy on the part of the farm-

ing interest? We are for giving professional men their due weight, but not for abandoning to their management the entire reins of government. Professional men are not to blame for the position they occupy in this matter. They have so moulded public opinion that we are too apt to believe we need their services, when we have practical men of our own profession who would represent us, and whose interests are united with ours.

The advance of Agriculture in our State augments our wealth and importance in a degree which can scarcely be estimated. In our last number we referred to the causes which struck down the early prosperity of Southern Illinois, and which have long hung like a black pall over that beautiful region of our State. We have shown that any other country subjected to the same policy by government would have suffered as she has—in retarding settlements; in discouraging improvements; in preventing the establishment of schools, in keeping away capital, intelligence and industry. We know that all those causes which have marred the prosperity of the south, are passing gradually, slowly away; but their influences will be felt in that region for a long period to come. We rejoice that there is, though long delayed, a "better time coming," in Southern Illinois.

We have alluded to the composition of the last legislature for the purpose of referring to one item of its history. Among experienced and observing farmers, it is believed that annual county exhibitions and fairs of the products of agriculture, have great effect in promoting the prosperity of farming, by the presentation of fine stock, grains, fruits and other productions of the farm, as well as the products of the dairy, and household manufactures. The exhibition of mechanical skill, also, benefits that class of citizens, and the sight of new agricultural implements, designed to lessen the labors of the farmer and to increase his profits, presents a new field for investigation, and stimulates him to go in the path of progress, which has done so much to advance the wealth, the happiness and the intelligence of farmers in

other parts of the country. A few members on reviewing what had been done for associated wealth—for making, by acts of incorporation and other measures, the rich, richer, thought it not impertinent to ask the legislature to grant some legislative aid to agriculture in the different counties of the State, by which agricultural county societies should be organized, farmers brought together, and their productions by exhibition should stimulate all classes to industry and progress in their profession. For this purpose a bill was introduced into the house appropriating \$100 00 to each County Society duly organized, and the funds of which should equal the sum to be given from the treasury. It was found necessary to reduce the amount of appropriation to \$50 00, in order to effect its passage; and thus reduced it passed without serious opposition. In reference to this appropriation, we find the following remarks in an address delivered before the Clinton County Agricultural Society, on the 17th of October last, by W. S. Wait, Esq.:

“Here was an appropriation requested for the most useful of all purposes, for the encouragement and improvement of agriculture, which is the sole employment and principal dependence of some three-fourths of the people of Illinois. An appropriation calculated to do the State a vast service by encouraging institutions which tend to elevate the character of the farmer, increase his means, improve his morals, and add to the permanent wealth and prosperity of the State. An appropriation to involve a disbursement exceeding altogether two or three thousand dollars, which amount would return immediately to the same pockets from which it was drawn, that of the farmers and taxpayers of Illinois. Yet it was cut down one-half and then reluctantly passed. Thus was appropriated for the encouragement of agriculture in each county of the State which complied with the provisions of the enactment, the sum of fifty dollars. On the same day was passed without opposition, an additional appropriation of sixteen thousand dollars for the Governor’s House!”

Our argument is not aimed against the last named appropriation, but to show the immense disparity in importance in the encouragement of Agriculture in all the coun-

ties of this State, and the construction of a Governor’s house; the first received an appropriation of some five thousand dollars in all, and the other some thirty-five thousand dollars! We repeat that our argument is not against the appropriation for the Governor’s house, but we wish to hold up to public view that small appropriation, given to aid an interest on which the success of all other interests is based in our State.

We conclude by expressing the hope that in the legislature which is now convened, there will be found men who will follow the example of their predecessors in granting to the County Agricultural Societies not trifling, but sufficient means to render them more useful than they have hitherto been, in bringing out the agricultural wealth of the State. The money comes from the pockets of the farmers, and goes back into them. Our State has means, and our legislature should never forget in their legislation the sources of the wealth of our State, and should in all proper ways seek to promote its great interests, which are inseparable from the prosperity of Agriculture.

Improving Country Residences.

Hovey’s Magazine for November, says:

“Throughout the Western States there is room for great improvement in every class of country or farm dwellings. The timberless prairies offer free scope for the blasting winds to sweep across them, and nothing appeared to us more desolate than the small but neat houses, standing solitary and alone, without so much as a single tree on the vast expanse of broad prairie almost as far as the eye could reach. At what slight expense and in how little time could this be altered, simply by the planting of a dozen trees, or even by the sowing of a handful of seeds; for in that rich soil everything grows with great rapidity, and there can be little excuse for neglecting the work. Shelter from the wind and shade from the sun are two of the most important objects in ornamental plantations.”

Mr. Hovey thus depicts scenes which he witnessed in many parts of our State in the autumn of 1855. He seemed hardly to realize that these neat dwellings on timberless prairies were the result of the labor of one or two brief seasons. In that time protec-

tion from trees could not be secured. Some time must pass before this desirable state of improvement can be effected. It will be done in time. Men who go upon our open prairies and make their farms at a distance from timber, generally understand the advantages of shelter and shade, and so soon as they can provide cover for themselves and fences to protect their fields, will labor to secure other comforts, among them trees for protection from the blasts that sweep across the prairies, and orchards for providing themselves with the fruit to which they have been accustomed.

Almost every species of tree found growing upon our water courses, will readily grow and flourish on our prairie lands. Experiments with the seed of the ash have been entirely successful, and the same fact may be stated of the white oak, the black walnut, the maple, poplar, sycamore and other trees. Were it not for the destruction caused by the borer, the yellow locust might be recommended for planting on the prairies. In a few years they make a compact and valuable grove. The more trees you remove from the grove, the more you will appear to have. So necessary are skirts of timber near prairie dwellings, that the tree that will make them soonest is most desirable. The cottonwood grows at once, and rapidly, and in two years will afford protection. Other trees, more valuable, are of slower growth. Mr. Hovey is right in his estimate of the worth of tree protection, and we thank him for urging the occupants of prairie farms to proceed with all possible alacrity in securing so great a necessity.

In seeking for trees for such locations, we are in favor of those varieties which flourish best in our soil and latitude. We doubt much whether the larch or cypress will succeed to a great extent here. The same fact may be stated of many of the evergreens. The best evergreen we have seen for our region is that which is indigenous in Illinois, and if not the red cedar is a good deal like it. It stands drought well, and cold does not affect it. A protection on the north and west by these trees, suffered to grow up

without trimming, would indeed be a valuable and effective protection.

Nurserymen would consult the wants of our prairie farmers by raising forest trees for sale. The maple, the beech, ash, black walnut, oaks, linn and poplar could be raised in any amount, if attention was given to their propagation, and there would be a market for them. We supply ourselves from the nurseries with Osage orange plants at \$2 50 per thousand—why could not the young maple, ash, beech and tulip tree be sold for the same money? We do believe that there is a field opened here to enterprising nurserymen which would pay.

But we would not have our prairie farmers wait to be supplied with trees from nurseries. They should supply themselves from our forests. Ascertain when the seeds of the different varieties of trees are ripe, and be on hand to gather them. A few hours labor will furnish you with all you want; and it is all important that in this business there should be no procrastination. Take time by the forelock, and you have *him* at your command.

We have occasionally in our business been called upon for fruit trees by aged persons. They had cultivated their farms for fifteen and twenty years without planting out a good fruit tree. Their sons, more thoughtful in later years, had planted out orchards, and had secured valuable fruit. The aged procrastinators, when the sun of life was descending, were about doing a work which should have been done a quarter of a century before. They reminded one of the lamentation, the "summer is ended, and the harvest is past," and we are without the blessings which should have enured to our old age!

Young men upon the Prairies! lose no time in securing your groves and your orchards, and before you are aware you will be enjoying the comforts, the absence of which your old friend, C. M. Hovey, in the extract before us, so truthfully pictures.

— An Indiana editor, speaking of a rogue who lives in his vicinity, says: "The rascal has broken every bank and jail, and Sabbath, we have had in this county for the last five years."

A Hard Winter.

Observers inform us that within the last few centuries there have been a series of hard winters, continued for several years, and which have been followed by as many warm winters. They also state that we are now going into the series of hard winters, which may, as before, continue for several years.

Judging from the commencement of the present winter, and its continuance thus far, these weather-observers seem likely to be right; and our farmers, if they have not already, should do what they now can to provide for a winter of unusual severity. If it should prove warm nothing will be lost; and if it should be equal in cold and in length to the last winter, much will be gained.

The last season, in consequence of great drought, furnished a limited supply of food for stock. Many farmers, with a long winter, unless they use much economy and good management, will be short of food for cattle in the coming spring. If they shall be compelled to purchase fodder, they will find it very seriously to affect their pockets; and if they stint their stock in the last part of winter, such stock will make a poor show in the spring and a good part of summer.

Cattle properly protected from the weather, do not require as much food as those exposed to all its inclemencies. Cold rains and snows, and heavy winds, always render cattle uncomfortable. Look at them under such circumstances! If they could speak, they would remind you of their sufferings in a way more sensibly than by their shrinking and shivering, as they stand exposed to the peltings of the pitiless storm.

But farmers who cannot provide shelter for their cattle, must do the best they can for them. They must feed them in a way to give all due nourishment, and, at the same time, to make their food go as far as possible. A farmer would be justly censurable for wasting fodder the present winter. All straw can be made useful as fodder by using the cutting box, and even hay will go much further by being cut up in that instrument. Our horses are injured by the large quantities of corn given them; and it is con-

ceded that horses fed with oats and rye, with the straw properly cut up and prepared, are much better fitted for labor and made sounder and better animals than if they were fully fed with corn. Eastern horses are preferred to western horses; not on account of superior blood, but because of the manner in which they are fed and reared when young.

We need not prepare a long article on the subject under notice. Our object is to give a word of caution to our farmers—to induce them to practice economy in the feeding of their stock the present winter; and to recommend to them to employ the best means suggested by experience to make their fodder go the farthest and do their stock the most good. The straw cutter will save the farmer twice the cost of the instrument in a single winter. The time for feeding hogs is nearly past, but experiments within a few months, made in the most careful manner, by distinguished and reliable men, prove that when corn is fifty cents a bushel, fed raw to hogs, will make pork costing ten cents a pound, while ground and in a cooked state it will not cost more than two cents a pound. Such facts ought to open the eyes of farmers to the necessity of economizing food for stock, and to the great advantages which they may derive from a careful and practical management of their farming operations.

Chinese Sugar Cane.

We have been favored with the Patent Office Report—Agricultural Department—for 1855, just published. It contains much valuable information. We suppose this volume has not, as yet, been generally distributed. We shall make a short summary of some of the communications contained in the work on the Chinese Sugar Cane.

Mr. Joseph C. Orth, of Wabash county, Illinois, states that he found the fodder valuable for cattle, and that in making an experiment with the juice, he was fully convinced that fifteen per cent of good sugar could be made out of it. His experiment produced about twenty-five per cent of molasses.

Dr. Ray, of Tennessee, found the plant an

excellent forage crop, and that the juice contained ten per cent of saccharine matter, clear as crystal. Several persons were determined to go into its cultivation extensively the coming season, and fully test the value of the plant.

Mr. J. Hammond, of South Carolina, gives in detail many experiments with the plant. He came to these conclusions—that the cane made choice syrup; he was not prepared to make sugar, but he says that there can be no doubt that it can be made of such syrup; and he believes it will make better syrup and sugar than the Louisiana cane, because the Chinese cane perfectly matures, and the Louisiana cane does not.

Several other gentlemen cultivated the cane as a forage plant, and with decided satisfaction.

Mr. Hammond states a fact which should ever be borne in mind by the cultivators of the Chinese cane. It belongs to the millet tribe of plants, and if planted near broom corn will mix with it, and the seed become worthless.

Failure of the Sugar Cane in Louisiana.

The sugar cane has been cultivated in Louisiana since 1751. It was then introduced by the Jesuits from St. Domingo. It has been constantly subjected to vicissitudes since its introduction. In the spring of 1854 the plants had so degenerated that the cuttings were of little service. The summer was unfavorable to those which survived, and when the season for making sugar returned, the cane was not ripe, and there appeared to be little or no crystalizable sugar in the juice. Last spring it was found that a large portion of the cuttings, had been destroyed by the winter, and though attempts were made to procure a supply from Cuba, these failed, and we are now informed that the new crop of sugar and molasses will not be more than one fourth the amount of 1853.

We notice that efforts are now being made to restore the cultivation of cane in Louisiana. By some it is contended that the present condition of its culture is owing to bad management, especially to the neglect of a

rotation in crops, cane having been grown on the same fields until some of the lands are entirely unfit for its production. Government, to aid in this measure, has dispatched a vessel to the coasts of foreign cane growing countries, to obtain supplies of fresh cuttings, and thus give the planters a new start in the cultivation of the cane. This effort may be successful; but we apprehend that sugar culture in Louisiana will ever be an uncertain employment, and always will be subject to disappointment in untimely seasons whether of wet or frost. Sugar cane is a tropical plant, and the experience of Louisiana is sufficient to show that it cannot be acclimated in temperate latitudes. Government has done what it could to increase the product of sugar and molasses in Louisiana, by giving it a protection of thirty per cent; and as a great national object, the protection was popular; but the production having failed, it seems to be useless to force the people of the country any longer to pay an unwilling tax, from which neither themselves nor their country can receive any benefit. At this very moment there are thousands of tons of Cuban sugar in New York, in bond, which, but for the present duty, could be purchased in any quantity at seven cents per lb. The sugar duty is felt severely by the masses, and we hope that the present congress will place sugar on the list of free articles, with tea and coffee.

We have seen it suggested that the west, when it goes into the cultivation of the Chinese sugar cane, and when Illinois will make not only the sugar and molasses for her own consumption, (AS WE ARE CONFIDENT SHE SOON WILL) the sugar duty will be quite convenient and satisfactory to us. In regard to this matter then, we will only say that the sugar duty was established for a great national object, the production of sugar in our own country, to meet the wants of our people. The production has failed—the sugar duty has failed to effect its object. Let it be repealed. If, hereafter, a sugar duty, by giving the production of sugar from Chinese cane protection, can make the production a national object, then let the duty

be revived. Let us have no sugar duty until there is some other object to be attained by it than the raising of revenue.

A Nursery on the Central Railroad.
WEST URBANA, Champaign Co., Ills. }
December 16th, 1856. }

S. FRANCIS, ESQ.—As I am about removing my nursery from Leyden, Cook county, to this place, it is but natural that I should take an interest in the local agricultural press of that community where I intend to make my future home.

I have perused with pleasure and profit the ten numbers of the Illinois Farmer; the work fully meets my expectation of its merits, of which I had formed a high conception from the long editorial experience and rural taste that you would bring to its aid.

Until the railroads had penetrated this section of the country, it was a *terra incognita* to the most of us at the north part of the State. A winter's residence in your city and a few excursions through this fine region soon made me in love with its soil and climate, and I am now making preparation to pursue my favorite calling at this point, located directly on the Illinois Central Railroad, three miles south of the station at Urbana. And here on the fertile soil of Central Illinois, if life and health is spared, I will carve out a home dedicated to *Flora* and *Pomona*, where the latch string will ever be out to the lovers of fruits and flowers.

I have about eighty acres broken up, twenty-five of which will soon be covered with nursery stock and thirty acres in orchard. In fitting my grounds I plow a foot deep, by running the plow twice in the same furrow, using three horses. In running the first time the off horse goes in the furrow, and in the second time around the plow is dropped down and the middle horse takes the furrow; the same plow is used, which is one of the Grand de Tour plows of L. Andrus. I intend to fit all of my cropped land in this way, as I have observed that here you are more liable to drouth than the counties bordering on the lakes. I think deep plowing an essential requisite to ward off this defect in your climate.

I find the soil here better adapted to withstand drouth than Cook county lands, as the sub-soil is permeable, allowing moisture to ooze through its texture by expelling attraction, and with deep tillage farmers may confidently rely on a crop under almost any condition of either excess or want of rain.

That this part of the State contains the dor-

mant elements of fruit growing to as great perfection as any State in the Union, cannot be doubted, and what we now want is active lovers of the useful and beautiful to develop this latent power, to furnish an abundant supply of this health giving food for the hardy sons of toil—that shall gladden the brow of labor, and give zest to the enjoyment of all.

Yours, M. L. DUNLAP.

The above letter was, no doubt, intended as a private one, but it contains matters of general interest. Mr. Dunlap is not only a good writer, but a good nurseryman and farmer. He has chosen a position for his nursery, where he will find a good demand for all the trees he will have for sale. Really his nursery is an old establishment; he has not to wait until his trees can grow; but, as we suppose, he will be in market at once with a good supply of nursery articles.

What a field is there in Illinois for the sale of fruit and ornamental trees, and useful and ornamental shrubbery and plants? And there are sources within our own State where, as yet, all demands of this kind can be supplied.

And, it is important, when farmers purchase fruit and other trees for planting out on their farms, that they should obtain them from reliable sources. The names of the nursery-men of our State (well known, of high and honorable standing, enthusiasts in their calling,) are a guarantee for the faithful performance of their obligations.

Send your order to the nursery, and it will be filled at the proper season, and your trees reach you by railroad, fresh and sound, in a few days; and you can plant them out with confidence that you are not cheated.

DIVORCE IN INDIANA.—Putnam's Monthly for December, has a spicy sketch, designed to burlesque somewhat the facility with which divorces may be obtained in Indiana and Michigan, and the trivial pretexts which are deemed sufficient to sever the marriage bond. The writer concludes, from his legal experience in the matter, that all that is necessary for a stranger to obtain a divorce in Indiana, is to sleep one night in the State, and thereupon appear at court, swear that he is a citizen of it, file his petition for a divorce, have it published in some paper where his wife is sure never to see it, and then return six weeks after and take his decree.

THE GRAZIER.

From the Valley Farmer.

Cooking Food for Hogs.

EXPERIMENT OF SAMUEL H. CLAY, OF BOURBON COUNTY, KY.

The advantages of cooking food for hogs and other farm animals have never yet been duly appreciated by American farmers; although numerous experiments have been made (usually upon a small scale, it is true) that have gone far to demonstrate its importance.

In the October No. of the *Valley Farmer*, we published an article upon this subject, in which we gave the result of the valuable and interesting investigations of Dutrochet, Dumas and Raspail, going to show the mysterious and beautiful operations of nature in the formation of the various grains and roots which enter into the food of man and beast, and of the necessity of their being submitted to a certain degree of heat before their *entire* constituents could be reduced to that condition most available for digestion and assimilation. In that article we alluded to an experiment in feeding hogs, then in progress by Samuel H. Clay, Esq., of Bourbon county, Ky., and promised to give our readers the result as soon as the facts could be ascertained. Mr. Clay has since very kindly furnished us with a statement in full of the number and weight of the hogs, the quantity of grain they consumed, the form in which it was fed to them, and the gain of each animal under the different forms of treatment.

Mr. Clay's experiment was commenced on the 16th day of July, with six barrows, each about twelve months old. We shall indicate each hog by the same number throughout the experiment.

Nos.	Bushels consumed.	Gain in 30 days.	bs. of Pork to 1 bu. Corn.	Corn per bu.	Cost of pork per lb.
1 & 2	6 & 54 lbs. boiled corn.	102 pounds.	14 lbs. 65-100	23 cents.	1 cent 9 mills.
3 & 4	4 & 46 " " meal.	80 pounds.	16 lbs. 61-100	23 cents.	1 cent 6 mills.
5 & 6	7 & 13 " dry corn.	42 pounds.	5 lbs. 80-100	28 cents.	4 cents 8 mills.

At the end of 30 days the hogs were changed as follows: Numbers five and six that had been fed on dry corn were changed and fed on cooked meal for 26 days, they consumed in that time 234 pounds of meal, or 6 bushels and 10 lbs. No. 5 gained 40 pounds and No. 6 gained 34 pounds—the two together gained 74 pounds.

Nos. 3 and 4 that had been fed on cooked meal

Nos.	Bushels consumed.	Gain in 26 days.	bs. of Pork to 1 bu. Corn.	Corn per bu.	Cost of pork per lb.
5 & 6	4 & 10 lbs. boiled meal.	74 pounds.	17 lbs. 72-100	28 cents.	1 cent 5 mills.
3 & 4	6 & 28 lbs. dry corn.	44 pounds.	6 lbs. 77-100	28 cents.	4 cents 1 mill.

It will be seen that during the *twelve* days, when the hogs were first put up and all fed together on cooked meal, that No. 5 gained *twenty-five* pounds, which on the first trial after they were separated and fed *thirty* days on dry corn, consumed 202½ pounds, and gained but *ten* pounds; this, estimating the corn at 28 cents per bushel, brings the meat at 10 cents and 1 mill per pound, and when changed again on the second trial, to boiled meal, consumed but 117 pounds in *twenty-six* days, and gained *forty* pounds, which at the same rate per bushel redu-

Their several weights, at the time they were put up, were as follows.

No. 1,	255 pounds.
" 2,	285 "
" 3,	240 "
" 4,	240 "
" 5,	265 "
" 6,	245 "

These were all fed for twelve days alike, on cooked meal, reduced to a thin slop, so that they could easily *drink it*; and also on dry corn at the same time. At the end of twelve days they were again weighed, showing the following increase:

No. 1,	294 pounds.	Gain 39 pounds.
" 2,	318 "	" 33 "
" 3,	290 "	" 50 "
" 4,	276 "	" 36 "
" 5,	290 "	" 25 "
" 6,	282 "	" 37 "

The hogs were then separated. Nos. 1 and 2 were put in a pen to themselves and fed on boiled corn thirty days. The corn consumed was 390 pounds, or 6 bushels and 54 pounds, when dry. Under this treatment No. 1 gained 50 pounds; No. 2 gained 52 pounds. The two together gained 102 pounds.

No. 3 and 4 were put together in a pen and fed the same length of time on boiled meal, reduced to *thin slop*. The meal consumed, when dry, weighed 270 pounds, equal to 4 bushels and 46 pounds. No. 3 gained 30 pounds, and No. 4 gained 50 pounds—both together gained 80 pounds.

Nos. 5 and 6 were fed on dry corn for the same period, and consumed 405 pounds, equal to 7 bushels and 13 pounds. No. 5 gained 10 pounds, and No. 6 gained 32 pounds, or both together gained 42 pounds.

We illustrate the whole in tabular form as follows:

were fed the same length of time on dry corn; they consumed 364 pounds, or 6½ bushels; No. 3 gained 34 pounds, No. 4 gained 10 pounds—the two together gained 44 pounds.

Nos. 1 and 2 were continued on the boiled corn with about the same results as on the first trial. The following table shows the result of the second trial:

ces the gain to *one* cent and *four* mills per pound.

No. 4, in the first *twelve* days, fed on the cooked meal, made a gain of *thirty-six* pounds, or *three* pounds a day; and when separated and continued *thirty* days on cooked meal, consumed but 135 pounds, and gained *fifty* pounds, which brings the cost of the meat to *one* cent and *three* mills per pound; but when changed to dry corn on the second trial, consumed 182 pounds in *twenty-six* days, and gained but *ten* pounds, which

again increases the cost of the pork gained to *nine* cents and *one* mill per pound.

In conclusion Mr. Clay states: "I now give my mode of preparing the food. I have two large 60 gallon ket'les, fixed upon small furnaces. (Mott's Agricultural furnaces) that when full hold but a small armful of wood. I put 50 pounds of meal to a kettle and then fill it with water; when cooked this makes 405 pounds of slop. I find that my cows and horses are very fond of it and improve finely on it. I am of opinion it would be better to cook food for all kinds of stock."

Mr. Clay did not take into the account the quantity of wood consumed, as that was chips and trash picked up on the farm.

With an apparatus arranged upon a large scale something as we proposed in our October number, the cooking we believe could be done much more economically, both as to fuel and labor.

The experiment shows the advantages of cooking food for hogs, even more conclusively than we had anticipated, or in the articles we have frequently written on the subject, even claimed for it.

The gain of the hogs fed on cooked meal is about *three* times as great as the gain of those fed on the dry corn, although we think the difference in favor of the cooked meal would have been still greater had the hogs not received the start of twelve days feeding on cooked meal before the experiment of putting them on dry corn was commenced.

Whether the slop fed in this instance was reduced to that consistence calculated to give the most favorable results, is still a matter for further experiment. Somewhat less water might have given a greater gain; for it will be seen that the hogs that were fed on the boiled corn, although they eat more pounds, it was less expended in boiling than the cooked meal, and the hogs gained considerably more in the same time than those fed on the meal, though they eat more corn.

Farmers heretofore have failed to cook the food for their stock under the impression that the saving would not be equal to the trouble and expense of the operation. Mr. Clay's experiment proves that *one* bushel of corn fed in the form of cooked meal is about equal to *three* bushels of corn fed dry, making a saving of more than 60 bushels in 100 bushels of corn. Now we believe, that with a properly constructed steam vat, 100 bushels of corn in the form of meal, can be cooked at a cost not exceeding the market value of *ten* bushels of corn. Nor is that all that may be gained by this system of feeding. If a hog fed on cooked meal can be made to gain 50 pounds in the same time that another hog (equal in all respects) will gain 10 pounds when fed on dry corn, bringing it to the maturity of 200 or 300 pounds in the same time that one fed on dry corn can be made to weigh 100 pounds—thus avoiding the risk, trouble and expense of more than half the lifetime of the animal—then certainly every farmer should adopt the system of cooking without delay.

The Rev. Daniel Waldo has been re-elected chaplain of the House of Representatives.

Blood will Tell.

Our pleasant Quaker correspondent, Samuel William, of New York, tells the following calf story to the *Rural New Yorker*:

Our amateur farmer and stock fancier, Joseph Wright, having strong faith in Bovine lineage, took pains to send a fine red cow of simple pedigree to the famed grey imported bull of S. P. Chapman, at Clockville, Madison county. He was afterwards assured by Mr. C. that if the calf should be small, and not otherwise realize his first expectations, it would improve and "come out right in the end." The cow was placed with Garret Loverige, a shrewd Yankee farmer, three miles south of this village. Among the many good things Mr. L. learned from his Pennsylvania German neighbors and engrafted on his farming, were also some of their egotistical prejudices against book farming, improved breeds of stock, swine, etc. Hence Mr. Loverige verily believed that all was in the keeping of stock, and nothing in the breed; but as a true Yankee is never quite satisfied until he is certain he is right, he adopted the experiment of changing Wright's blood heifer calf at its birth, with one of the same gender dropped only four days before by one of his Dutch cows—well knowing that Mr. Wright would give his calf the very best of keeping, while the blood calf would only have the ordinary keeping of his other farm stock. This experiment would at least test the fact whether a plebeian calf, if extra well fed, would not grow into a better cow than a blood calf with ordinary keeping.

When Mr. Wright came to take home his cow and calf, he told Loverige that he was rather disappointed in its big Dutch tail and other marks of scrub origin; but as Mr. Chapman had told him that it would "come right" at maturity, he now took the best care of the cow, until she weaned the calf, and then the young blood, as he supposed it to be, was fed and pampered in order to bring out its good qualities at maturity. But all his care and feeding was in vain. After she had her first calf, he was so chagrined at her poor milking qualities that he sold her and her calf to the butcher. Now Loverige made known all the facts of the case to his own neighbors, and brought to Mr. Wright his own Clockville sired calf in the shape of a beautiful red cow, which I need not say elicited from Wright more astonishment and delight than he ever would have exhibited had a rich friend died suddenly, leaving him heir to a large estate. The very sight

of such a fine-limbed, graceful, gentle animal, to say nothing of her round, plump bag, shook the faith of all the Fayette *Weibsteute* in their old Pennsylvania breeds, and Loverige was cured of his prejudices against book farming and fancy breeds forever.

LOGAN COUNTY, Illinois, }
December 19, 1856. }

Editor Farmer: In looking over the December number of the Illinois Farmer, I notice Mr. Griffith's large hogs. I will give you my experience with hogs. I had two sows that dropped their pigs on the 23d day of March last. They saved eight pigs each. At about four months old, I sold one half of the pigs at four cents per lb., which amounted to \$30 50. The other eight I fed and killed—killing four of them at the age of seven months and eighteen days, and the remaining four at the age of eight months and two days. The first four averaged 206 lbs. net, and the last four averaged 238 lbs. net; and I am certain the last were gaining two lbs. each day when killed. I have given you the precise dates and age, and I think they are the best hogs ever raised in the State where date and age are given exactly.

I wish you would give my statement in your next.

Respectfully, Yours,
T R. SKINNER.

Brood Mares---In-Calf Cows, and Heifers.

These should be fed moderately liberal, and receive that which is good and nourishing. Feed them in sufficient quantities to keep their stomachs at peace, and preserve their bodily integrity. Pregnant animals should be fed on such nutritious food as will keep them in good thriving condition. The feeder should recollect that the young ones within require substance, as well as their mothers; that they have bones to be formed, flesh and tendons to be elaborated, and fat to be formed, and that these things can only be perfected through the agency of the dams, who can fulfil these demands only when such food is provided for them as will yield them.

Good, well ventilated stables, or dry, warm, comfortable sheds, are indispensable to animals in such condition.

A Suggestion---Illinois Farmer's Dictionary.

A most intelligent and patriotic farmer of our State, in a private letter to the Editor, says:

"I constantly feel, and perhaps a very large portion of farmers, more skillful and

practical by far than myself, also feel the want of a farmer's "*Vade Mecum*," for every day use. A small volume, say on the plan of "Dean's New England Farmer," alphabetically arranged, and giving plain directions relative to the management of crops, animals, seeds, instruments, &c., &c., that we could turn to at any moment. We forget what we have known, and want something of the sort constantly within reach to jog our memories.

"A cheap book of this kind, called, if you please, the "Illinois Farmer's Dictionary," would be a most valuable adjunct to your excellent Journal, and largely increase its circulation. Such a book would require no abstruse or painfully exact science; pretending to nothing more than a useful collection of every day knowledge. Every farmer needs it."

We venture to say that the suggestion here presented will meet the hearty concurrence of the farmers of this State. Such a work every farmer needs. It would furnish him with a store of information, which would be invaluable to him. We are aware that there are works to be had on the different branches of Agriculture (and none better than the series published by Saxton, and found at all well supplied seed and agricultural implement stores in the country;) but there is not one embracing, in a condensed and convenient form, what is needed by the *Illinois* farmer. We say *Illinois* farmer, because Illinois farmers know that agricultural works of the east are not fitted to the processes of Agriculture in our soil and climate. Such are undoubtedly useful; but they are not precisely what we want.

There are men in this State who have been long engaged in farming, of studious habits, and of practical education, qualified to prepare such a work. William S. Wait, George Churchill, M. L. Dunlap, we think of now, and we doubt not, many others could be named, who would, in getting up such a work, not only secure a remunerable reward for their labor, but confer great benefits on their fellow farmers. We commend this matter to the attention of the farmers of Illinois, and the Illinois press. If such a work be undertaken, it should not be a catch-penny affair, but should possess merit to make it popular and useful.

We would like to hear from friends further on the subject.

THE DAIRY.

A day or two since we were sitting in a store, when a half-grown lad entered, dressed in a large, torn overcoat, and going to the shop-keeper, said, "Don't you want to buy a roll of butter?" at the same time drawing from his capacious pocket something that was done up in a rag very nearly the color of saffron, and which, apparently, had not visited the water for the last twenty years, although constantly undergoing hard service. The shop-keeper looked aghast—"Sir," said he, "I have not time to examine your butter." The lad left. He was undoubtedly some relation to Miss Sally Sly, mentioned in the following report:

Report on Butter.

Joe's wife was Sally Sly—when a small girl she was sly—she would not half wash the milk-pail, but sly it away and let it sour. She was sly at school, and did not half get her lessons, but as she grew older she learned that to get well married she must appear well, and so she bent all her cunning to get a superficial education in everything, from roasting a potato to playing the piano. Poor Joe fell in love with her, and "love has no eyes;" so he married her. But soon after they entered on house keeping, his eye sight came, and he saw his fix, that it was for better or worse, and he thought it was all for worse. Like a true philosopher, he concluded to endure what he could not avoid or cure, and got along tolerably well, only when he came to her butter, for his mother was a real butter maker. Every time he saw or tasted Sally's butter he felt the horrors. Her manner of making butter is somewhat as follows:

She thinks it of no consequence whether the milk pail is sweet or sour—sets the milk in a warm room because it is easier than to go into the cellar, and if some dirt should blow into the pans, she thinks every man must "eat a peck of dirt," and in no place will it slip down easier than in butter—she lets the cream-pots be open, and when she churns, forgets the poke; leaves the cream at blood heat that it may come quick. When she takes it out of the churn, she picks out the bodies of all flies and spiders; the legs and wings are so small, they can be swallowed. She works out half the buttermilk and sets it away. Poor Joe has seen so much of this kind that he declares that butter does not agree with his health, and will

not taste it. Yet, his wife wonders why he does not try it, and marvels that he does not keep a dairy and make butter for the market.

Jonathan was a younger brother than Joe, and he had occasion to eat at his brother's enough to know why he did not eat butter; and he declared he never would marry without knowing what side of his bread was buttered. Following the bent of his fancy, Julia Jumper almost caught him—for there was always good butter on the table for tea, but he was determined to know by whom it was made. On inquiry, she says:

"La me! mother makes the butter; I take lessons on the piano."

"Well," says Jonathan, "I want a wife that takes lessons on the churn. I shall look further."

After several unsuccessful attempts, and just ready to despair, he started in pursuit of stray cattle before breakfast, and wandered through the forest to the next town, and weary and hungry, called at a decent looking house and asked for refreshments, which were cordially granted, for the family were what are called Scotch Irish—in religion Presbyterians, and in hospitality boundless.

Here he found the butter exactly right; though the weather was hot, the butter kept the shape as well as the beeswax. He catechised the old lady about her housewifery, for the bread was as right as the butter: The old lady said her health was feeble—she could do but little, and Jenny had the whole management. He made some round-about inquiries concerning Jenny, and heard that she was a hearty black-eyed lass of two and twenty; she had never seen a piano or attended a ball, but knew the Assembly's Catechism, and could sing Old Hundred to a charm, spin flax and darn stockings, and was then gone to town with butter. He lingered, but she was delayed, and when his excuses for staying were exhausted, he started. He could not get the butter out of his mind, and how it happened I know not, he soon found his way there again, and the result of his adventure was, he made a wife of Jenny McKearn. And now one lump of his butter is worth more than all Joe's wife would make in a month. There is no trouble in going to market—the keepers of the genteel boarding houses in the neighboring villages send and take it at the highest market price.

Now the main difference between these two women arises from the manner of training, though there is no difference in natural disposition. Old Madam Sly never looked on to see that Sally did right, but suffered

her to sly off her work as she chose; and though a good housekeeper herself, was altogether too indulgent, and, like some others, thought more of getting Sally well married, than of making her fit for a wife; while mother McKearn was determined that Jenny should be fit for any man's wife, whether she got married or not. Perhaps there is no more certain criterion by which to judge of a woman's character for neatness and good housekeeping than by the quality of her butter. Find on the farmer's table a good, solid, properly salted, well worked slice of butter, and you need not fear to eat the cakes or hash; but see a splash of half-worked butter—salt in lumps, and sprinkle of hair and flies' legs, you may be sure that if you board there long, death will not be obliged to wait much for you to finish your peck of dirt.

My advice to young farmers is, to make it a *sine qua non* in a wife that she makes prime butter—and the young ladies who aspire to be their wives had better be imperfect in filagree and music, than be deficient in that most important art of making butter, which smooths not only the sharp corners of crust and crackers, but will smooth the asperities of the husband's temper.

THE FUR TRADE.—The *Journal of Commerce* states that on particular inquiry the fur trade in New York will reach \$1,375,000 this year. The price of American furs has lately risen considerably. Mink, which formerly commanded from 30 to 50 cents, now brings \$2,50; other furs, too, are much higher.

The *Journal* says: "We lately saw a box of Russian sable, not more than three feet long, of camphor wool, which contained 400 small skins bearing the seal of the Russian Government, valued at fourteen thousand dollars. Some of the skins cost \$25 00 each. A lower grade of inferior color are worth \$23, and some not more than \$16. These are commonly sold at a profit of 30 to 32 per cent. Sixteen or eighteen skins are required to make a full sized cape, so that the cost of a choice quality garment of this description would be about nine hundred dollars. Adding the cost of making and the profit, such an article could not be procured for much less than \$1,400. Hudson Bay sable cost this year about \$25 00 per skin."

About thirty fresh water springs are discovered under the sea, on the south of the Persian Gulf.

A wasp's nest usually contains 15,000 or 16 000 cells.

Dr. Bright publishes a case of an egg producing an insect 80 years after it must have been laid.

HORTICULTURE.

Culture of the Blackberry.

Within a few years the attention of Horticulturists has been drawn to the cultivation of the Blackberry. Occasionally, there have been found varieties in a wild state that promised to do well when cultivated. But few of them, however, have proved to be of any value. The Blackberry produces good fruit in favorable seasons. When the summer is dry the fruit is small, imperfect and sour. This same variety, if cultivated in a garden, and the roots kept damp by mulching—(that is, by having leaves from the woods, or tan-bark, to keep them moist, placed about the roots) will bring you good fruit. The New Rochelle or Lawton Blackberry is a *new* variety, and is worthy all that has been said of it. Such is the demand for the plants, that prices are kept up. Few of them have been brought to the western country.

Mr. D. C. Richmond, of Sandusky, Ohio, a very intelligent and energetic fruit grower, has given his experience in the cultivation of the Blackberry, in the following article, copied from the *Ohio Cultivator*:

MR. DATEHAM: You are aware that the Blackberry is universally esteemed as one of our most wholesome summer fruits; coming in at just the right time to counteract the bilious diseases incidental to our climate, and filling a gap in the succession of small fruits, when strawberries, raspberries and currants have disappeared from our markets.

Being convinced that this valuable fruit could be much improved by the selection, I commenced, six years ago, selecting from the woods and fence rows the most promising plants I could find when in fruit—spending much time, and traveling many miles each season, in making observations. In this way I collected three or four varieties that I deem quite valuable. One of these has very tall, dark canes, resembling the New Rochelle, and I think it is the same species, (not the same *variety*;) another has light green canes, also a strong grower, and good fruit; another still, is of a dwarf habit, hence perhaps better suited for garden culture, with scarcely any thorns, fruit very fine.

The new Rochelle I have had in bearing the two past years, and I consider it a most

valuable acquisition to our list of small fruits. It is unquestionably a new variety; and the fruit shows its superior "breeding" among other varieties, just like a sleek Durham among a lot of scrub cattle, by its larger size and rounder form, and the juiciness of its flesh.

The past severe winter killed the canes of nearly all Blackberries, nearly down to the ground; but the New Rochelle produced a few fine berries from shoots sent up from near the roots. The *white* Blackberry is the hardiest variety that I cultivate, producing some fruit this season on the main branches—but it is too small to be of much value, except as a curiosity. My patch of natives, over an acre, in a somewhat sheltered locality, produced a few blossoms but no fruit. The New Jersey variety was the most injured, being killed quite down to the ground.

All my plants have grown well this season, and the dry fall has ripened the canes perfectly, so that I confidently expect a fine crop of fruit next season.

I would advise all who have a garden, to plant a row or two of Blackberries, (as well as raspberries.) If you can spare the money, buy half a dozen or more roots of the New Rochelle; but if not, take up some of the best roots you can find in the woods, and cultivate them until the others become cheap and plenty. In making a selection of the wild ones, the strong growing kinds produce the largest and best fruit. Any time will answer for transplanting, from the time when the leaves fall in October, till the buds begin to open in the spring. The best soil is a rich, deep, moist loam, but it must not be too wet, and good cultivation is required.

The strong growing kinds, as the New Rochelle, a plant in rows six feet apart, and four feet apart in the rows; and this distance is not too great for any of the varieties. The plants must be thinned out each year as they multiply, and pruned twice a year.

In pruning the New Rochelle, when the plants have attained the height of six or eight feet, cut off the tops, which will force out lateral branches, from near the ground upwards; in the fall, these branches should be shortened in, so as to give the bushes a compact form. Cut away the surplus shoots, and dig out the small plants, (which should have been cut down to about one foot in height at the August pruning.) for making new plantations. The weaker growing varieties do not need as severe pruning as the others, but they must be shortened some, and the shoots thinned.

Mulching the roots of Blackberries with

leaves from the woods, about the 1st of May, when there is a prospect of a crop of fruit, will be found of great advantage. (Where leaves cannot readily be found, tan bark or saw dust will answer.) Cultivators should remember that this fruit ripens in our hottest weather, and when there is liability of a severe drought, hence a little extra labor in mulching may greatly increase the amount of fruit, and prolong the season of ripening.

Native Grapes.

Hovey's Magazine of Horticulture for November, thus notices two varieties of our native grapes:

THE DELAWARE GRAPE.—This new grape, which has attracted considerable attention, and which we gave a full account of in a late number, has fruited in the garden of E. A. Brackett, of Winchester, Mass. The grapes were fully mature September 15th, thus proving it to be as early as the Concord. It promises to become a popular variety, and particularly adapted to our New England climate, being entirely hardy.

THE CARTER GRAPE.—This is the name which is given to a new variety cultivated in Milford, Mass., and recently shown at the annual exhibition of the Massachusetts Horticultural Society. It is a very fine grape, earlier than the Isabella, and superior to it in every quality. The berries are round, of large size, and of a deep reddish color, approaching to black at full maturity. What its origin is we do not know, but if it can be traced we shall give a full account of it at another time.

Trees Received Frozen.

Packages of trees, sent long distances late in autumn, and arriving frozen in winter, are often needlessly sacrificed by the want of a little knowledge and attention. If the roots are frozen stiff, and are not allowed to thaw, until they thaw buried compactly in soil, they will be uninjured. Trees which stand in open ground, have, as a matter of course, the roots frozen every winter, with the soil in which they stand. But they thaw out while still imbedded in the earth, and are unharmed.

Whenever, therefore, trees are received with frozen roots, immediately procure some place where mellow earth may be dug up, either out of doors under snow or leaves, or in a cellar, and bury the roots closely at once settling the earth about them by dashing—cold water on the earth which has been freshly dashed over the roots. If they have

not been previously frozen and thawed out of the ground, little fear need be felt of their growth. But if they have been previously frozen and thawed, the roots when cut with a knife, will have a dull brown color, and not exhibit the lively, white, fresh appearance possessed by uninjured trees, and nothing can save them. If taken into a cellar, avoid thawing the roots in the warm air—bury them immediately.

Trees well muddled before packing, and then compactly imbedded in plenty of fine damp moss, will be as little liable to injury by freezing, as if packed or buried in moist earth.—*Country Gentleman.*

Tricks of the Tree Peddlers.

Our old friend, S. H. Ellis, who does something at the nursery business at New Moscow, Coshocton county, has sent us an article, rather too long for our use, on the frauds practiced upon the farmers in many parts of Ohio during a few years past, by the pretended agents of distant nurserymen.

He says: It seems to be a thing of nature for some people to pay their money for articles brought a long distance, when better ones of the same kind can be had nearer home for a less price. A couple of men came into this county the past winter as agents for the old "Rochester Nursery," and with smooth tongues and much sophistry, they told the folks that there were no fruits to be had in the nurseries of Ohio at all to be compared with those from Rochester, and this was the reason why the Ohio nurserymen sold their trees for about half the price of the Rochester trees. In this way, they persuaded the simple ones to subscribe for a lot of trees, and without being aware of it, in a majority of cases, to sign a note for the amount of the bill, which note is then transferred to a third person who delivers the trees at some place specified, and if the note is not paid instantaneously, it is put in suit, no matter whether the trees are dead or alive, or the kinds specified or not.

The following are the prices at which these men furnished trees: Pears, not of rare sorts, \$1 each; plums and cherries, 75 cts.; apples, peaches, currants, gooseberries, etc., 25 cts., more or less, as they could catch it. The trees when delivered were so badly bruised and broken at the root, that but few of them could be expected to live, and at best could only become harbors for borers and other insects attracted to them by the bruised and dead spots. Again, the selection of varieties when left to the agents, as was commonly done, was often such as are

of little or no value in this climate; and some of the names are not to be found in any book or catalogue.

The remedy which our friend Ellis recommends, as the best means by which farmers can protect themselves against such imposition, is the diffusion of intelligence by means of Agricultural papers, the mere advertisements in which ought to be sufficient to save any reader from being duped by these Yankee tree peddlers.—*Ohio Cultivator.*

Successful Cultivation of the Prune in Pennsylvania.

Mr. Victor Scriba, of Pittsburgh, Pennsylvania, states that in the heart of Germany, from which he came, plums, and especially the Zwetsche prune, are grown in great abundance for home consumption and for exportation to Belgium, Holland, and the northern part of Germany. Some farmers raised there from eighty to one hundred bushels, and in some cases more dried prunes. The trees are generally planted along the banks of large and small streams, along the watering ditches of the meadows, and in the shades of orchards, between apple and pear trees. They grow there most luxuriantly, and the fruit attains a larger size and deeper color than in more elevated and exposed locations. This observation induced Mr. S., four years ago, when he rented a neighboring orchard, in which some large plum trees stood that scarcely ever had produced any ripe fruit before, to dig little holes around the trees, and to fill the same occasionally (every three or four days during the warm season) with rain water, dish water or soap suds. He found the trees growing more luxuriantly than before, and every year a good crop of most excellent plums remunerated him for the little trouble. Last year the crop was larger than any he had seen in his life, on account of the wet, rainy season, the plums hanging like clusters of grapes on the trees. One tree of the grafted prune kind had about ten bushels. They sold readily for eight cents a quart in the market. In 1854 when scarcely anybody raised any plums in this vicinity, on account of the great heat, he had, nevertheless, a small crop, which sold in market at twenty-five cents a quart. During all this time he had not much trouble with the curculio.

In its country plum trees and cherry trees are never pruned; only the dead branches are occasionally removed: Even in transplanting, the knife is not used, except in trimming the roots. An old pomologist in

this neighborhood, of whom he had purchased some choice peach trees, advised the writer, in transplanting the same, not to cut off the branches as injurious to the trees. This advice was strictly followed, and the trees grew most admirably, some bearing fine fruit the same year.

The writer planted some prunes which he procured from Mr. Schmidt, of Winesburg, Holmes county, Ohio, who has done a great deal in propagating this luscious fruit through the greater part of Ohio and Western Pennsylvania. The grafted or budded prune degenerates, and is not so highly valued as that raised by the seed of the shoot.

These observations are corroborated by those of the economists of Beaver county, Pennsylvania, who imported the genuine scions of the prune and grafted them on plums.

Mr. Pfeiffer, of Indiana, Pennsylvania, who raised prune trees in large numbers, and sold them at exorbitant prices, some as high as \$5 and \$10, and who had some of the fruit at the Pennsylvania State Agricultural Fair, held at Pittsburgh, which sold readily at 50 cents a quart.

Mr. Schmidt's prunes are of a like kind and quality, the writer having eaten at his house, a few years since, some of the most delicate and highly flavored fruit he had ever tasted.

State Horticultural Society.

Pursuant to a call, by a Committee appointed for the purpose, at the last State Fair at Alton, a large and respectable meeting of the Nurserymen and fruit-growers of Illinois met, in convention at Decatur, on the 17th instant, for the purpose of organizing a State Horticultural Society.

On motion of Hon. M. L. Dunlap, the meeting was called to order by appointing Hon. D. J. Baker, of Alton, chairman, and C. R. Overman, Esq., of Bloomington, secretary.

The chairman, in an appropriate and happy address presented the objects of the meeting.

On motion of Dr. Hull, the chair appointed a committee of five, consisting of Dr. Hull, Mr. Ellsworth, Mr. Dunlap, Mr. James E. Starr, and Dr. H. C. Johns to draft a constitution and by laws for the Society.

On motion of Dr. Long, a committee of three, consisting of Mr. Atwood, Mr. Shaw, and Mr. Galusha, was appointed to prepare business for the action of the convention.

During the absence of the committees the time was occupied chiefly in discussing the merits of

various fruits. The committee to draft the constitution and by laws returned and made their report, which was received, and thereupon the convention adjourned till 2 o'clock in the afternoon, at which hour the convention assembled, when the constitution and by laws reported, were discussed in sections, and after making some modifications, were adopted.

Thereupon, the State Horticultural Society was organized by the election of Dr. E. S. Hull, President, and James E. Starr, Secretary, and ———, Assistant Secretary, Dr. B. F. Long, Treasurer. Nine Vice Presidents were elected —one for each congressional district of the State.

In pursuance of the report of the committee to prepare business for the action of the Society, the President, Dr. E. S. Hull, M. L. Dunlap and David J. Baker, were appointed a committee to prepare and present to the General Assembly of the State at their next session a petition of the Society for the grant of a charter of incorporation and an appropriation from the State Treasury for promoting the interests of the Society.

To the same committee was also charged the duty of preparing and publishing a manifesto to the public, setting forth the importance of the subjects in which the Society is engaged and the great interests both pecuniary and others involved therein and the joint claim of the Society upon the fostering care of the State and the patronage and encouragement of the public.

Curious Facts of Natural History.

A single female house fly produces in one season 20,080,320.

Some female spiders produce nearly 2,000 eggs.

The Atlantic Ocean is estimated at three miles, and the Pacific at four miles deep.

A swarm of bees contains from 10,000 to 20,000 in a natural state, and from 30,000 to 40,000 in a hive.

The bones of birds are hollow and filled with air instead of marrow.

A cow eats 100 lbs. of green food every 24 hours, and yields five quarts, or 10 pounds of milk.

Two thousand nine hundred silk worms produce one pound of silk; but it would require 27,000 spiders, all females, to produce one pound of web.

Captain Beaufort saw near Smyrna, in 1841, a cloud of locusts forty-six miles long and 300 yards deep, containing, as he calculated, 169 billions.

Lewenhoeck reckoned 17,000 divisions in the cornea (outer coat of the eye) of a butterfly, each one of which, he thought, possessed a crystalline lens. Spiders, etc., are similarly provided for.

THE GARDEN.

A Good Garden.

The New York *Agriculturalist* says: "We induced one of our neighbors to keep an account of the products of his garden during the past season. It is a place hired for a long series of years, unblest with a fruit tree or shrub of any kind. Not even a currant bush produces its annual crop of cobwebs and wormy berries upon the premises. Probably the garden has not had a hundred dollars worth of manure laid out upon it in the last half century. Indeed there was not much but the soil there. Nothing can be credited to past liberal treatment. It was not more than half manured the present year, with Peruvian guano, and the contents of a pig sty. On the credit side we have for green corn sold, \$40; potatoes, \$15; peas, \$12; cabbage, \$10; onions, \$5; beans, \$7; sage \$2; corn fodder, \$2; sundry small items, \$12, making \$105, as the amount of vegetables sold. No account was kept of the amount of vegetables consumed in the family.

"The labor was all performed by the man himself, without interfering with the business upon which he relies for a livelihood. The amount consumed in the family was at least equal in value to the money paid out for the manure, making the amount of vegetables sold, the reward of a few days labor that would otherwise have been lost."

SALSIFY, OR VEGETABLE OYSTER.—This is a fine vegetable, easily grown and easily preserved. The seed is sown like those of the parsnip; they grow of the shape and size of small parsnips, and can be gathered in the fall, put in barrels and covered with sand. They are cooked in several ways, and are pleasant food.

COMSTOCK'S EARLY DWARF PEA.—This is one of the earliest peas grown. It is a new variety. It grows about eight inches high, and is remarkably productive. This pea is the thing for city gardens. It does not require bushing.

THE FIELD BEAN.—Our soils generally are too rich for the common small field bean. This bean has a good deal of stalk, which is so heavy that it falls on the ground, and the beans are discolored or mildew. For the small white bean our sandy lands would be suitable. In heavy rich lands, large beans, which produce strong stalks, are best. They keep the beans from the ground, which can be gathered in good order, and bring a better price than those which are small and discolored.

THE LIMA BEAN.—This is the best pole bean; but it often fails to produce good crops. If the season is wet, the vines grow on until frost killing time. This bean produces well, and early, if the tops are pinched off when about five or six feet high. This can be done with little labor, and it throws the strength of the plant into the production of beans. Such is the excellency of this bean, that it is worthy of a little extra trouble to obtain a supply.

CABBAGES.—To have cabbage head well, the plants should be strong and set early, and they will head often in dry weather. To set out plants late in the season, to prevent the head from cracking by over-growth, is a great fallacy; when the head is full and liable to crack, break the large roots by bending the cabbages on one side. All late planted cabbages have failed the past season from the effects of drought, while the early planted never were better. I often have to reflect how long-suffering nature is, when her seasons have to bear the blame of so many short crops—*Ohio Cultivator*.

SCORZONERA.—A native of Spain, resembling the salsify plant in flavor and character, and is cultivated more for variety than for absolute utility. The seeds are sown annually in an open, light spot of ground, at the period of the flowering of the apple and pear. The ground may be trenched, turning under a little dung with the bottom spit. Sow in drills half an inch deep, and twelve inches asunder. Thin the plants after they are up, to ten inches apart, and the roots will continue to increase until fall. They may remain in the ground, to be drawn as they are wanted, or entirely taken up in the autumn, when their leaves decay, and preserved during the winter in dry sand.

Fish are common in the seas of Surinam with four eyes; two of them on horns which grow on the top of their heads.

THE HOUSEWIFE.

Preserves for Winter.

TRANSPARENT PRESERVE.—This is one of the most beautiful, palatable and wholesome preserves that we know of. Take fair, smooth, sweet apples, with firm flesh, pare them neatly, cut them across the core in slices one-fourth of an inch in thickness, remove the seeds but not the core, as it improves the appearance of the preserve. Boil them very gently in a little water till tender, and then lift them carefully on to platters. Take one-half or three-fourths the number of lemons that you have taken of apples, cut them across the core in slices the same thickness as the apples, remove the seeds and spread the slices on earthen platters. Take pulverized loaf sugar—the weight equaling that of all the fruit, weighed before boiling—and sprinkle one-half of it over the lemon slices, let it stand a few hours till liquid enough has formed to cook them in, then drain it off, and put it over the fire in a porcelain lined kettle, with the rest of the sugar. When it boils, drop in both lemon and apple slices and boil gently till the fruit is clear.

APPLE PRESERVE.—For those who dislike the flavor, of lemon peel, the apples can be made as above, substituting lemon juice for lemon slices. The apples can be left whole, if desired, by carefully cutting out the cores.

APPLE JELLY.—Take any high flavored tart apple—rippies and bell flowers are good—boil them in a little water till soft, but not broken, removing neither skin nor seeds, but only defects, stem, etc. When soft, lift out the apples, mash with a spoon, and squeeze them through a flannel bag. To each pint of the juice thus procured, allow a pound of loaf sugar, boil slowly and skim thoroughly for ten or twenty minutes, till it jellies, and dip it into your moulds. Let them stand in the sun a few days, and then seal them up.—*Ohio Cultivator.*

GINGERBREAD.—Two cups of molasses, one cup of melted butter, one egg, one cup of sweet milk, one teaspoonful of soda, one heaping teaspoonful of cream tartar, two tablespoonfuls of ginger, and flour enough to make a stiff batter. This should be baked with care as it burns easily, and if burned has a bitter taste.

MOCK SPONGE CAKE.—One quarter of a pound of butter, one of sugar, three eggs, one half a pint of milk, one even teaspoonful of soda, three coffee cups of flour, one heaping teaspoonful of cream tartar, a little salt, and essence of lemon. This will make two loaves. Bake in a quick but not too hot oven.

COOKIES.—One pound and a quarter of sugar, three-quarters of a pound of butter, one half a pint of warm water, four tablespoonfuls of caraway seed, one teaspoonful of soda dissolved in three of warm water, three pounds of flour. Roll out very thin, and bake in a very quick oven.

Punch says there are two things a man rarely forgets—his first love and his first cigar.

MISCELLANEOUS.

Illinois Wheat in the London Market---Verdict of a Corn Factor.

Last season the Illinois Central Railroad Company, caused to be sent to the London Corn Exchange a number of varieties of wheat grown in different portions of the State. The samples were submitted to Mr. Exeley, an experienced corn factor, whose report we now present to the readers of the *Farmer*:

Report of Mr. J. Exeley on samples of Illinois Wheat received from the Illinois Central Railroad Company.

No. 1. Winter Red Chaff Lasalle County—A nice quality, but not of great strength in flour—now worth in Mark Lane 70s per quarter, imperial—will weigh about 62 lbs. per bushel.

No. 2. Union County—A splendid sample of red—will weigh in every opinion full 65 lbs. per imperial bushel—would command 70s per quarter if here now. Its berry is about the size of English "Nursery Red"—much approved by the town millers.

No. 3. White Winter Wheat—Resembles our "Chidham"—worth 74s per imperial quarter—weighs about 62 lbs. per bushel. Union county.

No. 4. White Winter, Blue Stem—A very fine and strong quality—fully 63 lbs.—worth 74s per imperial quarter—Perry county.

No. 5. Red Winter Wheat, Mediterranean, Perry county—strong and heavy—64 lbs. per bushel—such as we get from Leghorn—worth 68s per imperial quarter.

No. 6. Red Winter Wheat, Velvet Chaff—Prime, worth 68s per imperial quarter—will weigh 63 lbs.—Perry county.

No. 7. White Winter Wheat, Perry county—63 lbs. per bushel—worth 66s per imperial quarter.

No. 8. Spring Wheat, Perry county—Good, 62 lbs. per bushel—worth 66s per imperial quarter.

No. 9. Lasalle county—Fair quality—worth 55s per imperial quarter—62 lbs. per bushel.

No. 10. Lasalle county—About 63 lbs. per bushel—worth 64s per imperial quarter.

No. 11. Lasalle county, Red Spring, about 61 lbs.—worth 64s.

No. 12. McLean county—A nice quality, about 62 lbs., worth 66s per imperial quarter.

No. 13. McLean county,—White Winter Wheat—Worth 74s per imperial quarter, prime, useful sample.

No. 14. Iroquois county—White Winter, very heavy, 64 lbs. per bushel—worth 74s per imperial quarter.

No. 15. Iroquois county—Prime Wheat, 64 lbs. per bushel—worth 74s per imperial quarter.

No. 16. Iroquois county—Winter Wheat, 62 lbs. per bushel—worth 74s per imperial quarter.

No. 17. Will county—Winter Wheat, 73s per imperial quarter—weighs 63 lbs. per bushel.

No. 19. Dewitt county—White Winter Wheat, 73s per imperial quarter—weighs 63 lbs. per bushel.

No. 20. Kankakee county—White Winter Wheat, worth 73s per quarter—about 62 lbs. per bushel.

No. 21. Lee county—Spring Red, about 64 lbs. per bushel—worth 68s per imperial quarter.

No. 22. Marshall county—Fair White Winter Wheat, about 62 lbs. per bushel—worth 72s per imperial quarter.

No. 23. Union county—Winter Wheat, about 63 lbs.—worth 73s per imperial quarter.

No. 24. Mason county—Fair quality, about 62 lbs.—worth 72s per imperial quarter.

No. 25. Williamson county—Red Winter Wheat, 64 lbs. per hushel, prime sample—worth 72s per imperial quarter.

N. B.—All the samples are in the best condition and cleanly dressed, in both respects better than the cargoes arrive, and the whole would bear the passage well and no doubt come out in good order. I never saw a finer specimen of samples from the United States together.

(Signed.)

J. EXLEY.

November 27, 1856.

SEA-KALE.—This hardy perennial is found growing on the sea coasts of Britain. It is cultivated for its blanched shoots, which are cooked liked asparagus, and is esteemed as a delicate and wholesome vegetable. As yet, it is but little grown in the the United States.

Sow the seeds early in the spring, an inch deep in fourteen inch drills. When the plants are one year old, transplant them eighteen inches apart, in straight rows five feet asunder. The ground must have been thoroughly trenched and manured. Late in the fall, when the leaves have separated themselves from the crown, heap over each plant a shovelful of clean sand or ashes, and earth up a ridge a foot and a half high over the rows, from a trench dug along the space between them, and beat it smooth with the back of the spade. In the spring, after the cutting is over, the earth should be levelled into the trenches, so as to expose the crowns of the plants, and a good coat of strong manure dug in around them. It is adapted to the coldest climates, and deserves to be more extensively cultivated.

YOUNG COLTS AND CATTLE.—The half feeding of your stock is one of the most mistaken and injudicious systems ever pursued by man, besides being positively sinful. They should be provided with good tight, warm, dry sheds, facing the south, opening into yards. They should be so fed, as to be always kept in good growing condition—so fed, as that the elements of bone, muscle, tendons, and a moderate degree of fat, are always to be found in the quantity and quality of the food given to them.—*Am. Farmer.*

Gutta Percha and India Rubber.

These two articles which were scarcely known when the *Merchants' Gazette* was established in 1839, now occupy a large space in the commerce and industry of the world. Very many persons, say our cotemporary, the *Southern Argus*, wheth they first arise in the morning, takes a bath in a Gutta Percha tub, comb their hair with a gutta percha comb, and shave with a gutta percha handled razor, sharpened on a gutta percha razor strop, before a mirror with a gutta percha frame; eat their breakfast on a gutta percha table cover, and over a gutta percha crumb cloth, and after they have finished take their gutta percha walking-stick and rally forth to their business; and if it is raining, don themselves from head to foot in gutta percha garments. And yet many of these intelligent people are totally ignorant of the article which they use so extensively, and many imagine that it is a preparation of the old fashioned India rubber.

Mr. E. L. Simpson, of New York, a gentleman of eminence in the scientific world, sheds some light on thiz subject, and furnishes a succinct and most interesting account of the discovery and proprieties of this article.

Perhaps no material was ever discovered which was so extensively shipped as an article of commerce—taken up so eagerly, and manufactured atonce so extensively, as has been the article of gutta percha.

The first that was known of this wonderful production by the Europeans, was in the year 1845, when Doctor Montgomerie, an English gentleman, residing at Singapore, observed in the hands of a Maylayan wood chopper, a strange material used for a handle to his axe. On learning from him that it was made from the sap of a tree, which soon solidified on being exposed to the air, also, that by the use of hot water it could not only be made plastic, but made to take (and when cool retain) any desired form, he immediately obtained samples of the material, which were forwarded to the London Society and Sciences, with the best description he could obtain regarding them.

These samples arrived in England about the time the importance of the discovery for vulcanizing India rubber was made known, and the vast monopolies created by the issue of rubber patents. The London Society equally impressed with the singular properties of these strange samples, lost no time in having them examined and reported upon, which report was of such a character as to create a great excitement, and to induce large orders for its importation, which continued so to increase, that in 1848, its importation amounted to 21,508, valued at \$275,100.

This article is produced from a juice or sap, taken from the Isonandra or Gutta tree, which is indigenous to all the islands of the Indian Archipelago, and especially to the Maylayan Peninsular, Borneo, Ceylon, and their neighborhoods, in which are found immense forests of it—all yielding this product in great abundance.

Its fruit contains a concrete edible oil, which is used by the natives with their food.

In its crude state, gutta percha has no resemblance whatever to India rubber, nor are its chemical or mechanical properties the same, nor does the tree from which it is taken belong to the same family of trees or grow in the same soil; yet, from the fact that it can be dissolved, and wrought into water-proof wares, many, not informed on the subject, have inclined to the belief that the two materials are identically, or very nearly the same. But nothing could be more erroneous, as may be seen by the following comparisons, which prove that India rubber and gutta percha are chemically and mechanically, as well as commercially, very different:

India rubber, or caoutchouc, is produced from a milk-white sap, taken chiefly from the *Sephonca Cabuca* tree, afterwards coagulated, and the whey pressed out or dried off by heat—the residue is the India rubber of commerce.

Gutta percha is produced from the *Isonandra* or *Gutta* tree; is of a brownish color, and when exposed to air, soon solidifies, and forms the gutta percha of commerce.

India rubber of commerce is of a gummy nature, not very tenacious, and astonishingly elastic.

Gutta percha of commerce is a fibrous material much resembling the inner coating of white oak bark, is extremely tenacious, and without elasticity, or much flexibility.

India rubber when once reduced to a liquid state by heat, appears like tar, and is unfit for further manufacture.

Gutta percha may be melted and cooled any number of times, without injury for future manufacture.

India rubber, by coming in contact with oil or other fatty substances, is soon decomposed or ruined for future use.

Gutta percha is not injured by coming in contact with oil or other fatty substances—in fact, one good use of it is, for oil cans.

India rubber is soon ruined for future use, if brought in contact with sulphuric, muriatic, and other acids.

Gutta percha resists the action of sulphuric, muriatic, and nearly all other acids in fact, one great use of it is for acid vats, &c., and other vessels for holding acids.

India rubber is a conductor of heat, cold and electricity.

Gutta percha is a non-conductor of electricity, as well as of heat and cold.

India rubber, in its crude state, when exposed to the action of boiling water, increases in bulk, does not lose its elastic properties, and cannot be moulded.

Gutta percha, in its crude state, when exposed to the action of boiling water, contracts, and becomes soft like dough or paste, and may then be moulded to any shape, which it will retain when cool.

India rubber is not a perfect repellent of water, but is more or less absorbent, according to quality.

Gutta percha has an exceedingly fine grain, and its oily property makes it perfect repellent of liquids.

HYGIENE.

Fever and Ague; How to Live in Unhealthy Situations.

To go west, and to have fever and ague, are almost synonymous. Indeed, we once knew a Methodist preacher, who was going out west on purpose to catch the ague, in order to cure him of bronchitis, or preacher's sore throat! Every man expects to have fever and ague who goes into a new country to settle. The western parts of the State of New York, and even the adjacent parts of the counties of New York and Westchester, are very much infested with this disease. The consequence is, that the value of the property in these parts is depreciated.

We have no doubt, that if there could be discovered a certain cure for—or, still better a prevention of this disease, the value of the land would, in many cases, rise fifty per cent. at once. We should be very much elated in heart, and enriched in intellect, if we could prescribe a sure remedy for the country, or the inhabitants. But, as we do not profess to be priests, nor prophets, nor even "wonderful doctors," but simply medical philosophers, we must inquire as rigidly for ourselves as for others, the cause and the remedy.

What is fever and ague? and what is its cause? Many, and learned, truly, are the treatises on these questions; but like many other subjects, authorities are not agreed upon them. We cannot, therefore, refer you to any one authority on the subject for satisfaction, but we must try to satisfy you ourselves.

Fever and ague, or rather ague and fever, is a peculiar kind of fever, which consists in having a distinct cold stage, hot stage, and sweating stage, and then a period of freedom from fever at all. It has many varieties, but our description covers them all.

The cause of this disease, is an alternation of hot and cold, damp and dry, condition of the ground and air, whereby the heat of the body is raised and lowered suddenly, and the vegetable remains are quickly decomposed, giving existence to noxious vapors.

Either the direct loss of heat of the body, or the indirect loss of it, by the action of the noxious vapors on the respiration and blood, will produce the cold stage, and that will cause the hot and sweating stages. If only one of these causes operate the fever is mild. If both operate the fever is severe.

The temperature of the human body in health is 98° of Fahrenheit's thermometer. If this be raised, as is the case in sun-stroke or burning, fever, with little, if any, cold stage ensues. If this temperature be lowered, just in proportion to the lowness of the temperature, and the suddenness of it, fever, with considerable cold stage, ensues.

The immediate cause of the fever, is the reflection of the temperature of the blood. No matter how this is produced, whether by some subtle poison inhaled in the atmosphere, or by the heat of the blood being abstracted. If, therefore, you feel cold and shivery in an agueish locality—at once do everything that can be done, to restore the heat to the blood.

Ginger-tea, common tea, clove tea, or any hot drink, taken to make you sweat, is good. Warm clothing, such as woollen clothes, blankets, feather beds, and lying before a hot fire, with your back to the heat, is good. A hot bath, if you can have a real one for the whole body, is the best of all. A good bed, with blankets only, and heated with a warming-pan, is a good substitute.

Perhaps the very best treatment for immediate use, is lying with your back to the fire, well wrapped up in blankets, and drinking hot and stimulating fluids, until you are hot, and sweat. Then begin and take tincture of bark, quinine, or any other stimulating tonic, as fast as you please. There are two very distinct substances in the bark, quinine and cinchonine. We need them both.

When the fit of fever is over, whether from remedial causes, or natural ones, give plenty of bark, quinine and good food, and if the person can take it, ale, porter, wine or spirit, simply to keep up the temperature. Daily, at the hour of the expected or possible time of the cold stage returning, repeat the hot applications in some mode.

We have forgotten one of the most effectual modes of obtaining heat—the spirit-bath. Put a couple of table spoonfuls of alcohol, or any other spirit, into a *sand* and place in the centre under a *wooden chair*. Undress and sit on the chair, wrapped round with a large blanket. Set fire to the spirit with a taper, and cover your head. You will soon be in a sweat.

This much for yourself. Now for the locality. Fill up the marshy ground, or keep it covered with water. Plow and sow your land, or dig and plant it, so that it may have to grow something wholesome. If you build your own house, and may choose your site, select, if you can, some spot where you can turn a stream into your ground, and surround your house with a stream of running water, eight or ten feet wide. It is a singular fact that the peculiar poison that generates ague is absorbed by water; neither will it pass from a swamp across a belt of trees. Build your house, therefore, so as to avail yourself of such protection, if possible: If you should conduct a stream of water round your house, let it be a *running* one.

Mind you do not make a stagnant moat, and if you can, prevent any one else from so doing do, or having a stagnant pond or dam. Water, to be useful to us, must like our blood, circulate. Both live by constant motion. Both die by being still. Even the air dies, by being shut up in some place of seclusion. We go further, even thought and feeling die from want of use. The writing of this article is as good for us as for you. We have more matter on a subject, at the end of an article than at the beginning.

So as for you, as readers—the more you read us, the more you will want to read us. We shall be as necessary to your healthful existence, as your newspaper is to your political existence.

The first command ever given to man was "Be fruitful, and multiply, and replenish the earth, and *subdue it*." The man who goes into a new

part of the country should remember this part of the command, "*Subdue it*." We are exceedingly delighted with the work of any pioneer who obeys this command.

It is an inspiring thought, that man can subdue mountains, rivers, seas and continents—aye, and even fever and ague. There is a grandeur in the feeling, while we pen these lines, that we are helping to fulfil our great destiny—to subdue the earth—its natural evils and maladies.

If fate compel you to live in a swampy country, never leave the house after sundown if you can help it: if you live in a valley where ague exists, never leave your house after four o'clock in summer, for by that time, in places that cool rapidly from the absence of the sun, the dew begins to fall, and dew is deadly to those who are predisposed to ague from weakness: women and children suffer terribly from moonlight walks: if you must go out, wear a great coat and thick boots, even in August. Build fire in the sitting room early in September, and close the doors and windows. Never mind what your ignorant neighbors say; let them call you eccentric, crazy, or what they please. Perhaps they will soon be glad to imitate you, when they find you in health, and feel the ague twice a year.

Live well—generously. Drink a little *good wine* or round ale. Eat fresh meat—never salt, unless you cannot avoid it. Drink good coffee in the morning, and be exceedingly careful to avoid chills from too little bed clothing. The temperature of the human body *always falls four degrees* towards four o'clock in the morning. Remember this, and have an extra blanket or quilt at hand. *Never sleep with your chamber windows open after the first day of August*; but by no means close your door. Air you must have, but not September night air; it is deadly. —*New York Scalpel*.

[There has been but little of the ague and fever in Illinois the last season; not as much as in many localities in the Eastern States. The article above is a good one, and may be generally useful, especially in some parts of New York.]

River water contains about 28 grains of solid matter to every cubic foot. Hence such a river as the Rhine carries to the sea every day 145,080 cubic feet of sand or stone.

Mole hills are curiously formed by an outer arch impervious to rain, and an internal platform with drains, and covered ways on which the fair and young reside. The moles live on worms and roots, and bury themselves in any soil in a few minutes.

Few insects live more than a year in their perfect state. Their first state is the egg, then the caterpillar, then the chrysalis or pupa, and finally the precreative form. But in these changes there are infinite degrees and varieties of transition, all of which constitutes the pleasing and very instructive study of Entomology.

The quantity of water discharged into the sea by all the rivers in the world is estimated at 39 cubic miles in a day; hence it would take above 35,000 years to create a circuit of the whole sea through clouds and rivers.

EDITORIAL NOTICES.

The Ohio Board of Agriculture, at their meeting on the 3rd of December, at Columbus, decided upon taking measures to test the value of the Chinese Sugar Cane for making sugar and molasses, in the soils and climate of Ohio.

The celebrated stallion horse, Black Hawk, owned by David Hill, of Bridgeport, Vt., died a few days since, at the age of twenty-three years. He belonged to the Morgan stock, and was the sire of many successful trotting horses.

The raspberry is an old fruit. It is said that some years ago a stone coffin with the remains of human being, was found in a tumulus, in England. Where the stomach would lie, some seeds, supposed to be those of the raspberry, were found. These were carefully sown, they generated, and proved to be plants of the common raspberry. The remains from which the seed was taken, was deposited as early as the fifth or sixth century. This shows a wonderful vitality in the seeds of the raspberry, and also that our Saxon and Cimbrian forefathers used the berries as food.

The "Catawissa Raspberry," a native variety, which bears from July until frost, is advertised in Washington. The plants can be had there at \$1 each. The berries are fine, flavor excellent, but they are not as good as some of the improved varieties. Their excellence consists in the hardiness of the plants and the long time they continue bearing.

The United States Agricultural Society will hold its annual meeting at the Smithsonian Institution, in Washington, on the 14th instant.

CHINESE SUGAR CANE.—Persons should be cautious in purchasing this seed. There is a great demand for the seed; and there are several kinds of seed that bear a general resemblance to it. We have been told that peddlers are already in the field selling chocolate corn seed for the sugar cane seed.

Robert A. Alexander, the distinguished stock raiser of Kentucky, is the son of Mr. Alexander, who emigrated from Scotland at an early day. The father was a brother of the late Sir William Alexander, of Scotland, and the present R. A. Alexander is entitled to the title. But he prefers to remain here as an American farmer. He occasionally visits Scotland to see to his estates. He is a bachelor—the worst thing that can be said of him.

New Subscribers.

We are constantly receiving the names of new subscribers, but they do not come as fast we desire. Come on friends! We can send back numbers.

HOW TO KEEP MICE FROM FRUIT TREES.—The Ohio Cultivator says: Mix fine gun powder and tallow together and rub on the bodies of your trees, and you will not be troubled with mice. If the powder is coarse it should be pulverized in some way *after* it is mixed with tallow. Any attempt to pulverize *before* will most likely result in an explosion.

LLAMAS FOR CUBA.—Large stocks of Llamas from South America, are being shipped to Cuba. These are used for beasts of burden.

CUTTING GRAFTS.—Now is the time that this should be done. Tie them up in separate bunches and label them well. They can then be buried in sand or earth, and kept till wanted.

Get your cuttings for Gooseberries, Currants and Grapes and treat them in the same manner. These should be planted out early in the spring.

THE DIOSCOREA BUTTATOAS.—Wm. R. Prince has issued another circular for the sale of the tubers of this plant. He insists that it has been successful wherever properly cultivated. Out of the great number of publications in the agricultural papers, from those who have experimented with the plant, we have seen one which speaks of it in high terms.

CHINESE SUGAR CORN.—There is great anxiety among farmers to obtain the seed of the Chinese Sugar Cane. It will not be likely to be plenty, but the prospect is that there will be a sufficient supply in the fall of the present year to meet future demands. We have strong confidence that the Chinese Sugar plant will within five years be among our most valuable crops and will supply much of the domestic demand for sugar and molasses.

MARKETING.—This is high in our market. At retail—Butter, 25 to 35 cts. lb; Eggs, 25 to 30 doz.; Chickens each, 12 to 15 cts.; Turkeys, 8 to 9 cts. lb.; Potatoes, 40 cts. per peck; Apples, 35 cts. per peck; Cheese, 15 to 16 2/3 cts. per lb.

We need a large number of small farmers in the neighborhood of our city, for furnishing our citizens with market articles. Most of the farmers of our State are engaged in raising large crops of wheat, or large stocks of hogs and cattle for market.

CHINESE SUGAR CANE.—The value of Chinese Sugar Cane will be thoroughly tested the coming season. We have seen it noticed that large field—one hundred acres, fifty acres and ten acres—will be planted in the south; and even in our own State fields of ten acres and less will be planted. Seed will be scarce and high the coming season; but thereafter it will be more plenty.

WOOL.—There is a decided tendency to higher prices in the wool market. It is said the foreign stock is exhausted. We look for good prices the next season.

TRIAL OF MOWERS.—At the great trial of mowers, at Worcester, Mass., last fall, **HEATH'S MOWER**, manufactured by D. C. Henderson & Co., of Sandusky City, Ohio, was the successful competitor. The trial was a very thorough one, and the prize of \$1,000 was won by the Heath Mower, with a large competition. The decision was for mowing fifty acres in the best manner. We learn these facts from the *Ohio Cultivator*. This mower has a zig-zag movement in the face of the drawing wheel, without gear, and if well made, cannot fail to work well.

AGRICULTURAL BOOKS.—Saxton & Co., of New York, are publishing a series of Books on Agriculture, and subjects connected with it, most valuable for farmers. They make a handsome and useful Farmer's Library. We take it for granted that farmers, at the present day, are benefitted by information to be found in Agricultural works, and we know of no series better adapted to their use than that published by Saxton & Co.

AMERICAN APPLES.—Mr. Brown, a nursery man of Montreal spent recently two years in his native country—Scotland. He says: "they know nothing of fruit as we do in America. He could not get any eatable apples, till he fell in with some Newtown Pippins."

Copies of this number of the Farmer will be sent to individuals who we hope wish to become subscribers for it. Should they not desire to do, they will please return the same by mail.

We have not yet received the official report of the proceedings of the Horticultural Convention held in Decatur in the last month.

We should be glad of the assistance of the members of the Legislature in extending the circulation of this publication. To those who will favor us in this way, we should be glad to furnish our prospectus, to be sent to their friends.

PROSPECTUS OF THE **ILLINOIS FARMER.**

In December, 1855, we presented to the public the prospectus for the first volume of the *Illinois Farmer*. We did this with some hesitation; that hesitation was overcome by the wishes and judgment of our friends. Considering the short time the prospectus was before the public previous to the time fixed for issuing the first number, we had reason to be gratified with the number of subscribers whose names were promptly furnished. We shall not forget the kind assistance rendered us by friends, as well in neighboring, as in distant counties. It was given at a time and in a manner which rendered it of great value.

A year has nearly passed. Those friends near us insist that we shall present to the agricultural public a prospectus for the second volume of the "*Farmer*." We feel certain that an agricultural paper, published at the Capital of the State, is needed—that it can be rendered of great value to our farming interests—and published in the present form, and at the present price—should receive a very large subscription—so large as to be reasonably remunerative to its publishers.

While many improvements are designed in the coming volume,—in illustrations and in the mechanical work—we shall still aim to make it *practical* and *useful*. Progress is a distinguishing feature in the Agriculture of the present day,—but there are humbugs which are sought to be forced upon the community which should be mercilessly exposed.

The agricultural papers of other States, although ably conducted, do not suit the condition of Agriculture in Illinois. We have a peculiar climate, and soils differing from those in the East. While therefore Eastern periodicals are valuable to us, they do not supply the want of well conducted agricultural publications in our own State.

An exciting election has now passed. Our farmers, as good citizens, have been deeply engaged in it. In this country, all men should make themselves acquainted with the principles and designs of parties, and should act understandingly, with clear convictions that they are in the right. It is only in this way that the institutions which have come to us from our fathers can be transmitted to posterity.

But there is now to be a lull in political affairs. Our agricultural friends will be able to give their attention to matters which especi-

ally belong to their profession. This will enure to their advantage. They will be disposed to patronize the agricultural press, and by means of it carry into their families a fund of knowledge which will greatly benefit them.—There is among our farmers a manifest disposition to avail themselves of the experience of others, as given in the agricultural press, for their own advantage. No farmer can read attentively any agricultural publication of the country without obtaining *practical information* that he would not part with for thrice the amount of its subscription.

We send our prospectus to our old friends,—who labored for us in procuring subscribers for our first volume,—and to many others,—and solicit them to make up clubs wherever possible. Send us the names and subscription price—and we promise to do the best we can to give them a paper worthy of their patronage.
S. FRANCIS.

Terms of the Farmer.

In Clubs of five or over, sent in one package 75 cents each—to be paid in advance. Single copies \$1 a year in advance.
Nov. 18, 1856.

THE ILLINOIS STATE JOURNAL.
A Literary and News Journal for the Family and Fireside.

PROSPECTUS FOR 1857.

In presenting our Prospectus for the coming year, we take occasion to return thanks for the very liberal patronage bestowed upon the *Daily and Weekly Journal*, since the paper passed into our hands. We have endeavored to keep pace with this increase, by a corresponding effort upon our part to make the *Journal* still more worthy of public favor and support.—In the amount and variety of reading matter furnished, it stands unrivalled by any competitor in Illinois, and having recently at great expense, clothed it in an entirely new and beautiful dress, we flatter ourselves that its typography and general appearance is likewise superior. Of this however, it does not become us to speak at length—every reader can judge for himself.

A heated partisan contest, just ended, has prevented our paying as much attention to pleasing the palate of the general reader as could have been desired. We design to make up for this in the future, and intend to serve up every week such a pleasant variety as shall make the *Journal* a welcome visitor into every family.

Our contents for 1857, we need scarcely say, will be as varied as the Life with which we keep pace. Time and the ever changing World are the great baskets out of which we pick Wisdom and Amusement as we go—the exhaustless variety of event and novelty assuring, to us and to our readers, exhaustless themes and subjects of interest.

LITERATURE, GENERAL NEWS, and interesting MISCELLANEOUS READING will occupy much of our space.

We design making the *Journal* emphatically and especially a Newspaper for the Family and the Fireside. Containing Literary Tales, Biographical Notices, Sketches

of Character, Letters from Abroad, Anecdotes, and generally whatever will be most entertaining and most instructive to the great mass of Newspaper Readers.

In addition to its Literary and Miscellaneous character the *Weekly Journal* will give, in a clear and condensed form,

All the News of the Day,

From all quarters of the world, and in all departments of activity,—embracing

Agricultural, Commercial and Financial Intelligence,

Prepared expressly for its columns, and for the use of those in all parts of the country who wish to be kept informed upon all these topics.

The Doings of Congress,

With a synopsis of all important documents, valuable speeches, and full reports of the proceedings of the

Illinois Legislature,

For which purpose we have engaged the services of a corps of the best short hand reporters in the west. We have likewise made arrangements for the receipt of daily intelligence from every quarter by means of

The Magnetic Telegraph,

An enterprise never before undertaken in this city, and which will involve a large outlay of expense upon our part.

The Markets,

Shall constantly receive our especial attention; and we intend to give every week, in addition to our home market, the latest reports of the markets of New York, Chicago, St. Louis, and other prominent points, as well as

The Cattle Markets,

Of every point interesting to our readers.

The *Weekly Journal* will be sent to subscribers by mail, on the following

Terms:

One Copy, one year, for..... \$2
Three Copies, " " 5
Ten " " " 15
Payable in advance. Any person sending us ten subscribers and \$15, shall be entitled to extra copy for his trouble.

Address:

BAILHACHE & BAKER,

Publishers Journal Springfield, Illinois.

The Little One's Prayer.

A little child knelt at twilight hour near the broken lattice of a small poverty-stricken cottage. Casting a glance at the sleeping form of her inebriate father opposite her, she clasped her wan hands, and murmured, gazing out into the silvery starlight:

'Oh, God, make father leave his evil ways—make him my own dear father once again! Make mother's sad looks go away, and make her old smile come back; but thy will be done.'

Just then the little one's mother entered the room, and taking her husband, who had just awakened, by the arm, she said:

'Hearken to Minnie—she's praying.'

'Oh, God, make father love me as once he did and make him forsake his bad ways!' murmured the little one, her clear tones breaking the hushed silence.

'Oh, Paul—husband!' cried the mother; 'oh by our past joys and sorrows, by our marriage vows, our wedded love, blight not the life of our little one? Oh reform and let us all be happy once again!'

The conscience-stricken man bowed his head and wept. Then clasping his hands, he said:

'With God's help, you will never be made to sorrow again on my account.'

And he kept his vow.—*Life Illustrated,*

COMMERCIAL.

Springfield Market.

OFFICE OF THE ILLINOIS FARMER,
Springfield, January 1, 1887. }

There is a good demand for wheat, at present quotations. Most articles of marketing are in request.

HOGS—Hogs have taken a rise. They are now selling at \$5 25@5 50 $\frac{3}{4}$ 100 lbs, depending on size.

FLOUR—Extra White, \$6 50; Superfine, \$6 00; common, \$5 00.

WHEAT—Sales at 90c to \$1 00 $\frac{3}{4}$ bu.

CORN—Sales at 25@30c $\frac{3}{4}$ bu.

OATS—Sales at 35c $\frac{3}{4}$ bu.

HIDES—Dry Flint 12 $\frac{1}{2}$ c.

BRAN—8c $\frac{3}{4}$ bushel.

SHORTS—12 $\frac{1}{2}$ c.

MARKETING—Chickens, \$1 50 $\frac{3}{4}$ doz.; Onions, \$2 00; Apples, \$1 25; Cabbages, none in market.

Chicago Market—January 1, 1887.

The business transactions of the past week have been large in many departments of trade—the holidays do not appear to have withdrawn the trading public very much from business avocations, nor kept the country people at home, the roads being so good for wheeling and railroads again being free and open. In the produce and hog trade the effect has been a considerable increase of receipts, and the market is bouyant and in good conditlon. Every article is in quick demand, except, perhaps, poultry, butter and beans. In spring wheat there is an improvement, owing to the competition of buyers for Michigan mills, our city dealers and eastern shippers by rail. Other grains are taken at steady rates. The hog market has improved, being sought after at increased rates for packing and shipping. This has caused receipts to increase and the higher prices paid will draw out all the hogs that can be prepared for the market; though even under these circumstances, the result will show, if not a decrease in the number packed below last year's business, a short crop compared with the wants of the country. Provisions, particularly mess pork and other hog products, have been similarly affected. Sales of mess pork having been made as high as \$18 00 $\frac{3}{4}$ bbl, and there is but little left on the market.

We give the following quotations:

Bags—Lewiston 26c; Stark mills 26c.

Beans—\$1 50@2 00 $\frac{3}{4}$ bu for good white with but little demand.

Butter—The supply is pretty full, but prices heretofore given are maintained. Different grades of Ohio bring 22@26c $\frac{3}{4}$ lb, and western firkin, jars and roll range from 18@24c $\frac{3}{4}$ lb.

Candles—Stearine 16@20c $\frac{3}{4}$ lb; Star 25@27c; Adamantine 37 $\frac{1}{2}$ c; Sperm 40c; Tallow 14@14 $\frac{1}{2}$ c.

Cheese—11@11 $\frac{1}{2}$ c for Western Reserve, and 12@12 $\frac{1}{2}$ c for Hamburg.

Eggs—23@25c $\frac{3}{4}$ doz by the bbl.

Feathers—Live geese 60c $\frac{3}{4}$ lb.

Fish—White fish \$4 75 for hlf bbls No. 1; and 25@50c less for 2's and 3's; Trout halves \$4 50; Cod \$5 75@6 $\frac{3}{4}$ 100 lbs, Mackerel, No. 1, \$20 00 $\frac{3}{4}$ bbl; halves \$10@11; Herring, lake, \$5 00 $\frac{3}{4}$ bbl; halves \$2 00@2 50; Eastport do \$8 00; No. 1, box 50@62 $\frac{1}{2}$ c; scaled 70@75c.

Fruits—Apples (green) \$5 00@6 00 $\frac{3}{4}$ bbl; dried \$2 37@2 50 $\frac{3}{4}$ bu; dried peaches, unpared, 11@12 $\frac{1}{2}$ c $\frac{3}{4}$ lb; cranberries \$3@3 50 $\frac{3}{4}$ bu; lemons \$8 00 $\frac{3}{4}$ box; raisins, new M. R.'s \$5 00; layers \$5 25@5 50; new oranges \$9 00 $\frac{3}{4}$ bbl of 400; cherries 30c $\frac{3}{4}$ lb.

Flour—The market is quiet at \$4 25 for spring wheat extra; and from this up to \$6 50 for common to choice red and white winter wheat flour. Rye flour is \$4 50@5 00 $\frac{3}{4}$ bbl, and bnckwheat flour somewhat plenty at \$2 50@2 75 $\frac{3}{4}$ 100 lbs. Corn meal 87 $\frac{1}{2}$ c@91c.

Hides—Green 7@7 $\frac{1}{2}$ c; dry salted 8 $\frac{1}{2}$ @9c; dry flint 15@16 $\frac{1}{2}$ c $\frac{3}{4}$ lb; city slaughtered polts are \$1@3 15 each.

Hogs—Prices have again advanced since last week, owing

somewhat to the favorable cold weather, and number of eastern buyers. The market closes bouyant at \$5 00@5 12 for live hogs and \$6 00@6 25 net for dressed hogs averaging 200 lbs, and sales are mostly at the outside figure.

Lard—We quote No. 1, city kettle rendered 10 $\frac{1}{2}$ @11c.

Lumber—No change. We give the following as the unchanging rates at the yards:

1st clear and dry.....\$35@40	Flooring, dressed.....\$24@26
2d do.....30@35	Jolsts and scantling... 16@ 20
3d do.....22@ 25	Fencing..... 15@ 16
Clear siding..... 18@ 19	Common..... 15@ 16
Com "..... 15@ 16	Culls..... 8@ 12
Flooring..... 20@ 22	Clear Flooring..... 28@ 30

Lath—About \$2 75@3 00 at the yards.

Shingles—City warranted \$4@4 25.

Provisions—Mess beef \$12@12 50 $\frac{3}{4}$ bbl. Mess pork \$17 00 \$18 00 $\frac{3}{4}$ bbl. Pickled hams \$15 00@16 00 $\frac{3}{4}$ bbl. Smoked are scarce and nominal at 11c. Smoked shoulders 7c. Dry salted do at 6@6 $\frac{1}{2}$ c.

Poultry and Game—Chickens 16@18c each; dressed turkeys 8@10c $\frac{3}{4}$ lb; prairie chickens are scarce at \$4 00 $\frac{3}{4}$ doz; venison is rather plenty at \$4 50@5 00 $\frac{3}{4}$ 100 lb in the carcass; saddles 10@12c $\frac{3}{4}$ lb; quails \$1 75@2 00 $\frac{3}{4}$ doz.

Rice 5 $\frac{3}{4}$ @6c $\frac{3}{4}$ lb.

Seeds—Timothy \$2 25@2 50; clover \$6 50@7 $\frac{3}{4}$ per bu; flax \$1 25@1 50.

St. Louis Market—Jan. 1.

Weather cool and cloudy and river falling slowly, with about six feet in the channel to Cairo. Boats to New Orleans are asking 75c for Flour, \$1 for Pork, 45c $\frac{3}{4}$ sack for wheat and Corn, 45@50c $\frac{3}{4}$ 100 lbs for weight freight, \$8 $\frac{3}{4}$ head for stock.

Hemp—Sale of 65 bales undressed at \$160 $\frac{3}{4}$ ton.

Bale Rope—Sale of a small lot city machine at 10 $\frac{1}{2}$ c $\frac{3}{4}$ lb.

Flour—Sale of 300 bbls city superfine at \$6, and a rumored sale of 1,000 do at \$5 90. Nothing in country brands.

Wheat—Very little offering, and sales of 50 sks mixed at \$1 12 $\frac{1}{2}$; 192 do good red at \$1 14, sks returned.

Corn—Sale of 1,200 sacks at 60@62c $\frac{3}{4}$ bu, new gunnies included.

Oats—Sale of 780 sacks at 65c $\frac{3}{4}$ bu; 370 do at 68c, sacks included.

Hay—Sale of 21 bales at \$1 40 $\frac{3}{4}$ 100 lbs.

Barley—Sale of 200 sacks spring at \$1 75 $\frac{3}{4}$ sack, sacks returned.

Whisky—Sale of 207 bbls at 27 $\frac{1}{2}$ c cash; 20 do at 28c $\frac{3}{4}$ gallon.

Lard—Sale on Saturday of 600 tierces, to arrive at the opening of navigation, at 10 $\frac{1}{2}$ c, part cash down.

Pork—no transactions, and mess held at \$17 $\frac{3}{4}$ bbl.

Bacon—Sale of 18 casks country clear sides at 8c—an advance.

Hogs—Market tending upward, and heavy commanding \$6 25, but no sales reported to-day. Rumored sale on Saturday at \$6 37 $\frac{1}{2}$ c $\frac{3}{4}$ 100 lbs.

Flaxseed—Manufacturers paying \$1 75 $\frac{3}{4}$ bu, packages returned.

Money Market--Chicago, Dec. 31.

ILLINOIS STOCK SECURITY BANKS.

Chicago City Banks..... par
Other Illinois Banks.....1 dis

COUNTRY AND OTHERS.

New York and New England Banks.....	1 $\frac{1}{2}$ dis
New Jersey and Pennsylvania.....	1 $\frac{1}{2}$ dis
Interior Bank, Griffin, Georgia.....	1 $\frac{1}{2}$ dis
Merchants' Bank of Macon, Georgia.....	1 $\frac{1}{2}$ dis
Atlanta Bank, Georgia.....	1 $\frac{1}{2}$ dis
La Grange Bank, Georgia.....	1 $\frac{1}{2}$ dis
Michigan Banks.....	1 $\frac{1}{2}$ dis
Ghio State Bank and Branches.....	1 $\frac{1}{2}$ dis
Ohio Stock Banks (new plate).....	1 $\frac{1}{2}$ dis
Indiana State Bank and Branches.....	1 $\frac{1}{2}$ dis
Indiana Free Banks.....	par to 75 dis
Wisconsin Banks.....	1 $\frac{1}{2}$ dis
Bank of Circleville, Ohio.....	50 dis
Newport Safety Fund, Ohio.....	90 dis
Virginia Free Banks.....	1 $\frac{1}{2}$ dis
Ohio Stock (old plate).....	5 dis
Farmers' and Mechanics' Bank, Rent County, Md.....	25 dis
Trans-Alleghana, Va.....	1 $\frac{1}{2}$ dis
Tennessee, Old Banks.....	3 dis
Tennessee, New Banks.....	3@10 dis
Warron County Bank, Penn.....	5 dis
Erie City Bank, Penn.....	5 dis
Bank of Newcastle.....	5 dis

THE ILLINOIS FARMER.

SIMEON FRANCIS, EDITOR.

BAILHACHE & BAKER, PUBLISHERS.

Vol. 2.

FEBRUARY, 1857.

No. 2.

Legislative Aid to Agriculture.

We called attention to this subject in an article in the last *Farmer*. We are in favor of Legislative aid to Agriculture.—Agriculture is, confessedly, the great industrial interest of the State. It is the source of all our wealth and all our prosperity. A large portion of the public revenues of this State are derived from lands, and other property belonging to the agricultural part of our population. They have, therefore, peculiar claims upon the Legislature for aid in developing the Agricultural resources of the State.

The Agricultural press in different parts of the country, is pressing this subject upon the attention of Legislatures. We have now before us the *Valley Farmer*, which reminds us of what has been done in several States by Legislatures in aid of the great interest for which we plead. We transfer to our columns most of the article to which we have referred, as embracing facts of general interest.

“Ohio has made appropriations to the State Agricultural Society and has also appropriated a liberal sum for each county, when the farmers thereof shall organize an agricultural society and raise a like sum to be appropriated as premiums.

Missouri has made similar appropriations. The Legislature of Kentucky at its last session, in the act incorporating the State Agricultural Society, appropriated \$5,000 a year for two years, for the encouragement of the farming interests of the State. Had an additional appropriation of two or three hundred dollars a year been offered to the farmers of each county who would organize a county agricultural society and raise an equal sum to be offered in premiums, we think that no more wise appropriation could have been made. Such an appropriation

under the management of intelligent and judicious officers, would not only encourage and improve the agriculture of the several counties, but would greatly promote the interests of the State at large. Michigan has done nobly for the cause of Agriculture in that State. We do not now remember the amount that is given through the State Society, but a large appropriation has been made for an Agricultural College, which is now nearly or quite completed and ready to be opened for the reception of students. In connection with the College, is an experimental farm, where the practice as well as the theory of Agriculture in all its various departments, is to be taught.

The New York State Agricultural Society is one of the oldest in the country. The Legislature of the State has done more to foster and encourage this great interest in New York than has been done by any other State in the Union. Besides the aid that has been extended through this society, an appropriation of forty thousand dollars has been expended in erecting the new State Geological and Agricultural Hall in Albany. This is a model institution of its kind, such as should be found in every agricultural State in the Union. The building is of pressed brick, and was erected in 1855. The main building is 81 feet front on State and 52 1-2 feet deep, with a wing 68 by 40 feet, each four stories high. The front part of the basement story is for the accommodation of the Taxidermist, Janitor, Chemical Laboratory, heating apparatus, etc. The principal floor of the main building on the east of the main entrance, is devoted to the Office and Library of the State Agricultural Society, and on the west to the Geological collection. The principal floor of the rear part is occupied as a lecture room and for the meeting of the society, 40 by 68 feet square and 15 feet high. The halls above the lecture room, of the same size, with two galleries, lighted with skylights and windows, are for the society's Agricultural Museum. The whole of the

residue of the main building is for the State collection of Natural History, Minerals, etc.; and that portion on the west of the main hall is open from the first floor to the roof and has three galleries. The whole is lighted with gas and supplied with water. The State furnishes the building and officers with fuel, gas, etc., and pays the salary of Curator of the Natural History department. The State Agricultural Society pays the salary of its able and efficient Secretary, Col. B. P. Johnson, who devotes his whole time to the duties of his office, an office that he has filled for many years with credit to himself and profit to the society.

While in Albany a few weeks since, we spent a part of several days in examining the specimens of Natural History of the State, the Geological collection, and the Agricultural Museum. In the latter department we were delighted in examining the rude plows that had been used in early times by the Chinese, French, Mexicans and by the farmers of other nations, and other specimens manufactured in this country in 1780, 1800, 1806 and 1814, and comparing them with the many improved and beautifully finished plows in the collection of the present day.

Col. Johnson has added to the museum many other novel specimens of domestic implements and machines of other nations and of early times, that will be compared with the improvements in future ages with admiration and delight.

The galleries above the lecture room are furnished with cases extending nearly to the ceiling, with glass fronts, one of which is appropriated to each county in the State, and are to contain specimens of the soil and of the various farm products of the county. Some of these cases are already filled with specimens, showing the geological character of the several counties, and of the soils, together with the grains, grasses, etc.

Another great step in aid of the agricultural progress of the State has recently been taken. A farm has been purchased in Ovid, Seneca county, containing 670 acres of land, upon which is to be established an Agricultural College. The Legislature of the State having already made an appropriation of \$40,000 for the purpose, and upwards of \$40,000 more have been subscribed for the endowment of the "Delasfield Professorship of Agricultural Chemistry." The officers of the college have already been appointed, so that the institution may be expected to go into full operation at an early day."

Who believes that the movements of the States thus named, and the legislative aids therein furnished to agriculture, have not and are not paying a thousand fold more than they have cost? Agriculture is not a profession or science that stands still. Great minds, as well as vigorous hands, are giving aid to it. We do not speak in a spirit of boasting when we say that Illinois, in a very short period, is to be the leading agricultural State of the Union. What is done now by her citizens and by the Legislature will advance rapidly, or retard injuriously, this great consummation.

Gov. MATTESON, in his valedictory message, refers to the subject of Agriculture, and the means to advance it, in a manner that shows as well his sound judgment, as his patriotic disposition to add the influence of his position to the prosperity of the leading interest of our State. He says:

"In my former communication I invited the attention of the Legislature to the agricultural interests of the State. I beg leave to refer you to my previous suggestions upon this subject, and to urge, in the strongest light, those interests to your careful consideration. I apprehend no acts of the Legislature have been more acceptable to the people than the appropriations heretofore made for their encouragement. I think I may safely add, that no appropriations have been more faithfully or judiciously applied to the objects intended. I have already referred to the fertility of the soil as one of the elements of greatness for our State. She has scarcely an acre of waste land, and when all the contemplated improvements are completed, every acre will be convenient to market. Her present large farms are capable of extensive sub-division, and the climate and soil are so capable of production, that a few acres of ground will be found adequate to the support of a family. I apprehend the time has come in the history of the State, when she may safely take a position in relation to this interest which shall be commensurate with its importance. In view of our present condition, if my power was limited at the present time to a single recommendation, I think I should urge upon you to base the industrial interests of the State upon the same liberal principles which now characterize the educational system. Education and labor, which were once deemed almost incompatible, should go

hand in hand. Agriculture is the life of commerce. It is the food of business upon railroads and rivers, and lakes, and in cities. It must necessarily be one of the great foundation stones of the prosperity of this State. It must enter largely into the basis of all calculations of a dense population. Sufficiently removed from the ordinary incitements to vice and excess, the farming population are the great bulwark of safety, in the hour of peril or threatened degeneracy. They are safer for defense than standing armies, and better depositories of a nation's wealth than national treasuries.

I would place this great feature of our State upon a basis which would not only bring its operations in generous rivalry with each other, but I would also bring their productions into proud competition with the world. The starting point has already been gained, by the organization of State and County Agricultural Societies, and it remains for you to give them greater efficiency. Like every other public measure, to be effectual, this should be a system. It should be permanent and vigorous. I recommend the passage of a bill giving to the State Society all the corporate and police powers necessary to the full accomplishment of its objects, protection of its property, and enforcement of its rules of order. The observation of the last three years satisfies me that the location of its State Fairs should be permanent. This proposition, at first thought, may meet with disfavor, but I am satisfied no other course can render it such an exhibition of the agriculture of the State as the people ought to demand.

Its erections and fixtures should be ample, and upon the rotary system, would require the outlay of greater expense than would be within the means of the Society. Besides, all exhibitors throughout the State and the world, should know the place of the exhibition, and become accustomed to the channels by which it could be reached. Much more would result from this than might at first be supposed. In conjunction with this I would recommend the connection of department of Agriculture with the State Department, at the head of which should be placed the President, or some other officer of the State Society, and make it his duty, among other things, to collect and transmit agricultural information and statistics, looking to the advancement of agriculture as a science. This plan contemplates, in the future, when the circumstances of the State Society are such as to justify it, an experimental farm, of a high order.

County Societies should be strictly auxiliary, and should also possess necessary corporate and police powers.

To carry out this system, I would recommend the annual payment, out of the State Treasury, of \$10,000 to the State, and \$500 each to the County Societies, payable on condition that each of the societies raise an equal, or greater amount, to be expended in premiums. I would also recommend the annual appropriation of not less than \$10,000 to the Agricultural Department, to defray the expenses of the office and the statistics. I am confident the amount would soon be returned to the treasury, in the increased value of taxable property, in consequence of the adoption of such a system. You would hold out new inducements to spirited and energetic farmers to make their homes in, and devote their lives to a State which displayed its liberality and appreciation of their calling. You would create a more dense population by doing away with the necessity for large farms, and by more careful husbandry, producing better results from diminished territory. You would greatly add to the value of farms by developing more fully their power of production. You would make the laborer happy by bringing his works to the eye and approval of the world. You would raise the standard value of the State in the estimate of the people at large, and make her worthy of being the centre of this vast Republican system. I make these suggestions to you with the strongest confidence in the ability of the State and the people to carry them out, and most earnestly hope they may receive your favorable consideration and action.

Country Homes.

Farm houses, cottages, country seats,— what a world of good is summed up in these words? How much of interest centers on a home in the country, on the ultimate repose we intend to give ourselves before we go to the final rest? Such is the language, the deeper feeling, of the affluent of the great cities of London, New York, Boston, gayer Paris even, as they buy their estate, their farm, their seat, in some secluded place, away from cares that have hitherto oppressed their steps.

We like the country because there is a freedom in it; because it is generally more virtuous than the city life. Its unlimited

range of earthly view is, or ought to be, a type of largeness of thought and soul—a mean man from the country could hardly be, if he had used his senses,—had elicited instruction from the teeming observation around him. In the country there is more time to reflect; more nature to attract attention; more of mother Earth to give us strength. What is it that is said of the mythic warrior in there ancient fables, when overcome by his assailant, but to touch the earth and miraculously gain strength;—so of us, we want more of earth, more of the hills, and trees, and fields, to make us mighty.

But for more substantial purposes, our readers will think, do we like the county,—for self-support, for matter of fact life, for wherewithal to live. And be it so. We need not reject in the humblest lot a particle of the sentiment we have expressed. Increased cultivation of mind or heart proportionately lightens labor, and is bounded by no condition of human life. A dwelling in the country, where we remove for purposes of subsistence, or for any other purpose, is too important an undertaking for the whole heart not to be engaged in it. Whether of log, or frame, or brick, or stone, no man should build, be it ever so large or small, cheap or dear a house, without some symmetry, some proportion, some design. Beauty and taste were given us by the Al-mity, as much as were a limb; and he who neglects their training, sins against himself, and leaves behind him a lasting memorial of his disgrace.

Houses we have seen built up by the thoughtless, that, in defective weather boarding, placing of the chimneys, or other minor details, could not be made warm; when the additional fuel they would consume in a few months would have covered the expense of a better dwelling, besides bringing with it comfort and health. Again, a proper site for the erection of a house is a matter of importance. In a former number we expressed the opinion that when a nuisance existed, a swamp, timber, ditch or hollow, we should get on the south or west side of it. Those

directions being the ones from whence the winds usually blow; and the same caution should be observed in towns and cities towards slaughter houses, burying grounds, gas works, and manufactories, which give out smoke and other impurities. For the want of this forethought, ill health and its unhappy concomitants, have followed and been ascribed to the inscrutabilities of Providence, when we ourselves have been solely to blame. Put your trees to the north and northwest of your house, to protect it from the cold of winter, and to the east where they will shelter you from the storm, and but few of them at the west and south to cast a distant shade in the summer heat. Trees and shrubbery too near the house originate unwholesome odors, which will not rise during the night. We have enough vegetable exuvium every where in the Prairie State without soliciting it at the doors and windows of one's house.

We think a second story, if possible, should be put to a house. Sleeping up stairs we believe to be better than on the ground floor; but in good situations, with a dry flooring, and fairly elevated foundations, such sleeping may be perfectly safe, and have some advantage to the aged, to whom clambering up stairs is a dangerous and tedious operation. Of water, we think that which comes from the earth is generally as wholesome as any other; rain water collects many impurities, and perfect filtration is unattainable. We may, therefore, trust to mother Earth, and drink our prairie water, from prairie wells, with all its lime, rejoicing in a slow death. At the same time rain water should be preserved, and arrangements made in every house for its collection and preservation in cisterns and other receptacles. Water from streams is of the very first value to the farmer, and if he desires it, he or the community of which he is a part, must not cut down the timber, or drain the swamps, for it is upon these that the springs depend. The cutting down of forests is drying up the streams over this fair continent. In the State of New York, the Mohawk pours forth far less of a flood than it did within the

memory of not the oldest inhabitant, in consequence of drainage and cultivation, but more in consequence of the barbarous system of levelling the forests and not planting others in their place. It is known that rain will not fall so copiously where moisture finds no protection, and we can imagine these level prairies, without anything to arrest or condense the vapors, to become in time deserts, instead of gardens, as they are at present. If we disregard the phenomena of nature, its necessities and wants, we, or our posterity will suffer, that we may be assured.

The Chinese Sugar Cane.

The Patent Office is now distributing the seed of this plant, in the different States.— That which was distributed from the same office a year since, was sown by many in different parts of the country, north, west, east and south, and the result has been very satisfactory. The plant has been found to make most excellent fodder, and when the experiment has been made of its saccharine qualities, has given decided satisfaction.— No to go any farther than our own State, we know, that in Wabash county, Sangamon county, and Rock Island county, most excellent molasses has been made of the juice of the plant. We have tested the molasses made in this county and Rock Island county, and are perfectly certain that the article was fully up to the standard of any we have seen from Louisiana. Specimens made in this county, with little care, granulated; so that we are sure the syrup can be converted into sugar.

In the Patent Office Report for 1855, just published, are several communications in relation to this cane. Mr. JOSEPH C. ORTH, of Wabash county, in this State, from some imperfect experiments, estimates that "fifteen per cent. of good clarified sugar can be obtained from the juice." Mr. FREDERICK MUNCH, of Warren county, Mo., says he "succeeded in a superior syrup from this plant." Mr. SAMUEL CLAPHAM, of Suffolk county, New York, "looks upon this plant as of great value as a forage crop; yet pos-

sibly it may be cultivated for sugar, as the juice contains nearly ten per cent. of saccharine matter, clear as crystal; and on a very small scale, beautiful clarified sugar was produced by Dr. RAY." J. H. HAMMOND, of Barnewell District, South Carolina, made several careful experiments. "In one instance, from 400 canes, 37 1-2 quarts of juice were obtained by an imperfect press. It was estimated that one quarter of the juice remained in the cane. These 37 1-2 quarts, boiled two hours in a very unsuitable pot, produced six quarts of choice syrup. All who have tasted it, agreed that it was equal to the best from New Orleans."— Mr. HAMMOND adds, that "a good sugar mill, with three wooden rollers, may be erected for less than \$25, and a sugar boiler that will make thirty gallons of syrup per day, may be purchased in Augusta at less than \$60."

We trust that the value of this plant for making sugar and molasses will be perfectly tested the coming fall. To do this we must have suitable mills for expressing the juice and suitable boilers for manufacturing it into syrup.

We annex a copy of the circular issued from the Patent Office in reference to this cane.

UNITED STATES PATENT OFFICE,
December 10, 1856. }

SIR: This new plant seems to be destined to take an important position among our economical products. Its seeds were sent, some six years ago, from the north of China, by M. de Montigny, to the Geographical Society of Paris. From a cursory examination of a small field of it, growing at Verrieres, in France, in the autumn of 1854, Mr. D. J. Browne, then on a mission from this Office for collecting agricultural information and products, was led to infer, that, from the peculiarity of the climate in which it was growing, and its resemblance in appearance and habit to Indian corn, it would flourish in any region wherever that plant would thrive. From this source, he obtained some 200 pounds of the seed, which was distributed in small packages, by this Office, among the members of Congress, with the view of experimenting with it in all parts of the Union, and thereby ascertaining its adaptation to our soil and climate.

In numerous instances, the results proved highly satisfactory, as it attained the height of eight or ten feet, as far north as St. Paul's, in Minnesota, and matured its seeds at various points in Massachusetts, New York, Pennsylvania, Illinois, and other places further south. The following year, while in France, on a similar mission as above, Mr. Browne obtained several bushels of the seed of this plant, grown from that reputed to have been brought from South Africa, by Mr. Leonard Wray, of London, and which has since proved to be identical with that obtained by this Office in 1854.

There appears to be a doubt among many in Europe, as well as in this country, as to the true botanical name of this plant. M. Louis Vilmorin, a scientific cultivator, of Paris, provisionally gave it the name of *Holcus saccharatus*, which had previously been applied to the common broom-corn, if not to other species, or at least varieties, of some allied plant. He also conjectured that it might be the *Sorghum vulgare*, (*Andropogon sorghum* of others,) and thought that it might comprehend a variety of it, as well as *Andropogon cafra*, *bicolor*, etc., of Kunth. Mr. Wray, who has devoted much time and attention to the cultivation of this plant, with the view of extracting sugar from its juice, at Cape Natal and other places, states that, in the southeast part of Caffraria, there are at least fifteen varieties of it, some of them growing to a height of twelve or fifteen feet, with stems as thick as those of the sugar cane (*Saccharum officinarum*.) M. Vilmorin, also, says that, in a collection of seeds sent to the Museum of Natural History at Paris, in 1840, by M. d'Abadie, there were thirty kinds of sorghum, among the growth of which he particularly recognised several plants having stems of a saccharine flavor. Others are of the opinion, that the common broom corn (*Holcus saccharatus*), the chocolate or Guinea corn, (*Sorghum vulgare*), and the Chinese sugar cane, (*Sorghum saccharatum*), all of which, containing more or less saccharine matter, belong to the same species, but are variations caused by differences of soil and climate, or by a disposition to sport, after the manner of Indian corn and other plants under cultivation. The Chinese sugar cane, however, differs from the others, in containing a far larger proportion of juice, and consequently is more valuable for fodder and other economical uses.

In 1766, a plant analogous to the one in question, was experimented upon at Flor-

ence, in Italy, by Pietro Arduino, for the extraction of sugar; yet it must have been of a different variety, as he describes its seeds as of a clear brown color, while those of the Chinese sugar cane are of a shining jet black, and in appearance identical with those of the *Sorghum vulgare*, of the old collections.

DESCRIPTION AND HABIT OF GROWTH.

The Chinese sugar cane, when cultivated on ordinary land, in the United States, somewhat after the manner of broom corn, grows to a height of from 8 to 16 feet, while in Europe it does not attain much more than half of this altitude. Its stems are straight and smooth, often covered with a white bloom, or down, having leaves somewhat flexuous, falling over and greatly resembling in appearance those of Indian corn, but more elegant in form. When cultivated in hills, containing eight or ten stalks each, it puts forth at its top a conical panicle of dense flowers, green at first, but changing into violet shades, and finally into dark purple, at maturity. In France and the central and northern sections of the United States, it has thus far proved an annual; but from observations made by M. Vilmorin, as well as experiments in our southern States, it is conjectured that, from the vigor and fullness of the lower part of the stalks, in autumn, by protecting them during the winter, they would produce new plants the following spring. It stands drought far better than Indian corn, and will resist the effects of considerable frost without injury, after the panicles appear, but not in its younger and more tender state. If suffered to remain in the field after the seeds have ripened and have been removed, where the season is sufficiently warm and long, new panicles will shoot out at the topmost joints, one or more to each stalk, and mature a second crop of seeds. The average yield of seed to each panicle is at least a gill.

CULTIVATION.

Since its introduction into this country, the Chinese sugar cane has proved itself well adapted to our geographical range of Indian corn. It is of easy cultivation, being similar to that of maize or broom corn, but will prosper in a much poorer soil. It does not succeed so well, however, when sown broadcast with the view of producing fodder, as it will not grow to much more than one-half of its usual height. If the seeds are planted in May, in the Middle States, or still earlier at the South, two crops of fodder can be grown in a season from the same roots—the first one in June or July, to be cut before the panicles ap-

pear, which would be green and succulent, like young Indian corn—and the other a month or two later, at the time, or before, the seed is fully matured. In the extreme Northern States, where the season is too short and cool for it to ripen in the open air, the cultivator will necessarily have to obtain his seed from regions further South. If it were important for him to raise his own seed, he could start the plants under glass, in the spring, and remove them to the field or garden about the period of planting Indian corn, after which they would fully mature. One quart of seeds are found to be sufficient for an acre. If the soil be indifferent or poor, they may be sown in rows or drills about 3 feet apart, with the plants 10 to 12 inches asunder; but if the soil be rich, they may be planted in hills, five or more seeds to each, 4 or 5 feet apart in one direction, and 3 or 4 in the other. The plants may be worked or hoed twice in the course of the season, in a similar manner to Indian corn. Any suckers or superfluous shoots, which may spring up, may be removed. The seed should not be harvested before it acquires a dark or black hue. If the plants lodge, or fall to the ground, by the excessive weight of the heads, during storms of wind or rain, before the seed matures, they may remain for weeks without injury. In collecting the seed, a convenient method is to cut off the stalks about a foot below the panicles, tie them up in bunches of twenty-five, and suspend them in any secure, airy place, sheltered from rain. If intended solely for fodder, the first crop should be cut just before the panicles would appear, and the second, as soon as the seed arrives at the milky stage. It may be tied up in bundles, shocked and cured, like the tops or stalks of Indian corn. If not intended to be employed for any other economical use, after the seed has been removed, and the weather be cool, and the average temperature of the day does not exceed 45 deg or 50 deg F., the stalks may be cut up close to the ground, tied in bundles, collected into shocks, or stowed in a mass in a succulent state, for fodder in sheds or barns, where they will keep without injury, if desired, until spring. In this condition, however, the lower parts of the stalks will be found to be quite hard and woody, and will require to be chopped into small pieces for feeding.

PRECAUTION.—Particular care should be observed not to cultivate this plant in the vicinity of Dourah corn, Guinea corn, nor broom-corn, as it hybridises or mixes freely

with these plants, which would render the seeds of the product unfit for sowing.

Yours, very respectfully,
CHARLES MASON, Com'r.

Foreign Demand for American Produce.

The foreign demand for American produce greatly influences the home prices. The Cincinnati Gazette has an article on this subject containing facts and speculations of much interest. An investigation proves that the production of live animals in the United States does not increase in proportion to our population; and, indeed, in some of the older States that there had been an actual decrease between 1840 and 1850. This fact, says the Gazette, explains in a measure, the apparent mystery connected with the market for bread stuffs and provisions, and which for several years past has puzzled the most shrewd and best informed operators. From a superficial view of the progress of agriculture in the United States, it might appear that our products increased more rapidly than the population; such, however, is not the fact. It is true, that the quantity of land sold by the government has been very large, but the purchase of land is one thing and the cultivation of land is another. The increase of population has been greater than the increase of live animals. The same is probably true of breadstuffs, but upon this point we are not yet prepared to speak. This, as already remarked explains in part the mystery connected with the present condition of our markets, inasmuch as it accounts for the high prices that have for several years past prevailed throughout the country for hog products, and indeed all kinds of domestic provisions.

Connected with this, however, is another feature of importance, and one which has exercised, and must continue to exercise, a great influence upon prices of produce. We refer to the foreign demand.

We now present a statement, prepared from official sources, showing the value of hog products, viz: hogs, pork, bacon and hams; and bread-stuffs, viz: corn, corn-meal, wheat, flour, rye meal, rye, oats, &c., rice, biscuit, and potatoes, exported from the United States, each fiscal year, from 1840 to 1855, both inclusive:

Years.	Hog Products.	Provisions.
1840.....	\$1,894,894	\$15,576,056
1841.....	2,621,537	12,420,466
1842.....	2,629,403	11,841,407
1843.....	2,120,020	6,922,083
1844.....	3,236,479	11,187,872
1845.....	2,991,284	9,779,212
1846.....	3,883,884	19,061,362
1847.....	6,630,842	56,977,395
1848.....	9,003,272	25,097,003
1849.....	9,245,885	25,548,458
1850.....	7,550,287	15,797,419
1851.....	4,368,015	16,706,427
1852.....	3,765,470	19,842,948
1853.....	6,262,324	23,686,101
1854.....	11,061,015	51,138,913
1855.....	11,690,100	28,499,323

The figures for the fiscal year ending June 30, 1856, we have not at hand. These would show a large increase over 1855. The aggregate value of breadstuffs and provisions exported for the last year has been published. It is \$77,187,301. This includes the products of beef as well as hogs. The value of the hog products for the year, however, may be estimated at \$15,000,000.

It is thus seen that the demand from abroad for the product of the hog, has, with a few exceptions, steadily increased since 1840. Prior to that year, the demand was insignificant. The total value of the exports from 1821 to 1840 did not exceed in any year \$2,000,000, and it reached that amount only in 1833. Its increase commenced with 1840. The value of exports in 1821 was \$1,354,116, while in 1839 it was only \$1,777,330. The average for the twenty years preceding 1840 was about \$1,500,000. The following figures show the quantities of lard and bacon exported at different periods from 1821 to the present time:

	Bacon lbs.	Lard lbs.
For the year 1821.....	1,607,506	3,996,561
do 1831.....	1,477,446	6,963,516
do 1841.....	2,794,517	10,597,654
do 1851.....	18,027,302	19,683,082
do 1855.....	38,188,989	39,045,049

The increase in pork was also large, but not so great, in proportion, as lard and bacon.

The conclusion to be drawn from these facts is this: *Europe is every year becoming more dependent upon this country for provisions, and a very large proportion of the hog products of the United States will continue to find a market in the Old World, regardless of prices.* Most of the nations of Europe are densely populated, and their lands are already cultivated to the highest extreme. There is no room, therefore, for increase in agricultural products; yet the population is of course swelling, and this forces the people of Europe to look to the United States for food to meet their increasing wants. The demand fluctuates as the crops prove full or short, and prices run high or low, but in any event the increase in our exports of domestic produce to Europe must continue. High prices of course influence the consumption at home and abroad, and more in Europe than in this country; but for a heavy draft upon our resources, even at current rates, we may rely; and to a more rapid increase in our agricultural products than has recently been experienced, we must look for cheaper food in the domestic markets. Last year England and France purchased largely of our breadstuffs and provisions. This was attributed to war influences. This year, however, with a peace establishment, heavy purchases are

continued, and we find English operators busy in all the Western pork markets securing middles. It is evident therefore, that the exports of the current year will be large, and in value, if not in quantity, they promise to equal those of 1855-56. We have not presented these facts with a view to stimulate the pork market. It needs no stimulant. It is already dangerously inflated, and it is by no means certain that with the foreign demand anticipated, the season will prove a profitable one; but aside from this, the facts presented are important, and should be understood. They indicate clearly the tendency of our trade, and are sufficient to stimulate the productive energies of the country.

Chinese Sugar Cane.

We give a valuable communication on this new plant from J. C. ORTH, Esq., of Wabash county. The facts in his communication are derived from his own experience.

To the Editors of the Illinois Farmer:

Just at this time nothing can be brought before the farming community of more interest than some reliable information about the newly introduced plant, the Chinese Sugar Cane, or Sugar Millet. I planted the seed of this plant in 1855, and again in 1856—and am fully satisfied with the result of my experiments with it. It wants no extra cultivation, and any one who understands the cultivation of Indian corn knows all about raising Sugar Millet. I am satisfied that it should be planted in the same manner, and after planting attended like corn.

The only difficulty I found was in knowing the time when it should be cut for boiling. I made several experiments, and am fully convinced that it should not be cut until the seed has fairly turned black, and has nearly or altogether dried off and hardened. It may be cut sooner, but the syrup will never attain a clear, and proper color; it remains cloudy and murky. But if left standing until it is fairly ripe, the syrup will become of a beautiful clear color, equal to the best New Orleans reboiled, with a pleasant and excellent flavor. Cut too early, the flavor is musty and easily betrays the fact, that it was cut before ripening. It may, however, stand 10 to 14 days after it is ripe, without any particular injury. From trials I made I feel certain that as a fodder it cannot be surpassed by anything else we can raise, either in a green or dry state.

Plant as early as frosts will permit, to insure a well ripened crop, and if you wish to grind, plant successively until the middle of May.

In pail of saccharine matter, my experiments have proved that the average stalks produced one pint of juice.—a few large ones produced a quart each. In Wabash county a few stalks were raised 22 feet long and 2 1-2 inches in diameter. But they were uncommonly large. Careful measurement proved that the juice contains not less than 16 per cent of saccharine matter, and that one pound of sugar can be made from every six pounds of the juice. This statement and all my experiments warrant me in saying that from 150 to 250 gallons of syrup may be made from an acre, according to the quality of the land on which it is planted.

I ground upon a mill constructed of two rollers, of hard timber, plain surface, 15 inches diameter and 18 long, put up vertically, in the same manner as the old fashioned apple mill, and keyed together by means of followers. The horse was attached to a beam placed on the top of one of them like the apple mill. The stalk was pressed through these rollers, and a trough or tub underneath caught up the sap as it was expressed by the rollers. This is the cheapest and most effective mill upon a small scale. But is not large enough to grind a large crop. Horizontal rollers made of cast iron would be the best, but require a separate horse power, and would of course be more costly. The mill used need not exceed in cost \$10.

Whatever doubts I might have had as to the success of this plant, I am fully satisfied now, that it will more than prove to the Northern States what sugar cane has to the South and the Gulf Islands. The stalk contains more juice, and according to the tests of Mr. Peters, of Georgia, contains a larger per cent. of saccharine matter. In 1855 I ripened it from a planting as late as the 25th May, but in 1856 that portion which was planted so late did not ripen, owing to the fact that we had a killing frost a month earlier than usual.

I am anxious to distribute the seed as far as possible, so that this season every farmer in the country can procure a sufficient quantity to make his own sugar.

To all post paid applications, with a six cent postage stamp inclosed, (to pay return postage,) I will forward a quantity sufficient to plant a quarter of an acre. This, with care, planting not more than three or four in a hill, will produce from eight to ten bushels of seed.

Address me at McCleary's Bluff, Wabash county, Illinois.

JOS. C. ORTH.

Scarcity and Cost of Provisions.

There is room for much reflection in the high price of provisions,—in the dearness of human sustenance, that prevails so generally over the world. In early times, through the records of all history, men have suffered from the want of food; the Patriarchs went into Egypt, or sent there, after corn; and Egypt was afterwards visited with a famine. The inhabitants of India and China, forming the bulk of the Asiatics, are not a well fed people,—flesh being almost unknown to them; and in the latter country, snakes and reptiles are exhibited in the market stalls of the great cities, and are readily taken by those who have the power wherewithal to buy. In Europe there are few countries where the lower or middle classes have the power of much selection in the quality or quantity of their food. Indians and the barbarous, all the world over, are celebrated for the precariousness with which they live; the want of nutriment; the abstinence they suffer; the obstacles they surmount, at all times, in the keeping of the body together.

In this country, until of late years, we have prided ourselves upon the general abundance of food; but at this time there is much complaint, in every direction, and much suffering in consequence of the dearness, and therefore general scarcity, of our supplies. Though seed time and harvest are interrupted by droughts, by contingencies that man cannot compass, by absolute famines; yet we are not prepared to arraign the providence of God for the cause of this limited dispensation of the prime necessities of life. We must seek for its solution in our own limited views of what is right in the premises; in our short comings; in our improvidence; in our ignorance; in our positive viciousness;—but quite as much we think in the very plethora of our abundance, and to which we will now address ourselves. The earth teems with sufficient sustenance for countless millions more of inhabitants than now dwell upon its face. Taking the more Christian and civilized portions of men, for our data, we find that Europe in the Middle Ages, after the down-

fall of the Roman Empire, assumed the feudal form for its society; and this form is probably the ground work of our present civilization, substantially the concentration of wealth and power in the hands of a few. In England, vast estates, the greater portion of the country, is held by a few individuals, some of them of fabulous wealth; and these domains that might feed the hungry millions, are given over to deer parks, and to purposes of waste so far as nine tenths of their product is concerned. On the Continent of Europe land is monopolized in much the same way, or subjected to such taxation to sustain monarchies and aristocracies, the titled rich and the titled poor, the debts growing out of wars and dissensions that alone concerned these interests, that no fair remuneration accrues to the struggling and unnoticed poor.

In this country our feudalism consists in paying undue respect to wealth,—in the all absorbing attention that is given to riches,—putting into disdain all other human concerns. To get rich is the one thing needful, and as there are only a few in comparison to the great body of the people who possess the requisite talents and tendencies to accumulate, these few are fast getting possession of the property of the country; inequalities are yearly getting broader. To possess land, to possess unlimited quantities of it, to hold it in an uncultivated state, and for children and children's children, who do not need it, and would be all the better without it,—is the mania of our countrymen,—is our madness. It is worse than this,—it is driving the poor and those of moderate means away from the Eastern States, away even from the Western States, toward the setting sun, where they find that the speculator, with the visage of Shylock, has already preceded them; and sections held now in the sparsest districts, not far from the Rocky Mountains, are much higher in price than any product of the soil could justify or remunerate.

We know of nothing that can alter this condition of things; no legislation can reach it; no communist associations or socialist

sentiments, are worth a straw to remedy it; it concerns alone our moral nature; it concerns a higher purpose of the individual life than we have yet reached; it resolves itself into more moderate desires on the part of men in reference to wealth; it resolves itself into a higher Christianity than the earth has yet seen. If men possess and centre in themselves so much that might belong and be useful to others, we may expect that hunger and destitution will stalk the earth. The poor we shall always have with us, says the inspired testimony; but they may be reduced to the most harmless proportions, if the inequalities of human condition on the upward side were restrained by some rational check, were tempered more to the matter of fact demands of life. To step away from the scene of active absorbing gain, to give place to others when fears of present or prospective want are not to be thought of—and they would be less thought of in a more equal condition of life—would make this earth an Eden, as the pretty song says, and give opportunity for other labors, other duties, other work.

With vast properties their arises a horde of dependent beings as a necessary sequence, and through our desire for accumulation we are but repeating a condition of society that makes the old world so repulsive to us. Industry is employed too much in worthless things, to minister to desires that are no part of our necessities, to tastes that are an utter waste of labor, that neither exalt nor purify our manhood; and so long as we adhere to this course the bread question will find itself as much embarrassed as by the influx of the precious metals, the draughts and inundations, the famines and adverse seasons, that now so much occupy our attention.

When a daughter remarks:—Mother, I would not hire help, for I can assist you to do all the work in the kitchen," set it down that she will make a good wife.

Both erudition and agriculture ought to be encouraged by government; wit and manufactures will come of themselves.

Too much sensibility creates unhappiness; too much insensibility creates crime.

THE GRAZIER.

Arab Horses.

We find a most interesting letter from one of a party of three Americans, who recently visited Palestine, Syria, Damascus and the homes of the Bedouin Arabs, for the purpose of obtaining and bringing to Kentucky some horses of pure Arab blood. One of these gentlemen was A. K. Richards, well known in Kentucky, as the owner and breeder of fine horses. The whole letter is interesting, but we have only room for that portion of it directly relating to our subject. The letter is dated at "Gavston near Liverpool." The writer says—

"You are doubtless acquainted with A. K. Richards, the importer of some Arab horses a few years ago, and the owner of some of the best stock in America—Peytona, Blonde and many others. It has ever been his opinion that the Arab horse is superior to every race in the world, either for racing, riding, or, crossed with the proper kind of mares, for carriage purposes. Although the importation he made was much approved by the best judges, he was still dissatisfied, and determined to make another. For this purpose we went to Europe, and being joined by Mr. Troye, traveled through England and France expressly to examine and compare the horses of those two countries, and also to see the character of the importations made from the East, as Arab horses. We saw no Arabs in England that we considered thorough-bred, and but two in France. These belonged to the Emperor. We saw a great many called Arabs, and have since seen hundreds such in Syria; but they are a mixture of the Arab, Turkish and Koord races. We went to Turkey, and thence to Syria. We traveled through every part of Palestine and Western Syria, without meeting with a single horse that would do to import. Having stayed a few months in Damascus to gain some knowledge of the Arabic, of the Bedouin tribes, &c., we launched out into these wild tribes East and South of Damascus dressed as Bedouin Sheiks, and well armed with Colt's revolvers and Minie Rifles. Mr. Troye was very hard to please, for in the course of his profession you know he has had much to do with the horse, and is a thorough judge. We would sometimes see an animal that looked perfect, but something would be wrong about the pedigree, and however given a Bedouin may generally be to lying,

he will always speak the truth about his horse. An oath, too, is always required by the buyer from the owner, and from the Sheik of the tribe. Thus we would find about six out of ten whose pedigree could not be established. They have three varieties—the noble, the doubtful, and the "ked-desh," or mixed. The noble races are five—the Coheylan and Sacklowee being considered the best—the former for bottom, the latter for speed—and these, of course, bring the highest prices. The sum demanded for a fine mare is sometimes incredible to those unaccustomed to the Bedouin's estimation of an extraordinary animal. I will give you an instance of this kind. I saw a mare of the most symmetrical form and the purest blood. I wished to purchase her. A Bedouin never fixes a price, but leaves you to bid until he is satisfied with the offer. I commenced bidding, and at last went to what I considered a very extravagant price; but still the savage merely shook his head and showed his teeth. Then I asked him if he wouldn't sell her if I doubled my offer. He threw out his arm, and pointing towards her, asked me if I could load her with gold. I told him that was far beyond my means. "Well," said he, "if you could the gold would still be yours, the mare mine. Such is the Bedouin's appreciation of his horse. And yet that same mare stood chained in front of the tent, exposed to cold nights and rains, or ready at any time for a run of twenty miles over the burning sands of the desert.

We at last selected two stallions and a yearling colt. One of the stallions and the colt are Nesjda bred, of the most perfect forms and purest pedigrees; the former, a dark gray, being of the Coheylan; the latter a dark chestnut, three years old, also of the same race. The other stallion is a rich bay, nearly four years old, bred near Palmyra, of the Sacklowee race. This horse Mr. Troye considers one of the most perfect animals he ever saw. He is very much like the Darley Arabian, according to the plates we have seen, and resembles West Australian, but is a much more blood-like horse. I have, also a magnificent mare.

I am now going to show why the Arab horse has been so underrated since the time of the Godolphin or Darley Arabian. If, in the deserts, six out of ten, as we found, are not thoroughbred, is it probable that a thoroughbred is often to be found in the town and villages of Syria or Egypt? When a Bedouin visits a town he never rides a fine horse, and this we often observed. There is

little communication between them and townsmen, whom they despise, and from traders they always exact a heavy tribute. They are jealous of strangers, few venturing among them. A Bedouin holds a thoroughbred at many times the value of any other horse which may look equally well, though impure, and therefore pure bred animals are seldom sold. Purchases are generally made in the towns and villages by Europeans from traders who would not be likely to pay so high for pedigree when they can make out one themselves to answer every purpose. I will cite two instances that occurred whilst I was in Syria. An English gentleman in Damascus told me one day that he had purchased two Arabs and intended to carry them to England. He wished me to see them and give my opinion about them. He could not understand why I was so much amused at the stable. I told him he had been "done." One was a little Egyptian pony, the other an ordinary Syrian horse. He sold them. The other was a horse that came on the same steamer with me, belonging to Lord P——n, and will doubtless pass in England for anything but a very common horse of Syria. Just such, I am inclined to believe, have been the character of importations for the last fifty years; and I am sustained by Mr. Layard, who, at Ninevah and among the Bedouin tribes, had a good opportunity for observation.

This selection has been made with reference to size, symmetry, and pedigree, and if our stock are not improved, it will be useless to talk any more of the Arab for improving the racing stock. These horses will never do to train, for they have been broken with the severe curb-bit, which shortens a horse's stride. Mr. Richards, whether successful or not, deserves great credit for his efforts to improve our race of noble animals.

I am staying here several weeks to rest my animals, previous to shipping them to New Orleans on the "Sultan," which leaves on the 10th of August. An Arab groom goes with them. Crowds of people are here daily to see them. Judges give a very favorable opinion of them in the papers, and say that such have never been brought to England.

The love of glory can only create a hero; the contempt of it creates great men.

The errors of great men, and the good deeds of reprobates, should not be reckoned in our estimates of their respective characters.

It is sometimes quite enough for a man to feign ignorance of that which he knows, to gain the reputation of knowing that of which he is ignorant.

Illinois Stock Importing Association.

On the 9th of January, there was organized in this city an Association, the object of which is briefly expressed in the caption to this article. It is intended as an institution to embrace the whole State, and subscriptions to its stock are invited from every part of Illinois. We need not say that the object is an important one. That is self-evident. Illinois is fast becoming a leading stock-raising State. Our climate, our soil, the excellence of our native and cultivated grasses, compel us to believe, that Illinois may justly aspire to compete with any State in the Union in the advantages of rearing stock. What we want now is to secure the best breeds of every variety for propagation. If these are to be found in Europe, (and it is believed that they are,) we want them in Illinois. To secure this great object, is the design of this Association; and the appeal is made to our enterprising and progressive farmers to add to the stock of this Association, and by doing so the object will most certainly be accomplished. Men have taken hold of the matter in this city who do not know the world "fail."

The Constitution, &c., will be found below:

1st. This Association shall be styled "The Illinois Stock Importing Association."

2d. The object of the Association shall be the selection, purchase, and importation into this State from Europe of such domestic animals, as may seem to be required by the interests of the stock growers of Illinois.

3d. The Capital Stock of this Association shall be Twenty-five thousand dollars—a subscription of one hundred dollars to constitute one share—and each stock-holder to be entitled to cast one vote in all meetings of the stockholders for each share he may hold.

4th. The officers of this Association shall be one President, one Secretary and one Treasurer, whose duties shall be those usually appertaining to their respective offices.

5th. The first election of officers shall be pro tempore—except that of Secretary whose duty it shall be forthwith to open books for subscription to the Capital Stock of this Association, at his office in the city of Springfield.

6th. Whenever the sum of ten thousand dollars shall be subscribed to the Capital Stock of this Association, it shall be the duty of the Secretary to give notice by mail or otherwise, to the stockholders to convene at the city of Springfield, at some specified day for the purpose of transacting such business as may be

presented for their consideration—at which meeting the majority of those stockholders present shall elect permanent officers for this Association, and chose a committee of three whose duty it shall be under the instructions of this Association to select, purchase and import such animals as the Association may direct—provided that no person shall be entitled to vote at this or any subsequent meeting who shall not have paid in to the Treasurer at least five per cent upon the amount of his subscription.

7th. All stock imported by this company shall be sold at public auction in the city of Springfield as soon after the arrival of the same within the limits of this State, as due notice of such sale can be given, and upon such terms as a majority of the stock-holders present at the meeting referred to in the Sixth rule may determine—and the proceeds of such sale be divided among the stock-holders in proportion to their respective subscriptions after deducting the entire expenses of the importation.

8th. The stockholders present at the meeting referred to in the Sixth rule shall designate the times at which those who have subscribed to the Capital Stock of this Association shall be required to pay to the Treasurer the unpaid balances of their respective subscriptions.— Any stock-holder failing to pay the remaining balance upon his subscription as may be directed by resolution of this association, shall if the association shall so order, forfeit his stock to this association upon such terms as the association may determine—provided, however, that there shall be no forfeiture of stock unless notice of at least twenty days shall be given by publication in some of the newspapers in Springfield of the time and place at which the unpaid stock shall be required to be paid.

SUBSCRIBERS.	COUNTIES.	NO. OF SHARES.	TOTAL SUB.
James N. Brown	Sangamon.....	10	\$1,000
A. G. Carl	Champaign.....	10	1,000
Calif & Jacoby	Piatt and Sangamon.....	10	1,000
John Williams	Sangamon.....	10	1,000
H. C. Johns	Macon.....	5	500
Joseph Stockdale	Sangamon.....	5	500
E. S. Hull	Madison.....	1	100
Washington Iles	Sangamon.....	5	500
George W. Chatterton	Sangamon.....	2	200
James M. Hill	Cass.....	5	500
W. Brown	Morgan.....	5	500
J. C. Crowder	Sangamon.....	1	100
John C. Maxcy	Sangamon.....	1	100
Cyrus W. Webster	Marion.....	5	500
E. Stevenson	Morgan.....	5	500
J. J. Elliott	Sangamon.....	1	100
S. Dunlap	Morgan.....	5	500
S. A. Buckmaster	Madison.....	5	500
John Williams	Sangamon.....	5	500
James W. Singleton	Adams.....	3	300
John Wood	Adams.....	10	1,000
E. Rigney	Sangamon.....	3	300
John H. Brown	Sangamon.....	2	200
David A. Brown	Sangamon.....	2	200
J. S. Smith & D. Brown	Sangamon.....	4	400
J. T. Smith	Sangamon.....	2	200
John E. Ousley	Sangamon.....	5	500
Thomas S. Mather	Sangamon.....	1	100
John Gatewood	Piatt.....	5	500
William Rea	Macon.....	5	500
E. B. Hitt & Co	Scott.....	13	1,300

The Post office address of the Officers of the Association are as follows:

- JAS. N. BROWN, President,
Berlin, Sangamon County, Ill.
- JNO. WILLIAMS, Treasurer, Springfield, Ill.
- GEO. W. CHATTERTON, Sec'y, " "

From the Ohio Farmer.

Close Breeding---Its Effects, and the Cause Thereof.

There is an impression that in-and-in breeding produces an inevitable deterioration, and that this is made manifest in a certain and invariable manner. This dogma has passed into certain sciences—physiology for example; and then diffusing itself over the face of society again, re-appears continually in newspapers. I have expressed my conviction of the total erroneousness of the common opinion, in some articles which my good friend Mr. Brown permitted me to publish about a year since in the Ohio Farmer, on the culture of domestic animals. Repeated conversations since that time, both with practical and scientific men, have led me to suppose that I would have done well to have attempted, at that time, a more precise explanation of the real nature of those evils which are often seen to attend extreme in-and-in breeding, and a more distinct statement of the real working of the practice, both for good and for evil. It is this which I now propose to myself.

Nature, if left to herself, acts with invariable steadfastness; and this is the first and the grand principle of all re-production. It is culture, (using the word in its widest sense,) which seduces nature into all her variations; and this is the second and crowning principle of all re-production. With these two, we can do all that is doable; without both of them, we can do nothing.

Under the variations produced by culture, it is pure blood—high breeding, which stands in the place, and represents the steadfastness which nature manifests when left to herself. Culture is tantamount to variation; pure blood is the only safeguard under and against endless variations under culture. In other words, high bred is steadfastness under culture.

Such is the state of the case, as it comes into the hands of the breeder. If he comprehends and respects nature under both of the aspects I have presented, she will do for him everything in her power. If he abuses, tortures, insults, neglects, and crosses her, why, he must expect to rule her with infinite rigor and intelligence, or to be defeated by her at last.

What then, will she say and do, when obliged persistently to breed extremely close? Look at the first flock of partridges or crows you happen to see; look at a herd of buffalo or deer; look any where upon nature, pure and simple, and she responds with perfect distinctness. This is what she will do: she

will make the most perfect type of which the materials are capable, under the circumstances; and then she will re-produce that type with perfect distinctness. In reaching these results, first, she will intensify the blood; second, she will cast out heterogeneous elements which are accidental; thirdly, she will make prominent, elements that are inherent; fourthly, and every now and then, she will throw out some individual mark to show that the work is in progress, but not finished. Each one of the four statements, in that last sentence, if true, and I am sure it is, is of supreme importance to the breeder. The four statements cover the entire principles and results of close breeding, considered scientifically and considered practically.

But now comes the trouble. Beyond a doubt, certain families have deteriorated under close breeding; what then? The close breeding did it. True enough, in one sense, but not in the common one. Close breeding did it, by revealing, intensifying, and making permanent, the inherent evils predominant in the original blood, and obscured by certain previous crosses. It ruined your stock, not by making it base, but by revealing how base it was; and the remedy is, not to quit that mode of breeding, but to quit breeding creatures that cannot stand that test. It is easy to get better blood; it is impossible to change the laws of nature.

Men have rushed to a superficial conclusion, because it was obvious. The true conclusion lay in the opposite direction. Certain families of men and of inferior animals are said to be ruined by too close breeding. If they should say, the close breeding brought out the original staple, and it proved, after being stript of some better crosses, to be worthless, they would hit the mark. All mixtures give way, under persistent close breeding; if the thing is dross at the foundation, it will turn up dross; if gold, it will turn up gold. And to my notion, all history, from that of universal man, downwards, and all philosophy, the most abstract and the most practical, alike incontestibly establish the distinct and overwhelming preference of nature for what is pure and unmixed in all reproductive processes; and her positive refusal to have anything to do with mixtures, even in inert matter, except upon terms so rigorous, that they form the fundamental laws of many of the experimental sciences.

How close? As to man, the word of God has clearly defined, in great detail; and the laws of Christian States follow it, in general. As to all inferior creatures, each

must be judged after its kind; each must be subjected to culture, before the precise degrees of closeness, and the exact extent of persistency can be fixed, even approximately. The first point is undeniably and long ago reached, to-wit: breed within the limit of pure blood. The second point is, that which is now considered; shall we keep to the inner, or the outer use of that impossible limit? All the old breeders who left any mark, said, keep to the inner edge; all the ambitious young ones, seem to be hunting for what they call distinct crosses on the outer edge. What we ought to do, depends on what we seek. If we seek a many sided man or animal, we had better keep to the outer edge, if we want a specialty, we had better keep to the inner edge. If we seek only, and in general, a fine horse, or bull, or ram, we may as well keep pretty far out, but still in pure blood; but if we want the best race horse, the best Durham bull, the best Saxon ram, or the like, we had better keep very close indeed to the inside edge of the charmed circle of blood which represents to us, under culture, the steadfastness of the re-productive power of nature.

They who honor me by reading these few lines on a very important topic, will be pleased to observe that I do not attempt to do more than state clearly, and illustrate simply, the opinions I favor. If I am distinctly understood, it is all I desire, or attempt now; not imagining for a moment, that I have done more, than by that means to awaken the attention of enlightened men to the more careful consideration of a matter, which is, I fear, drifting in a wrong direction.

THE MURDER MANIA.—A murder trial has recently taken place at Maidstone, England, where the plea of murder monomania was set up in behalf of the prisoner. Society is deeply indebted to the judge, Mr. Baron Bramwill, for the plain spoken way in which, in his charge to the jury, he demolished this defence:

“If he understood the meaning of the term ‘homicidal monomania,’ it was that the man entertained the bad desire to kill another and could not control it; and he would only observe, that if it were to go forth that any man who killed another would escape the consequences if he established such a fact, it would have a most dangerous effect upon society; and it appeared to him that the object of the law was to check such feelings, and to teach those who were base enough to entertain them, that certain punishment would follow if they carried them out. The real questions they had to consider were whether the prisoner knew the nature of the act he was committing; and whether he knew it was a wrong act; and if so, it would be their duty to say that he was guilty.”

HORTICULTURAL.

Illinois Fruit Culture.

At the meeting of the Illinois State Horticultural Society held at Decatur on the 17th ult., the committee appointed to examine fruits made the following report on the specimens presented by Dr. B. F. Long of Alton:

Newton Pippin—Has not succeeded well North. Decided true.

Dr. Long says: Medium productive, slow coming in to bearing; second only to Lady in price; keeps until March.

President says: Early bearer; keeps without decay until May in cool cellar. Best single variety for latitude of Alton.

Winter Wine—Distinct from Wine or Wine Sap—deep red; showy; size small. Dr. Long says productive; bears regular; best in quality. Committee say only good.

Rawle's Janet—True. Dr. Long says enormous bearer: requiring thinning; the most popular winter apple, with proper attention in thinning. Committee coincide.

Gilpin or Small Romanite—Good for baking and cider, and will always sell in spring.

Milam Apple—True; great bearer; third quality; small.

Pryor's Red—True; late fall and early winter; productive; profitable for market.

Lady Apple—True; late coming into bearing; commands high price in market.

Winter Greening—Dr. Long says great bearer; does not like it; never ripens well; will re-graft in the spring.

A. and F. Starr of Alton, presented:

Newton Pippin—True.

Gilpin, Lady Apple, Rawles Janet, also Pennock or Big Romanite—True, worthless.

White Belleflower—True; very good.

King of Alton—Worthless.

Red Canada—True; President says best early winter for latitude of Alton.

Baldwin Apple—True; variable; at the North winter; very good; fall at Alton.

Wine Sap—One of the most valuable winter apples; quality best; very productive throughout the State; hardy.

The following remarks upon the subject

of grafting, may be of benefit to some of our readers, and will interest all.

Grafting the one year old Mazzard Cherry.—This operation, as described by Hon. M. L. Dunlap, differs from the ordinary mode of splice grafting in the more perfect manner in which it is effected. With a sharp knife sever the stock with a smooth sloping cut upwards at such point as will exactly correspond in size with the graft, and a similar slope downwards on the scion; place the two together so as to make a perfect fit; then with a strong linen thread previously secured to a button hole in the vest, take the end of the thread in the right hand and proceed to bind very firmly the graft to the stock, holding the scion and stock with the left hand to prevent slipping; having tied the ligature, or rather having drawn the end of it down between the graft and stock, which has been left a little open at the top to receive it, with a brush apply a thin coating of warm wax to exclude air and moisture; this coating of wax being very thin, is sufficiently transparent to admit of seeing the union of the stock and graft; they will generally be found to have united when two or more perfect leaves are formed on the graft; it will then be proper to cut the thread, which, up to this period, held the stock and scion in contact. The more perfect success of this style of grafting stone fruits, particularly the cherry, over the ordinary modes hitherto practised, is attributed to the close contact in which the parts to be united are held, and to the partial obstruction of sap along the edges, causing the parts to cicatrize in a few days. This kind of grafting was practised extensively the past spring on year old stocks in the nursery rows by Messrs. Dunlap and Ellsworth, their loss not exceeding one per cent.

In answer to a call, Dr. Hull stated that grafts of the peach embracing a portion of the two year's old wood could be successfully inserted, either in the peach or plum stocks by cleft grafting, thereby making it practicable to send grafts of new and desirable sorts to distant places for spring use. The current year's shoots when large and

very fine would sometimes succeed. He had seldom failed to secure a perfect union of the stalk and graft when a portion of the two year's old wood was employed.

Dr. Long desired to know how grafts intended for distant places should be packed to prevent their shrivelling or becoming dry.

Mr. Hull—First cut into convenient lengths, immerse the cuttings in a thin solution of gum shellac dissolved in alcohol; then carefully wrap each scion in cotton to protect it from bruising; it may then be sent to any part of the country in good condition.

C. R. Overman had practised covering the grafts with warm wax. His grafts usually arrived in good order.

Mr. Dunlap, by request went into a minute practical description of a process of root grafting the peach, which so far as tried, he had found to be quite successful. He uses firm and well matured shoots, cuts them into convenient lengths, with two or three wood buds to each; he then selects one year old peach roots of convenient length to transplant well. These pieces of roots are split from the side nearly through, so as to leave the bark entire on the opposite side. Having cut the graft wedging both ways, it is laid into the root and firmly bound, waxed, and the treatment the same as for root grafted apple trees. He believes that this kind of grafting will, when better understood, be practised in the propagation of peach trees.

The best method of preserving scions was also discussed. C. R. Overman said that he had tried all the methods that he had heard or read of, and had met with partial success in all. They must be kept fresh to succeed well. The best plan, so far as he had tried, was to cut the scions as early as admissable in the fall, then dig a hole in the ground, selecting a dry spot, in this place a box in which to put the scions, covering first with straw and then with earth. Another method was to box up with sawdust, nearly dry, and keep in cool cellar. For grafting prefers roots of one year's growth. Has grafted peaches and nectarines on roots, but did not succeed well. Used the roots of one year's

growth. Has had poor success in grafting pears on their roots. The roots of one year old Virginia Thorn, he had found to do well for dwarfing the pear.

Dr. Haskell cut scions with the leaves on, and keeps them well by closely packing them in bulk. Has cut the scions at all times of the winter. If frozen thaws them out carefully. Thinks the grafts from frozen scions do not do well.

L. Ellsworth was next called upon. Keeps his scions in a cellar by planting the butts in saw-dust; do well if kept cool; best time to cut was just as the leaves were dropping; has cut at all times; if frozen must be thawed before using, the frost must be taken out by placing the scions in cool water or burying in the earth.

O. B. Galusha had tried different methods; now uses a box, closely packing them until nearly full; puts then a few strips to secure them firmly in their place; then having dug a hole in the ground, turns the box over into the hole; throws on some straw and dust to keep them from the frost.

M. L. Dunlap uses saw-dust just from the logs; prefers basswood saw-dust; scions kept in a cellar, kept cool and ventilated, but not allowed to freeze, should be cut in November and December; terminal bud grafts succeed as well as side bud grafts, if mature; the side shoots of nursery trees are generally mature; if the terminal bud is imperfect, cut back to a sound bud; frozen scions should be thawed out gradually.

From the Valley Farmer.

Shade Trees on the Prairies.

With all the natural beauty of the Prairies there is a nakedness around many a farm house, that in the season of winter imparts a shudder to the beholder, and under the burning sun of July the opposite sensation is very forcibly brought to mind.

With proper care and forethought in establishing nurseries of shade trees in various sections of the prairie region, not only profitable trade might spring up with the grower, but he would have the proud satisfaction of witnessing a few years hence, the vast improvement he had caused in the landscape, and the comfort he has been instrumental in imparting to his fellow neighbors. There

are a variety of fast growing shade trees suitable to fill the great blank around the many farm houses of the prairies.

But all need not wait for the trees to be planted and grown in the nursery. There are thousands of native trees of large size upon the borders of the streams, and in the wood-skirts that may be removed with the most perfect success, if due care is only taken in the operation. We have removed trees twenty feet high and eight inches in diameter and hardly lost 5 per cent. of them, by the removal. The proper season is now approaching, and we will give the necessary directions.

If the tree to be removed is large, say from four to six inches in diameter, a trench of from eighteen inches to two feet should be dug from the body, all round the tree, saving the earth about the roots entire, except on the top it may be thrown off to the surface of the roots. Cut off the roots that come within the trench, leaving the ends smooth and clear, let the tree stand until the ball of earth around it has become so firmly frozen that it may be handled without breaking. The holes to receive the trees should also be prepared and the richest parts of the earth that is thrown out should be laid in a compact pile, and covered with stalks or straw to prevent it from being frozen when wanted to fill in around the tree. To remove the tree the tap roots must be cut, leaving the ball of earth as large as can conveniently be handled, or according to the size of the tree. With a rope secured near the top, the tree may be pulled over upon the fore axle and wheels of a wagon, or a common slide (sled) and hauled to the place where it is to be planted. Care should be taken to bind the body of the tree with straw or corn stalks, where it comes in contact with the sled or axle of the wagon, so as not to bruise the bark.

Before the tree is set, its branches should be thinned and shortened, in proportion to the loss of the roots, in the act of removal. Care should be taken to cut and thin out the branches so as to leave a well balanced head, and to shorten them according to the size of the tree, from three to five feet from the stem and not according to the absurd practice of some by cutting everything close to the body of the tree, leaving it as bare as a bean-pole, without an eye or a bud to furnish a leaf. A tree to grow with certainty, when removed, requires a proper number of vigorous buds, which are as essential to its growth as due portion of roots.

THE DAIRY.

NEW PROCESS OF MAKING BUTTER.—Mr. D Minthorn, of Jefferson county, exhibited at the late State Fair at Watertown, New York, some samples of very fine butter, made by a process which he describes as follows:

"This sample of butter is made by my improved method, whereby every drop of water or buttermilk is taken out of it by solar evaporation. In this process, I claim to have so perfected butter making, that butter may be kept sweet for several days, without the rancid odor caused by the decomposition of water and butter milk, that pervades most of the butter at the present time.

"The following is an outline of my improved process: Firstly, in churning the cream, enough ice should be put into it occasionally, to make the butter come in crumbs; pour off the buttermilk and wash the butter several times in soft ice water, until there ceases to be any milky appearance. During the process of washing, should there be a solid lump of butter large enough to contain a cell of fluid, that lump should be crushed while in the water, and broken into a corresponding size with the other crumbs. Lastly, wash it in brine made of rock salt, saltpetre, soft water and ice; skim the crumbs out off the brine, with a skimmer; drain each skimmer full well, and spread the crumbs of butter on zinc plates, (in cold weather, wooden tables will do instead.) In very warm weather, the zinc plates should be set on ice water. While the crumbs are spread out thinly, place the butter in the middle of a milk room; open all the windows, and a current of air passing over it, will evaporate all the moisture in warm weather, if the room is suitably ventilated.

Care should be taken not to have any other moisture in the room, like water on the floor, or wet dairy furniture in the room. When the butter is perfectly dry, pack it down immediately; let there be no more working of it than is necessary to pack it solid in a jar or tub. This will secure unbroken the crystals of butter and its original flavor. As near as I can ascertain, there will not exceed one ounce of salt, to ten pounds of butter, by the process of brine salting. As a general thing, in making for hospitals, gouty invalids and sick persons, the salting process should be omitted altogether. Butter made in this way, (without salt,) if sealed in cans or jars, and placed in an atmosphere or chamber of bin-oxide of nitrogen, I believe will keep any practical number of years."

TO MAKE YELLOW BUTTER IN WINTER.—*Messrs. Editors*—For a churning of ten or twelve pounds of butter, take about three or four carrots, grate them fine, and press out the juice, then pour some hot water on them and press again. Take the juice thus obtained, and mix it with about a pint of new or sweet milk, and put in the cream and churn as usual.—*Country Gentleman.*

THE FLORIST.

THE ROSE.—This will always be regarded as the Queen of Flowers. In Eastern lands, and wherever civilization has at all made advances, to the rose has been assigned the first place among ornamental plants. Formerly there were but few varieties known in Europe and Western Asia, and those blossomed only in the spring. Within the memory of many, varieties of the Chinese Rose were brought from China, which had the quality of perpetual flowering. These have been hybridised with other Roses, and we have now at this time a class of Hardy Perpetual Roses, some of which may be found almost in constant bloom, and others blooming in Spring, in mid-Summer and in Autumn. The producing of these classes of Roses, has been deemed one of the greatest achievements of the professional florist. Most of them come from France, but there are several of the finest which have originated in this country. They vary in color from white to the deepest crimson. A half dozen can be selected that will always give satisfaction. *Augustine Mouchlet*, is a deep crimson. *Bouton Des Fleurs*, is a light crimson. *Caroline de Sausal*, is a delicate flesh color. *Clementine Seringe*, is a dark clouded rose. *Dr. Lindley*, bright red with a purplish centre. *Dutchess of Sutherland*, a pale rose. *Giant des Battailes*, a fiery crimson. *Marquis Boccella*, delicate rosy blush, nearly white. *Pomeln*, spotted or mottled. *White Portland*, white.

There are many Bourbon Roses, which with slight protection, will withstand, out doors, the cold of our winters. Of these we have had growing in our garden many years the *Hermosa*, which blooms profusely and constantly, in spring, summer and autumn. There are others of this class equally hardy.

The *Noisette* and *Tea* Roses are generally tender and require protection; but their bloom will repay all the care and attention paid to them.

There are varieties of the *Bengal Rose*, that will withstand our winters, treated as an annual. The wood should be cut down

in the fall within six inches of the ground, and a mound of earth placed over them, to be removed in a damp, cloudy day, in May, when there is no danger from frosts. They will send out strong shoots at once and be in blossom as soon as the *June roses*. Many of the *Bengal roses* are fine in shape, various in color, of most agreeable perfume, and their constant disposition to flower make them great favorites.

The *Moss Rose* is popular with the ladies. There is now a variety of them, and some which are called perpetual. Of these the *General Drouet* is best. The *Moss Rose* is most beautiful when in bud. After they have expanded, there are many other roses which excel them in fragrance and beauty. The *Princess Aidelaide* is one of the most prolific in buds, and of strong and rapid growth.

Climbing Roses are beautiful in suitable situations. Of this class there are few such as the Florist would desire. Some of the hybrids of the *Prairie Rose* are fine in appearance. Indeed, there can scarcely any thing be more gorgeous than a large plant of the *Queen of the Prairies*, *Mrs. Hovey*, the *Milledgeville*, or the *Baltimore Belle*, covered with flowers. Many of this class, however, lack fragrance—a great fault;—the *Baltimore Belle* is not, however, of this number, and evidently had for one of its parents a tea rose. The roses named, however, are hardy, except in the severest winters. They grow rapidly, and in flower command the admiration of all.

All the Roses we have mentioned, and numerous others, can be purchased here in the proper season, in the latter part of February, and afterwards through the spring, summer and fall, if wanted.

THE VERBENA.—This is one of the most lovely ornaments of the Flower Garden. A few years since, it was scarcely known in gardens, and there was only one variety. In 1827 a new variety was brought from *Buenos Ayres*, and since then others from different parts of the world. They are found to hybridise freely and the varieties are now

large and most beautiful. The original varieties make no show along side of their progeny. There is now in the Green House of M. Doyle & Co., near this city, in cultivation, some fifty varieties, embracing all colors,—crimson, scarlet, blood red, striped, white, &c., &c.

The cultivation of the Verbena is very simple. The ground should be in good order, kept moderately moist, and the plants exposed to the sun. These plants are purchased in pots, at very low prices, and a few of them will make a beautiful bed, which will furnish flowers the whole season.

HARDY HERBACEOUS FLOWERING PLANTS AND BULBOUS ROOTS.—There are many of these, a few of which planted about the yard or garden, will make a fine show, and as their roots are perennial, will give but little trouble, when once planted, in their cultivation. Among these we would note: The New England Aster; Daisy, double white and red; Dielytra Spectabilis, a new and splendid plant from China; American Cowslip; Day Lilies, copper colored, yellow and grass leaved; Lillies, white, Chinese and tiger; Scarlet Lychnis; Forget-me-not, the true and the common; Double Feverfew; Gladiolus, varieties; Rosea Achillae; Chinese and Siberian Bee Larkspur; Aconite; Peonies; Iris, &c. It is not supposed that these will all be required in a single garden or front grounds. Plants and flowers never look well if crowded. They require room to develop their growth and beauties. A single well established plant of the Dielytra, would command admiration. True taste will direct that plants be placed in suitable positions, where they can be seen, and where they can grow, and in soils suitable to them.

THE FLOWER GARDEN—ANNUALS.—The seeds of these cost but little and a few of the plants make a beautiful show. Young Misses, especially, should be induced to cultivate them. The beds should be prepared for them, and they should be taught how to sow the seeds and to take care of the plants. This employment would be health-

ful, create a fine taste, and they would learn much that would be useful to them in after time. Children, girls especially, love flowers. God has implanted this love in them. It is a love of the beautiful in Nature. The little girl, who cannot toddle about the room, will show at once her love for flowers when placed within her reach. And older persons love them. Indeed, there are few ladies, whenever the taste can be indulged, will ever cease to love flowers. The memory of them is associated with the early scenes of childhood, and there are some, perhaps now not regarded as the most beautiful, that will bring back scenes to the memory and associates and loves, that will come to us like the green oasis on the desert of life. We love to see the pink, the larkspur, the marigold, the sweet William, the lavatera, the poppy, the tassel flower, and some other flowers we could name, because of their connection with early associations, with a mother and sisters now resting beneath the clods of the valley. We say to the young, cultivate flowers.

SETTLING ACCOUNTS.—The close of the year should find every account squared up, and the farmer should be able to tell how he stands with the world, and how much he is worth. This is the only satisfactory way of prosecuting any business,—the only way by which system can be introduced into our farming operations. A multitude of unnecessary articles are purchased upon credit, for want of some such settlement of accounts as every December, should bring with it. Every man ought to know, once a year at least, what his pecuniary ability is, and ought not to purchase anything that he has no means to pay for.

Accounts of long standing often lead to unkind feelings between neighbors, and to expensive litigation. If they only run a year the items can be remembered by both parties, and a satisfactory settlement be made. To avoid these disputes and feuds, make annual settlements, and if you find a man that you cannot bring into the measure, give up business dealings with him. It is far better to give up trade with him than to run the risk of permanent alienation by unsettled accounts.

THE GARDENER.

It will soon be time to prepare for gardening. Every man knows that the ground should be put in good order, should be rich,—well manured with well rotted manure. When this is done, you should have fresh sound seed. Seed that has been handed down and carried about in boxes from year to year, though they may be had very cheap, pay poorly.

For a common garden, where you wish a few varieties of good vegetables,—you want Early Snap Beans; Pole Beans; Early and late Beets; Early and late Cabbage; a few Carrots; Celery; early and late Cucumbers; Cress; Egg Plant; varieties sugar Corn; early and late summer Lettuce; Cantaloupe; water melons; Onions; Parsley; Parsnips; Early and late Peas; Peppers; Early and late Radish; Salsify; Summer, autumn and winter Squash; Tomatoes; Early and fall and winter Turnips; Sage, Thyme, Coriander and other herbs. These make a good variety.

Persons who have not taken the pains to understand the fact, would be likely to be surprised at the great improvements which have been made within the last few years in vegetables. Seed Gardeners, who make it their business to raise seeds, are constantly perfecting their vegetables. Instead of suffering them to degenerate, they are continually improving them. An evidence of this can be seen in the seed Peas now in market—Early Emperor, Comstock's Dwarf, Champion of England, &c. Sweet Corn—Early, large and Mammoth; Cabbages—Wakefield, Battersea, Comstock's Flat Dutch, &c., &c.

FOOD FOR CHICKENS.—Mr. J. J. Goldsmith, of Morgan county, in a business letter, says: "I enclose you a sample of Dourah Corn. It will be appreciated by the poulterer in one season in the raising of young broods of chickens. This corn will accelerate their growth, and enable him to dispense with the wet and washy diet which destroys so many of them in their early stage." There is much good sense in these sentences.

THE CHINA CANE.—On the second day of the meeting of the National Agricultural Society at Washington, as we learn from the proceedings of the Society, Mr. J. D. BROWNE, of the Patent Office, was called upon for his "experience" in respect to this cane. This he gave with great readiness, tact and ability, and apparently to the general satisfaction of the numerous and intelligent members of the Society. Every sort of inquiry was made, and as promptly answered by Mr. Browne. We append the main points in relation to this addition to our cultivated plants, as elicited from the remarks and replies of that gentleman. He first observed that he could say no more than had been already published, but was willing to reply to any queries that might be put. As to the process of granulation of the sorghum he could not say much, but the proportion of crystallizable syrup depends on the dryness or moisture of the land on which the plant grows. It should be cut when in its milky state. When pressed it is deprived of its leaves and passed through rollers; and for crystallization the syrup should be raised a little above blood heat. In some cases the old-fashioned cider press had succeeded. Could not say how the free acid evolved would be best neutralized, but it is generally done by lime water. When a saccharate of lime is formed the fluid remains sweet. When the plant is cut at 45° or 50 of Fahrenheit it does not ferment, but keeps sweet, but if cut earlier in the season that when this temperature prevails it is apt to run into the acetous fermentation. Five cuttings of sorghum had been made in Florida last year. Sugar could sometimes be made from the dried stalks, but it is expensive. It contains saccharine matter as far North as the milky state can be had; in Massachusetts it has shown 23 per cent. of sugar, here in Washington only 14 per cent. It requires a dry soil and hot sun. Should not be planted so soon as Indian corn by several days. Will mature in less than a hundred days from sowing the seed. For sugar it flourishes best on poor soils, but for fattening animals on rich soils. For sugar

it should be harvested, or rather cut, late in the season, but for seed should be cut, and therefore planted, earlier. As a fodder crop Mr. B. considered it as making a revolution in cattle-food all through the Union. The seed can be produced at the price of oats, at the rate of fifty or sixty bushels to the acre, and can be converted into bread or chocolate, fed to fowls, &c. It will give 1,500 gallons of vinegar to the acre. The most northerly point of its growth is Minnesota. If the seed be cut off, it will sprout again and bear double, as last year in South Carolina. Did not think it good for producing quantity as much as a fine quality of milk. These answers were made to questions chiefly from Hon. Mr. Clemson, Prof. Nash, Mr. Waring, and others; and in the discussion Mr. Clemson and Dr. Antisell took prominent parts.

CHINESE SUGAR CANE.—We have distributed a good deal of this seed, which has gone into most parts of the State. There is no difficulty in raising the plant;—nor is there any uncertainty in the saccharine qualities of the plant. It yields a large quantity of juice, and 16 per cent. of saccharine matter. If failure results, it will only be, because mills are not at hand to express the juice from the plant and suitable kettles or pans to evaporate the syrup. Those persons who have seed, and intend to cultivate the plant, should take time by the forelock in making preparations to manufacture sugar and molasses. You must have a suitable mill and you must have suitable pans—one of the latter will answer;—two or three are better.

We refer the reader to the circular from the Patent Office and the communication from J. C. Orth, Esq., relative to this cane, which will be found in previous pages.

Don't crowd your Garden with shrubs, trees or vegetables. They must all have room—have air—have sun—or you will be disappointed in their growth. There are very few plants or vegetables that will grow well in the shade.

EDITORIAL NOTICES.

MICHIGAN DOUBLE PLOW.—A writer in the Country Gentleman says: "This is a valuable instrument. I have owned one since September, 1852, and used it sufficiently to wear out many points and one land side, and have this day replaced the worn parts with new, and commenced turning a stony piece of land, that, from causes needless to mention here, has been down too long—consequently June grass has taken the place of the clover, and now stands nine inches high in defiance of stock, and seemingly boasts of becoming lord supreme of the premises; but my Michigan plow, with three horses, is putting it in the bottom of a nine inch furrow, perfectly covered, and a good quantity of loose dirt about it, that will only need the harrow and gang plow to make it the most desirable preparation for wheat.

"With me nothing is equal to it for plowing corn stubble, and other material that should be put out of the way in preparing land properly for a crop."

ILLINOIS BEEF.—Next to the State of Ohio, Illinois has furnished the largest number of cattle for the New York market during the year 1856, of any State in the Union. She has sent and sold there 1,312 more head than New York, and 1,273 more than the State of Indiana. As for the other States, they are so far behind that it is no use to mention them.

ILLINOIS STOCK IMPORTING ASSOCIATION.—It will be seen by the proceedings of this Association following, that the plan of importing stock of various kinds, from Europe, is fairly under way. J. N. Brown, of Berlin, H. Jacoby, of Springfield, and H. C. Johns, of Decatur, have been selected as agents to visit Europe—E. Stevenson, of Jacksonville, as alternate. The money on the stock is to be paid to the Treasurer, and as soon as means are provided, we suppose, the agents will proceed in the performance of their duties.

We consider this an important movement, and the public will be anxious to learn the future proceedings of the Association.

BARLEY.—This is becoming one of the most profitable crops. The demand for it has increased rapidly within a few past years. The yields of barley depends upon circumstances—proper cultivation, suitable soil,—favorable or unfavorable season. Winter barley, if the season be favorable, produces a heavy crop. Last season, Messrs. Hennesly in this county, had a large field, which produced 40 bushels to the acre,—most of which they sold for \$2 per bushel. Barley, sown in the spring, with a favorable opening, generally produces a good crop. The soil should be tolerably light, dry and clean. From one and a half to two bushels of seed are sown to the acre. In Europe, a much larger amount of seed is used.

☞ The Ohio State Fair is to be held at Cincinnati on the 15th to 18th September. The State Board of Agriculture have determined to hold a trial of implements, mowers and reapers, at Hamilton, Butler county, on the 1st of July.

☞ The time to make maple sugar will soon be here, and we would just say that those who have the trees would be likely to make the article pay the present year. There is no prospect of a fall in the price of sugar and molasses, at least, until next autumn.

☞ We have heard it suggested that the fruit buds of the apple were in danger from the late cold weather. We think not. From the peculiar character of the fall the young wood matured well, as also did the fruit buds. The prospect now is that there will be a good crop of apples the coming season.

CANADA CLUB SPRING WHEAT.—This wheat, the last season, maintained its high reputation. It is equal in value to winter wheat, and produces large crops in a good season, in suitable grounds well prepared for it. Mr. Sykes, from whom we have purchased much of this wheat for seed, says that thirty and thirty-five bushels an acre have been raised by himself.

Officers of the Illinois Horticultural Society.

Dr. E. S. HULL, Alton, President.

O. B. GALUSHA, Lisbon, Cor. Secretary.

J. E. STARR, Alton, Recording Secretary.

F. K. PHOENIX, Bloomington, Assistant Rec. Secretary.

Dr. B. F. LONG, Alton, Treasurer.

VICE PRESIDENTS—2d District, R. N. Hunt, Napierville; 3d district, F. K. Phoenix, Bloomington; 4th district, L. Shaw, Fremont; 5th district, S. Francis, Springfield; 6th district, Wm. Stewart, Quincy; 7th district, Dr. Wm. Kyle, Paris; 8th district, J. P. Reynolds, Salem; 9th district, Allen Bainbridge, Jonesboro.

COMMITTEE AD INTERIM—Lewis Ellsworth, Napierville; F. K. Phoenix; A. R. Whitney, Franklin Grove; Wm. Stewart; Henry Oswald, Jonesboro; Tyler M. Whorter, Millersburg; A. Williams, Galesburg; J. E. Starr, E. S. Hull and A. S. Barry Alton.

STATE FAIRS.—The Ohio State Fair is to be held at Cincinnati, on the 15th to the 18th September next.

The Annual State Fair at St. Louis will commence on the 4th Monday of September. That is the time usually fixed upon for the Illinois State Fair.

☞ The Washington Star says: "Lieut. D. D. Porter, commanding United States store-ship Supply, writes to the War Department, on the 14th ult., from Smyrna, that he would sail for the United States on the 15th, (the next day,) and expected to reach the mouth of the Mississippi by the 20th of January, there to turn over his cargo of camels to an officer of the War Department, prepared with a steamer to receive them, and take them to Texas. Lieut. Porter had on board the Supply forty-four camels, six of which were presented to the Government by the Sultan, the remainder were purchased by Lieut. Porter."

☞ We have frequent calls for Gardeners, to be hired by the month or year. Gardeners in want of employment would do well to call on the Editor.

☞ The National Agricultural Society at their late meeting at Washington, resolved that they would have a national exhibition and trial of agricultural implements and machinery at Louisville, Ky., during the fall of 1857.

PRUNE YOUR GRAPES.—It is time this was done, and save enough cuttings to make new plants. These may be buried in the cellar until you want to set them out.

Illinois Stock Importing Association.

At a called meeting of the Illinois Stock Importing Association, held on the 2d inst., the following gentlemen were appointed agents to visit Europe and purchase stock for the Association: Hon. H. C. Johns, James N. Brown, and Henry Jacoby—Elliott Stevenson being appointed as alternate in the event of a vacancy.

A committee, consisting of E. B. Hitt, Stephen Dunlap, James D. Smith, Robert Pollock, Joseph Stockdale and Wm. Brown, appointed to report instructions to govern the agents in the selection, purchase and importation of stock for the Illinois Stock Importing Association, reported as follows:

1st. That about four-fifths of the capital stock, less its proportion of expenses, be invested in the purchase of cattle.

2d. That of cattle, not more than one-third males be purchased; the ages of cattle to be purchased to be left discretionary with agents, recommending in the main, the purchase of young stock, of good size, bone, constitution and carriage. The agents are directed to purchase a complete set of the English Herd Book, and to pay particular attention to pedigree and purity of blood.

3d. That about one-fifth of the capital stock of the association, less its proportion of expenses, be invested in horses, sheep and hogs.

4th. That the agents be directed to purchase one stallion of fox-hunting stock, (thorough-bred) say sixteen hands high, with good bone and muscle, and fine range of neck; and also to purchase one thorough-bred mare of same stock, with calf by her side or in foal.

5th. That the agents purchase at their discretion, from ten to twenty hogs, and from ten to twenty head of mutton sheep.

6th. That if agents should deem it best, they can purchase a fine roadster stallion adapted to all work, if to be had at a reasonable price.

7th. That the agents can use their discretion as to buying one or more jacks.

On motion of J. T. Smith,

Resolved, That upon the return of the agents to Illinois the association be called together and that the agents report there to the result of their agency.

Resolved, That the 3d article of the association be so amended as to read: The capital stock of the association shall not be less than twenty nor more than thirty thousand dollars.

On motion of Hon. H. C. Johns,

Resolved, That the agents appointed to select and purchase stock for this association shall receive no compensation for their services, but that their necessary and proper expenses shall be paid out of the funds of the association.

Resolved, That the stockholders pay to the treasurer, the balance due on the amount of their subscription by the 20th of April. That the treasurer and secretary be authorized to

confer with the Sangamon county Agricultural Society and procure the fair grounds for the accommodation of the stock on its arrival from Europe.

Resolved, That the papers friendly to the cause be respectfully invited to publish the proceedings of this meeting.

J. N. BROWN, Pres't.

G. W. CHATTERTON, Sec'y.

Trees---Climate.

It is a common observation, that our summers are becoming dryer and our streams smaller. Take the Cayahoga as an illustration. Fifty years ago, large barges, loaded with goods, went up and down that river; and one of the vessels engaged in "the battle of Lake Erie," when Perry "met the enemy, and they were ours," was built at Old Portage, six miles north of Albion, and floated down the lake." Now, in an ordinary stage of water, a canoe or skiff can hardly pass down that stream. Many a boat of fifty tons burden, has been built and loaded on the Tuscarawas, at New Portage, and sailed to New Orleans without breaking bulk. Now, that river hardly affords a supply of water, at New Portage, for the canal. The same may be said of our other streams. They are growing smaller and beautifully less. Our summers are growing dryer, and our winters colder.

The cause of all this is in the destruction of our forests. In the woods we find springs and streams of water, that indicate a permanent supply—clear of the woods and the dry up.

To show how this operates, let us suppose an electric cloud passing over a dry, level desert. So long as it meets no obstructing object it remains suspended. If, however, it meets a cloud in an opposite state of electricity, rain, hail and a tornado is the consequence. This illustrates the principle. Instead of meeting a cloud in an opposite state of electricity, suppose it meets a forest of trees sufficiently elevated to reach the cloud, the trees, being good conductors, act in a less degree to be sure, but in the same manner as an opposing non-electric cloud in drawing the electricity from the cloud to the earth, disturbing the vaporous particles of the cloud which are mingled and become drops of rain, which fell to the earth in showers.

This is the cause of the perpetual want of rain in portions of Egypt and South America. They are always in the vicinity of high mountains, covered with forests, which take the rain from clouds, forming those mighty rivers that flow from the mountains of Upper Egypt and South America.

If the destruction of our forests goes on, and none are set out to supply their place, we shall feel more and more the effects in the drought of summers, the diminution of our streams and coldness of our winter.—*Ohio Farmer*.

Attempts are being made to raise cotton in Australia. The quality of that which has already been grown, is like the variety known as the Sea Island, and bears the very highest price in the Liverpool markets.

NO GLOOM AT HOME.—Above all things there should be no gloom in the home. The shadows of dark discontent and wastefulness should never cross the threshold, throwing their large, black shades, like funeral palls over the happy young spirits gathered there. If you will, your home shall be heaven, and every inmate an angel there. If you will, you shall sit on a throne, and be the presiding household deity. O! faithful wife. What privileges, what treasures greater or purer than thine?

And let the husband strive to forget his cares, as he winds around the long narrow street, and beholds the soft light illuming his little parlor, spreading its precious beams on the red pave before it. He has been harrassed, perplexed, persecuted. He has borne with many a cruel word, and nerved himself up to an energy so desperate, that his frame and spirits are weakened and depressed. And now his limbs ache with weariness, his temples throb with the pain-heat, caused by too constant application. He scarcely knows how to meet his wife with a pleasant smile, or sit down cheerfully to their little meal, which she has provided with so much care.

But the door is opened—the overcoat thrown hastily off. A sweet, singing voice falls upon his ear, and the tones so soft and glad that Hope like a winged angel, flies right into his bosom and nestles against his heart.

A home where gloom is banished—presided over by one who has learned to rule her household. Oh! he is thrice consoled for all his trials. He cannot be unhappy.

That sweetest, best, dearest solace is his—a cheerful home. Do you wonder that the man is strengthened anew for to-morrow's cares?

Carrots are very good to produce yellow butter, but they should be fed to the cows. We hope this artificial coloring of butter will never be countenanced by the consumer. There is no difficulty in making butter of a good color in winter, provided the cows are properly fed and the cream kept and churned at the proper temperature.—*Louisville Journal.*

The spring of a watch weighs 015 of a grain; a pound of iron makes 50,000. The pound of steel costs 2d, a single spring 2d; so that 50,000 produces £416.

With a view to collect their webs for silk, 4,000 spiders were once obtained, but they soon killed each other. Manufactures and war never thrive together.

ROLLERS.—One cup of butter, two of sugar, one of milk, one teaspoonful of soda, three eggs, and flour sufficient to roll with ease. Fry in plenty of good lard.

JACKSONVILLE, ALTON AND ST. LOUIS RAILROAD.—By reference to our advertising columns it will be seen that the company are about ready to receive contracts for the grading, &c., of this road between Jacksonville and Monticello. They are now procuring the right of way, and expect to have the plans, profiles and specifications ready for examination by the 10th of next month. We are pleased to see that the managers of this road are determined to lose no time in its construction. Everything has been said and done necessary to give the enterprise a fair start, and we hope that the proper energy will not be wanting to push it through in the shortest possible space of time.—*Morgan Journal.*

PUBLISHING NEWSPAPERS.—Thurlow Weed, the veteran editor of the Albany Journal, recently said to a person who applied to him for advice with regard to starting a newspaper: "With all my experience, I should shudder at undertaking a new paper. It is as difficult of creation as a State." Who that has ever undertaken the work, has not realized the full truth of this remark?

COMMERCIAL.

Springfield Market.

OFFICE OF THE ILLINOIS FARMER,
February 1, 1857.

There is a demand for Wheat. Corn finds sales. Most produce articles are in good demand.

HOGS have hardly been sold at 6@6½ cts. Packers have closed their killing business for the season.

FLOUR—Extra white, \$6.50; superfine \$8; common \$5.

WHEAT—Sales at from 90 cts. to \$1.00 per bu.

CORN—Sales 25@30 cts. per bush.

OATS—Sales at 30@35 cts. per bush.

HIDES—Dry flint, 12½ cts. per lb.

BRAN—2 cts. per bush.

SHORTS—12½ cts. per bush.

CHICKENS—\$1.50 per doz.

TURKEYS—8@9 cts. per lb.

ONIONS—\$2.50 per bush.

POTATOES—\$1.50 per bush.

APPLES—\$1.25@32 per bush.

BUTTER—20@25 cts. per lb.

CHEESE—10 cts. per lb.

EGGS—20 cts. per doz.

MONEY MATTERS—ILLINOIS BANK PAPER.—The brokers in St. Louis and Chicago are taking the paper of all Banks in this State at par, except that of the Banks of Bushville, Stock Security at Danville and People's Bank at Carma. The paper of the three last named Banks has been sold in market at 10 per cent discount. At the time of writing this paragraph we have not learned that the discredited Banks are to be wound up. Under any circumstances we trust that they will be able to pay within five per cent. of their notes. The Banks which have before closed in this State have paid for their paper dollar for dollar.

St. Louis Market, Feb. 2.

Wheat—Sale of 96 bags at \$1.65, sacks returned.

Corn—Sales to-day, 143 bags white at 67c per bushel.

Oats—The supply is small. Sale to-day, 153 bags at 38c, in bags, and 70 bags at 37c. without bags.

Clover Seed—Sale of 39 bags at \$7 per bushel.

Whisky—Sale of 45 bbls at 28c per gallon.

Dried fruit—Sale of 241 bags peaches at \$2.90 per bushel.

Sugar—Sale of 50 hhd Muscovada at 10c per lb.

Provisions—No offerings and nothing doing at all.

Chicago Market, Feb. 3.

Flour—Superfine City, \$6.75.

Wheat—Rules dull. 90c for common spring; \$1.15 for white winter.

Corn—41@43c.

Oats—36c.

Hogs—Dressed 7¼@7c per lb.

Beef—Dressed, 5@5½c.

Beans—From New York, \$2.25@2.50 per bushel.

Great preparations are said to be making for the spring trade.

THE ILLINOIS FARMER.

SIMEON FRANCIS, EDITOR.

BAILHACHE & BAKER, PUBLISHERS.

Vol. 2.

MARCH, 1857.

No. 3.

Gardening.

The importance of a good garden to the farmer, can hardly be overrated. It furnishes his table with much desirable and healthy food. A day's labor in the garden will pay him better than a day devoted to any other work.

The garden, too, is important for the mechanic, the laborer or professional man. But few persons are so much employed that they cannot spend half an hour each day for the garden. Women and children promote their own health by occasionally doing light work in the garden. We need not dwell upon these facts; for they are too well known to be questioned.

Most of our soils in the West make good gardens. If there is too much clay in the soil it can be improved by well rotted manure. The soil should be rich, deep and dry. That which does not bake is best. If the garden has a southern aspect, you will obtain vegetables early—an object very desirable. A flat garden, take the season through, produces better than one on an inclined plane.

Having selected your ground for a garden have it well protected by fence from hogs, cattle, and even fowls. If in the country, many vegetables can be so grown that they can be cultivated by the horse and plough. Of these varieties are beets, parsnips, carrots, corn, potatoes, cabbages, beans, onions, turnips, radishes, lettuce, spinach, and many other smaller plants and vegetables, should be cultivated in beds. But most persons can judge in this case. Other articles, such as cucumbers, squashes and melons, must be cultivated in hills, and these planted at a good distance from each other. One fact

must always be borne in mind; to have vegetables in perfection, they must have room to grow, and have the benefit of sun and air. Without this is done, good vegetables cannot be grown.

The planting of garden seeds depends somewhat on the state of the season. For many seeds the blossoming of the apple indicates the proper time; but even then the young crop is often cut off by frosts and replanting is required. Dry weather is best for sowing, because the earth can be properly worked. Small light seeds require but little covering; while peas and beans will bear a heavy coat of earth. To be successful with the bean, it is not usually safe to plant them in this latitude before the 6th of May.

We here append a list of some of the leading vegetables.

ARTICHOKE.—This is grown for the flowers. It produces them the second year.—They are cooked as asparagus or eaten as salad, and are a luxury. The seed should be sown in the spring and the plants transplanted where they are to stand in the fall.

ASPARAGUS.—This should be sown in the spring and transplanted the next spring, on light ground, made very rich, ten inches apart.

BEANS—BUNCH.—The early Mohawk is the hardiest, its seed large, kidney shaped, brown and purpled marbled. Early China, excellent variety, both for snaps and shelled beans, green or dry. Early Yellow six weeks—quite early, and a good bearer.—Early Cluster—a small early variety. Early Valentine—very early, excellent for soups, remains a long time brittle and tender. Thousand-to-One—a great bearer, has round

fleshy pods. **Large White Kidney**—excellent green and dry; good for field culture. **White Cranberry**—the handsomest white bean—excellent green or dry, and good for field culture. Plant two inches apart in two and a-half feet drills.

BEANS—POLE.—Early Dutch case-knife—an early and abundant bearer. Horticultural Cranberry—has all the good qualities of the red cranberry and is larger. Large Lima—undoubtedly the best pole bean that grows. There are other varieties, but these here named are the best. The beans should be planted in hills, three feet apart, in good mellow earth, raised in hills.

BEEF.—The early Bassano and the Early Blood Turnip, are the best early beets; and the Long Blood the best for winter. The seed can be sown very early in warm, dry, deep soil.

CABBAGE—Of these there many are excellent varieties. Early York, Early Wakefield, Early Drumhead or Buttersea, furnish early varieties; and the Green Globe Savoy and Comstock's Premium Flat Dutch, are as good as any for winter. The Premium Flat Dutch is very certain to produce large and fine heads. The Red Dutch is good for pickling.

CARROTT.—Early Horn is the earliest variety, and the Long Orange is best for late table and for stock.

CAULIFLOWER.—The Early London is said to do well here; and sometimes other varieties succeed. Cultivated as cabbage.

CELERY.—There are very many varieties. The White Solid and the Superb Red are as good as any. To have Celery early, it should be sown in hot beds. For late crop sow in the spring, very shallow, in a seed bed. When plants are large enough, they should be transplanted into trenches, four feet apart, a foot wide and ten inches deep, made very rich with well rotted manure. The plants should be placed four inches apart. They should be earthed during their growth, holding the leaves close with the hand while the earth is thrown in, taking care that none of it falls in the centre of the plants.

CRESS.—This can be sown very thickly broadcast on beds, and once a fortnight.

CUCUMBER.—Early Russian is the earliest that grows. Early Frame good for table and pickling. Early Prickly, fine for pickling. Long London Green, an excellent and late variety, grows a foot in length; for pickling and for the table. Extra Long Green Turkey grows a foot and a half in length—fine and productive. Gherkin—very small, productive, good for pickling.

EGG PLANT.—Early Long Purple, the earliest and most productive. Fruit of superior quality. The plants should be started in a hot bed.

ENDIVE.—Green curled is the best variety. It can be made very crisp and tender. It is cultivated for salads. Plants should be thinned to a foot apart to blanch, the leaves must be tied up, and earth thrown about the roots. They will blanch in three weeks.

INDIAN CORN.—The three varieties of Sweet or Sugar Corn, known as the early Red Cob, Large Sweet, and Mammoth are all that is needed for table corn. The first should be planted in hills two and a half feet apart, the second the same distance, and the third three feet apart. Stowell's Evergreen is an excellent variety.

LEEKS.—Broad Scotch and London—The seed is sown very early. The plants can be transplanted, but if designed to remain in the seed beds they should be six inches apart. If transplanted they should be planted out deep, nearly up to the leaves. This blanches the neck and increases the size. The bed requires much water.

LETTUCE.—There are many varieties. Early Curled Siberia, and Drumhead and Ice head Lettuce, are among the best. For early, sow as soon as the ground is fit.

MELON, OR CANTALEUP.—The new varieties are of delicious flavor. Green Citron, Pine Apple, Nutmeg, Skillman's Nettled, Beechwood, are all excellent, and nearly or quite equal to pine apples. Plant late in spring in hills five or six feet apart; scatter a dozen seeds in a hill, and after they are out of danger from bugs, thin them to three

or four plants. The fruit is at perfection when the stem will cleave from it.

WATER MELON.—The water melon is highly estimated. Mountain Sweet, Mountain Sprout, Ice Cream, Long Island, and Spanish, are well known varieties. The new Orange, when in perfection, cannot be excelled. The Citron is only used for preserving.

MUSTARD.—The white is excellent, cultivated as salad, and is also a superior article for greens. Sow early in the spring.

NASTURTIUM.—The plant is ornamental, and the flower bud and green seed pods, preserved in vinegar, make a pickle equal to, if not better, than capers.

OKRA, OR GUMBO.—This plant is cultivated for its green seed pods, which are used in soups, or stewed and served like asparagus. The seeds when ripe, are sometimes used as coffee. Plant late in the spring in drills, and thin the plants to two feet apart.

ONIONS.—The seed should be sown as early as the ground is in order. It will answer from the middle of March to the middle of May, and when desired to obtain small bulbs for another season, the seed may be put into the ground even later. In Wethersfield, cultivated in beds, six pounds of seed are sown to the acre. When sown broadcast 2 1-2 pounds of seed will be sufficient for an acre. In cases where the land is new and clean, the seed can be sowed broadcast, when it should be raked or harrowed in with a light harrow, and the ground rolled afterwards. Large Red, New Yellow, or Silver Skin, and White Portugal are good varieties. The small onions of these varieties are good for early crops the next spring.

PARSLEY.—A well known savory herb. The seed should be soaked a few hours in warm water, and should be sowed early in the spring. The Double is dwarfish and most tender. For winter, the plants should be taken up and set out in a light cellar.

PARSNIP.—This vegetable requires the warmest and richest soil. The seed should be sowed in drills a foot or more apart, and the plants thinned to eight inches apart. Long Smooth is the best variety.

PEAS.—There are numerous varieties. They are so hardy that the seed can be planted in drills soon as the absence of frost will permit it. Comstock's early Dwarf is the earliest of the Dwarfs. It is a great bearer, growing only ten or twelve inches high in the richest soil. Early Emperor, a very early variety; Dwarf Blue Prussian grows three feet high and very strong. Pods large and long, containing eight blue peas. One of the best varieties and an excellent summer pea. Champion of England—universally admitted to be one of the richest and best flavored peas grown, and very productive. It is early, with large and long pods, producing a great many pods to a stem—one and a half feet high. Sow thickly in rows two feet apart. Large White Marrowfat; a standard variety, cultivated more for a summer crop than all others. This variety is so well known that it is needless to speak of its qualities. It is doubtless the best summer variety; it grows about five feet high. There are many fancy varieties of peas, of delicious flavor, but moderate bearers. The planting for an early crop should be made in the spring, as soon as the ground can be worked. The ground should be rich and warm. The seed should be planted about three inches deep.

PEPPERS.—The Bull Nose and Sweet Mountain are best for pickling. The Cherry and Cayenne for pepper sauce.

POTATOES.—Early Kidney, Early Neshannoc, Hall's early, are the best for an early crop. They can be planted as soon as the ground is in order.

RADISH.—Sow as early as the ground can be worked, and every two weeks for a succession. Early short top scarlet is a very early variety. Scarlet Turnip or Cherry is beautiful small radish. Long Salmon is a later and good variety. Yellow Turnip Radish does well in summer. Black Fall Radish is sown a little earlier than fall turnips, and the roots must be taken up and stored in the cellar for winter. To grow radishes well, they must have good ground, plenty of room, and grow quick.

RHUBARB. The principal seed sold at the

stores comes from Wyatt's Victoria and early Tobolsk. Few of the varieties seed well. The seed cannot be relied on to produce the same varieties as the parent plant; they may produce better or worse. Sow the seed early in a seed bed. In the fall throw away the plants that have shining or glossy leaves. Set out the others where you wish them to remain, three feet apart. The ground should be very rich. No garden should be without this plant. Where roots can be purchased of known varieties it would be well to get them.

SAGE.—The seed should be sown the latter part of May, and so thin that the plants should not be nearer than three inches of each other. When six inches high, they should be thinned to six inches apart. You can transplant them in the fall to permanent beds, if you choose; and they should be protected in winter by straw or litter.

SALSIFY, OR VEGETABLE OYSTER: Sow and cultivate as for carrots or parsnips. The roots should be taken up in the fall and kept in sand in the cellar. The Scornoze-ra is very similar to the Salsify, sometimes called Black Salsify, and its cultivation is the same. The leaves blanched make a good salad.

SEA KALE is a delicious vegetable. The seeds are sown in the spring and the plants are transplanted in the fall to a place where they are to stand. Late in the autumn they should be covered with a spadeful of sand first, and rich rotted manure afterwards. After the cutting is over, the manure and sand should be removed.

SPINACH: For an early spring crop, the seed should be sown very early.

SQUASHES: Early Yellow Bush, Early Bush Summer Crookneck, are excellent early varieties. Winter Crookneck, Autumnal Marrow and Lima Cocoanut, are excellent fall and winter varieties.

TOMATOES: Large Red, Large Yellow and Cherry, furnish all the varieties necessary. To get them early, they may be sown in pots placed in Northern window or in hot beds. Cover the early plants when there is danger from frosts.

TURNIPS: There are several varieties of early turnips for the garden. Spring Flat Dutch, Early Six Weeks, and Garden Stone are among the best.

We have named the principal vegetables and our readers can make such selections as they desire.

Illinois Stock Importing Association.

The agents of this company made arrangements to leave on the 5th instant, for England, for the purpose of purchasing, and importing into our State, the best stock that can be obtained in that country. The stock raisers of this State are determined not to be behind those of any other State in the good qualities of their stock. They intend that it shall be unnecessary for any citizen of this State, or of the States and Territories West of us, to go East or South to obtain fine stock.

The gentlemen employed as agents of the association, J. N. Brown, H. C. Johns, and H. Jacoby, understand stock business, and we anticipate confidently that their purchases and importation will be of the first character. We suppose the agents will be absent for at least three months; and they may not return until the latter part of June. The stock, when brought here, will probably be kept on the Fair Ground of the Sangamon Agricultural and Mechanical Association.

A communication suggesting to the association to purchase and introduce some milch breed stock, we give below. It is very certain that large sums of money are sent out of this State every year for butter, and cheese brought and consumed here. This ought not to be.

EDITOR OF THE ILLINOIS FARMER: I notice that the Illinois Association are fully organized, and have appointed agents to purchase stock in England. In the list of stock they are directed to purchase, there is nothing said of stock for the Dairy. We need a dairy stock in Illinois. The State loses much for want of Dairies. A great portion of the cheese consumed here, is imported from oth-

er States, while we have the best pasturage in the world.

There are some good milkers among the Durham and Devon cows, though not furnishing a large amount of milk, give milk of a rich quality. But neither of these breeds possess the milking qualities that we desire. We can occasionally find as good milkers among our native stock.

The Alderney cow is famed as a milker—does not give much milk, but she yields milk that has no rival for richness. A single cow has been known to give milk from which nineteen pounds of butter were made for several weeks in succession. This, of course, is a rare occurrence; the average is from six to nine pounds weekly, during the season, supposing the cow to be first-rate of her kind. This stock is small; generally of a white and sandy red, or fawn color; the latter being dispersed in large patches. They are remarkably gentle, and great favorites. The Ayershire is an improvement on the Alderney. It is said to be a cross between Alderney and Durham. The stock is a favorite with dairy-men. It is particularly valuable because when it ceases to be a profit for other purposes, it is good for beef, being readily fattened, and the meat yielded is highly nutritious, and of the best flavor.

It has been estimated that a good Ayershire cow will yield, for two or three months after calving, five gallons of milk daily; for the next three months, three gallons daily; and a gallon and a-half the following three months. This can be increased with rich feeding. This milk is calculated to afford 250 lbs. of butter annually, or 500 lbs of cheese. This estimate is for first-rate cows. The Ayershire is of good size, has something of the appearance of the Durham; the color usually varied, mingled with sandy red; horns crooked; eyes lively; fore-shoulders thin; straight body; capacious udder, and broad behind.

The Illinois Association would, I think, subserve the public interest by importing some of the Ayershire stock. We want milk stock as well as beef;—so, at least it appears to the writer.

FARMER.

Revenues, Tariffs, Taxation.

Editor Illinois Farmer:

The revenues of most commercial nations are derived chiefly from the foreign commodities they consume. Without denying the advantages of this system, aside from the protection of home interests, to which we will hereafter allude, they seem to consist in convenience, and the satisfactory unconsciousness with which large and extortionary sums are taken from you, and put into the dark and unknown abysses of the treasury. It may be tolerated under governments with which the people have nothing to do, but is a reproach to those who administer their own government, and have a lively and intelligent sense of their rights. Duties on foreign goods bear unequally and unjustly upon the different members of society; a poor man may from a variety of circumstances consume more of foreign goods than his richer neighbor, and as revenue is based upon property, the system becomes doubly hard upon those who have small means. To this it may be said that duties are discriminating, being levied mostly upon luxuries; but our people scarce recognize the distinction. Sugar is required for all, and a multitude of other articles that enter into common use, and if we descend to a silk dress, we shall be disposed to let it pass, as it is deemed a requisite to good society, in the improved or unimproved usage of the times.

If this reasoning be true, their property escapes the taxation that justly belongs to it, and the Astors and Sears' may contribute as little to sustain the general government (not the real authorities,) as tens of thousands of other families in the land. But, as before hinted, this system of revenue suits an ignorant people; not we should trust so applicable to our want of intelligence as to our thoughtlessness and unbounded prosperity; but year by year becoming more and more a reproach. Instituted in a dark age, to fill the coffers of corrupt princes, it should now be scrutinized with untiring vigilance and curtailed wherever possible.

Protection is considered necessary in new countries to develop their resources, and for protection alone would we advocate a tariff, until wealth, means, and labor get a controlling power, when we would dispense with duties altogether, and level custom houses to the ground. Under a system of direct taxation, suddenly imposed, the rich would find themselves very much involved, and the poor very much relieved. The former living where his property had con-

tributed little to the national treasury, and not feeling any immediate thankfulness at the prosperity of his lot, would be apt to rail at the change, declare it unequal and unjust; whereas, the latter would be more alive to the greater cheapness with which he could provide for his family, and be content to look closely to the expenditure of the government, that required him to pay, in so tangible a manner, towards its support. Governments under direct taxation would be administered more economically; the people would require more accountability on the part of their rulers. The disbursements necessary to keep up and sustain custom houses, which must already have cost this nation some fifty millions of dollars, would not be needed in the simple mode of assessment by direct taxation. Revenue cutters, are the outside appliances to prevent smuggling, and protect this interest are onerous, complicated and corrupt, only perhaps equalled by the corruption that reigns within. No other department of our government is, no other can be framed, so utterly undemocratic; that has so little direct contact or accountability with the people. It stands, with its pile of marble or stone, a huge colossus, not like the one at Rhodes, which had an heathen grandeur in it, or an Eastern Pagoda, whose gods look down with derision upon the simple ones around. The entry of foreign goods through the custom house involves a delay to the ship of one week, that is to say, five days are allowed for the entries, which, with an intervening Sunday, may be construed into a week, before the hatches are open, "bulk is broken," the ship begins to discharge. Now, can the whole nation stand this week's suspension of its trade, when without this system we could discharge our goods whenever we choose, by night or by day, at any place, without the supervision of any officer or his keys, or being subjected to any control not known to the ordinary pursuits of life? Again, this system infringes upon the laws of God's providence, not within the line of comment by the mere political economist, that assigns differences of soils, climates, and productions to the different nations of the earth, restraining each from the other, placing barriers between them, and breaking up those mutual relationships that we may suppose these differences were instituted to promote. That there is no sudden or immediate relief to this condition of things we know, while the European world and those nations that we have the most intercourse with continue their tariffs and protection laws, we

must continue our's as a countervailing effect. But let demand and supply be infringed upon as little as possible, and trade will run into even channels. Place the fewer impediments in the way and more will engage in trade, fewer will overdo, because monopolies will be removed. We have said that the rich would feel this change, and the circumstance would have a beneficial effect in confining property within simpler limits, in making it more productive, for who would want unemployed land or capital? and in the long run we are not so sure the general benefit even to the wealthy, would not more than compensate for their apparently heavy individual tax.

Laziness and improvidence, some would say, should not be exempt from taxation, but they are their own reward, and a poll tax if necessary, might be devised to meet their case, but the enhanced rent of the houses they live in, the grounds they occupy, and here the rich reap an advantage, will always ensure for this class their share of the public burden. B.

Chinese Sugar Cane.

We have noticed the publications of individuals who have made experiments with the Chinese Sugar Cane, with a good deal of attention, and so far we have not seen the first thing to discourage the hope that molasses and sugar can be made from this cane. No regular attempts seem to have been made for making sugar, but in many instances the molasses has granulated, and those who understand the subject best express the utmost confidence that good sugar, as we know good molasses, can be made from the plant.

We have now before us the American Agriculturist, which contains several articles on the subject of this cane. We select two of them:

COLD SPRING HARBOR, JAN. 21, '57.

To the Editor of the Am. Agriculturist:

Last year I found it produced a very sweet juice, and I saved enough seed from ten plants to put in half an acre. One half I fed out, and found horses, pigs and cattle, eat it with avidity, though when ripe, owing to the flinty skin, the latter could not eat it. The balance, after breaking the joints with a mallet, I passed once through a rude self-constructed pressing apparatus, and it produced, when boiled down, seventy gallons of good syrup or molasses, which I am

daily using in my family. I am so well satisfied with my past year's experience, that another year I shall plant several acres, and with a good machine that will press all the juice, I have no doubt but I can produce eight to ten barrels to the acre, at a cost not exceeding twenty-five cents the gallon. I see no reason why, in a few years, every farmer who can raise Indian corn should not raise his own molasses, as the same climate is favorable to both, and I have little doubt but it will be the case. I have omitted mentioning that when cut down for fodder, at about four feet high, it sprouts again and produces a good second crop.

J. D. HEWLETT.

KINGSVILLE, Ohio, Jan. 1, 1857.

To the Editor of the Am. Agriculturist:

Last spring we received a paper of the Chinese Sugar Cane Seed from the Patent Office, by Hon. J. R. Giddings, which we planted in four rows, four stalks in a hill, eleven hills in a row. We cut it up about the 17th of October, stripped the leaves from the stalks, crushed it, and cut it into short pieces, and boiled it in water. The liquid was then strained through a coarse cloth, boiled down to molasses, and to our great surprise we found that we had made two gallons of quite palatable molasses. I do not think we expressed all the juice that we might if we had been more experienced in making it. We think of raising a larger quantity another year. The cattle of Mr. I. H. must have had quite unusual tastes if they would not eat this nutritious food, for our's ate it both before and after it was boiled—in fact, they would leave good pasture, and eat it up before leaving it.

So far the matter is settled. Our farmers can make their own molasses. This is a fixed fact. In regard to the sugar, another year's experience, will render that also a fixed fact. On this latter subject we here give a communication from the Chicago Democratic Press:

PORTAGE CITY, Wis., Feb. 16, 1857.

To the Editors of the Dem. Press:

Feeling a lively interest in the success of the Chinese sugar cane, I willingly give my suggestion (opinion I could scarcely call it,) to be experimented on by those having syrup on hand. Use a table-spoonful of bi-sulphate of lime to each gallon of syrup, stirring them well together before boiling the syrup. Bi-sulphite of lime has been much used of late years in Louisiana, has several virtues, but is generally most effi-

ent when used with frosted cane, as it corrects the acidity of that kind of cane, and allows a greater quantity of syrup to granulate that would otherwise be sent to market as molasses. If my reading and conversation with southern chemists be rightly remembered, this salt, being solvent, becomes a nucleus for a grain; converting syrup into a solid, and, as above stated, corrects all acidity.

Let not those who fail to granulate their syrup now be at all discouraged, as that process should be done at the time of grinding, as juice, after expression, soon becomes fermented; and to prevent this is the secret of sugar making. Should it ferment much, then molasses alone is hoped for.

Should this suggestion of trying bi-sulphite of lime meet the eye of a chemist, it would be well for him to make a few gallons for the use of those who wish to experiment. This is known as "Melsen's process," fully detailed, I think, in Dr. Ure's work on the Arts and Manufactures. I would further suggest that a communication be addressed to Prof. Riddle, sen., of the Louisiana University, New Orleans, who has much experience in analyzing the bi-sulphite of lime made by the various makers in Louisiana. It sells for \$7 a barrel.

Unlike many, it is not to bring Louisiana sugar into disuse that I feel an interest in the Chinese cane. I am satisfied that if it will granulate, that Louisiana will be the point where it will flourish in perfection, if corn growth be taken as an index. It would become the interest of the planter to use it instead of that now in use. Having the expensive sugar works already built, it could be made cheaper; and, not to be lost sight of, less negro labor would be required; white folks could grind and granulate in their houses. And if ever slavery is to be discontinued amongst us, it will be when white labor is substituted and becomes more economical than dark. The result of the question, "Can Chinese cane juice granulate?" is fraught with much interest, and worthy the thought of all who can throw light upon it.

Every farmer who can, should provide himself with a small quantity of seed for planting the coming spring.

During the period included between the years 1847 and 1856, 1,779 persons sentenced to State prison have been pardoned by the Governor, 409 of whom have been restored to citizenship.

New Orchards.

Editor Illinois Farmer:

I have been at work some five years on my farm, which, when I took hold of it, was raw prairie. Being poor and short handed, it required all my time to get it fenced, plowed, and the buildings necessary, (and they are very common ones,) put up to make my family comfortable. For two years I had no time to spend in making such improvements as render a country residence beautiful. I mean I had no time to fix up yards, and lay out my garden grounds as I had always intended to do, and plant trees and shrubbery so as to make the place look like a home. But I have prospered on a small scale, and I now have more time to spend in regulating these matters, not much time for this, however, but as I tell my wife, I am determined to take time. And now I want a little advice from you. I want you should tell me what I want in the way of garden fruit, trees and shrubbery, just a few, and how many apple trees I ought to have for an orchard for a family; and I want you also to tell me something about the kinds and quantities of seeds I want for my vegetable garden. Here I will just say to you, that more than a year ago a traveling agent induced me to buy some apple trees of him, which I planted out; but when the fall came there was hardly one of them alive; and the trees themselves when I got them appeared to be stunted, ugly and altogether unthrifty. I do not desire to buy any more trees from pedlars, who bring them from New York, Canada and elsewhere.

A.

Our correspondent has imposed on us a hard duty; but to oblige him, and perhaps benefit others, we will append some hints to his communication. We like to see the dwellings of a farm, especially in this prairie country, on a somewhat elevated piece of ground, which will be dry at all seasons. We care not if this is near or at some distance from the road. A pleasant residence cannot be had where the ground is not high, dry and where a good cellar cannot be had. We do not like to see a few rods square of ground, "pailed in" in front of a country

dwelling. There should be some ten or a dozen acres at least about the dwelling, the front portion of which should be in grass, relieved at little distances with clumps of shrubbery (roses, snow balls, lilacks, &c.,) and trees of smaller growth, such as the Mountain Ash, evergreens, and the like. On either side there can be peach, plum, quince, cherry, pear trees; grapes, and on well arranged plats, a flower bed, if you like. In the rear, a kitchen garden, and a good space devoted to it. There can be no question that a proper use of vegetables and fruit are among the securities for health. The vegetables of the present day, where good seed is procured, are far better than those produced by the ordinary, degenerated and mixed seeds, usually produced in our gardens. We venture to say that farmers would be the gainers if they would throw away most of their old seeds and purchase fresh and new and improved varieties. It would be a difficult matter to give such a list of seeds as you would need for a vegetable garden. Tastes differ; but we suppose, like most people, you want early vegetables. Then you must have early Silesia lettuce, early radishes, early onions, (these must be grown from setts,) early beets, early beans, early cabbages, early corn, early squashes, early potatoes, early peas. You want all these early varieties. The tomatoe can only be made early by forcing the growth of plants in a hot bed, afterwards to be transplanted into the garden. You want also the same kinds of vegetables when the season for these early varieties has passed. You can procure the seeds of later beets, beans, cabbages, &c. To do this, it would be convenient if you had a small work on gardening, which usually can be procured at book stores at the cost of 25 cts. There is no necessity of failing to have excellent garden vegetables, in ordinary seasons from the time the early arrive at maturity until frost destroys vegetation, and then to be able to put away in your cellars or in other secure places, a variety of delicious vegetables which would last you until spring.

We find that our correspondent has cut

out a deal of work for us; too much to be disposed of in a few paragraphs. We refer him to the article on gardening which precedes this; and we would say to him, that if he desires good fruit trees, varieties that can be depended on, accustomed to our soil and climate, which can be had fresh from the nurseries; he can do so by sending to the nurseries in his neighborhood, or by applying to the Editor of this paper; who will give him cheerfully all the information he requires. Fifty apple trees is a small orchard for any farmer. Good fruit always pays well.

Law Intelligence.

Important Decision of the Supreme Court.— Cattle must be kept off the Railroad Tracks.

The following account of a case recently decided in the Supreme Court, is from the proof sheets of the forthcoming seventeenth volume of Illinois Reports.

The Illinois Central Railroad Company, Plaintiff, in Error, vs. Henry Reed, Plaintiff in Error.

ERROR TO LASALLE COUNTY COURT.

Trespass *vi et armis*, is not the proper form of action for injuries, resulting from the negligence of the servants of a corporation; trespass on the case, is the proper action, of which a justice of the peace has not jurisdiction.

Animals wandering upon the track of an unenclosed railroad are strictly trespassers, and the company is not liable for their destruction, unless its servants are guilty of willful negligence, evincing reckless misconduct.

The burden of proof is on the plaintiff, to show negligence. The mere fact that an animal was killed, will not render the company liable.

In order to show the manner in which railroad trains are conducted, witnesses acquainted with their management, must be examined.

This was an action of a trespass begun before a justice of the peace, for killing a steer, by the train of the defendant running upon the railroad in LaSalle county. Judgment was rendered for the plaintiff below, for twenty-five dollars and costs. The case was taken by appeal to the LaSalle county court. The case was submitted to H. G. Cotton, Judge of the county court, without the intervention of a jury, who gave judgment for Reed for thirty dollars and costs. The railroad company thereupon brought the case to the Supreme Court.

There was but one witness examined who testified that he was plowing on the 5th of May, 1855, when he heard a freight train coming on the Illinois Central Railroad; stopped to look at it, and saw a lot of cattle on the track, all of which left the track, except one steer, who ran before the train about twelve paces, when the locomotive caught him and shoved him along the track and then upon one side, both of his hinder legs were broken, and his forelegs severely wounded. The steer died of his wounds.

That the value of the steer was thirty dollars.

The counsel for defendant maintained that the proper form of action was not trespass, *vi et armis*, but trespass on the case for the negligence of the servants of the Company. This was not the case in this cause. No negligence had been complained of on the part of the company or its attaches. If those put in charge of the train, in conducting it, behaved carelessly, and thereby caused the injury, such carelessness is the direct and immediate cause of the injury, for which they might be made liable in trespass, but the employer whose act was at the most, but the remote cause of the injury, could only be made liable in an action on the case.

But waiving this question as to the form of the action, the evidence does not show such a case of negligence in those having the charge of the train, so as to render the company liable for the injury sustained. The rule laid down by this court in the case of *The Chicago and Mississippi Railroad Company vs. Patchin*, 16 Ill. 198, must control this case. It had been previously settled, that the company was not bound to fence the road against, or to prevent the intrusion of stock upon it. In this case it was settled that animals wandering upon the track of an unenclosed railroad were strictly trespassers, and that the company was not liable for their loss while on the track, unless its employees were guilty of willful or wanton injury, or of gross negligence, evincing reckless or willful misconduct.

The only point which the evidence settles is the killing of the steer. There is nothing testified to; showing the least want of care, or that, by the greatest possible exertions, the accident could have been prevented, much less, is there that gross and culpable negligence or wanton recklessness shown, which the law requires, in order to render the company liable for the loss of the steer. The burden of proof is on the plaintiff, and it is for him to show by facts and circumstances, and by those acquainted with the management of trains, who could speak understandingly on the subject, that it was practicable and easy to have avoided the collision, and that in not doing so, those in charge of the train, were guilty of that measure of carelessness, or willful misconduct, which the law requires, to establish the liability of the defendant below. The defendant's train was rightfully on the track, and could go no where else. The plaintiff's steer was there wrongfully. He was wrongfully allowed to be in the most dangerous place which could be found, and where there was every reason to suppose he would be killed. He being there, was not only dangerous to the steer, but to the property of the company and the lives of those upon the train, and courts and juries should not strain the law to encourage the owners of stock to allow it to run into danger, which exposes not only their own property, but the lives and property of others.

The judgment must be reversed, and the cause and the cause remanded. *Judgment reversed.*

THE FARM.

French and English Farming.

The last published number of the Journal of the Royal Agricultural Society contains a few particulars concerning French and English farming, which present the different results obtaining in the two countries in a peculiarly striking light. To raise corn, the immediate food of man, has for years been the prime object of the cultivator on the other side of the Channel, and with a bad effect on the land, because he has not sufficiently cared for keeping up the fertility of the soil. The Englishmen, on the other hand, by devoting a considerable area to green crops and the raising of cattle, not only maintains the fertility of his fields, but produces more wheat from a smaller surface. Taking England alone, a country not larger than one-fourth of France, the produce is 38,000,000 hectolitres of wheat, 16,000,000 of barley, 34,000,000 of oats. France produces 75,000,000 hectolitres of wheat, and 100,000,000 of oats and other kinds of grain. The difference is remarkable; and the writer who is a Frenchman, states that, "taking all products into account, animal and vegetable, it appears that the produce of England per hectare, nearly doubles that of France." The French farmer contents himself with an average of seventeen bushels of wheat from his hectare, the English farmer reaps his sixty-five or seventy bushels from the same extent of land. In the United Kingdom there are 35,000,000 sheep; and France has an equal number; but while on this side the Channel there are 31,000,000 hectares available for feeding, on the other there are 53,000,000. The sheep in France ought therefore to number 60,000,000, to be in the same proportion to the land as in the United Kingdom. And if the comparison be made with England alone, the difference is yet more surprising. In England, on 15,000,000 hectares, 30,000,000 sheep are fed; three times as many as in France. And this is not all; the weight of an English sheep is twice that of a French sheep; so that an English farm on an equal surface gives six times as much mutton as a French farm. The result is not less favorable to English skill and judgment, if we look at cattle. France possesses 10,000,000 head of cattle, England 8,000,000 and yet more meat is produced every year in England than in France. Of the 4,000,000 head of cattle killed every year by our allies, 2,000,000 are calves, weighing about seventy pound each. And

then your Frenchmen must have labor out of his cattle, as well as milk and meat; so he keeps his ox till it is too old, and kills it when the meat is scanty and poor in quality. The Englishman is content with milk and meat, and kills the animals just when they weigh heaviest. Hence it is that while the 4,000,000 head of cattle killed yearly in France average no more than 100 kilogrammes per head, the 2,000,000 killed in the United Kingdom average 250 kilogrammes per head. Two million cattle on this side of the Channel give 100,000,000 kilogrammes more of meat than 4,000,000 on the other side. In other words: "with 8,000,000 head of cattle and 30,000,000 hectares of land, British agriculture produces 500,000,000 kilogrammes of meat; while France with 10,000,000 head of cattle, and 53,000,000 hectares of land, produces only 400,000,000 kilogrammes."—[Chambers' Journal.

Profitable Farming.

A gentleman farmer, we do not mean one who puts on airs, or farms at the expense of money made in other callings, but an earnest, self-reliant, enterprising man, one who farms for profit and wins, wrote us last November, as below:

"My carrot crop has just been harvested. I employed a practical surveyor to measure off just one half acre on the west side of the field you saw, and the carrots were all sold by the pound, and I was satisfied of the weight, and found it to be 21,250 pounds. This lot was entered for the premium offered by our Society. They required all to be weighed, and thinking it less trouble I sold them on the lot for one-half cent per pound, and received \$106,25 in cash for the half acre, besides nearly enough tops to feed to pay the harvesting. Nothing more was done after you saw them than harvesting and loading teams on the lot. I am sorry that I did not thin one row so as to compare the difference. If any one had told me two years ago that a crop would grow like this, standing, as they did, about ten to the foot in the row, I should not have believed it; but I am now convinced, after two trials."

We had visited this gentleman a few days before. The carrots of which he speaks were exceedingly thick-rowed, not more than twelve to fourteen inches apart, and the carrots a real thicket in each row; two or three to an inch, as it appeared to us. His doctrine was, that they must be so thick in order to shade the ground. They served, as he thought, as a sort of mulching to keep the ground moist. We thought

otherwise, that they should be thinned to one in three or four inches, and we are obstinate enough to think so still; though it must be confessed that he had a great crop without thinning.

The same gentleman wrote: "My onions harvested 900 bushels of a first-rate article, and sold for seventy-five cents a bushel."

The carrots on the west side of his field were no better, as we could see, than those on the east side. The value of the crop on the whole acre must have been \$212 55 and the two acres of onions brought him, at seventy-five cents per bushel, \$675, making on the two acres of onions and one of carrots, \$887 55.

The cost of cultivating was undoubtedly more than is requisite for small crops; but after hearing his statement, knowing him as we do to be a most reliable man, we think the increased cost was little compared with the increase of crops. The net profit was equal to that of some large farms slatternly cultivated. Perhaps we might say a thousand times greater, for we doubt whether there is much next profit in slatternly farming.—[Plough, Loom and Anvil.

From the Country Gentleman.

Deep and Shallow Plowing.

So various are the opinions on this subject, as expressed in the manuals of culture, and the weekly publications, that positive authority can be found for either; leaving the anxious inquirer for truth in the condition of "the ass in the fable, standing between two stacks of hay." So far as my own observation has extended, I have never known any injury to accrue from sinking the plow to a generous depth, provided a corresponding application of fertilizing material was made to the land at the same time, but on the contrary, I have often known the labor applied to land almost entirely sacrificed for the want of proper attention to depth in plowing.

There is scarcely any plant cultivated, the roots and fibres of which will not sink to the depth of 12 inches or more, if the soil is in condition to admit of such penetration. Take for instance, Indian corn, a plant more extensively grown than any other; what depth should the land be stirred for the most advantageous growth of this crop? Should it be six or twelve inches? I say twelve inches; and whosoever attempts to operate on less than this, "takes in at the spiggot to let out at the bung." I know that there are those who say that their lands

will not admit of being plowed so deep, and that they have raised as fine crops as any of their neighbors, and have never suffered a plow to sink on their fields to a greater depth than six inches; and that they would not thank a man to plow deeper than this. I have heard this said by gentlemen who stood high in the world, whose opinions were referred to as authority wherever they were known, chiefly because of the authoritative manner in which they were uttered. The truth is, the time is gone by when any man's ipse dixit is to be taken for law in the culture of the land or in relation to the rights of man. Facts, established by repeated experiments, in accordance with scientific demonstration, can only be relied on in the management of the farm, or in the government of the State. W.

Experiments in Corn Planting.

The following experiments were made by the Hon. Adam Beatty, of Kentucky, a few years since, in order to ascertain the advantages or disadvantages of planting corn more closely than usual:

"On one side of the field I laid off, in an oblong square, four acres, each acre lying equally well, and of equal fertility. It was laid off for planting the long way, with great accuracy, three and a half feet from centre to centre of each furrow, and then checked off the other way in rows as follows: The first acre four feet a-part; the second acre three and a half feet a-part; the third acre three feet a-part; and the fourth acre two and a half feet apart. The whole was planted the same day; and in due time the three first acres were thinned out to three stalks in the hill, and the fourth acre to two stalks in a hill. The number of stalks to an acre (if none had been missing,) would have been as follows:

No. 1, 3½ by 4 feet.....	9,355
No. 2, 3½ by 3½ feet.....	10,668
No. 3, 3½ by 3 ".....	12,447
No. 4, 3½ by 2½ " (2 in a hill).....	9,956

Upon gathering and accurately measuring each acre separately, I found the product as follows: No. 1, 68 bushels; No. 2, 69; No. 3, 69; No. 4, 77½ bushels.

The acre planted three and a half by two and a half feet, and only two stalks to a hill, produced eight and a half bushels more than either of the others, being decidedly the best. The hills, however, were too close one way to be plowed with convenience. Planted three feet each way, would be better."

THE GRAZIER.

Fattening Animals.

The following hints on the subject, from the Albany Cultivator will be found of interest:

Substances in which the nutriment is much concentrated should be fed with care. There is danger, especially when the animal is first put to feed, that more may be eaten at once than the digestive organs can manage. Meal of Indian corn is highly nutritive, and when properly fed, causes animals to fatten faster than almost any other food. They will not, however, bear to be exclusively kept on this article for any length of time. Meal made from the heaviest varieties of corn, especially that grown in the northern and eastern States, is quite too strong food for cattle, sheep, or horses to be full-fed upon. Hence one of the advantages of having the cob ground with the corn, by which the nutriment is diffused through a greater bulk, lays lighter on the stomach, and is more thoroughly digested. The effect of pure corn meal on animals, we suppose to be similar to that sometimes produced on our own species by the use of fine wheaten flour—the subject becomes dyspeptic, and is forced to use bread which has the bran mixed with the flour. The mixture of the cob with the corn answers the purpose of bran—the health of the animal is preserved, and the process of digestion goes on uninterruptedly. In fact, the advantages of grinding the cob and corn together for feeding cattle may be said to be well established. For hogs, the benefit of the cob is not, we think, so evident; those animals appearing to be better adapted to taking their nourishment in a more concentrated form than those which ruminant or chew their cud. Yet food sufficiently bulky to effect the distension of the bowels is necessary for hogs.

Hay or straw cut into lengths so short as to be readily mixed with meal, answers a good purpose in rendering the meal easy of digestion, and in enabling the animal to extract all the nutriment from it.

The conclusion arrived at from the result of a series of experiments, instituted by the Highland Society of Scotland a few years ago, was, that the superiority of cooked over uncooked food for cattle is but trifling, and not sufficient to balance the cost; but for hogs, the extra cost of preparation was repaid.

The appetite and health of the animals are promoted by giving a variety of food. This fact has led to the preparations for fat-

tening stock. For fattening hogs we have used, with advantages, the following mixtures: 1. Two parts potatoes and two parts pumpkins; boil together until they can be easily mashed fine, then add one part meal, stirring and mixing intimately together. The heat of the potatoes and pumpkins will scald or cook the meal, and when cold, the mixture will be a stiff pudding. 2. Two parts of potatoes and two of ripe palatable apples (either from corn, barley, or oats and peas, allowing the same weights,) and mix together while the potatoes and apples are hot.

Hogs are more fond of food when it is slightly fermented (hot becoming pungently sour,) and they appear to fatten faster if it is given to them in this state. We have never seen hogs fatten faster than when fed on these mixtures, with occasionally a little dairy slop, and we have always found the pork solid and of good quality."

From the Country Gentleman.

How to destroy Lice on Calves.

It will often happen, in spite of one's best efforts, that a calf will become lousy; soon he will communicate the vermin to all in the flock, and they will increase with astonishing and alarming rapidity. It is not always an easy matter to rid the youthful bovines of these pests, and many will contract divers other ailments in consequence, which too often prove fatal. Some of the books recommend one remedy and some another—most of which either prove unsatisfactory or troublesome in application. A simple, but invariably effectual remedy is used in this section, which may not be known to the majority of your cattle-breeding readers. It is smoking them with tobacco—one of the very few good purposes which the vile weed may be made to subserve. We use a pipe made after this fashion: the bowl is a round piece of wood fifteen inches in length by three and a half inches thick, with an inch and a quarter hole, bored through it longitudinally. A hollow mouth-piece should be made to fit into the bowl, and also a pipe somewhat sharpened at the point, to carry off the smoke, each about six inches in length. With the latter snugly fitted into its place, fill up the bowl with the cheapest smoking tobacco, put in a coal of fire at the top, adjust the mouth-piece, and you are prepared to blow destruction to millions of lice. The smoke is easily blown through the creature's hair to the skin; but to facilitate the operation a thick blanket should be thrown

over the calf, leaving the head uncovered, when the smoke will search out and destroy every louse. Five to eight minutes smoking will be sufficient. The nits will survive, but a second smoking will do the business for that generation also.

Smoking affects the lice as it does the human creature—it kills them off. The same remedy will be found effectual for ridding colts of the nuisance. C. A.

Little Valley, N. Y., Jan. 12, 1857.

To Fatten Horses.

Every horseman knows that a horse looks twenty per cent better if fattened in a short time, than if several months are employed in the process. I don't believe in loading a horse down with fat—they do better in medium condition. A horse if not very thin, can be put in fine condition in three weeks. But a narrow-headed, yardnecked, narrow-breasted, lighquartered animal, if he has never been fat will give you a two or three months' task, and will look the better for all the flesh you may put on him.

To fatten a poor horse quickly is no easy task. It is to be done by a variety of the best feed, and with close attention in giving it. Many persons feed sufficiently liberal, and yet their horses are low in flesh, simply because of the careless and irregular manner in which it is given out.—When I wish to fatten a poor horse, I put his stable in a clean and neat condition, and commence by giving him small feeds of corn or oats, (which ever he takes best,) every two hours, from the time of rising in the morning till I retire at night—say six or eight feeds a day—taking care so to feed that he will always eat with a relish and be hungry for the next meal. At no time do I suffer his food to lay by him; if he leaves any I take it from him and let him stand till he asks for it. For the first ten days I am careful not to let him get quite all he will eat. There is no better way of getting a horse's appetite up to the fattenin point than to feed very often of good clean feed. By paying strict attention for ten days you will have him fairly under way; and this is the most difficult part of the task. If at any time he gets cloyed, so that he refuses to eat, let him stand till gets hungry.

During this time his stable must be kept clean and comfortable. He should have but little hay, but as much pure, soft water as he will drink three times a day. Salt all the time at his will. He must be carried thoroughly once every day. Few men curry a horse as it should be done. Take

your currycomb firmly in your hand, and with it make a quick motion back and forth, pass all over your horse, getting to the skin and removing the dirt therefrom; then pass all over more gently with comb and brush; replacing the hair, and finish with the naked hank—putting every hair to its place.

Never give medicine of any kind—you can succeed better without. If I wished to reduce a horse in flesh in the least possible time, I should bleed and physic. If you have have the time to spare, it will be better employed in scalding or grinding your grain, and feeding warm mashes, &c. It appears that friend Munson has little faith in our no-doctrine advice. If he finds the oil to answer I advise him to stick to it, for if he does nothing worse than to pour a pint of grease down a horse that has a tooth or belly ache, he will hardly lose any. I have known it employed for thirty years—It is like mush to a stone bruise—does neither good nor harm.

HOW MUCH SHOULD A COW EAT?—Cows, to give milk, require more food than most farmers imagine. J. W. Johnson, writing from Munich to the Country Gentleman, gives an interesting report of some experiments which have been made in Bavaria, from which the following is an extract:

“Our trials have confirmed the view that cows, to give the greatest possible quantity of milk, must daily receive and consume one-thirtieth of their live weight in hay, or an equivalent therefor. If more food be given, it goes to the formation of flesh and fat, without occasioning a correspondingly increase in the yield of milk; but if, on the contrary, less food be furnished, the amount and value of the milk will be greatly diminished.”

PAYING TO SUPPORT ANOTHER MAN'S WIFE.—A novel and strange case of alimony has just been decided at Louisville, Ky. A man named Ferguson separated from his wife and she sued for alimony. A settlement was made, he agreeing to pay her \$500 a year during her life. Subsequently the parties were divorced, and neither party was restricted from marrying again—the husband relying upon the religious faith of his wife (she being a Catholic) to prevent her from taking another husband. She did marry, however, and Mr. Ferguson thereupon stopped the supplies. He didn't relish the idea of feeding and clothing another man's wife without deriving some little benefit from the outlay. A suit was brought to compel the payment of the \$500 per annum, and it was decided in favor of the wife.

THE GARDENER.

We have devoted considerable space in the first pages of this number of the Farmer, to the Vegetable Garden. It is now time to be provided with the proper seeds, and persons should be careful to obtain fresh seed. Vegetables make a considerable portion of the food for the summer season, especially, and furnish a diet that may save many doctor's bills. Farmers will find it much to their advantage to renew the seed, from year to year, of many kinds of vegetables.

From the American Agriculturist.

Small Gardens.

What you say in relation to the profits of a small garden is very true. I have in this city, (Roxbury, Mass.,) about one-third of an acre adjoining my house, well set with fruit trees of all varieties. I have more than fifty pear trees, all of which are doing finely. One Bartlett this year yielded five and a half bushels of pears, worth \$4 a bushel. A Bonne de Jersey, only six years of age, gave a bushel of beautiful pears, worth at least \$6. For the past three years, I have had one hundred boxes of strawberries each year, and in addition, this year I have raised fifty boxes of raspberries, and twenty-five of blackberries. I also raise my currants and cherries, and all the vegetables for my family, with the exception of corn and potatoes. I had this year about two bushels of grapes, and my grape vines are doing well, and in a few years will supply a great many mouths with a delicious fruit. I expend annually about twenty-five dollars for manure, and do my own garden work before eight o'clock in the morning. It would cost at least two hundred dollars per annum to purchase in the market what I gather from my little garden, but the advantage to health of body and mind, and energy of action, is worth far more than any other species of profit.

JAMES RITCHIE.

Upland Cranberries.

To the Editor of the Am. Agriculturist:

In the great variety of new fruits brought before the public, many of them will prove of great value to the cultivator. Among them is a new cranberry which was brought to my notice by Prof. F. Shepherd, of New Haven, and by whom I was favored with a

sample of the berries. This season, an enterprising merchant of Newfoundland brought several thousand gallons into Boston, and disposed of them at a remunerative price—less than the common cranberry.

In many respects they are found to be superior to our berries; they are not as tart, and need less sugar. By boiling them three-quarters of an hour they make a fine clear jelly, of a beautiful purple color, which can be kept for a long time. It will make superior tarts, and is also very valuable for dyeing purposes. I was not able to procure the plants until late last fall, and have not had an opportunity to learn how they will adapt themselves to our soil and climate. I shall plant them out the coming spring, and shall be glad to have others do the same. The few plants I have obtained were taken from the rocks and barren places, by pulling the most and plants and decayed leaves, in which they grew, all up together, leaving no soil under them, which shows that they grew on poor shallow soil, on the highlands of Newfoundland, and the gentleman from whom I procured the plants, says: from the manner in which they are found, he has no doubt they will grow on any soil in the United States.

The plants are similar to our low cranberries, the leaf round and deep green, throwing up shoots from the roots like a mat, and covering the ground with bright scarlet red berries, which look beautiful. They are gathered by hand, and was informed that in one case a female gathered fifteen bushels in a day, which show their great productiveness.

I have the promise of a communication from a gentleman whose statement can be relied upon, and who is acquainted with its growth, habits, &c., and when received I shall lay it before the public.

F. TROWBRIDGE.

New-Haven, Conn.

HIGH MIXED.—A widower at Camden who was not very young, became smitten with a young and beautiful girl, and married her. A short time after, the son of this man by a former wife, became also in love with the mother of his father's new wife, a widow lady still in the bloom of life. Soon the young man and the widow were united, so that in consequence of these two connections, a father became the son-in-law of his son, and the wife not only the daughter-in-law of her own son-in-law, but still more, the mother-in-law of her own daughter; while the husband of the latter is the father-in-law of his own mother-in-law, and father-in-law to his own father. Singular confusion may arise if children should spring from these peculiar marriages.

HORTICULTURAL.

Remedy for Rot in Grapes.

At a recent meeting of the American Wine Growers' Association, in Cincinnati, the following communication was read from Mr. Werk, on the subject of Grape Rot:

Allow me to explain to you the trials I have made in this country, in the cultivation of the grape, during the last eleven years, and my intentions for the future in regard to the rot. It is a remarkable fact that vines never fail, in this country, in their flowering period; at least, I never have witnessed it. They hang as full of grapes as they can, every year. The favorable flowering of the vines, in the greatest part of the old country, generally is the barometer of an abundant crop, and if the flowering of the vines is a failure, the crop, of course, is a failure; the enemy there and the rot here. The quality there depends alone on the dry, warm summer, to bring the grapes to maturity, which is never the case here, (if the vines are not overladen with fruit,) this rot is the only main destroyer of our grapes.

Professor Liebig in his complete book of Chemistry, speaks of the observations of Dr. Halez on the blight in hops and other plants (pages 39, 40,) who states that the development of the growth of plants depends on the supply of nourishment and moisture from the soil, which is determined by a certain temperature and dryness of the atmosphere. The absorbent power of plants, the motion of their sap, depends on evaporation; the amount of food necessary for the nutrition which is absorbed, is proportional to the amount of moisture given out (evaporation) in a given time. When the plant has taken up a maximum of moisture, and the evaporation is suppressed by low temperature or by continued wet weather, the supply of food, the nutrition of plant, ceases, the juices stagnate and are altered. They now pass into a state in which they become a fertile soil for microscopic plants. When rain falls after hot weather, and is followed by great heat without wind, so that every part of the plant is surrounded by an atmosphere saturated with moisture, the cooling due to farther evaporation ceases, and the plants are destroyed by "fire blast" or scorching (sonaer brand,) "sun burnt or sun blight."

Now, if these remarks are well founded, and I do believe they are, then we will be nearer to our point of preventing our grapes from rotting, in avoiding too rapid growth

in the fore part of the season. We have been cultivating our vineyards in the same manner as they do in the greatest portion of the vine countries of Europe. We hoe and dig them three or four times at least twice in a season, and by so much cultivation in such rich and fertile soil and climate, we urge the vines in their growth, keep the soil moist, and procure for the plant too much nourishment at once, by retaining the moisture in the soil, call forward in the loose cultivated soil, the influence of the atmosphere, and in this way have our plants fairly prepared for the approach of our enemy, with which we are all very well acquainted; cold, fog and warm moist atmosphere; so that by the appearance of one or the other of these enemies, our grapes rot, and often from one-half to three-fourths are gone in twenty-four hours. As the superabundance of moisture is taken up and the evaporation suppressed, it of course leaves the enemy a greater chance for his ravages. This is not the case so much in the greatest portion of the vine countries of Europe, as the soil and climate is not so rich and fertile as here, and of course frequent hoeing and higher culture is necessary to obtain from the soil the substance by provoking the influence of atmospheres to the soil.

The largest portion of us vine growers have often noticed that about the time the rot appears, vine plants of a yellowish pale color alongside of other vines with a dark green healthy color, both fruit and leaves remain healthy and sound, whilst the dark green and healthy-colored fruit are partly destroyed, and the leaves have lost their healthy appearance after the attack of the enemies, cold and fog, or a warm moist atmosphere. The cause of this is admirably explained in the remarks of Dr. Halez in his observations on plants in general. I dug down to the roots of many pale and also dark green colored vines, after the rot had made its appearance, and without exception, I found the pale colored in a harder soil and generally on places where the water could run off easily; the reverse was the case in the dark green colored plants.

Eleven years ago I planted my first vineyard in this country, in a timothy field of eleven acres. I had learned the cause of the rot from other experienced wine growers, they remarking that the fog and the wet summers were the cause of the rot, and this led me to think that if the plants were far apart and the soil covered with other vegetations, the fog and the wet summers would not have the same effect, as the soil

keeps dry under the grass. The rains falling in the morning, during which the rot prevails, will run off in part, and what is absorbed by the soil will soon be taken up by the grass.

The result of this was, I made the first crop in this vine and timothy field, without any rot in 1850, and so every year in succession, until '54, but in the spring of '54 my timothy ran out. I plowed the field, and that year the greatest portion of my crop was destroyed by the rot, in spite of the wide planting. By plowing, of course I urged the vegetation and made the soil more fertile, and retained the moisture of this already rich soil, and prepared my fruit for destruction by the enemy.

One of my vineyards was not hoed for two years, only scraped to keep the grass down, planted three by six feet apart; the vines are laid dry by drawing the soil to the plants as we do in a potato or corn field, so that the water can run off.

The result of this was, I obtained in the year '55 near seven hundred gallons of wine, and in the year '56 about five hundred gallons to the acre, while in the same year, in vineyards alongside, of the same age, and on the same exposure, only one hundred to one hundred and fifty gallons to the acre was obtained.

Last summer was a very dry summer, but our grapes rotted. By the observations of Dr. Halez we can easily account for this. The winter of '55 and '56 was very cold and the soil was frozen from one to two feet deep. The whole continent was covered with snow one or two feet deep.—The result of this was a late spring—the soil enriched by the snow and loosened by the frost, caused such a luxurious vegetation at once, that in four weeks we had flowers and grapes formed; the vine plants were met in the highest and richest state of vegetation, with a cold night at first, second and third; the rot we had last season and the mischief was done. This was the reverse in 1853, as the winter of '52 and '53 was mild and dry, and the spring of '53, with the fore part of the summer dry and warm, the growth was regular and less rapid, and the consequence was a rich grape year.

According to all this, I came to the conclusion to lay my vineyards dry winter and summer, not cultivate them in the spring, except to scrape them, to keep the grass down, summer prune and with all those planted wide enough apart to admit of it, I will roll with a path roller, as soon as the frost is out of the ground, to prevent absorption of rains and atmosphere moisture to check the growth in part, put in the fall as soon as the kernels are formed, and the fruit begins to change color, at this moment we know that all plants want all their nourishment to ripen their fruit and wood, a period of growth of which we are all aware there is no more danger of the rot—then I will set plow and hoe at work. My experience last year, in a vineyard cultivated at

the change of color of the fruit, is this: Catawba must of this part of the vineyard weighed 98 degrees, and the Isabella 101 degrees, while the must of another part of the same vineyard, and of the same exposure, not cultivated in the autumn, the Catawba must weighed 92 degrees, and the Isabella 90 degrees on the saccarometer.

It seems to me that any means we can discover to check the growth of vegetation in the early part of the season, will be a help to conquer the enemy, the rot; be it by the reverse of culture—that is, cultivate in the fall when the grapes change color—press the ground in the spring to check the absorption of atmospheric moisture in part, or by any means we can imagine, check the too luxuriant vegetation in the spring and first part of summer a step will be taken toward the production of grapes instead of wood, and perhaps enable us to plant many European kinds of vines in this rich and fertile climate, as for them the too rich and rapid vegetation, with too long a season is destruction.

From the Chicago Press.
Emigration Westward.

The tide of humanity has already begun to set westward for the season. Through our exchanges and correspondence, we learn that New England will send larger deputations of her sons and daughters to the promised land than in any previous season, and New York and Pennsylvania exhibit strong symptoms of the Western fever. Ohio, too, which but comparatively a few years since was on the verge of civilization, is now reckoned as one of the old States, and the Cincinnati *Gazette* informs us that a large number of its citizens have started for different portions of the Northwest, chiefly Minnesota, Kansas and Nebraska. Other States will send a full quota to the general migratory army, and it will be further reinforced by thousands from the old world. The arrivals during the winter months show a considerable increase in foreign immigration over the corresponding months of two or three previous years, and the next quarter will doubtless exhibit a still stronger tendency in the same direction. A very large proportion of this immigration is and will be from Germany, the main body of whom invariably seek the Northwest as their home. Let them come in any number. There is no class of immigrants to whom it offers a more hospitable welcome, or who make more valuable citizens.

CHILD-STEALING.—The business of stealing little children, for the purpose of obtaining a reward for their restoration, has been practiced for a long time unsuccessfully in this city.—Probably on an average, two children a week are abducted from their homes while playing on the side walk, and are detained until the afflicted parents offer a reward for them, when the kidnappers bring their little victims to light and receive their money. This infamous business is made to pay very well, for the rewards frequently amount to over \$100, and the parents joy at recovering their offspring is so great that they do not hesitate to hand over the amount without a careful inquiry into the facts.

THE FLORIST.

Cultivation in the Garden.

VERBENAS.—These are among the most beautiful ornaments in the flower garden. They are in blossom from early in spring until late in fall. They now embrace all colors, and no finished garden can be without them.

Dexter Snow, of Chicopee, Mass., has an extensive green house establishment, devoted expressly to the cultivation of this plant. His stock is immense, and his sales yearly amount to many thousand dollars. We shall place our lady readers under obligations by copying from his catalogue of 1857, his instructions for the *outdoor cultivation* of the verbena. He says:

The ground should be prepared in the fall, by throwing it into high ridges and spreading over it a coat of wood ashes, and upon these old and well decomposed stable manure. In thus exposing the whole action of the frost, the worms, the larva of insects and the worst of all enemies with which the verbena has to contend, (the root louse,) are in a great measure destroyed. The soil becomes pulverized, and receives a share of ammonia from the snows and rains of winter.

If the soil be too sandy, so much as to be incapable of retaining sufficient moisture to sustain the plants in very dry weather, there should be a compost of equal parts clay and leafmould thoroughly incorporated with it. In preparing the beds in the spring, care must be taken not to get them too high, or the plants will suffer with drouht, although the verbena requires all the sun it can get, yet they will not blossom unless there be a good degree of moisture kept up at the root. This must be done by wattering them thoroughly every evening during very dry weather, always stirring the soil immediately after to prevent its becoming hard baked.

The greatest pests of the verbena in the garden are the root louse, and a small worm that encloses itself in the truss, eating out the developed umbels. It sometimes does serious mischief in this way by drawing together a number of trusses and destroying them entirely. They are easily detected by the pips being drawn upon one side, and wove together, thus forming a sort of cocoon in which the worm may be found. I have found no better way of destroying them, than by picking off the bud or truss as soon discovered, and before they have spread over the whole bed.

For the root louse, apply a coating of wood ashes, (best done in the fall,) and have the ground spaded deep in the spring. Let plants when put out be young, strong and healthy. Get them out as early in the season as the weather will permit, so that they may get a good start before the hot weather comes on, (at which time the louse makes its appearance,) in this way the plants will get ahead and keep it throughout the season. Water occasionally with guano, which is quite offensive to most insects, especially ants, which are the constant

attendants of the root louse, and wherever their little mounds are thrown up near the stalk of the plant, it is pretty sure indication that the root louse is there also. They may both be routed by scattering a little guano near (but not in immediate contact with) the stem of the plant.

MONTHLY CARNATIONS.—There has lately been introduced varieties of Monthly Carnation.—They are grown in pots and a strong plant, well attended, will blossom all the year round. Mr. Perry, of Brooklin, has lately grown several most beautiful seedlings,—which for robustness of habit and freedom of bloom, surpass the imported kinds. Their colors are not so brilliant, but their fragrance has no equal among them. Mr. Perry has named them as follows:

Bunker Hill, a deep rich purplish flower.

Washington, very large deep crimson.

Henrietta, black, striped with crimson.

Perry's Seedling, lilac, striped with purple.

“Well, sir, I want some seeds now, and shall want some shrubbery and trees in a few days.”

“What can you want with them?”

“Why, sir, I have married, have got on to my new place, am keeping house, and I am going to put in practice, as fast as I can, what you have often printed about fitting up my home, so as to make it pleasant—so that I shall love it—and I have made my plans so that ever blow I strike will be to carry out my plan for making my place what I have figured it shall be in my mind's eye.”

“Well, well—I am glad to hear that. There is nothing I like better to see in the country than a pleasant and happy home. And if you love it, if all your joys centre there, it will be pleasant. But what do you want?”

“But few things now. I shall be in, in a few days for shrubs and trees, when I will get all the seeds I want. Give me—let me see—some early cabbage, early radish, early lettuce, early peas, early cucumbers, early beans, early beets, and I must have some early potatoes to begin with—and—and—I must have some small onions now, for this spring, and onionseed for making a crop for fall and winter. I shall get a good many seeds after a little, but I mean to raise my own seeds hereafter.”

The seeds were put up.

“Now, I want some flower seeds. You know more about these things than I do—besides my wife told me to have you make the selection. She wants them now,—for she fears they may be gone before I come in again.”

Well, here are the flower seeds.

Now this young man is on the right track—he is a progressive farmer;—he was a good boy—he will make a good man, and we promise ourself the pleasure of giving him a call at his home the next summer.

Illinois State Agricultural Society--Meeting of the Executive Committee.

A meeting of the Executive committee of the State Agricultural Society, was held in Springfield, commencing on the 4th inst. The following persons were present: C. W. Webster, President; Lewis Ellsworth, Wm. Kile, S. A. Buckmaster, A. B. McConnel, H. Capron, Vice Presidents; J. N. Brown and H. C. Johns, Ex-President; S. Francis, Corresponding Secretary; P. Warren, Recording Secretary; John Williams, Treasurer.

A communication was read from Dr. John A. Kennicott, which was laid on the table for the present.

A communication was read from the County Agricultural Society of Peoria county, asking that the next State Fair be held on the grounds of that society, and pledging that they will perform all the requirements of the committee, in furnishing fixtures, &c.

Mr. Kile laid before the committee some proceedings of the Agricultural Society of Edgar county, asking that the State Fairs be permanently located at Springfield. Laid on the table for the present.

The Premium List was taken up.

On motion, *Resolved*, That a premium of \$10 be allowed for the best Essay on the Cultivation of the Chinese Sugar Cane, and the manufacture of its juice into sugar and molasses; and a medal for the second best.

Adjourned till 7 o'clock P. M., at which hour the committee met pursuant to adjournment.

On motion, *resolved*, That premiums be offered for four distinct classes of thorough-bred Cattle,—Durhams, Herefords, Devons and Ayershires.

Sometime was spent in revising the premium list. Adjourned till 7 o'clock the next morning, at which time the business of locating the State Fair was taken up.

On motion, *resolved*, That the Society hold its next Fair at Peoria; *provided*, that satisfactory guarantees shall be given to the President that the grounds, fixtures, and police shall be furnished the Society.

Mr. Powell, State Superintendent of Common Schools, addressed the committee in reference to the establishment of District School Libraries; stated that they were provided for by law, and suggested the propriety of placing in those libraries a proportion of books on Agricultural subjects.

Messrs. Ellsworth, Kile and Capron were appointed a committee to consider the subject.

On motion of Mr. Ellsworth, a medal was

awarded to C. W. Mustfeldt, for his essay on the rearing of stock.

On motion, the draft of a Diploma, by J. A. Miller, was accepted, and he was directed to cause it to be engraved.

On motion, *resolved*, That a trial of Reaping Machines shall be made at Salem, at such time in June, as the President shall designate.

On motion, *Resolved* that the Executive committee be the Awarding committee on this trial of the reaping machines.

On motion, *Resolved* That the State Agricultural Society will hold their fair on the 21st, 22d, 23rd, 24th and 25th days of September next.

The committee appointed upon Dr. Kennicott's papers made the following report:

"The committee on Dr. Kennicott's papers, beg leave to report, that they have had the same under consideration, and offer to the committee the following resolutions:

Resolved, That this Board endorse the action of Dr. Kennicott in accepting Mr. Lapham's essay on the grasses of Illinois, and that the Recording Secretary draw an order upon the Treasurer of this society for \$150, in favor of Mr. Lapham for such essay with the use of the explanatory plates.

Resolved, That the corresponding Secretary be authorized to employ such assistance as he may need in editing through the press the forthcoming transactions, and be authorized to draw upon the Treasurer of the society for such compensation as he may agree to pay for such services.

H. C. JOHNS, Chairman.

The report was accepted, and the resolutions adopted.

Adjourned till 7 o'clock, at which hour the committee met pursuant to adjournment.

On motion, the President was ordered to procure the services of a band of music for the next fair.

The committee then appointed the superintendents for the next fair.

1st DEPARTMENT.—H. Capron was appointed superintendent of cattle.

2d. S. A. Buckmaster, superintendent of horses.

3d. A. B. McConnell, superintendent of sheep, swine and poultry.

4th. J. E. McClun, superintendent of agricultural implements.

5th. H. S. Osborn, superintendent of farm and garden products, food, condiments, &c.

6th. L. Ellsworth, superintendent of fruits and flowers.

7th. Wm. Kile, superintendent of machinery, metal work, cabinet ware, &c.

8th. J. W. Singleton, superintendent of mu-

sic, musical instruments, paintings, designs, and models.

9th. J. H. Stipp, superintendent textile fabrics, &c.

10th. Rev. S. Y. McMasters, superintendent natural history, geology, botany, chemistry, &c.

11th. John P. Reynolds, superintendent of miscellaneous department.

12th. Uriah Mills, superintendent of plowing match.

Adjourned till 2 o'clock P. M. when they met pursuant to adjournment.

On motion, W. S. Wait of Bond co.; W. Bebb, Lockport, Winnebago co.; L. H. Elliott, of Paris, Edgar co., were appointed committee on farms.

On motion, *Resolved*, That the Treasurer, Recording Secretary and S. A. Buckmaster be appointed a committee to contract for the plate to be used by this society in the payment of premiums at the next fair.

On motion, *Resolved*, That the corresponding Secretary be authorized to insert obvious omissions in the premium list.

Resolved, That the Corresponding Secretary be authorized to draw upon the Treasurer for fifty dollars for contingent expenses of his office, to be accounted for on settlement with the Treasurer.

Resolved, That the Corresponding Secretary be authorized to receive and distribute or safely keep, as the case may be, all books, seeds, or other articles sent to, or provided by the Society.

Resolved, That L. Ellsworth and S. Francis be appointed a committee to confer with Mr. Powell in the selection of agricultural books for the use of schools.

Resolved, That we recommend to general attention the series of agricultural books published by S. M. Saxton & Co., New York.

Resolved, That a portion of the premiums of the society be paid in agricultural books, and that the Corresponding Secretary contract for the same, subject to this provision, that no more books be paid for, than are distributed by the Society as premiums.

Resolved, That we desire the extensive introduction of agricultural books in the District school libraries throughout the State, as of great practical importance to the interests of the people.

Resolved, That the Superintendents of Departments report their awarding committees to the Corresponding Secretary, and that it shall be the duty of the second Corresponding Secretary to ascertain whether said committeemen will serve; that he shall report the facts to the Superintendents of the respective Departments to which the committees belong; that the Superintendents fill out said committees, if any members decline to serve, and that the Superintendents be held responsible that their committees are full.

The Premium list was gone through with by the Committee.

On motion, *Resolved*, That the Corresponding Secretary be authorized to procure for each of the Executive Committee, Agricultural and Horticultural periodicals, to be designated by the members respectively, to the amount of five dollars for each, and that the Treasurer pay for the same.

On motion, *Resolved*, That the Corresponding Secretary direct that the periodicals awarded for premiums at the last Fair, be sent to the persons entitled to them.

On motion, adjourned, to meet at Peoria on the Saturday evening previous to the next Fair.

PHIL. WARREN, *Recording Secretary*.

Sangamon County Agricultural Society.

The annual meeting of the Sangamon County Agricultural and Mechanical Association, was held in Springfield, on the 7th, inst. at 2 o'clock, the meeting was called to order by the President, H. Jacoby, Esq.

The minutes of the last meeting were read and approved, when, on motion of Mr. Vanderen, it was—

Resolved, That a committee of three be appointed to examine and revise the constitution of this Association, and that the committee report at a special meeting of the Association, to be held at the office of the Secretary, on Saturday, the 11th day of April next, at 2 o'clock P. M.

On motion, the President appointed the following committee on this subject: Messrs. C. W. Vanderen, S. M. Parsons, and S. Francis.

On motion of Mr. John McConnell, the following amendment to the constitution was substituted for the present provision of the constitution, relative to giving notice to stockholders to attend annual meetings of the Association.

"Notice shall be given to the stockholders of this Association, of the time and place of holding their annual meetings, by circular, sent to each stockholder, by the Secretary.

On motion, it was *Resolved*, That the Treasurer report at the next special meeting of this Association, the names of the stockholders, their post office, address, and the number of shares held by each.

Several accounts were audited and ordered to be paid.

The Treasurer presented his report, with vouchers.

On motion, *Resolved*, That the Secretary examine the report with the accompanying vouchers.

On motion, *Resolved*, That after the next special meeting of the Board, it shall be the duty of the Secretary to receive money for stock, and pay the same to the Treasurer, and that he shall keep a list of stockholders, the amount of the stock held by each, and he shall give

certificates of stock to persons entitled to them.

Mr. Jacoby, from the committee appointed at the meeting of the Executive committee of the Association on the 8th day of November, 1856, to borrow money for the use of the Association, presented the following report: That—

“The committee had borrowed of Abraham Lanterman, twelve hundred dollars, from the 2d of March 1857, for one year, at ten per cent. interest per annum.”

On motion, *Resolved*, That this Association endorse the action of said committee, and authorize said H. Jacoby to give said Abraham Lanterman a satisfactory note, and for the payment of which the Association will be held responsible.

The Treasurer reported, that the debts of this Association is now \$1475,63—of which \$1200 are due to Abraham Lanterman, and \$275,63 to John Williams, both sums bearing ten per cent. interest from the 2d of March current.

On motion, the Association went into the election of officers for the year ensuing, when the following persons were elected to the offices annexed to their respective names:—

C. W. Vanderen, President; John C. Crowder and A. B. Cast, Vice Presidents; S. M. Parsons' Treasurer; S. Francis, Secretary.

C. W. Vanderen, J. C. Crowder and A. B. M'Connell, were elected Trustees for the management of the Association.

On motion, *Resolved*, That the Association hold their Annual Fair for four days, commencing on Tuesday, the 15th of September next.

The following persons were elected superintendents of the several departments named:

J. D. Smith, Cattle; Jesse Pickrell, Horses, Jacks and Mules; A. B. McConnell, Sheep and Poultry; Wm. H. Crowder, Hogs; Henry Grubb, Implements, &c.; John N. Poorman, Farm Products; C. W. Matheny, Mill Fabrics, Needle Work, Painting, &c.; Preston Breckenridge, Ham, Bread, Cake, &c., &c.; J. B. White, plants and flowers; Wm. O. Jones, Miscellaneous.

On motion, *Resolved*, That the superintendents prepare the premium lists for their respective departments, and appoint the awarding committees for the same, and report at a special meeting on the 11th of April next, for its action, to be held at the office of the Secretary.

Resolved, That the Secretary inform the superintendents of their appointment and duties.

Resolved, That the editors of the newspapers published in this city be respectfully requested to publish the foregoing proceedings in their respective papers.

S. FRANCIS, Secretary.

J. C. Davis, of Ill., is appointed Marshal of Kansas.

EDITORIAL NOTICES.

Trial of Reapers and Mowers—Under the Superintendence of the Officers of the Illinois State Agricultural Society.

SPRINGFIELD, ILL., March 11. 1857.

At a meeting of the Executive committee of the Illinois State Agricultural Society held in Springfield on the 4th of March, it was resolved that there shall be a trial of mowing and reaping machines in the month of June next, under the following rules and regulations:

Exhibitors of machines must enter them with S. Francis, Springfield Corresponding Secretary of the Society, on or before the 15th day of May next; and the persons entering them are required to pay \$50 cash, in order to defray the expenses of the officers of the Board, Committees, &c. The trial is to take place at or near Salem, in Marion county; the time to be designated by the President. The Executive Committee will act as the awarding committee on the trial. The committee will seal up their decision, which will be opened at their meeting during the next State Fair. All the implements on trial must be exhibited at the Fair. The trial is to be under the direction of J. E. Mc'CLUN, Vice President of the Society, and Superintendent of the Agricultural implement department, and such assistants as he may designate. This trial will not be entered into unless six entries are made. The scales of merit which shall govern in this trial, were published in the premium list of the society for last year, and a copy of the same will be furnished to applicants.

By order of the President:

S. FRANCIS,

Corresponding Secretary of the Illinois State Agricultural Society.

All papers friendly to the objects of the Agricultural Society, in this State, are requested to publish the above.

The Dairy—Trial of Milch Cows.

The Illinois State Agricultural Society have offered the following premiums for the best milch cows, under the rules and regulations annexed:

OPEN TO ALL BREEDS OF CATTLE.

Best milch cow.....	Dip. and \$20
2d do do	Medal and 15
3d do do	10

The cow to be kept on grass only during the experiment. The time of trial from 5th to the 15th of June, and from the 5th to the 15th of August.

Statement to be furnished, containing:

1st. The age and breed of cow, and time of calving.

2d. The quantity of milk in weight and measurement, and also weight of butter during each period of ten days.

3d. The butter made to be exhibited with cow at the fair, and the statement to be verified by the affidavit of competitor.

The awards will be declared at the next State Fair, by a committee especially appointed for that purpose.

This notice is published at an early day, to enable all those to enter into competition for the premiums who desire to do so.

By order of the President;

S. FRANCIS,

Cor. Sec., Ill. State Agricultural Society.

~~As~~ Papers friendly to the objects of the Agricultural Society, are requested to publish the above.

Premiums.

The gold medals awarded at the fairs of the Illinois State Agricultural Society, for the years 1855 and 1856, are engraved, and are ready for distribution.

The first volume of the Transactions of the Illinois State Agricultural Society, was awarded in many cases as premiums at the Chicago fair, 1855. They will be sent as ordered, to persons entitled to them.

The postage on medals, prepaid, is nine cents; on the Transactions, prepaid, thirty one cents.

S. FRANCIS,

Cor. Sec. Ill. State Agricultural Society.

Encouragement to Agriculture.

The Legislature at its recent session made an appropriation to the State Agriculture Society of three thousand dollars a year for two years, to be used by the Society for premiums. The bill passed the Senate with only four negative votes, and in the House there were but seven votes in opposition. This is a liberal appropriation, and we doubt not will be paid back into the treasury in a short time more than a hundred fold.

The Legislature also made an appropriation of one hundred dollars a year, for two years, to the County Agricultural Societies. We hope this appropriation will induce the establishment of societies in every county in this State. Our impression is that at this time there are not sixty county agricultural societies in Illinois.

~~As~~ There will be much clover seed sown the present month. Ten pounds will be sufficient for an acre. It answers well to sow it on a light snow, or better, when the ground is frozen on a warm morning.

Illinois State Agricultural Society.

The Executive Committee of this Society met in this city on the 4th instant. They were principally engaged in making arrangements for the next State Fair—preparing the premium list, appointing committees, &c.

There was only one application received for holding the State Fair, and that was from Peoria. The citizens of that county, represented by Messrs. Chase and Arnold, agreed to comply with all the requirements of the Committee, in furnishing grounds, fixtures, police, &c.

The grounds are said to be most beautiful. They belong to the Agricultural Society of the county. They are situated about a mile from the city—contain some twenty-three acres—part prairie and some groves—beautifully overlooking a great extent of country, as well as Peoria lake and river, with excellent water, in great abundance, near the grounds.

We are told, and have good reason to believe, that Peoria county will make an effort to get up such fixtures and arrangements for the coming fair, as have not been excelled in this State.

The Committee determined to have a trial of Reapers in the latter part of June, in Marion county, provided that six entries should be made. We believe, that so far, there is only one entry. This trial, should one be held, will be held, will be of great interest, not only to exhibitors but to farmers generally and must attract a great crowd of people. The wheat crop looks well in Southern Illinois, and ample fields will be furnished for the trial.

~~As~~ We lament to state the death of Jas. C. Orth, of Wabash county, Illinois. A few days after he wrote the article over his name in the last number of the Farmer, he was taken sick in this city and died with only a few days illness. He was an excellent man, a good farmer,—a citizen of whom Wabash county might well be proud.

~~As~~ This number of the Farmer contains two important laws passed at the last session of the Legislature. The first, a general law for incorporating county agricultural societies; the second appropriating \$100 a year for two years for each county agricultural society, and giving all agricultural societies, police powers, on the days of their fairs, over their fair grounds, and 200 yards distance outside of their fair grounds.

Spring Work.

Our farmers are now called to this work in earnest.—Has the drought of last fall and the cold of the winter, cut off your wheat? If so, what is to be done with the land. You can sow upon it spring wheat, spring barley and flax, with a reasonable prospect of a handsome profit. Either of these crops are better than oats. What is to be done? There is no time to be lost.—Wheat will be likely to bring a good price the coming summer. We are told that St. Louis operators are contracting at \$1.70 for the next crop of barley; and flax seed is bringing large prices at St. Louis and has done so for the last two years or more. The supply is not at all adequate to the demand.

Farmers should now attend to their orchards. Trim where necessary. If you have no orchard, you should lose no time in putting out one—especially should you not lose another year.—Fifty apple trees will make an orchard for a family. No land pays better than that filled with apple trees. The market cannot be overstocked with good fruit in Illinois for fifty years to come. Farmers, should by no means neglect their orchards.

The State Normal School.

The Legislature have authorized the establishment of a State Normal School. This school is mainly intended for the instruction of young men, so as to qualify them to be the instructors of youth. We notice that many of those who had been urging the establishment of an Industrial University, united in sustaining the project for a Normal School. They required the Normal School as the beginning of a system which shall be extended, as necessity shall require, until such means of education can be provided as are demanded by the best interests of our agricultural population.

There are many opinions in regard to the proper time for trimming trees. We prefer spring. Do this with sharp instruments, that the wounds may sooner heal over. Shrubby must now be trimmed and pruned so as to make compact and handsome bushes. Roses blossom best by cutting off the tops of shoots and trimming out superfluous wood. Currants and gooseberries early in the spring, and superfluous wood taken out. Ladies you should have your pruning knife or shears whenever you go into the garden; and this you should do often—there is interest and health in it.

Sugar and Molasses from the Chinese Sugar Cane.

The Executive Committee of the State Agricultural Society, realizing the importance of deciding for the Society the value of this plant, and adding another staple to the productions of the country, have offered in their forthcoming premium list, the following premiums:

Best 50 lbs. Sugar, made from the Chinese Sugar Cane.	
	The Society's GOLD MEDAL.
Second best.....	\$15 00
Third best.....	10 00
Best five gallons Molasses made from Chinese Sugar Cane.....	The Society's GOLD MEDAL.
Second best.....	\$15 00
Third best.....	10 00

We are of opinion that there will be specimens of sugar and molasses from the China sugar cane, at the coming State Fair at Peoria, which will satisfy the public that sugar and molasses can be readily and cheaply made in Illinois. If this is done, if Illinois can manufacture sufficient for her own consumption—what will be the result? Illinois has, say, a population of one and a half millions; these require an average of \$3 dollars worth of sugar in each year. Here are three millions of dollars saved in the State, on a rough calculation.

We hope every farmer who can, will procure a few seed, and try the experiment on a small scale. He can, at least, make sufficient seed, to plant a large field, the coming year.

Hedges & Free, of Cincinnati, have been getting up a sugar mill, to answer the wants of the farmers of the west, who design to manufacture molasses from the Chinese sugar cane.—They intend to have one on exhibition in Washington City, at the fair held there the present month. The cost—a material point—is not stated. But we shall hear more of this mill.

Mr. Kroh, of Wabash county, writes that he made seventy gallons of syrup from the Chinese sugar cane last fall, and that he is now using the article in his family with great satisfaction. He is making arrangements to increase, extensively, the cultivation of the plant. More than a hundred acres will be occupied with it, in that county, the coming season.

Several persons will receive the Farmer for the present year without ordering it. The publishers are instructed to say that the Farmer is sent to such persons by order of the Corresponding Secretary of the State Agricultural Society, in pursuance of directions by the Executive Committee,—as premiums for articles exhibited at the last State Fair.

The Wheat.

In Central Illinois the coming crop of wheat will be light. Many fields will not make their seed. This is the opinion of many of our best farmers. This is a great misfortune—but what is to be done?

We say, lose no time in lamenting over a state of things that cannot be helped. Many of you, farmers, have lost your wheat. You do not wish to put your wheat land into corn. There are some spring crops which you can get from your wheat land. Oats, spring wheat, barley and flaxseed. All these articles pay well; and, in a favorable season, well put in, they all yield good crops.

Mr. Sykes, of DeWitt county, has raised with ordinary culture, 35 bushels an acre of Canada club wheat, and that, too, sown as late as the 15th of April. Barley is now bringing \$1 90 per bushel in St. Louis by the quantity; and we are told that operators there are contracting for the coming crop at \$1 70. Oats are worth 54 cents; and the last quotations of flax seed were over \$2 50 a bushel.

We tell our friends to be busy—to obtain seed of wheat, barley, oats, flax—and put these seeds into the ground well—and, with the blessing of Heaven, you will not be great losers by the loss of your fall wheat crop.

Raising Spring Wheat.

MR. EDITOR:—Under the above caption I give you my modus operandi with several years experience in the cultivation of spring wheat. As the season is fast approaching, preparations should be commenced at once. If corn has been raised the previous year, and the stalks remain on the ground, they should be broke down, raked up in heaps or long rows and burned previous to seeding. The earlier wheat is sown the better, provided the ground be in good order. A few days later is better than sowing in mud and water; therefore, let the ground settle. If plowing has been done in the fall, of course no clearing is necessary, but both are brought now to a common level; with one

horse and a one horse plow, (which every good farmer has one or more for cultivating corn,) mark out in lands twelve traces wide, which is very convenient, three breadths to the land (where a machine is not used.) From one and a half to two bushels to the acre should be sown with the same horse and plow;—turn it under as shallow as the plow will turn a furrow. The advantage of plowing in wheat on ground that was plowed in the fall, is, that it kills to a great extent all running vines or wild buck-wheat, as it is commonly called; and will produce from five to ten bushels per acre more than if put in the ordinary way; not being so likely to lodge. Each horse and hand will put in from two to two and a half acres per day; harrow once the same way it was plowed and the whole is complete. J. H. S.

West Jersey, March 6, 1857.

Every man who has a garden or farm should not neglect to have some good grape vines in cultivation. The Catawba and Isabella do well here. They should not be planted where the roots stand in the water during winter.

A GENERAL ACT for the Incorporation of County Agricultural Societies.

SECTION 1.—*Be it enacted by the People of the State of Illinois, represented in the General Assembly,* That an Agricultural Society may be formed in any county of the State, by the voluntary association of any number of legal voters of the same—not less than twenty—who may meet and organize for that purpose, under a constitution and by-laws of their own construction, which they may alter and amend at pleasure; the use and benefit of the same to be alike free to every citizen of the county who is disposed to associate with them under the constitution and by-laws so provided, and in accordance with this act, upon such terms as may be provided.

§ 2. Each County Society, thus organized, may thereupon be constituted a body corporate and politic, under an appropriate name; which name, together with that of the President, Secretary and Treasurer, shall be recorded on the books of the county clerk of the county wherein said Society is located; whereupon said Society shall be deemed legally constituted, and under this name shall be capable of contracting and being contracted with, suing and being sued, pleading and being impleaded, in all courts of law and equity in this State; and in said county shall have power to sue for and collect all gratuitous subscriptions which are or may be made to such Society; and may have a common seal, which they may change at pleasure; and may, in their corporate name, acquire by purchase or otherwise and hold real estate, for the use and to promote the objects of the Society, not exceeding in quantity, at any time, five hundred acres.

§ 3. Any person who shall, without the permission of the officers of the corporation, enter within any inclosure which may be used by such corporation for an agricultural or mechanical fair, and any person guilty of disorderly conduct, or such as may interrupt or be prejudicial to the interests of said fair, show or exhibition, whether inside the inclosure for the same, or at any distance within two hundred yards of such inclosure, shall be liable to immediate arrest, and to the payment of five dollars to the association, to be recoverable at suit of said corporation in action for debt, before any justice of the peace or other court in this State.

§ 4. The provisions of the third section of this Act are hereby made applicable and legally available to all Agricultural Societies within the State, whether incorporated or unincorporated, and which desire to take the benefit of the same.

§ 5. This act to be in force from and after its passage.

Approved Feb. 8, 1857.

AN ACT to aid and encourage County Agricultural Societies.

SECTION 1. *Be it enacted by the People of the State of Illinois, represented in the General Assembly* That the sum of one hundred dollars is hereby appropriated to the use of each and every Agricultural Society throughout the State, for the purpose of giving them aid and encouragement in the general object of promoting agricultural improvements. And the Treasurer of this State is hereby authorized and directed, when called upon for that purpose, to pay over to the Treasurer or fiscal agent of each County Agricultural Society in the State, the sum of one hundred dollars, on receiving his receipt therefor, accompanied by the certificate of the County Clerk of each county respectively, where such Agricultural Society is located, that such society is organized, and that such Treasurer or fiscal agent is authorized to receive and receipt for money on behalf of the same.

SEC. 2. The grant of one hundred dollars to each County Agricultural Society as aforesaid, may be demanded and received for the year 1857, by each and every County Agricultural Society that is now duly organized, or that may be so organized on or before the first day of June next, and a further sum of one hundred dollars is granted to each County Agricultural Society throughout the State, for the year 1858, that is now duly organized, or that may be so organized, on or before the first day of June, 1858, and the Treasurer of this State is hereby authorized and directed to pay over the same under the same conditions as provided in the first section of this act.

SEC. 3. This act to take effect and be in force after its passage.

Approved Feb 12, 1857.

CHINA SUGAR CANE.—The seeds of this plant are likely to be disseminated in every part of the country. Some persons will get them for the purpose of making experiments satisfactory to themselves; others to secure seed for another year; and a few, such as have already made satisfactory experiments, will cultivate the plant extensively for the purpose of making molasses and sugar. If there be failure in any case to obtain syrup, we believe it will be from the imperfection of machinery and apparatus.

This sugar cane is cultivated in France as feed for stock. The cool summers there do not give the plant the richness found in our country, under a more genial and powerful sun. The French are introducing the cultivation of the plant in Algeria, where they anticipate great success. In France, the juice of the plant has been employed extensively in the manufacture of Champaign; the leaves and stalk as food for stock; the seeds as feed for cattle; and the dark covering of the seed to make a deep purple dye. The plant itself, after being deprived of all its juice, it is stated, can be manufactured into paper.

Before the season arrives for expressing the juice, we have no doubt Yankee genius will be successfully employed in getting up cheap mills for that purpose, as also cheap pans for evaporating the juice.

Wm. G. Warring, Esq., principal of the Farmer's High School at Boalsburgh, Penn., writes us that evergreens can be grown by those who understand the business, such as Pines, Norway Spruce and Cedars, at \$5 per 1,000. These evergreens planted out properly, would greatly meliorate the climate in Illinois.

COMMERCIAL.

Springfield Market.

OFFICE OF THE ILLINOIS FARMER,
March 14, 1857.

The roads have been so utterly impassable for several weeks that there has been a perfect dearth of transactions in grain. The weather however is now pleasant and business will soon be resumed. All kinds of marketing is in demand.

FLOUR—Extra white, \$5 50; superfine \$6; common \$5 50.

WHEAT—Sales Red at \$1 75 bu.

CORN—Sales at 30@35 cts. 75 bu.

OATS—Sales at 30 cts. bu.

HIDES—Dry flint 14 cts. 75 lb.

BRAN—10 cts. 75 bu.

SHORTS—15 cts. 75 bu.

CHICKENS—\$1 50 75 doz.

TURKEYS—8@9 cts. 75 lb.

ONIONS—\$3 75 bu.

POTATOES—\$1 50 75 bu.

APPLES—Green, \$1 25@2 25 75 bu.; Dry 2 50@3.

BUTTER—20@25 cts. 75 lb.

CHEESE—12 1/2 cts. 75 lb.

EGGS—15 cts. 75 doz.

HAY—\$20 75 ton.

CORN MEAL—50c. 75 bu.

HAMS—Smoked 12 1/2 t 75 lb.

MOLASSES—Plantation 90c. 75 gal.

S. H. SYRUP—\$1 75 gal.

GOLDEN SYRUP—\$1 20@1 25.

SUGAR—Brown, 20c 75 lb.

St. Louis Market---March 7.

Flour—Demand for city with sales of 1000, 500 and 200 bbls superfine at \$6. Sales of country as follows: 100 bbls city. Quincy, superfine, at \$5 70; 40 bbls country at 5 75; 100 bbls branded extra, private; 200 bbls fancy at 5 87 1/2, delivered; 50 do at \$5 90, and 130 at 5 92 1/2.

Wheat—Prices advanced. Sales 2,800 bags spring, in lots, from \$1 12 to 1 14; 52 bags fair Mediterranean at 1 16; 300 bags, fair red, a little damp, at 1 17 1/2; 124 bags fair white at 1 20; 675 bags prime red and white at 1 21 and 1 26, and 570 bags prime red at 1 20; choice red would probably command 1 23@1 25, and choice white 1 28@1 30, without bags.

Corn—About 3000 bags fair at 65c, prime mixed yellow and white at 55c, in new gunnies.

Oats—Sales 300 bags in lots at 56c, and 203 bags, in inferior bags, at 53c.

Rye—51 bags sold at 87 1/2c in bags.

Pork—Sale 200 bbls mess up Illinois river, at \$21.

Cut Meat steady and firm; sales 500 pounds here not well salted—shoulders at 8c, sides and hams at 9c; 1300 shoulders, 1300 hams, also 1400 shoulders, 500 sides and 1900 hams, all up the river—shoulders at 8c, sides and hams at 9c.

Grease—114 tierces yellow and white sold at 10c.

Bacon—Sales 5000 lbs shoulders, sides and hams in loose and rough packages, at 9 1/2c; small lot new shoulders and hams at 9 and 11c; 25 casks old rib and clear sides in bad order at 10c.

Whisky drooping. Sales two lots of 50 bbls at 25 1/2c; 60 bbls city at 26c.

Potatoes—Sale 50 bags Missouri at \$1, and 200 bags prime and choice Northern at 147 1/2c in bags

Hides—Dry Flint steady at 20c.

Seed—Sales 23 bags Clover at \$7 12 1/2, and 22 bags at 7 25.

FRUIT—91 bags dried apples sold at \$2 50.

Molasses—Sale of 138 bbls N. O. Sugar House at 72c.

Sugar—130 boxes yellow Havana sold at 11c.

St. Louis Live Stock Market---March 7.

Bellevue House—There has been a fair supply of Beef Cattle of all descriptions for the past week. Shippers are holding back, owing to a low market below. Butchers are paying for common to fair 7 to 8c, for good to choice 8 1/2@9c 75 100 pounds net. Shipped South about 270 head. About 950 head unsold.

Hogs scarce and in demand, selling from 7 1/2 to 8 1/2 net.

Sheep are in demand; few lots have arrived during the week, and sold at prices ranging from 3 25 to \$4; choice will bring \$5 a head.

Cows and Calves—A fair supply, and selling at \$20 to \$30 for common to fair, and \$35 to \$45 for good to choice.

Chicago Live Stock Market---March 7.

Cattle are in fair supply; packers pay \$3 50 to 3 75 gross for common stock, and butchers \$4@4 50 for the best that come in.

HOGS—Live Hogs have been very scarce and in demand, \$6 being the regular rate, gross weight. A lot of 400 head of plump pigs to average 200 lbs were offered to-day for delivery, the last of this week at \$6 12; only \$6 was offered.

THE ILLINOIS FARMER.

SIMEON FRANCIS, EDITOR.

BAILHACHE & BAKER, PUBLISHERS.

Vol. 2.

APRIL, 1857.

No. 4.

American Farmers.

If it is true, as we have stated before, and as we believe every man well read in the history of modern civilization will admit, that the cultivators of the soil have nowhere yet held that high position of social and civil influence, which the best good of the race requires that they should, it is worth while to inquire for the cause of so important a failure. Why have they not?

Leaving other countries, we will confine the inquiry to our own. Here are comparatively few monopolies. We have few vested rights, by which to turn the rewards of labor into coffers of another. No ancient king has erected a barrier about New York, Philadelphia, New Orleans, as around Paris, and decreed that for all coming time the farmer, who carries his produce through its gates, may have for it half of what the consumer pays, while the city shall have the balance. No divine right is claimed for oppressing the producing classes. The government has always been administered as the farmers wished, or at least might have been, had they been united and spoken out, for they have always been in majority. Either they have always had their way, or, if they have not, it has been their own fault.

Our own views are well known;—we believe that everybody else has been served first, that the farmer's interest has been left to the last, and is not reached yet. We begin to doubt whether it ever will be. Certainly it will not, unless the farmers of the country assume a more united and a more formidable position than they have yet done. This very winter, if a remodeling of the tariff were undertaken, we suppose that a British iron-monger residing in New

York would gain more consideration with Congress than all the farmers in the land. ~~The iron-monger's trade would be sung through at least three octaves and into a fourth, till it should attain so high a squeak as to drown more decent voices.~~ We should hear of ships rotting at the wharves, of sailors robbing hen-roosts, and of national ships unmanned for the want of a mercantile seaman's apprenticeship, till we should forget whether American farmers should have the feeding of the men who make iron for their carts and ploughs, or whether British ore and coal, or American, should be used in the manufacture.

But all this does not reach the difficulty. The question is, why have not American farmers attained a high place of influence and power? Why do they, numerous as they are, as really the supporters of the government as the ass is of the master who rides him, stand aside, with hats under their arms, like underlings, and see every other interest served before theirs? That it is so, every one can see. But why is it so; and by what means is it to be otherwise? Let us look at these two questions.

If we look back to the commencement of farming operations in this country, we shall find that the early farmers had most of them been farmers in England before coming here; not however of their own land, not the owners of their own houses, but farmers of another's land, and dwellers in another's cottage, liable to be turned out if they did not demean themselves meekly. They were taught by church and state that there is a wide difference between the owner and the tenant. They might respect themselves as compared with their fellow laborers, but not

in comparison with Mi' Lord and his sons, that rode fast horses and hunted foxes. They might dress clean of a holiday, but might not wear such as the gentlemen in their neighborhood wore, not even if they could afford it, which was not often the case. That would be quite unbecoming. They were as thoroughly trained to cringe, and fawn, and make low bows, as men of their sterling sense could be. Now the effect of education is tremendously strong. What is drilled into the bones of a race, cannot be bred out of the flesh in one century, nor two, nor wholly in three. Our fathers came here fully prepared to look up, and if any one, whether lawyer or doctor, merchant or gentleman, assumed to fill the place above them, it was perfectly natural to them to see it filled. We have not the least doubt that this cause operates to this day, and will for another century. Under its influence, the American farmer feels very much like taking off his hat to everybody that wears a fine coat, and talks a little more flippantly than he can. Heaven forbid that we should destroy his respect for real intelligence and worth. Our national bump of reverence has nothing to spare. As a whole we would sooner see it growing than declining. But we cannot bear that the farmer should allow himself to feel an inferiority in the presence of men who are not really his superiors.

This tendency of the farmer to think diminutively of himself as compared with men no way his superiors, was helped on by the entire policy of the English rule, so long as we were colonies, but what drove the nail and clenched it for centuries, was the colonial policy of compelling our fathers to depend on England for our manufactures. For a while this could be endured, because in the infancy of a colony the settlers are necessarily dependent. They cannot clear up their lands, build houses, establish churches, colleges, schools, factories, all at once. The building of factories, the development of mineral resources, the proper division of labor, must of course be postponed for a while. While they were postponed to the necessity

of the case, and by common consent, the system became fixed upon us so strongly that it seems likely to take the years of another jubilee to slough it off. England must make our door locks, whether she could make one that would keep out her villains coming among us or not. Her smithy must have twenty-five cents for making it; her exporting merchant must have twenty-five more for bringing it here; the jobber would get twenty-five more, and the retailer another twenty-five; and the farmer pay one dollar for a lock that would make a rogue laugh and an honest man cry. It may be said that this is not so very bad, no worse than we are doing now, when we buy English razors for a dollar, which everybody knows, or should know, are retailed in England for one shilling.

British manufacturers at home, and British merchants stopping in New York, love to shave us, and if we love to be shaved, let it go on. But the trouble with our fathers was, that they had no money to buy those locks to let in rogues with and those razors to be shaved with. They could grow produce, but there was no manufacturer among them to consume their produce. It went begging. Nobody would buy it. Now, when any one has a great deal to sell, but can raise no money for it, he feels like rather a small sort of a man. He can hardly hold up his head among merchants and others who have money enough. And yet this is the very training which American farmers have been through. Even since this century came in, fatted calves have been killed, the fore-quarters thrown to the pigs, and the hind-quarters carried a long way and sold for two and a half cents a pound. Pay was often taken in India cotton at fifty cents a yard. Nothing could be more unfavorable to agriculture. We have often wondered why the farmer did not lie down in the furrow. There is a sense in which he did;—he became unenterprising, nor was he to be blamed for it. He lacked incentives. He, in a measure, lost his self-respect. Anybody that could get some money was better than he. He rejoiced if a young law-

yer, or a sprig of a merchant's clerk, took a fancy to his daughter, and would rather his son should learn to turn broomsticks or make shell combs from oxen's horns, than to be a farmer.

Now the times are better. If the farmer can grow something, he has a reasonable prospect of selling it at a living profit. But the depressing influences of such a state of things as the farmers of this country have been through, do not cease in a day or a year. They run through generations.

Out of this non-manufacturing system, this dependence on a foreign power for nearly all that was worn by day, or slept in by night, articles without which we could not be born comfortably or buried decently, or work the soil while we lived, grew among other foolish ideas, this most foolish of all, that the farmer alone has little need of education. We mean that this ridiculous idea grew out of that state of things, as an American idea. It was old in Europe three centuries ago.

It may be nearer the truth to say that it was imported; but it became acclimated, confirmed, made, we sometimes fear, as immovable as the everlasting hills, by that very state of things which we have described, a dependence on England for our swaddling clothes, and grave clothes, and all the clothes we wear between, wedding suits and all, for our pots, axes, dish-kettles, and log chains, everything we wore or used, and consequently no home market for our produce, twenty pounds of veal for the writing of a dunning letter at us, and then no money for the veal, but a yard of Indian cotton, that the wind might not blow upon too rudely, and that the lawyer would by no "manner of means" accept as pay for a three-line dunning letter. Those who oppose American manufactures would re-inaugurate precisely such a condition for the farmer; would leave him to the sorry chance of raising a great deal and getting precious little for it. All the commerce in the world would not save him. It would only filch away the little money he could get, and put

it quite beyond his reach, concentrating a large share of it in our own commercial centers, and dividing the rest between the foreign merchant, the foreign farmer, and the foreign mechanic, instead of leaving it here to go the rounds, from the farmer to the manufacturer, from the manufacturer to the laborer, from the laborer back to the farmer, through everybody's hands, buying what everybody wants.

It is nothing but the supplying of our own wants, and, as fast as possible, our own luxuries, by home industry, that can keep this latter state of things in operation. Nothing else will save us from being cheated as badly as our fathers, when they bought their door locks of England, and as we are when we buy a certain class of razors that sell here for a dollar, and there for a shilling, or another class, that shave when we buy them, but won't shave afterwards: It is true that foreign immigration, and our exportation of farm produce, great in itself, but destined for ever to be small compared with the amount we can grow, might a little retard the return of times when the results of the farmer's labor would go a begging. But it should be considered, that a failure to manufacture for ourselves would stop immigration, while it would stimulate foreign agriculture, and would soon leave the American farmer without a buyer.

While the old order of things lasted, while we imported all our manufactured goods, instead of importing only as now too large a portion of them, while the farmer got almost nothing for his produce, and that not in cash, but in slazy cotton cloth, or in pot-metal nails, or pewter tankards, or pewter gimlets, what wonder that the idea of a young man's wanting no education to be a farmer took possession of the public mind? Alas! if educated, he might be spoiled for his condition. If one of his brothers was dull, educate him for a minister. If another was trickish, make a lawyer of him. The one that was to be a farmer, was born to the trade, and that was enough. Let him stay at home, work hard, and help his brothers into a better position, one from which they

would be pretty sure to look down upon him for the rest of life.

This was the reasoning. The idea became about as fast in the public mind, as a thorough-going farmer wishes his gate post to be in the ground. To read tolerably, to spell badly, and to cypher worse, was enough for the unlucky boy that was condemned to farm life. Well, where is this old idea, half justifiable fifty years ago, gone to now? Nowhere. It sticks in the heads of some people like a well-set gate-post in the ground. Too many farmers still think that reading, reflection, reasoning, the brightening up of the mental powers, is of no use to them. They laugh at science; call it book farming with a sneer, if some neighbor tries to pry into the secrets of the trade, or sends his son to an agricultural school. The farmer, they think, need not know much!! This is a terrible mistake!!!

It has been true since time began, and will be while time lasts—a truth unaltered and unalterable—that any profession is honored just about in proportion as the men exercising it are intelligent, mentally cultivated, self-improved.

To improve your soils, your fruits, your breeds of cattle, is well. But it generally happens that, when a man fails to improve himself, nothing improves around him. He rusts, and his buildings rot; all becomes worse, and his profession suffers in the public estimation. An ignorant farmer is a disgrace to his profession, just as an ignorant minister, an ignorant lawyer, an ignorant doctor, or an ignorant, narrow-minded merchant is a disgrace to his. We do not say that the farmer should know all that these men know. "Every man to his trade." But he should know his business as well as they theirs; and in order to do this, he has much to learn beyond what fell to him by being born on a farm, or will come to him of course by being brought up a farmer.

We would not counsel farmers to read poetry in seed time, or romance in harvest. The tendencies of their calling are rather scientific than literary. Their business is an art, but it is so interwoven with many sci-

ences, that to speak of the science of Agriculture is no absurdity. The soil is a sort of chemical laboratory, and if the farmer knows enough of chemistry to comprehend steadily the chemical allusions in his agricultural journal, it is of immense advantage to him. Plants have peculiar laws for drawing nourishment from the air and the soil, and if he understands these laws he can better minister to their wants, and will thereby gain enough in a single year to pay him for carefully studying a small treatise on vegetable Physiology. Animals have causes of thrift and unthrift, laws of growth, diseases; and how can he be ready for every emergency in the stall unless he understands the nature of the animal he cares for?

We grant that his knowledge on this subject is to be obtained mostly from observation, but then his power of observation will be quickened and made far more useful to him by some reading. His profession is in some respects like that of war. He has enemies, and how can he win, unless he keeps himself informed on the nature, positions, and probable movements of the enemy?

But we forbear. The benefits of study to the farmer are not all payable in dollars and cents. It gives him personal consideration, a high standing in the community—influence. It makes him an honor to his profession. The intelligent, inquiring farmer, of awakened intellect, elevates his profession, just as the ignorant farmer, of no inquisitiveness, with no mind aroused to action, sinks it. The one honors, as the other disgraces, the whole body of farmers. The intelligent farmer, and we have more such than any other country after all our deficiencies, is a pattern to his fellows, and in this way is pre-eminently useful; for of all the model farms we have ever seen, none are more instructive than those of some self-made, but well made thoroughly instructed farmers among ourselves.

Where a majority of farmers will consent to become like them, aiming at a high self-culture, with a wise reference to their business, and a generous desire for usefulness, and a high standing before the community,

their profession will be honored, the government will respect their interests, empty-headed coxcombs even will know enough not to speak contemptuously of them as a whole, and the country will be safe.

Of all the means within the farmer's own control, for elevating his calling and securing for it a just consideration, this self-culture is the first. The second is like it—the education of his sons for the farm. Of this in a future number.

Ploughing by Steam.

Much has been said and written and published lately on the subject of plowing by steam. The attempt of Mr. Hussey, in Maryland, was partially successful. While we have been talking however, there have been those who have been acting in England. The first trial there was by a stationary engine. This did the work well enough on a small field, but it was not what was demanded.

A new engine has been introduced in England, lately, which is likely to answer the wants of the farming community to some extent. It is called "Boydell's Traction Engine," with revolving railway. Its operation seems to demonstrate, that the engine will work on even grounds, like those of the prairies of the west. We doubt much whether any locomotive can be made to work on uneven or hilly soil.

The London Agricultural Gazette, an authority which may be relied upon, gives the following account of some recent experiments made in England with "Boydell's Traction Engine:"

"The trials having been advertised, we attended on Tuesday and Friday, the 16th and 19th inst., and I shall present the readers of the Agricultural Gazette with a brief account of what came under our observation.

"On Tuesday the engine was trench-ploughing a small field on Steam Farm, with two of Cotgreaves' trench-ploughs, Mr. Cotgreaves himself superintending them. The work was being done about twelve inches deep, and at the rate of five acres per day, or half an acre per hour. The engine, to appearance, would have hauled

nearly another plough, as it was never working up to its full pressure of steam; but the two ploughs being all that were at command, we had not an opportunity of bringing this to the test of experiment. The quality of the work gave great satisfaction, especially to the market gardeners of the neighborhood, some of whom offered to give 30s per acre for land so trenched, assuring Mr. Middleton—who lets out engines—that a large area of market garden grounds of the capital could be had at this rate.

"The daily expense of the engine and hands was estimated at about 30s., so that the cost per acre would be 6s.; consequently the profit would be 24s. per acre at the above estimate—equal to £6 per day, or £36 per week.

"On Steam Farm there was also a good deal of ploughing done by the engine, in two large fields, with four of Howard's P. P. ploughs, the depth of the furrow being nine inches, and the rate of ploughing from eight to ten acres per day. The quality of the work was superior—fully equal to what could have been done by four horses in each plough. Both fields were well adapted for traction engine work, being comparatively level, and of great length.

"On Friday the engine was at work in a large field on Butts' Farm. It was again hauling four common ploughs, ploughing nine inches deep, and at the rate of an acre per hour when timed. The field was still better adapted than the former, being nearly as level, of greater length, and rather lighter in quality of soil. Both fields on Steam Farm, although of a gravelly character, were yet rocky hard in the bottom; but here the soil was more friable and sandy, consequently the ploughs were more easily held—enabling the ploughmen to make far better work than that done by them with horses in the same field.

"The steady, equal draught of the 'steam-horse' deserves especial notice, as it differs widely from that of horses. Accustomed to the latter, we think little about the irregularity of their traction force, when holding the plough behind them, but we have only to examine their mechanism and the ever-varying position of the fulcra (footprints on the ground) over which their muscular force acts, and compare them with those (the endless rails) of the traction engine, to perceive that the difference is great, and wholly in favor of the latter. In point of fact, Howard's P. P. ploughs, after being entered behind the steam-horse, almost went alone, for we saw Mr. Middleton remove his

hand from one of them for a considerable distance, and how much further it would have gone cannot be said. The expense of ploughing nine inches deep, with four ploughs, is £1 16s. 6d., or about \$7 50 per day.

"The sum of 36s. 6d. per ten acres would be something less than 3s. 8d. per acre; but say £2 per day and 4s. per acre.

"The value of the work done was estimated at from 20s. to 24s. per acre; say the lowest of these two figures, which would give £10 per day, so that deducting the £2 (the expense of the engine,) we would have £8 as the profit per day over our present system; £48 per week; or the prime cost of the engine in some ten weeks' work.

"When the engine was timed it was ploughing fully an acre an hour, but that time it was going rather over its ordinary pace. In point of fact, the boiler is only calculated to keep up a maximum pressure of 45 lbs. of steam per square inch, and with the most successful stoking it seldom much exceeded this pressure, while it very frequently fell below it. Midland we found it at one time as high as 50 lbs., and at another as low as 35 lbs. We may also mention here, that we had the diameter of the cylinder measured, and found it 6½ inches. Probably at the ordinary pace of the engine it was ploughing at the rate of eight acres per day of ten hours. We insisted very hard, on Tuesday, for a ten hours' trial without intermission; but owing to the urgent demand of visitors,—some of them from the continent of Europe, the East and West Indies, and the United States of America,—to see it trench-ploughing, etc., etc., our request was found impracticable on any of the days advertised for public trial.

"At eight acres per day, the expense per acre would be 5s., and the profit per day, £6; per week, £36; over the present system—a profit which would soon pay off the prime cost of an engine. In the provinces the expense of such ploughing would be, on an average, only 16s.; at ten acres this would yield £8, or £6 of daily profit; at eight acres, £6 8s., or £4 8s. of profit, allowing the expense of the engine in each case to remain as before.

"There was no two-horse or six-inches deep furrow work done, and therefore we cannot say from experience what the expense of such was; but we may safely conclude that, at ten acres per day, it would not be more than 2s. 6d. per acre; and at eight acres per day, 3s

"Such are the leading facts we gleaned from two days spent with the Messrs. Mid-

leton. That they involve a revolution in agriculture no one will deny who comprehends their importance. To those of our readers who have hitherto been opposed to Boydell's steam-horse entering their fields, the above results may appear startling, and even incredible; but to such we say, go and judge for yourselves, and be guided by facts, not opinions. We ourselves hope very soon to witness far more triumphant results in favor of direct traction than the above; for several of our most intelligent and leading agriculturists have traction-engines of an improved construction, and with better implements for tillage, nearly ready to enter than what were used on the above occasion."

☛ If tobacco must be used, it would be well for those who can, to grow it. You will then have the satisfaction of knowing that you are using a pure article. Who can tell what ingredients make up the article sold as tobacco in the shops? The seed should be sown early in the spring in a warm and sheltered place—the south side of timber would be best. The ground should be burnt over. A pipe bowl of seed will be enough for 16 feet square. The plants should be transplanted in May. The ground should be light, rich and loamy. The plants should be kept clean. The tobacco worm should be destroyed. The top of the flower stalk should be taken off and the suckers removed, to make large leaves. When yellow spots come on the leaves, the plants should be cut, carried to the barn and hung up separately, to dry. To do this in the best manner, the barn should be heated by stoves. Connecticut tobacco cured thus is worth 40 cents per pound, while Kentucky tobacco brings from 14 to 20 cents.

☛ The heart cherries fail here. This is attributed to many causes. Mr. James Fountain, of Jefferson Valley, New York, says: "For many years I lost all my cherries. I gave them the richest soil I could gather. They grew finely; bore some good crops, then split and died." He tried again. Planted out trees in loamy and gravelly matter—making poor ground. The cherries are doing well, but grow slowly.

☛ Henry Shively, Esq., residing in Wood county, Ohio, the last season, raised for his first crop, 12 tons of clover, worth \$144, on five acres of land. The second crop 19 bushels of seed, worth at \$5 75 per bushel, \$109 25. So that the land yielded him in hay and seed \$50 05 an acre!

Cheap Article for Building.

A comfortable dwelling is one of the leading comforts of life. To obtain these at the least possible expense, has always been the study of architects and other scientific men. In the west, we have a large class of people who begin life with little means—perhaps more without means—and who seek, by industry, to secure the comforts of a Home in the shortest possible time. In Illinois, before our railroad were built, it was supposed that when we had such facilities for obtaining pine lumber, we should be able to build cheaply; but dwellings now cost as much as they did fifteen years ago.

Mr. Willis H. Johnson, of this city, supposes that he has made a discovery which will greatly lessen the cost of building, and for which he has procured a patent. We fear we cannot give all the particulars of his process;—but they are mainly these. He makes bricks out of the common prairie soil,—dries them by the sun—puts them into the wall, and immediately covers them with a cement made of the same article by being mixed with coal tar. The composition becomes at once as hard as stone, and impenetrable to water. We have seen some of the composition some months old, which was apparently harder than limestone. The coal tar used in this outer cement was some five per cent. A house, with walls of this material, could be built very cheap. Mr. Johnson will put up one the present season.

Our readers are familiar with the process of making cement houses. The walls of such cost not more than one-third of those made of brick. But even in the building of these houses there can be great improvements, lessening materially the expense.

Our attention was called to this subject by an article in the Country Gentleman. The statements made in that article, are so reasonable, and we believe so just, that we offer no apology for presenting them to our readers, and we invite the attention of those persons to them who desire to erect cheap and comfortable houses.

EDS. COUNTRY GENTLEMAN—I wish to say some words to your readers upon the best

and cheapest material for building houses, and the mode of use. I like the material used and recommended by Fowler and others—artificial stone walls, made of lime, sand, and stones—that is, cobble stones, fragments of brick, coal, cinders, &c. But I object to the usual method of using it in what are called "grout" houses, cement houses, &c. It is sloppy and annoying work to build it up in troughs, as is usually done. The fluid runs down over the walls, and each layer does not harden fast enough to build on, as soon as is often wished.

I use the same material, and propose to obviate these objections by a neater and pleasanter mode of use, which shall be easier and stronger work than the usual mode. I make my material into blocks of stone, and build my house of these. Thus, make cheaply some 20 or 30 boxes, of sides only, without top or bottom, of proper size, say two feet long, one foot high, and 14 to 18 inches wide. These are the dimensions of the mould boxes. Make up, of a morning, sufficient material in a bed, fill up all the boxes, smooth the tops, and go off. Next morning lift off the boxes; let the blocks stand to dry and harden; set the boxes in a new place, and fill up as before. Do this under a shed, or if out-doors, cover over the blocks during the first rains, and they will soon harden enough to use. In this way any Irishman may, in twenty-five mornings, at 50 cents or less, each, hew out stone enough for a large house.

Then build your house, as any one would, of stone. The blocks for first story may be 14 or 16 or 18 inches wide, and for second story, 10 or 12, narrowing the mould boxes by nailing a board or two inside, or sawing the ends narrower. Walls so built are dry; but they may be made still more so, and warmer if possible, and still cheaper, if any one could wish it, by putting a wooden cylinder or two into the mould-box, and knocking it out after the box is lifted off, thus making dead air in the wall. Besides this, the wall is of course to be furred and lathed and plastered inside. Of course some blocks are to be made solid, for corners and ends of the walls.

Given the dimensions of your house, and one can easily calculate the number of blocks needed, and any farmer's boy may make them.

In laying the wall, if, in order to bring a flush wall for door or window, it should be necessary to leave a few inches between some blocks, the space may be easily filled

by pieces of brick or regular stones well mortared in.

I commend this as the best plan for building a cheap and durable house—better than brick, as good as stone, and lasts forever. If nice finish is needed, cement and color the outside wall, and lay it off by lines, like stone, as indeed it is.

If any one doubts this plan, try it on a smoke-house, or hog-pen, or shed of any kind or indeed, a stone wall.

No rats infest this house, no storm can shake it, no wind whistle through it. Dry, tight, warm in winter and cool in summer, it is the cheapest, strongest and best.

A good proportion of the ingredients which Fowler and all others recommend, is—say 10 bushels or barrow loads of lime, 20 of sand, and 70 of stones, &c., and any quantity of water. I take it for granted your readers understand something of the gravel wall plan. I write merely to advocate the block stone plan—the same material, but in different shape. One can see how cheap must be the walls of a house with only one-fourth lime, and that so cheap, and the other materials, nine-tenths, which cost nothing.

J. E. S., Barre, Mass.

Keep your Boys at Home.

All experience shows that no boy is safe as long as he is suffered to run about the streets at night. If the cause why boys of the city are more vicious than those of the country, were ascertained, it would be found to be in a great degree owing to their night street associations. Keep your boys at home evenings, and to do so you must make home a desirable place and pleasant.

We understand that the new foundery and machine shop at Alton, carried on by Messrs. Stigleman, Miller & Co., is getting up a mill to be used in expressing the juice from the Chinese Sugar Cane. We trust that this will be a cheap and efficient machine; and if the gentlemen would also get up cheap pans for boiling the juice, they would be likely to make money for themselves and benefit greatly the public.

The editor of the Ohio Cultivator a few years ago visited the farm of Ezra Meech, near Lake Champlain. He had protected his garden by a dense growth of evergreens, which were then from twenty to thirty feet high, and in this garden were growing fruits and flowers that are called tender in Central Ohio. That garden was in 45 degrees north.

THE MICHIGAN DOUBLE PLOW.—But few of these plows have been used in this section of Illinois. They can be employed for many purposes. In foul grounds, whether of weeds or blue grass, they place the seeds and turf so deep in the ground, that they are out of the way of doing mischief. They also plow the ground well and leave it in the best possible order.—They are used, too, with success as prairie-breakers. Prairie broken by these plows is as good or better than old ground for any kind of crop. Orchards can be planted, or any use can be made of grounds broken by the Double Michigan Plow, that can be made on old grounds. We annex two statements on the subject of the performances of this plow by gentlemen well known in this State:

OTTAWA, August 6, 1856.

John Derre, Esq., Moline, Ills.

We purchased at the ~~State~~ Fair last fall, one of the Michigan Double Plows, and this spring another, from Mr. Chamberlin, of your make. ~~They were~~ entirely to our satisfaction, and we shall have another this fall. Last fall we had about fifty acres late broke prairie sod, unrotted; common plows would do nothing at cross-plowing or turning it over; put in this plow and it buried the unrotted sod out of sight with three yoke of oxen abreast. That land produced a fine crop of spring wheat. This spring broke prairie with both these plows; rigged them to run alone and put on six yoke of oxen and steers; they broke about an acre and a quarter a day, and left the ground as mellow as an old field newly plowed in the spring;—harrowed this ground, planted to corn, all plowed before the 10th of June, and tended it;—have promise of a fine crop. The later broke goes into fall wheat and timothy. We would like to have all our plowing done with it.

There is no land so hard in our region but this plow will penetrate it and run steadily in it without jumping.

Your ob't serv't,
BRONSON MURRAY.

[Signed]

OTTAWA, Ills., July 11, 1856.

Mr. John Derre:

Dear Sir: I have your favor of the 7th inst. I purchased of Mr. Emery one of the Michigan double subsoil plows, with which I have broken about eight acres here, and have sent it to my farm near Plainfield, in Will county. I broke about ten inches deep. It did the work well, and left the ground almost as light as old ground plowed to the same depth. I did the work with four heavy horses. The plow was well made, easily adjusted and works finely. It is a good plow, when a farmer has plenty of team and a full crop is desired the first season, and its influence will no doubt be felt for several years. It will no doubt answer well for subsoiling old ground.

Your's truly,

J. D. CATON.

On the Means of Securing the Advantages of Climate.

BY WILSON FLAGG.

The selection of a site for one's dwelling-house, whether it be designed only for a summer residence, or for a permanent abode, is a subject of greater difficulty than is generally supposed. In treating of this matter, we should consider those circumstances which are most favorable for shelter in winter, for shade in summer, for recreation, and for prospect. In this essay, I shall treat less of the comparative advantages of living north or south of a certain latitude, on the coast or in the interior, than of the importance of certain circumstances attached to particular locations, that may be found in all places.

The average of the weather throughout the year might prove the advantages in favor of a residence on the coast. But whether we live near the sea-shore, or a hundred miles back of it, the American climate is so cold at one time, and so hot at another, and so variable at all times, that the true art of enjoying it consists in using the best means to avail ourselves of its benefits, and to secure ourselves from its evils. It does not involve the question whether we shall live in this latitude and longitude or another; but what rules should our govern choice of a location for our dwelling-houses, and what means should be used to protect them from the cold winds, and secure to them the advantage of the sun's rays. None will dispute that, in the same township, certain locations are more favorable for comfort, as well as for prospect, than others; and were all men to pay proper regard to the selection of a site, and to the use of all available means of protection from the disagreeable effects of the weather, I am persuaded that the people would enjoy more comfort, both at home and abroad. We should also hear less fault-finding with the climate, which, on account of the great proportion of clear, sunny days, admits of improvement, both by adopting the means of shelter from the cold winds, and of collecting and reverberating the heat of the sun. If our climate were a cloudy one, a hill or a grove would be of equal value to protect us from the winds; but, under present circumstances, they may be contrived to afford no positive heat when the sky is clear, in the coldest of weather. Hence a well protected inclosure may be comfortable during all clear days in winter; while an unprotected one is no warmer on clear days than at other times, because all the heat reflected from the surface is immediately dissipated.

By considering the great cause of the difference between the climate of America and that of the same latitudes on the old continent, we might easily be convinced of the importance of a natural or artificial bulwark, to increase the comfort of our inclosures, and to make a pleasant climate about our homes. The great Himalayan range of mountains runs east and west, separating the continent of Asia into two grand divisions, one on the north, and the other on the south. By means of this natural barrier, the country lying south of it is completely defended from the north winds, and seldom experiences a

severe degree of cold. The countries north of the range, on the other hand, are just as effectually cut off from the warming influence of the south winds. The returning currents of the atmosphere, from the equator to the poles, cannot freely pass over these mountains, but are diverted to the outside of the chain, and return along the valley of the Red Sea and the Mediterranean, and over the western coast of Europe. Hence, the climate of that country is the most delightful in the world; and while Persia and the Indies, on the south of the Himalayan range, enjoy an almost perpetual summer, Siberia, Tartary, and other countries on the north of it, are rendered almost uninhabitable by cold.

The character of the American continent, which is divided by the Rocky Mountains, in the direction of north and south, is quite the reverse of this. The northern regions feel the full influence of the returning winds from the equator to the poles, and the southern regions are equally subject, in winter, to the freezing winds, that meet with no barrier to intercept their progress from the Arctic circle. Hence, North America has the most variable climate known; and often, while the New England States in mid-winter are enjoying the mild weather of the Carolinas, brought to them by a few days' prevalence of the south wind, the orange trees in Florida are in jeopardy from the freezing gales that pour down west of the Alleghanies, directly from Labrador.

All this difference between the climate of Asia and America may be attributed to the different course of the great ranges of mountains in these two continents. Were the Rocky Mountains stretched uninterruptedly across the continent of America, from the coast of Labrador to that of the Russian possessions on the Pacific—the Canadas would have a climate as mild as that of Europe; and Newfoundland, now almost uninhabitable, receiving the atmospheric currents from the equator, turned aside by the intercepting mountains, would be a land of perpetual spring, and the garden of the world.

Nature in these cases has presented us examples, from which we might derive some useful instruction. Rules for the improvement of the soil have been carried almost to perfection; but little has been done for the improvement of climate, which is nearly as much under our control as the soil. The laws that influence climate are the same in all parts of the world, and the same proportionally on a smaller as on a larger scale of operation. In a land of so much sunshine as our own, we may economize it for our use and benefit, or we may allow it to be lost, according as we adopt or neglect certain contrivances for this purpose. Nature has shown, by her own example, the effect of woods, of mountains and ranges of hills, upon the weather in their vicinity. Let us study these effects, learn the laws of climate, which are vastly more important than the prognostics of the weather, and we might soon be enabled to double our own comforts.

This essay cannot contain anything beyond a few hints that may lead to further investigation of these laws. In many cases our farmers seem to have been governed by them, and in general

have located their houses on the south side of a hill. Many a farm is exposed all winter to the bleak northwest wind, which might be rendered comfortable by a plantation of trees on its northern boundary, and be furnished with an agreeable promenade all along under the edge of the grove.

It may be objected, that every man cannot have choice of a location for his house. This might be said with truth, if the whole land were covered with buildings, as in the town or city. But every man who owns a farm, or even a solitary acre of land, unless the whole of it lie on the northern slope of a hill, may plant a grove of evergreens, of greater or less width, around its northern limits, which, if well supplied with undergrowth, though but two or three rods in width, would protect his grounds as well as half a mile of forest.

A house on a bleak exposure would suffer the inconvenience of it during eight or nine months of the year; while another, in a sheltered vale, though exposed to more heat in July, would suffer vastly less from the inclemency of the weather in winter and spring. But it is not necessary to plant one's house in a valley to secure these advantages. An elevated site may be as warm as a low one, if its slopes are in such a position as to receive the direct rays of the sun during the best part of the day, and if it be provided with a boundary of wood that will save the solar heat from being scattered by the winds. I would never allow this bulwark, if it could be prevented, to extend round so far east or west as to intercept my view of sunrise or sunset, considering a view of the heavens, at these hours of the day, as more valuable than any other kind of prospect; and, during the short days of autumn and winter, I should set a high value upon any circumstance that would hasten the arrival of morn, and prolong the light of declining day.

The best kind of protection is a hill or a ridge forming a bend, with its concave side facing the south, having its lower part open, and its summit crowned with a wood. The wood in this case cuts off the force of the winds, while the lower surface of the slope acts as a reverberator of the sun's heat. The same hill, without the trees, would be an excellent reverberator; but it needs the wood on its summit, to retain the heat which is thus accumulated. As the width of surface protected by any such barrier is proportional to its height, other things being equal, a wood on the summit of a ridge or a bank must protect a much wider surface than could be protected by the hill without the wood, or the wood without the hill, or by the hill with the wood only on its lower part.

In spite of the awkward appearance of a northern boundary of wood near one's dwelling-house, it seems to be almost indispensable in a climate like our own, which, more than any other, admits of such improvements. If my house were protected only by a wood, I should plant a close thicket of undergrowth outside of the belt, to prevent the winds from sweeping under the trees. In that case, the members of the family might walk with comfort in the grove,

which would freely admit the beams of the sun to enter on the south side.

It is hard to determine whether the northeast or the northwest wind, in this part of the country, produces the most discomfort. None will deny that the northwest is the coldest winter wind but in spring the northeast wind is more uncomfortable than the other in winter. In the New England States, no house is well protected which is not guarded against both of these winds. It is wise to furnish all country-houses with such safeguards, when the space will admit of it, not only for the comfort of the inmates of the house, but also for the good condition of one's cattle and flocks. All animals in cold weather require additional feed, to supply their systems with fuel for the production of animal heat, as well as for sustenance. Hence, if they are well protected from the cold, they must require less of this fuel to preserve their vital warmth. Good economy, therefore, as well as a regard for our own comfort, would advise the adoption of all such available means of protection from the cold, and of securing the benefit of the solar heat.

A great deal might also be said of the utility of such protection for farming and gardening operations; but this point has been ably elucidated, in a late article, by the editor of this journal. In the majority of cases, when one is about to select a location for a dwelling-house, he might choose a spot that is already provided with these advantages, without sacrificing others that might be deemed of more importance.—Protection is more valuable in this climate than prospect, how highly soever the latter may be prized. But if the best views of the landscape lie north of one's grounds, let them be reserved for recreation, when the weather will permit one to go out to seek for them. In almost all cases, the value of a prospect is enhanced by any little difficulty in the way of obtaining it; and there are but few who would not prefer a prospect that was near at hand, though unseen from one's windows, to one that was always tiresomely conspicuous, and could not be concealed.

THE MOTHER'S INFLUENCE.—The solid rock, which turns the end of the chisel, bears forever, the impress of the leaf and the acorn, received long, long since, ere it had become hardened by time and the elements. If we trace back to its fountain, the mighty torrent which fertilizes the land with its copious streams, or sweeps over it with a devastating flood, we shall find it dripping in crystal drops, from some mossy crevice, among the distant hills; so, too, the gentle feelings and affections that enrich and adorn the heart, and the mighty passions that sweep away all the barriers of the soul, and desolate society, may have sprung up in the infant bosom, in the sheltered retirement of home. "I should have been an atheist," said John Randolph, "if it had not been for one recollection, and that was the memory of the time, when my departed mother used to take my hand in hers, and caused me, on my knees, to say, "Our Father who art in Heaven!"

THE GRAZIER.

Points of a Good Horse.

The New York Spirit of the Times gives the following directions for examining the condition of a horse:

"In purchasing a good horse, sight, wind, feet and limbs must be the uppermost objects of inquiry; for nine horses out of ten are defective in one of these particulars. First, then, examine his eyes, and do this before he comes out of the stable; see that they are perfectly clear and transparent, and that the pupils or apples of the eye are exactly alike in size and color. Next examine his pipes; if good and sound, on being nipped in the gullet, he will utter a sound like that from a bellows; but if his lungs are touched, and he is broken winded, he will give vent to a dry, husky, short cough; look to his limbs also, and in passing your hand down his legs, if you find any unnatural protuberance, or puffiness, or if feeling first one leg then the other, you discover any difference between them, disease more or less is present; he may not be lame, but he is not clean upon his legs. If he is broad and full between the eyes, he may be depended on as a horse of good sense, and capable of being trained to almost anything. If you want a gentle horse, get one with more or less white upon him; many suppose that the parti-colored horses belonging to circuses, shows, etc., are selected for their oddity; but it is on account of their docility and gentleness; in fact, the more kindly you treat horses, the better you will be treated by them in return."

From the Country Gentleman.

The Best Cattle for Slaughtering.

The rearing of cattle for the beef-market will certainly call into requisition a larger amount of scientific and experimental knowledge, when the consumers and venders of beef shall have made the discovery, more generally than at present, that the beef of certain breeds, and still more, of certain modes of feeding, is greatly superior to that otherwise produced. When a proper distinction of this shall be more generally made, there will be a call for superiorly fed animals, which will attract more attention and greater numbers to that department of agricultural skill and labor.

To those who are at present engaged in the raising of cattle for the market, or in the production of the best quality of beef, it may be both interesting and instructive to

be informed as to the principles and practices of those who have been the longest employed in this department of business, and who have brought to its pursuit all the resources found in physiology, chemistry, the analysis of food, &c., together with the facts accumulated during a long experience. That the business of rearing and feeding of animals for the production of beef and other kinds of meat has been pursued during a longer series of years, and has received much more attention in Great Britain, than it has, as yet, in this country, will be at once acknowledged. From the best experience of those in that country, who are the most successful in this department of business, there are few in this country, we presume, but might gather many useful hints and items of information. We have, accordingly, been induced to select a few such hints and items from recently published essays and discussions, giving the results of the experience of those who have been most skillful and most successful, in the business referred to, on the other side of the Atlantic.

To obtain stock best fitted for feeding, or for the laying on of fat and flesh and early maturity, breeding by crossing distinct or allied breeds is much resorted to among British feeders. It is a fact, pretty generally known we presume, that a vigorous progeny is usually obtained as the result of a cross of two distinct breeds. This fact or law is the foundation and explanation of the practice just named. Another result of the crossing of breeds is, that the offspring are generally precocious, with a tendency to an increase of size. To secure this result with the greatest degree of certainty, and to the utmost extent, it is the usual practice to select a male having the peculiar properties of early maturity, and the disposition to accumulate flesh and fat rapidly. Size is also a quality which is regarded; but ought to be, always, deemed of less importance than a hereditary tendency to obesity, precocity, and superior quality of flesh. As the Short-horns possess these qualities in an eminent degree, this breed is almost invariably resorted to for a male for crossing females of other breeds. Where the rearing of cattle is followed mainly with the view of obtaining stock for the production of beef, the practice in many districts is to use a pure bred male of the Short-horn breed, with a female of the breed peculiar to or prevalent in the particular district. This system of crossing is gradually extending over the whole of Great Britain and Ireland. This class of cattle is rapidly extending in most

of the northern counties of England, where the breeding of cattle is practiced to any great extent. The dairies in London, also, are mostly supplied with cows so bred.

In both of these respects we might follow the practice of our British brethren, with good prospect of similar results. For here, as there, the Short-horn breed is peculiarly characterized by a tendency to early maturity and to a great accumulation of fat. This breed is also possessed of valuable qualities as dairy stock, though their lactative capacities have not been cultivated so much as their capacity for laying on fat and flesh.

The Cholera among Hogs.

The Buffalo Republic, referring to the malady that has prevailed among hogs in the Ohio valley, says:

"The same malady appears to have prevailed extensively in the adjoining States. In Western New York, especially, we learn it has been very fatal, but is now over. In conversation with one of the most extensive dealers in the neighborhood, a day or two since, he informed us that about six weeks ago he lost about 400 in a very short space of time. A distiller in Jordan, during the month of September, lost fourteen hundred, which cost him in addition over \$1,000 to have them buried. In Rochester, at all the principal points, and even among the farmers, the mortality has exceeded anything ever before heard of. A butcher in this city not long since, purchased five hundred dollars worth of fat hogs, but they died so rapidly on his hands, that he scarcely realized \$75 on his investment.

In this quarter the disease appears to have been confined to no particular class of hogs, but to have prevailed indiscriminately among "all sexes, ages and conditions"—corn-fed, still-fed and grass-fed, have fared alike. The fattest, however, seem to have been more susceptible than others. When first attacked, the hog was noticed to fall rapidly away. Soon the skin about the neck and ears assumed a purplish hue, and generally in about an hour the hog was dead, after which the whole carcass became purple. The lungs, liver and kidneys, on examination, were found to be like sponge in appearance, but nothing like the symptoms of cholera has been noticed in this vicinity. In the neighborhood of Cincinnati, it is said that the disease appears to have assumed the form of ersiypelas in the throat.

All efforts at finding a remedy which

should prove the least effectual in staying the ravages of the epidemic have thus far failed. In this quarter, however, the disease appears to have ceased its ravages some four or five weeks ago; but it is not improbable that it will return again another season, and in the meantime its origin and progress, should be investigated. Whether the subject is of sufficient importance to call for legislative interference in regulating the sale of pork we shall not attempt to decide. We presume every person will consult with his own taste in pork in this respect.

MANGE IN SWINE.—I have noticed in one of your late papers an inquiry for the cure of what we "back woods" people, call mange in pigs. Permit me to assure you that I have a never-failing remedy, to-wit: Give the pig or hog affected, (according to age) from ten to twenty grains of arsenic twice a week for three weeks, feeding him plentifully during the time, and I will warrant that he will soon shed off, and become perfectly well, fat and slick. It will also cure the worst case of mange on any dog. I speak from experience, and there is no danger of doses of that size killing either pigs or dogs.

JOHN BONNER, Hancock, Ga.

GREAT GEOGRAPHICAL DISCOVERY IN GEORGIA.—Interesting intelligence has just been received from the State survey of the Okefenokee Swamp, which covers nearly a fourth of the map of Georgia. The great swamp does not appear to be a swamp after all. So far from being impeded by water, the expedition suffered severely from the want of it, and were compelled to sink three wells for drinking and cooking purposes. The underwood, also, was found of most fabulous thickness, through which they were compelled to cut their way with knives, whereby they were so much delayed as to be in danger of starvation, their supplies being exhausted. The most erroneous opinions have been entertained of the extent and nature of the whole region. No published map gives any idea of its geography. The survey will prove a fortunate venture. The submerged portion is found to be easily drained, whereby thousands of acres of the most valuable cotton lands in the south will be reclaimed.

PLANT TREES.—The proper season for transplanting both ornamental and fruit trees, is now at hand, and we would take the opportunity of impressing it upon the minds of our readers that it is their duty not less than their interest to let not the time go by without improving it.

☞ What is that, that can be right but never wrong?—An angle.

AGRICULTURAL.

The Passion for Large Farms Prejudicial.

There is a passion for large farms, which very extensively prevails in this country. It leads men to add field to field, tract to tract, and small farms or portions of farms all around them to their original purchase, until they come into possession of far more land than they can cultivate or manage to good advantage, and into the possession indeed, of what, in Great Britain, would be quite an estate, or of what would elevate the possessor of it into the envied class of landed proprietors. The ownership of as many acres there, as are frequently owned by some of our large farmers here, would give to their possessor the much-coveted and much-prized title of a "Country Gentleman."

This prevailing passion operates so often injuriously, not only to the individuals more immediately concerned, but also to the neighborhoods and school districts in which they are located, that it would be a contribution to the good of many communities, and to the well being of individuals and neighborhoods, if it could be effectually restrained. Notwithstanding the many and the obvious prejudicial consequences which have been seen, or may, at least, be seen, to flow from this passion, it appears to be just as strong and as urgent as it was many years ago when the evil consequences flowing from it had had less time and opportunity to develop and manifest themselves. We presume that some of the ridiculous or hurtful consequences of this passion, and of the possession of large farms by one individual, are known to almost every one, as almost every neighborhood affords an instance of the fruits of this folly. These natural consequences, demonstrating the injuriousness of the folly under consideration, may, in time, work out such a revolution in public opinion as may put a check upon this passion for large farms; but as that reformation, like some others not a little needed may come rather slowly; we would give it an impulse by any and every other means which present themselves. For this purpose we would submit to the consideration of the more intelligent and patriotic or public-spirited of our readers, the following sensible observations, which were originally presented by Judge Woodford, in his address before the Penn. State Ag. Society at its recent Fair at Pittsburgh.

Among several of what Judge W. calls

the WANTS of farmers, elsewhere as well as in Pennsylvania, is the want of smaller farms :

"As a general rule, Pennsylvania farms are too large. If a man have capital enough to stock and carry on a large farm property—that is, so as to make it yield up to its full capacity, and, at the same time to be growing better, there can be no just objection to his adding field to field, and farming largely. And there are some advantages peculiar to large farms, such as a greater diversity and a more systematic rotation of crops, which the man of large means has a perfect right to purchase to himself. But, generally speaking, the capital employed in carrying on farms is very small, and the size of farms is out of all proportion to the means invested. It is a distressing sight to see fields half tilled. Such farming is pernicious as an example; it corrupts and finally kills the soil, and degrades the cause of agriculture. It is not for me to say how many acres a farmer ought to cultivate; but I will say that he ought to attempt no more than he can cultivate thoroughly and well. If, instead of hurrying his sons off to the West, as they grow into manhood, he would divide his farm of two or three hundred acres among them, until each of them and himself should have but fifty acres apiece to cultivate, it would not surprise me to hear that he and each son had found fifty acres, properly cultivated, more productive than the whole had been before. The Romans illustrated the importance of thorough tillage by the following apologue—A vine dresser had two daughters and a vineyard. When his eldest daughter was married, he gave her a third of his vineyard for a portion, notwithstanding which he had the same quantity of fruit as formerly. When his youngest daughter was married, he gave her half of what remained, and still the produce of his vineyard was undiminished. This resulted from his bestowing as much labor on the third part left, after the daughters had received their portion, as he had been accustomed to give to the whole vineyard."

There can be little doubt with those who will reflect upon such facts as good gardening, market gardening, and small farms well tilled, have often presented, than an experiment like that named might be repeated with success in many neighborhoods. Many a man might sell half his farm and profitably employ the proceeds in making the rest more productive.

of the northern counties of England, where the breeding of cattle is practiced to any great extent. The dairies in London, also, are mostly supplied with cows so bred.

In both of these respects we might follow the practice of our British brethren, with good prospect of similar results. For here, as there, the Short-horn breed is peculiarly characterized by a tendency to early maturity and to a great accumulation of fat. This breed is also possessed of valuable qualities as dairy stock, though their lactative capacities have not been cultivated so much as their capacity for laying on fat and flesh.

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The Buffalo Republic, referring to the malady that has prevailed among hogs in the Ohio valley, says:

"The same malady appears to have prevailed extensively in the adjoining States. In Western New York, especially, we learn it has been very fatal, but is now over. In conversation with one of the most extensive dealers in the neighborhood, a day or two since, he informed us that about six weeks ago he lost about 400 in a very short space of time. A distiller in Jordan, during the month of September, lost fourteen hundred, which cost him in addition over \$1,000 to have them buried. In Rochester, at all the principal points, and even among the farmers, the mortality has exceeded anything ever before heard of. A butcher in this city not long since, purchased five hundred dollars worth of fat hogs, but they died so rapidly on his hands, that he scarcely realized \$75 on his investment.

In this quarter the disease appears to have been confined to no particular class of hogs, but to have prevailed indiscriminately among "all sexes, ages and conditions"—corn-fed, still-fed and grass-fed, have fared alike. The fattest, however, seem to have been more susceptible than others. When first attacked, the hog was noticed to fall rapidly away. Soon the skin about the neck and ears assumed a purplish hue, and generally in about an hour the hog was dead, after which the whole carcass became purple. The lungs, liver and kidneys, on examination, were found to be like sponge in appearance, but nothing like the symptoms of cholera has been noticed in this vicinity. In the neighborhood of Cincinnati, it is said that the disease appears to have assumed the form of *ersiypelas* in the throat.

All efforts at finding a remedy which

should prove the least effectual in staying the ravages of the epidemic have thus far failed. In this quarter, however, the disease appears to have ceased its ravages some four or five weeks ago; but it is not improbable that it will return again another season, and in the meantime its origin and progress, should be investigated. Whether the subject is of sufficient importance to call for legislative interference in regulating the sale of pork we shall not attempt to decide. We presume every person will consult with his own taste in pork in this respect.

MANGE IN SWINE.—I have noticed in one of your late papers an inquiry for the cure of what we "back woods" people, call mange in pigs. Permit me to assure you that I have a never-failing remedy, to-wit: Give the pig or hog affected, (according to age) from ten to twenty grains of arsenic twice a week for three weeks, feeding him plentifully during the time, and I will warrant that he will soon shed off, and become perfectly well, fat and slick. It will also cure the worst case of mange on any dog. I speak from experience, and there is no danger of doses of that size killing either pigs or dogs.

JOHN BONNER, Hancock, Ga.

GREAT GEOGRAPHICAL DISCOVERY IN GEORGIA.—Interesting intelligence has just been received from the State survey of the Okefenokee Swamp, which covers nearly a fourth of the map of Georgia. The great swamp does not appear to be a swamp after all. So far from being impeded by water, the expedition suffered severely from the want of it, and were compelled to sink three wells for drinking and cooking purposes. The underwood, also, was found of most fabulous thickness, through which they were compelled to cut their way with knives, whereby they were so much delayed as to be in danger of starvation, their supplies being exhausted. The most erroneous opinions have been entertained of the extent and nature of the whole region. No published map gives any idea of its geography. The survey will prove a fortunate venture. The submerged portion is found to be easily drained, whereby thousands of acres of the most valuable cotton lands in the south will be reclaimed.

PLANT TREES.—The proper season for transplanting both ornamental and fruit trees, is now at hand, and we would take the opportunity of impressing it upon the minds of our readers that it is their duty not less than their interest to let not the time go by without improving it.

What is that, that can be right but never wrong?—An angle.

AGRICULTURAL.

The Passion for Large Farms Prejudicial.

There is a passion for large farms, which very extensively prevails in this country. It leads men to add field to field, tract to tract, and small farms or portions of farms all around them to their original purchase, until they come into possession of far more land than they can cultivate or manage to good advantage, and into the possession indeed, of what, in Great Britain, would be quite an estate, or of what would elevate the possessor of it into the envied class of landed proprietors. The ownership of as many acres there, as are frequently owned by some of our large farmers here, would give to their possessor the much-coveted and much-prized title of a "Country Gentleman."

This prevailing passion operates so often injuriously, not only to the individuals more immediately concerned, but also to the neighborhoods and school districts in which they are located, that it would be a contribution to the good of many communities, and to the well being of individuals and neighborhoods, if it could be effectually restrained. Notwithstanding the many and the obvious prejudicial consequences which have been seen, or may, at least, be seen, to flow from this passion, it appears to be just as strong and as urgent as it was many years ago when the evil consequences flowing from it had had less time and opportunity to develop and manifest themselves. We presume that some of the ridiculous or hurtful consequences of this passion, and of the possession of large farms by one individual, are known to almost every one, as almost every neighborhood affords an instance of the fruits of this folly. These natural consequences, demonstrating the injuriousness of the folly under consideration, may, in time, work out such a revolution in public opinion as may put a check upon this passion for large farms; but as that reformation, like some others not a little needed may come rather slowly, we would give it an impulse by any and every other means which present themselves. For this purpose we would submit to the consideration of the more intelligent and patriotic or public-spirited of our readers, the following sensible observations, which were originally presented by Judge Woodford, in his address before the Penn. State Ag. Society at its recent Fair at Pittsburgh.

Among several of what Judge W. calls

the WANTS of farmers, elsewhere as well as in Pennsylvania, is the want of smaller farms :

"As a general rule, Pennsylvania farms are too large. If a man have capital enough to stock and carry on a large farm property—that is, so as to make it yield up to its full capacity, and, at the same time to be growing better, there can be no just objection to his adding field to field, and farming largely. And there are some advantages peculiar to large farms, such as a greater diversity and a more systematic rotation of crops, which the man of large means has a perfect right to purchase to himself. But, generally speaking, the capital employed in carrying on farms is very small, and the size of farms is out of all proportion to the means invested. It is a distressing sight to see fields half tilled. Such farming is pernicious as an example ; it corrupts and finally kills the soil, and degrades the cause of agriculture. It is not for me to say how many acres a farmer ought to cultivate; but I will say that he ought to attempt no more than he can cultivate thoroughly and well. If, instead of hurrying his sons off to the West, as they grow into manhood, he would divide his farm of two or three hundred acres among them, until each of them and himself should have but fifty acres apiece to cultivate, it would not surprise me to hear that he and each son had found fifty acres, properly cultivated, more productive than the whole had been before. The Romans illustrated the importance of thorough tillage by the following apologue—A vine dresser had two daughters and a vineyard. When his eldest daughter was married, he gave her a third of his vineyard for a portion, notwithstanding which he had the same quantity of fruit as formerly. When his youngest daughter was married, he gave her half of what remained, and still the produce of his vineyard was undiminished. This resulted from his bestowing as much labor on the third part left, after the daughters had received their portion, as he had been accustomed to give to the whole vineyard."

There can be little doubt with those who will reflect upon such facts as good gardening, market gardening, and small farms well tilled, have often presented, than an experiment like that named might be repeated with success in many neighborhoods. Many a man might sell half his farm and profitably employ the proceeds in making the rest more productive.

From the Scientific American.

Experiments with the Chinese Sugar Cane.

MESSRS. EDITORS—Knowing that you take a deep interest in anything which promises to be valuable for our country, I send you the result of an experiment which I made with the Chinese Sugar Millet—*Sorgum Saccharatum*.

Having received from the Patent Office a paper of the seed, I planted it as a matter of curiosity, though not having the least confidence that it would prove to be worth anything. The seeds and stalks so nearly resembled our common broom corn as to make me feel quite sure they were.

I planted it in hills about two and a half feet apart, with from six to ten seed in a hill. It was greatly neglected during its growth, from an impression of its worthlessness.

Some time in August there was a chance frost which nearly terminated its growth, and, in fact, completely destroyed some sweet corn growing in the same garden. The millet was just putting forth its seed stalk, and the seed was, consequently, all destroyed. The stalks, however, were left standing until some time in October, when still supposing them to be worthless—I had them cut and thrown into piles, to get them out of the way.

After they had lain upon the ground for some time, I took a handful of the stalks and gave to my horse, who eat them greedily—eating both leaves and stalks.

About this time I saw a statement in the papers that some person had made some molasses from this plant. This led me to make the following experiment with mine, although I had reason to suppose that the frost and the exposure on the ground would have destroyed any good qualities it might have originally possessed.

I took some of the canes and cut them into pieces about three inches long, when they were readily ground through one of Hickox's Portable Cider Mills, with cast iron grinders; and then press with the powerful pressers attached to the mill. The quantity ground was about half a bushel of the pieces, and the juice expressed was about seven quarts. This juice when evaporated, made one quart of molasses that is pronounced, by those who have tasted it, to be superior to the New Orleans molasses, and some say, equal to the flavor of the maple syrup. It is, at all events, good molasses.

From an estimate made, I judge that the square rod of ground planted—if the canes

had all been used—would have produced four gallons of molasses, or at the rate of 640 gallons per acre. Such a crop would have proved valuable the last year, since sugar and molasses are so high.

There is little doubt in my mind that any person who has a small piece of land, may manufacture his own molasses, and, perhaps sugar.

If cultivated on so small a scale as not to warrant the expense of erecting the rollers for expressing the juice from the cane, they may be cut up in a straw cutter, and ground in one of Hickok's portable cider mills, with such facilities that two men could obtain five or six barrels of the juice per day by hand, and proportionally more if horse or other power is used. This juice could be cheaply boiled in one of the evaporators with which you are acquainted, without burning the syrup or wasting any fuel.

Besides the molasses obtained from the stalks, the leaves will make good forage, the seed will nearly equal that of a crop of corn or oats, and the tops will make brooms.

With all of these advantages, may not the sugar millet prove of great value to the community? Every family in the country can make their own sugar and molasses, while, at the same time, the seed, forage, and brush for making brooms will pay all the expenses of raising the crop.

Those having seed to spare, will do well to make it public, that more experiments may be made during the next summer.

H. G. BULKLEY.

Kalamazoo, Mich., 1857

From the New York Tribune.

A Threatened Money Crisis.

We are heavily in debt to Europe. Our city merchants and bankers owe those of Great Britain; the country owes the cities; the farmers owe the merchants—in short, two thirds of us are in debt. To "owe no man anything" is not the rule, but the exception. The bare interest on our foreign debt is a heavy item in our annual outgoes. The tariff reduction, which takes effect in July, will inundate us with more goods, goods even though we do not order them. We may not be able to pay off much this year, but let us resolve to go in debt no further. Let us stem the current this year, that we may be able to roll it back thereafter. And, as our foreign debt is mainly made up of the debts of companies and individuals, let us sternly resolve that we will, individually and corporately, go in debt no further. It is high time that we recognized and enforced the sound old maxim of pay as you go.

Pitch darkness has been so improved as to read "bituminous blackness."

HORTICULTURAL.

The Orchard.

Now is the time to plant out your young orchard. The ground is in good order to receive the trees. See that you plant them out well, and where cattle will not get hold of them, or careless working hands, who let the plow and harrow bruise them. As a general fact, not one half of the trees planted ever amount to any thing. They are suffered to die by neglect, choked with turf or weeds, or killed by cattle, suffered to be blown down, or dragged over by the plow or harrow. Good fruit is one of the greatest blessings given to us, either as a source of pleasure, profit or health; it is one of those things, which to succeed, must be taken care of. The orchard will reward this care.

PEACH TREES.—The terrible winter of 1855-6 killed nearly all the peach trees in this country, young and old. The fall of 1855 was peculiar, and kept the trees in a growing state till winter; and, in this state, the cold destroyed them. But this is a capital peach country, and as we may not have another such season for many years, we would do well to put out new peach orchards. The sprouts from the old stumps will neither make good trees or good fruit. We suppose trees will be found this spring at the nurseries, although they may not be plentiful. Every farmer should provide himself with a few, and those of good varieties. The tree is subject to injury by the grub, which can be found now in the body near the earth, and its location is generally shown by the gum which oozes from the tree. Search for him with a sharp knife and kill him when you find him. Valuable trees are destroyed by this worm.

DWARF PEARS seem to be in fashion at the present time. In good soil, well taken care of, they will bear, usually, the second year from planting them out.

PLUMS—Ah, if we could kill off the curculio, would't we have fine plums in this country? We trust a remedy will yet be found for preventing injury by this villainous insect.

CHERRIES—The Dukes do well in many

localities—the Morellos in all. Heart cherries ought to be planted out, in poor soil, and limbs encouraged to grow near the ground, so as to protect the body of the tree from the sun.

GOOSEBERRIES.—It is an idle tale that English Gooseberries cannot be successfully cultivated in Central Illinois. There is no difficulty at all in doing this. We have grown the larger kinds of English gooseberries successfully; but we do not regard them as profitable plants as Houghton's Seedling, which is a hybrid, and wonderfully prolific.

RASPBERRIES can be put out now; but those who do this, if they expect crops, must protect them in winter.

CURRENTS.—There are now a great variety of these; but for general crops the Dutch White and Dutch Red are the best.

PIE PLANT.—If you have not the roots of some of the new varieties, you had better get them if you can; and if you cannot, you can find seed at the seed stores.

Farmers and Gardners must be busy now. You have not a moment to lose. Those who are opening new farms, should put out an orchard without fail. A year lost in doing this, is an essential loss in Illinois.

The Grape.

Hovey's Magazine of Horticulture for January, contains a valuable article on the progress of Horticulture for the present year. In reference to the grape, and the new hardy American varieties, introduced the present and last year, the writer says:

"The grape, that most delicious of fruits, so abundant in France as to be within the reach of every peasant, has for a long time, owing to the unfavorableness of our climate, been confined chiefly to the gardens of the wealthy, where it could alone be produced by artificial means. But, thanks to our enterprising cultivators, the time is coming when we may have them in as great abundance, and of as fine quality, as the inhabitants of Southern Europe. Our native grape, alone adapted to our variable climate, is, after a while, yielding to the ameliorating influence of cultivation through the seed, and we are no longer compelled to eat the half-matured Isabellas, so long the only var-

ity of any value. The Diana, the Concord, the Delaware, the Rebecca, the Carter, and other varieties of promise, can now be obtained, which produce their fruit with as much certainty as the Baldwin apple; and every individual who possesses a rod of ground throughout New England, may now enjoy the luxury of fully matured grapes. The warm and the cold grapery, may, and probably always will be, necessary appendages to every complete garden; but the same advancement made in this fruit that has been made in others, the strawberry for example, will render these structures no longer indispensable, as they have hitherto been to all who would possess good grapes. In our opinion it is doubtful whether any of the foreign grapes, unless we except the Muscats, exceed the Rebecca in quality. And even the Concord, in the size of its berries and beauty of its clusters, is to be preferred to an ill-matured Black Hamburg. Mr. J. F. Allen's efforts at hybridization promise well, and if his grape sustains the same reputation under open culture it has received under glass it will quite supersede the growth of the Chasselas and other common grapes."

THE GARDENER.

Seeds for early vegetables should now be in the ground—lettuce, radishes, cress, onion seed and setts, peas, beets, parsnips, early cabbage, celery, spinach, and some others.

The ground should be well shaded, and finely pulverized, and the seed should be sown carefully, not too thick, and should be properly covered. The larger seeds can be planted deeper than the smaller and lighter seed.

Farmers, if they choose, can sow peas broadcast, cover them well, and they will produce good crops. Even the Champion of England, Blue Prussian and Marrowfats, will produce well when sown broadcast, or what would be better, drilled into the ground.

Some early corn may be planted. Attention to the garden will pay our farmers well.

☛ If a spoonful of yeast will raise fifty cents' worth of flour, how much will it take to raise funds enough to buy another barrel?

THE FLORIST.

The Moss Rose is a favorite with the ladies. But few of them, however, are beautiful except in bud. A few years since, there was only a single variety;—now there are the following, and perhaps some others:

Luxemburgh, fine purplish crimson;
 Alice Leroy, lilac rose;
 Crimson;
 Elizabeth Roue, bright crimson;
 *General Drouet, purplish crimson;
 New White, pure white;
 Princess Adelaide, blush;
 Princess Royal, bright rose;
 Pacific, Rose;
 Queen Victoria, rosy lilac;
 Red Moss, very common;
 Violace, delicate pale violet;
 White Moss, white.

* This is a hardy perpetual, and is said to be a very fine rose.

Verbenas.

A few years ago only two or three varieties of this beautiful flower were known. Now the varieties are numerous, and embracing all shades or colors. In the list of Verbenas for sale by Francis & Barrell, among many others, we notice the following beautiful varieties—

Defiance, light fiery scarlet;
 Gen. Scott, blood red;
 St. Margaret, rosy crimson, violet centre;
 Belle of St. Louis, blush, large crim'n do;
 Reine de Jour, white do do;
 Stirata, white, with rose stripes;
 Heroine, bluish white, dark eye;
 Madame de Journay, blush, mottled with rose and crimson;
 White cluster, pure white;
 Mt. Etna, crimson scarlet, dark eye;
 Blue Defiance, bluish purple, very large;

PHLOX—This is a perennial flowering plant, and grows in gardens with very little care. There are now many beautiful varieties, and they bloom at a season when there are few other flowers. They can now be had of many different colors. No flower garden should be without some of them.

Bengal Roses.

These are known as China, daily and monthly ones. Usually when plants become of good size, and when not all day exposed to the burning sun, they bloom through the whole season. Some years ago it was not supposed that they would not live in the garden in winters but this they will do with a little care. The ground where they stand should be dry; late in the fall the tops should be cut off within six inches of the root, and a mound of earth thrown over them, to be removed only when danger of frost is passed in the spring. The following are good varieties—

Aggrapina, velvet crimson;
 Bellon, dark crimson;
 Belle Isadore, light blush;
 Cells, blush;
 Fortune's, colored, striped semi-double;
 Louis Phillipe, dark crimson;
 Mrs. Bosanquet, pale flesh color;
 Meillez, white;
 Palida, bright rose;
 Vesuvius, dark crimson;

Trim Roses and Shrubs.

The ladies can now see how far their roses have been killed down, the buds having started, and when they go into their gardens, they should carry their garden shears and trim their roses. Cut off all the dead wood. Trim out all the weak shoots, and put the bush into shape. It must be manifest to every one that the flowers will be better when there is not too much top to dissipate the strength of the plant.

Other shrubby plants want trimming. Don't be afraid to use the knife or shears. They do all the better for trimming and their appearance is much improved. "Scraggy" plants show neglect and bad taste. Every lady should have a pair of trimming shears.

Annual Flowering Plants.

The list of these has been greatly increased within the last few years, and the old varieties much improved. There has

been a great increase of the list by plants from California. The Aster class of plants, for fall flowering, produce many gorgeous varieties. Every little girl and big girl should have her flower bed. It will give them health, improve their taste for the beautiful, and lead them to look up from "Nature to Nature's God." It is said that one of the most impressive lessons ever given to WASHINGTON was by his mother in the flower garden.

THE HOUSEWIFE.

To Cure Dried Beef and Hams---Sausages.

Messrs. Editors—Last year, after using up our dried beef we bought some, and found it so much inferior that we desired that all might know how to make good dried beef or hams. For this purpose I send you our

RECEIPT FOR BEEF OR HAMS.

To 36 lbs. meat, 1 pound salt, 1½ table-spoonfuls saltpetre, one-third rubbed on once a day for three or four days, and they are ready for drying or smoking.

RECEIPT FOR SAUSAGES.

To 36 lbs. meat, 9 or 12 ozs. salt, 1 1-2 ozs. pepper, 1 1-2 table-spoonful saltpetre, 3 table-spoonfuls molasses, 6 handfuls or more of sage.

I send you the above, hoping some one may get a slice of bacon without soaking out all the juice of the meat before it is cooked. E. S. MALTBY, Bristol, Conn.

Daniel Webster on Cooking Potatoes.

It would seem from the following extract from his published letters that Mr. Webster was fond of good potatoes, and knew how they should be cooked:

Dear Fletcher:—I send a quarter of lamb to roast; and if not too rainy will come to dine with you. Tell Mrs. Baker the hour.

Potatoes. Let these potatoes be peeled early, and thrown into a basin of cold water till time to cook them. Let them be boiled in a good deal of water. When done, pour off all the water, shake up the potatoes a little, hang on the pot again, and then bring them to the table. I remember when we heard Hannah Curtis shaking her pot, we knew that dinner was coming.

THE POULTRY YARD.

Poultry.

Nearly every family can, with very little trouble, have eggs in plenty during the whole year; and of all the animals domesticated for the use of man, the common dung-hill fowl is capable of yielding the greatest profit to the owner.

The Hen-House should be warm in winter, well ventilated in summer, whitewashed and kept clean. Roosts of sassafras poles are less infested with lice. Have no ground floor. Supply slacked lime, fine gravel or ashes, or burnt oyster shells, &c.

Feeding.—They will sing over Indian corn with more animation than any other grain. The hen must have secrecy and mystery about her nest, watch her, and she will forsake her nest and stop laying.

[This is not always the case. We have known hens to come into the kitchen, when permitted, and lay upon the mats, or in the wood-box.]

They eat less, if allowed to help themselves to what they want, than if fed in the usual way, for, in the latter case, each tries to get as much as it can, and thus burdens itself; but finding in the former case, that they have an abundance, they eat but little, and that generally in the morning early, and in the evening before going to roost.

A farmer may keep an hundred fowls in his barn, may suffer them to trample upon and destroy his mows of wheat and other grain, and still have fewer eggs than the cottager who keeps a single dozen, who provides secret nests, chalk eggs, pounded brick, plenty of Indian corn, a few oats, lime, water and gravel, for them; and who takes care that his hens are not disturbed about their nests. Three chalk eggs in a nest are better than a single nest egg, and large eggs please them.

A single dozen fowls, properly attended, will furnish a family with more than 2,000 eggs a year, and 100 full-grown chickens for fall and winter stores. The expense of feeding the dozen fowls, will not amount to 18 bushels of corn. They may be kept in cities as well as in the country, and will do as well shut up the year round as to run at large, with proper care.

A Fact.—Eggs the nearest to roundness, produce females, and those pointed at one end, always produce males.

For Fattening.—Boiled Indian corn, wheat and barley, are better than oats, rye or buck wheat. One-third is gained by boiling.—[The Orator.

EDITORIAL NOTICES.

The attention of the reader is invited to two valuable articles in the first pages of this number of the Farmer,—from the Plow, Loom and Anvil—the first headed, "American Farmers," and the other, "On the means of securing the advantages of Climate," from Hovey's Magazine.

Chinese Sugar Cane.

The time is fast approaching for putting in the seed of this new plant, and a few remarks in regard to planting, &c., will be in season.

The seed can be planted from the period when we commence corn planting until June. Those who design to grow any considerable quantity for the manufacture of syrup, should so plant that the canes will mature from late in August until they are killed by frost. Even after heavy frost the juice will make syrup, though as with the Louisiana cane, it may not make sugar.

We do hope that our farmers will thoroughly experiment with this plant the present season, so that they will be ready with seed and experience to go more thoroughly into the cultivation of the plant and the manufacture of its juice the next. They will then be one year ahead of their neighbors; and this is no trifling matter in Illinois.

We learnt a few days ago that Mr. Thomas, of Waverly, intended to plant thirty acres of land the coming season with the Chinese sugar cane. He experimented with the cane the last season and is satisfied of its saccharine qualities. Messrs. Hammond & Co., of Jacksonville, iron founders, are at this time building for him a mill for expressing the juice from the cane stalk. He supposes his mill will do the work perfectly.

The failure of the sugar cane in Louisiana, the great and increasing demand for sugar and molasses, and the high price of these articles, which will not probably be much lower at present, have drawn the attention of enterprising men to the cultivation of the Chinese sugar cane, to supply sugar and

molasses. Experiments and chemical analysis go very far to prove that this cane will answer the purposes required. Should future experiments sustain our present hopes, it is hardly possible to estimate too highly the advantages which will result to the country from the cultivation of this new plant.

The southern agricultural papers contain a communication from Dr. Robert Battey, on this subject. Dr. Battey is professor in the College of Pharmacy in Philadelphia. He cultivated the cane in the summer of 1855, and made experiments with the juice of the stalks, from which he obtained sugar and molasses. His investigations go to prove that the Chinese sugar cane adapts itself to all the vicissitudes of our varied climates; that it succeeds well in Georgia and as far north as the northern parts of Illinois and Massachusetts; on rich land and land of a poor quality—indeed, where corn will grow to advantage, there the Chinese sugar cane can be made to grow. At this time, when seed is scarce and it is an object to make most of the seed, it should be planted in hills and cultivated as corn. Harvesting should be done when the seed has passed the dough state and become hard. And before harvesting preparation should be made for expressing the juice and manufacturing it into syrup. For this purpose there should be a mill and three kettles of the capacity of from 60 to 100 gallons. No matter how rich and valuable the juice may be, to succeed in realizing its value, you must have apparatus to work with. Mr. Peters, in Georgia, found the syrup he obtained from one eighth of an acre of good canes, 53 1-4 gallons, and from another eighth of an acre of inferior canes, 43 1-4 gallons. He estimated the syrup that might be obtained with suitable apparatus at 570 gallons per acre.

Dr. Battey says—"If the opinions I express should seem to some too wild and extravagant, I trust they will be received as the honest and candid sentiments of one who has carefully examined the subject, and that others will be led to experiment for themselves."

Dr. Battey supposes the Chinese sugar cane will take the place of the cane now cultivated in the south, and that the production of sugar will in consequence be limited and its value enhanced. We hold, however, a different opinion. If the cultivation of the Chinese sugar cane can be made profitable in the north, it will be extensively cultivated here, and that southern cultivators will find that slave labor, in this case, will not successfully compete with free labor.

THE SEASON.—The loss of wheat threw "a damper" upon our farmers; but they never say "die," and they have gone to work to sow and plant the ground where the wheat has failed, with a hearty will. There was a great breadth of land sowed with wheat last fall; in this county, probably twice as much as was ever sown before. We believe that two-thirds of the winter wheat is killed beyond hope; but spring wheat has been sown in large quantities, as also barley, and we are inspired with the hope that the loss of our farmers will not be great. More corn will be planted this year than usual; and we hope, earnestly, that our farmers will plant potatoes and beans enough to supply the demands of the home market. Potatoes have become an "institution" in families that cannot be dispensed with; and the article of beans can be used also to great advantage. Beans at one dollar a bushel can be grown with profit; but there is no likelihood of their being below \$1 50 per bushel.

Let us go ahead, brother farmers; let us put the seed into the ground again, and we may yet be prospered in the crops of the coming season. Indeed, so far the season promises well. The earth is well saturated with water, and with the usual season crops will be abundant. When matters go wrong in any business, then you will see what the man is made of. If he is of "the right stuff," he will still go ahead. If he is of the baser material, he will sink under difficulties. We shall see these truths verified, not only in the present spring, but in all time afterwards.

Illinois Soils.

Mr. D. D. Owen, State Geologist of Kentucky, made a report to the Legislature of that State, while in session last winter, one of the principal objects of which seemed to be to depreciate the value of the soils of Illinois. He had made an analysis of a specimen of soil from Hancock county and comparing it with some soils of Kentucky, he came to the conclusion that the soils of Illinois would soon wear out by cultivation, while those of Kentucky would not; and on this basis he urged the people of Kentucky not to emigrate to the State of Illinois if they regarded their future welfare.

The Corresponding Secretary of the Illinois State Agricultural Society drew the attention of Dr. J. G. Norwood, Geologist for Illinois, to this matter, and deeming the subject important, by circular he communicated with many distinguished citizens of our State, and asked them to give their experience in regard to the lasting qualities of the soils of Illinois. We are favored with an answer to one of these communications, which we here append. No comments are now required. The experience of the writer, we doubt not, will be confirmed by thousands of our citizens:

MARINE SETTLEMENT, Ills. March 28, '57.
Dr. J. G. Norwood:

Sir: I reside in Madison county, and have done so ever since March, 1820, to the present time. I have been tilling the farm on which I now reside for 37 years, and part of it had a crop on it during all that time. When I fell heir to this old homestead it was very impoverished, owing to my father not knowing any thing about farming. In 1839 and '40 I sowed it with timothy, and much to my surprise, it produced a ton of hay to the acre without manure. In 1849 I ploughed it under, when the timothy and clover were in blossom, although there was no clover sowed on it. It will get in my old meadows and I am glad of it, for I have convincing proof that when ploughed under at the proper time, it makes it equal to new prairie. I have raised five crops of corn off of this land in succession, which has averaged 60 bushels of corn to the acre. In 1853 it produced eighty bushels to the acre, with no extra work, only deep ploughing, and no manure.

I consider my farm about an average soil of our State. I know of some better and some inferior. I am not surprised at so many persons emigrating from Ohio and Kentucky to our State, where they can put the plough to work on our rich and fertile prairies, which will produce forty bushels of corn to the acre the first season, or an equivalent to it, if cut up for fodder; and for durability, I have no doubt that the soils of Illinois are superior to the States which they left behind them.

With respect, DANIEL GROUND.

"Stick to the Old."

So said an old foggy farmer. He did not think where this doctrine would carry him. It would prevent all improvement. If practiced 2,000 years ago and from thence down; we should be now clothed with skins and live in holes in the earth. For such was the case with our British ancestors, when Cæsar invaded Britain. In this country, almost every article of vegetable food is exotic; wheat, rye, oats, barley, buckwheat; and so of other things, cotton, indigo; indeed, we are indebted to other countries for the most valuable articles, we enjoy in this. The world is a stage of improvement. He who does not catch the spirit of the age, will find himself in the back ground. There are doubtless humbugs in the world. We may try all and hold fast to that which is sure. The cultivation of the potatoe was once called a humbug, and the beet and the cabbage. Indeed, the writer of this paragraph though not an octogenarian, recollects when a very small lad, an old gentleman said that when he was a boy if a farmer raised three bushels of potatoes it was regarded as a remarkable thing. The first cultivation of cotton in this country, is within the recollection of many. The *Morus Multicaulis* proved a failure for a variety of causes. The Chinese sugar cane will not, we believe, be a failure. That boy who "sticks to what is old," will be sadly behind his fellows in time to come.

We urged our friends last fall to drill in their wheat. Mr. James M'Connell, near our city drilled in a field, which will show what he has done by not "sticking to what

is old." It now presents a beautiful sight. Let him who would "stick to what is old," go and view this field, and learn a lesson.

THE FRUIT.—The apple buds are not hurt, and we shall be likely to have a plenty of that fruit. The apple is the great reliable fruit of this country, and every farmer should plant out his orchard, and take care of it when it is planted. Apple trees will not grow in blue grass sod, or in any close sod, at least when they are young. The ground of the best orchard we ever saw was cultivated for many years in potatoes, corn and beans. Even corn grows too high to benefit young trees, and grain does not agree with them. An orchard in a field occupied by potatoes will grow twice as fast as in another occupied by grain. This has been tested in Bureau county, in this State. Indeed the orchard first mentioned flourished remarkably, while many of the trees in the second died out-right. Take care of your trees, good friends; furnish your families with the health-giving fruit of the orchard, and enable the hungry denizens of cities to enjoy also a fruit that can be grown to any amount in our own country. We have seen Belleflower apples sold for two dollars a bushel the last winter, and even Jennetings are now sold at that price. We are selfish in this matter of fruit. "We own up," kind reader.

Many farmers have lost all, or nearly all, of their fall wheat. What is to be done? Spring wheat, barley, flax and oats can at once be made to occupy the ground. If this is done promptly, the loss may not be as great as is now supposed. White beans are also a good crop. It will not be well, we think, to plant all the land on which winter wheat was sown and lost, with corn; because, in such case, there would be more corn raised than would be required, and the price would be very low. We have not hogs or cattle enough to consume a large crop of corn. The coming crop of hogs will be light. There are but few in the country, as is evinced by the price, five cents per pound live weight.

Hon. Wm. S. Wait, of Bond county, will plant eight acres with the Chinese sugar cane, the present spring. J. D. Patterson, Esq., of this county, will plant some fifteen acres with the same plant. We believe that experiments the coming season will determine the value of this new cane. As we have said before, we do not believe there will be a failure in any case where the experiment shall properly be made.

Two years ago Mr. James Sikes, of DeWitt county, sowed spring wheat on the 15th April, which yielded thirty-five bushels to the acre: of the variety known as the Canada club.

S. P. Baker, in Wabash county, will plant 25 acres with Chinese sugar cane the present spring. It is said more than 100 acres of land will be devoted to that plant in Wabash county, the present season. Mr. Kroh, of that county, last fall, made 75 gallons of Chinese sugar cane molasses, a good stock for his winter supply.

ASPARAGUS BEDS.—A good depth of soil is necessary—say from two and a half to three feet—well enriched with rotten farm yard manure. Thorough and effectual drainage should also be provided. Early in every spring apply a dressing of salt, to the extent of one or two pounds to each square yard. An additional dressing of rotten stable manure should also sometimes be given. Asparagus is a marine plant; hence an occasional application of salt should by no means be omitted.

MANNY'S REAPER.—The reader will notice an advertisement of these Reapers in this paper. Some one hundred forty were sold in this county last year.

In answer to the question often asked—We say, that there have been no entries, as yet, for the Reaper trial in Marion county in June next.

The silk worm malady continues in France. The Emperor has just offered a premium of ten thousand francs to discover the causes of this malady, and indicate an efficacious remedy.

White Beans as a Crop.

Mr. Editor:—Much of the land on which wheat has been killed out will bring good crops of white beans. They can be grown on sod land broken last summer, and which is now clean and in good order. If drilled in the crop would be most certain, but even if sown broadcast, and covered by harrowing, and the land rolled, they would be likely to do well. Fifteen bushels an acre would not be a large crop, and they have been selling from last fall to this spring at from \$2 to \$3 50 per bushel. If raised largely, I do not believe they would by any possibility be lower than \$1 50 per bushel.

The small "Yankee bean" would do best on the poorest land. For richer lands it would be well to plant larger beans, which would make strong stalks, and would not be so likely to fall and injure the beans. There is the navy bean, larger than the "Yankee bean;" the marrowfat bean, or white cranberry; and the royal white kidney. All these produce well and the beans sell readily in market.

Field peas can also be raised to advantage. These are sown broadcast, and if of good quality, they sell well in winter for cooking. The usual variety used in this country for that purpose is a small white pea; but in England all our garden peas are sown broadcast and produce good crops. Market gardeners raise them in this manner. They run on the ground for a foot or so, then shoot up perpendicularly, and if they do not produce as many peas as they would if "bushed," they produce well.

I desire to draw the attention of your readers to these subjects. Our farmers have a great space of fine ground to occupy this spring, and it will be well for them to put it into crops that will pay. Large quantities of beans and some peas (the latter hard to be got,) were imported from distant places last winter and even the present spring.

BEANS & PEAS.

ROOSTING LADDERS.—The best roost in a poultry house, is the ladder shaped. Make a ladder three feet wide, and of convenient length, to slope at an angle of forty-five degrees, (that is, the foot of the ladder resting as far from the wall, if the ladder rests against a wall or partition, as the top is above the floor.) The rounds should be two feet apart, that the fowls above, may not foul those beneath. Octagonal roosts are better than round ones.

Spring Management of Sheep.

A. Nichols, of Westfield, New York, gives the following article on the subject in the Genesee Farmer:

Great care must be taken with sheep in the spring. They should be driven to shelter from every cold storm; grain must be given to them until the pastures get good; they must have salt once a week during the whole summer, and once in two weeks during the winter. About the first of June in this latitude, or in the south in April or May, according to the climate, the sheep must be washed in running water until clean, recollecting that the water must be warm enough to make the men, standing in it to wash the sheep, sweat at their work; if colder, it is abusing both men and sheep. As soon as dry, or in about one week, they must be shorn by good hands, who do not get angry and handle them roughly while shearing them. The fleece should be folded up, flesh side out, very neatly and packed in close, clean bins or boxes, until disposed of. The ram lambs must be emasculated, and all the lambs should have their tails cut off, at least as soon as they are four weeks old, as they bleed but little, and it does not hurt them so much as when they are older. Before turning out to grass in the spring, all the sheep should be tagged, that is, have all the wool on each side of, and under the tail, and some distance down between the hind legs, sheared close, to keep them from getting sickly. After the sheep are shorn, they should be marked with the owner's name, and put back to their pastures. They should be changed from one pasture to another as often as once a month. About the first of August, take the lambs from the ewes, and put them into good pasture, that they may not get poor. If you wish your lambs to come in March, put the ram with your ewes in October, (the average gestation of the ewe being one hundred and fifty-two days.) As soon as he has given a ewe one leap she should be thrown out, as more than that injures both the parent and the offspring. Use the best ram you can get, and the lambs will be good. He should be at least four or five years old, for if younger than this, or over ten years old, his lambs will be weak and puny. He should have all the grain he can eat, or he will get poor. As soon as he has served all the ewes, put him in a pasture alone, and it is better that he be kept by himself the whole year. Never use the same ram more than two seasons. Never sell the best ewes at any

price. Whenever you buy a ram, buy the best, whatever it costs, and the flock will improve in quality, will be hardy and profitable.

For Marking Sheep.—Put into a pan a quarter of a pound of lampblack, two ounces of Venetian red, and linseed oil enough to make a good paint. Mark either with stamp or brush.

To Cure the Foot-rot.—Put into a quart bottle a quarter of a pound of blue vitriol, one ounce of verdigris, and fill up with chamber-ley. Put a quill through the cork, turn the sheep on its back in a trough, open the hoof and scrape out clean with a knife all the diseased flesh, put on a few drops of the above mixture, and a cure is effected. If there are but two or three lame ones in a flock, put some of this mixture in the feet of all the sheep in the flock—with this mixture, an ounce of prevention is worth more than a pound of cure.

To Cure the Stretches.—Administer a table-spoonful of pulverized saltpeter immediately or the sheep will soon be past all cure.

To Resuscitate Lambs when Chilled.—Give a tea-spoonful of Thomsonian No. 6 in some warm milk, a little at a time, and wrap him in warm flannel.

To ADVERTISERS.—The attention of Manufacturers and dealers in Agricultural Implements, and all others who wish to communicate with the Farmers of Illinois, is directed to this periodical as an excellent medium for advertising. Terms reasonable.

A CHEAP PAINT.—A correspondent of an exchange gives the following simple method of making a mixture which he recommends as both fire and water proof, besides being very durable: Dissolve potash in water, and mix the liquid with fine clay till it is as thick as molasses, then apply with a paint-brush.

AN INTERESTING RELIC has lately been presented to the Pennsylvania Historical Society by Mr. Grenville S. Penn. It is the beautiful wampum belt originally given to William Penn by the deputation of Indian chiefs at the time of the great treaty. This is an important curiosity, and will be highly valued by the society.

Why are sheep the most dissipated and unfortunate of animals? Because they gambol about in their youth, frequent the turf, are very generally black legs, and are universally fleeced.

AN ACT to prevent the sale of spirituous liquors and other articles of traffic at or near agricultural fair-grounds.

SECTION 1. *Be it enacted by the People of the State of Illinois, represented in the General Assembly,* That no person shall keep any shop, booth, tent, wagon or other carriage, vessel or boat, for the sale of spirituous or other liquors, or any provisions or any article of traffic whatever, or sell, or expose to sale, give, barter, or otherwise dispose of, in or near any such shop, booth, tent, wagon or other carriage, vessel or boat, or in any other way or place, any spirituous or other liquors, or any provisions, or any article of traffic whatever, at or within the distance of two miles from the place where any agricultural, horticultural or mechanical society or people are collected, holding any agricultural, horticultural or mechanical fair or public exhibition; nor shall any person within the distance aforesaid, exhibit any shows or plays, unless the same shall have been duly authorized by the proper authority, previous to the commencement of such exhibition; nor shall any person, within the distance aforesaid, promote, aid or be engaged in any racing of animals, or in any gaming of any description; nor shall any person obstruct the free passage of any highway or traveled road within the distance aforesaid: *Provided,* that nothing in this act shall affect tavern keepers, distillers or others, exercising their calling at their usual, legitimate places of doing business, nor any person who shall have a written permit from the president of such agricultural, mechanical or horticultural society to sell bread or other provisions for the supply of persons attending such fair or exhibition, their horses or cattle, such persons conforming to all regulations of said society and the laws of the state.

§ 2. That any person who shall be guilty of a breach of this act, shall be notified by any one of the officers hereby authorized to make an arrest or seizure, or by any person, that he, she or they are violating the law, and if after such notice any such person shall continue in such violation, he, she or they shall forfeit and pay for every such offense any sum not less than five nor more than fifty dollars to the society holding such fair or exhibition, to be recovered before any justice of the peace or court having jurisdiction of the prosecution; and any judge of the circuit or county court, sheriff, coroner, justice of the peace, or constable of the proper county, shall, upon view or information, and without warrant, apprehend any person so offending, and seize booth, tent, wagon or other carriage, vessel or boat, spirituous or other liquors and other articles of traffic, and convey the same to a place of safe keeping, and take the said persons before any convenient justice of the peace having jurisdiction, together with an inventory of the things so seized; and the justice of the peace, upon complaint or oath, or affirmation of any competent witness, shall issue his warrants, which the said officer or constable shall have authority to serve, and cause the said offender to be arrested, and proceed forthwith to inquire into the truth of the accusation, and if found true, shall enforce the penalty of this act.

§ 3. If the accused shall fail to pay such fine as said justice of the peace shall inflict, together with all costs of proceedings, including the necessary expense of such seizure, the said justice of the peace shall forthwith issue an execution, commanding any constable of the county in which such inquiry shall be had, to make the said fine, costs, necessary expenses and costs of execution, by sale of so much of the things so seized, and of so much of the other property of the accused as shall be necessary therefor, and to make return thereof in ten days thereafter, and the overplus of the things so seized as aforesaid, after the satisfaction of said execution, shall be delivered to the defendant, on demand.

§ 4. In case the officer to whom said execution shall be delivered shall be unable to find sufficient property of such defendant to satisfy such execution, such agricultural or other society upon affidavit of any of its officers, shall be entitled to a *ca. se* against the body of the defendant, as in other cases. The defendant in any suit under this act shall have the right of trial by jury, as in other cases under the laws of this State.

§ 5. This act is hereby declared a public act.
Approved Feb. 13, 1857.

Midas was so great a man that everything he touched turned to gold. The case is altered now—touch a man with gold and he will change into anything.

A loving friend's rebuke sinks into the heart, and convinces the judgment; an enemy's or stranger's rebuke is invective, and irritates, not converts.

"Trees which abide age," said Burke, "grow slowly. The gourd that came up in a night, withered in a day."

COMMERCIAL.

Springfield Market.

OFFICE OF THE ILLINOIS FARMER, }
April 3, 1857.

All kinds of marketing is indemand.

FLOUR—Extra white, \$6 50; superfine \$6; common \$5 50.

WHEAT—Sales Red at \$1 to 1 60@1 15 $\frac{1}{2}$ bu.CORN—Sales at 30@35 cts. $\frac{1}{2}$ bu.

OATS—Sales at 40 cts. bu.

HIDES—Dry flint 16@18c cts. $\frac{1}{2}$ D.BRAN—10 cts. $\frac{1}{2}$ bu.SHORTS—15 cts. $\frac{1}{2}$ bu.CHICKENS—\$1 50 $\frac{1}{2}$ doz.TURKEYS—7@8 cts. $\frac{1}{2}$ D.ONIONS—\$3 $\frac{1}{2}$ bu.POTATOES—\$1 @1 50 $\frac{1}{2}$ bu.

APPLES—Green, \$1 25@1 50; Dry \$2 50@3.

BUTTER—20@25 cts. $\frac{1}{2}$ lb.CHEESE—12 $\frac{1}{2}$ @15 cts. $\frac{1}{2}$ lb.EGGS—10 @12 $\frac{1}{2}$ cts. $\frac{1}{2}$ doz.HAY—\$20 $\frac{1}{2}$ ton.CORN MEAL—60c. $\frac{1}{2}$ bu.HAMS—Smoked 10@12 $\frac{1}{2}$ c $\frac{1}{2}$ D.MOLASSES—Plantation 90c. $\frac{1}{2}$ gal.S. H. SYRUP—\$1 $\frac{1}{2}$ gal.

GOLDEN SYRUP—\$1 20@1 25.

SUGAR—Brown, 12@14c $\frac{1}{2}$ lb.TALLOW—9@10c $\frac{1}{2}$ lb.

BACON SHOULDERS—8@9c.

SIDE MEAT—10c $\frac{1}{2}$ lb.

LARD—12@15c.

BEANS—2 25@2 50 per bush.

COFFEE—Rio 14@16 $\frac{1}{2}$ c $\frac{1}{2}$ D; Java 8@20c.

RICE—10c.

CLOVER SEED—\$10 per bu; Timothy, \$3 $\frac{1}{2}$ @4.

CANDLES—Tallow 15; Star 30c per lb.

St. Louis Market. April 1.

New Orleans dispatches, of the 27th, quote prime yellow corn 80 to 82c; oats 67c; mess pork \$23; ribsides 12c; shoulders 10c; lard, in tcs and bbls 14 $\frac{1}{2}$ c; fair sugar 10 $\frac{1}{2}$ c.

Flour—Dull and declining. Sale 35 bbls country superfine at \$5 50; 248 bbls extra, on its merits at \$6 20. Yesterday 1,000 bbls city at \$5 75; 30 days.

Wheat—Sales to-day 1,260 bags spring in lots at \$1@1 05; small lot mixed at \$1 12 $\frac{1}{2}$; 143 bags fair red at \$1 13; 357 bags good red at \$1 17@1 18; 80 bags white at \$1 18; 120 bags prime red at \$1 20; 118 bags prime and choice red at \$1 22@1 25. Also including bags, 121 bags prime spring at \$1 25, and 480 bags choice white at \$1 45.

Corn—Inactive, though firmer, and without change. Sales 453 bags mixed at 46c; 756 bags prime yellow and white at 48c; 1,285 do do at 49c; 1,500 bags prime old do at 50c; 730 bags white in lots at 50c, including gunnies.

Oats—Firm and higher. Sales 500 bags at 61@61 $\frac{1}{2}$; 400 bags at 62c; 1,600 and 1,700 bags at private terms.

Rye—Steady. Sales 140 bags at 90@95, in bags, and 60 bags without bags.

Pork—No sale of mess—held at \$22 and dull.

Cut Meat—4,000 shoulders and 4,000 hams in bulk, at Burlington, Iowa, sold at 8 and 9 $\frac{1}{2}$ c.Bacon—Sides scarce and buoyant; joints dull. Sale 40 cks shoulders at 9 $\frac{1}{4}$; 45 do at 9c; 3 do clear sides at 11 $\frac{1}{2}$; 4 do at 12c and 7 do rib sides at 11c. Also, 50 tcs Sanford & Crane's celebrated canvassed sugar cured hams at 13c.Lard—31 tcs No. 1 sold at 12 $\frac{1}{2}$ c.Whisky—U. settled. Sales 85 bbls at 25c; 85 bbls at 25 $\frac{1}{2}$ c, and 90 bbls in lots at 26c—all cash—but 25 $\frac{1}{2}$ c is about the current rate.

Salt—Sales 2,200 bags coarse Liverpool at 1 10, and 3,000 bags at 1 05.

Seed—57 bags clover sold at 6 25; 25 bbls, 32 bags private.

Fruit—Sales 69 sks dried apples at 2 55; 20 at 2 65, and 33 bags peaches at 3 25 $\frac{1}{2}$ bush. Apples 30 bbls prime Genitons sold 3 75.Hides—Steady at 22@22 $\frac{1}{2}$ c.

Chicago Market—March 28th.

FLOUR remains about as usual at this season of year, no sale except for home consumption. The amount on hand in store, is something less than 40,000 bbls. Good spring wheat extra, can be had in quantity at \$4.75 $\frac{1}{2}$ bbl.

WHEAT—The market is but little changed, neither dull nor buoyant, though at least two or three cargoes, of spring, might have been sold on 'change at about 90c on board, last of April and 1st of May. One party time to buy some 12,000 bushels is new receipts of spring at 84c in store: a couple of cars of spring brought 85c in store.

CORN—The market is unchanged—firmer if anything. A cargo sold at 50c on board last half July, payable on delivery, and a few carloads went at 38c in store.

OATS—Some sales at 36c to store—40c to retail trade.

PORK—A lot of 500 bbls mess and another of 120 bbls sold at \$22.50 $\frac{1}{2}$ bbl.

SEEDS—There is comparatively little in the market. Clover has advanced in Cincinnati to \$7.75@8, and is worth nearly within a dollar of this in the Chicago market, Timothy \$2.75@2.87.

HIDES remain firm. Some green sold at 9@9 $\frac{1}{2}$ c; and dry flint at 19@20c, though these are extreme rates.

BEEF CATTLE are in good demand; 12 head sold at \$4.62 per 100 lbs gross, to go to Canada. They averaged near 12,000 lbs.

NEW YORK MARKET—MARCH 30.

New York, March 30, 1 P. M.—Flour dull, prices drooping; sales 6,000 bbls 5 65@5 75 for superfine State; 5 80@6 50 extra do; 5 65@5 90 superfine W stern; 6@6 40 for extra do. Market closing dull, tendency downwards, sales 360 bbls Canadian 7@7.40. Wheat market heavy, sales small, parcels at 1 41@1 45 for red southern and western, 1 58 white Canadian. Rye heavy, sale of Jersey 84@86. Oats unchanged. Pork, prime, better sales, 500 bbls 23 90 for mess; 19 60 for prime. Beef unchanged. Hogs quiet at 9 $\frac{3}{4}$ @10. Cut meats and bacon steady. Lard firm, sales 300 bbls 14 $\frac{3}{4}$ @14 $\frac{1}{2}$. Whisky, sales 250 bbls 26 $\frac{1}{2}$ @27. Stock active and tendency up, money in brisk demand at 5c on call; sterling exchange 8 $\frac{1}{2}$ per cent premium; Va sizes 92; Mo sizes 84; N Y C bonds 102; Erie 2d bonds 95 $\frac{1}{2}$; Mo 3d bonds 92; Erie convertible 79 $\frac{1}{2}$; Hudson first 97 1-2; C & R I 106 $\frac{1}{2}$; I O 138.

Chicago Money Market—March 25.

Since the issue of our circular of the 17th inst, money has been in increased demand, and bankers have not been able to supply the demands of their customers, and many parties are now seeking discounts who are not usually on the market as borrowers.

The lumber dealers are generally very close, owing to the large stocks held by them, and the great difficulty in making sales and collections.

Grain operators are quiet from the uncertainty that exists as to the rates that are to rule during the coming season, and prefer to wait rather than enter into engagements at present. They are not, therefore, in the market seeking to borrow. Merchants are now making preparations to meet their paper, which usually becomes due about the first of April and May, but as sales have fallen very short lately, many of them require some assistance from their bankers to carry them over their heavy payments.

Currency is very scarce with most of the bankers, and there is a but little sorting.

PHILADELPHIA WOOL MARKET—MARCH 21.

Holders are very firm in their views, but with a reduced stock in the hands of the dealers, and a limited demand from manufacturers, the market has ruled very quiet this week, and only about 65,000 lbs pulled and fleece have been taken in lots at fully former quotations.

BALTIMORE WOOL MARKET—MARCH 21.

The receipts of Wool this week reached in all to about 6,000 lbs. Demand good, but prices have a slightly drooping tendency. As soon as the new tariff comes into effect, prices will of course decline. We however quote as before, viz:—Unwashed 26@28 cents; tub washed 35@39c; pulled 28@38c; Fleece, common 32@35 cents; quarter blood 35@38c; half do, 35@40c; three quarters do 40@45c; full do 45@50c, and Saxon 50@55c.

Chicago Cattle Market—March 24.

The range of price is \$4@\$5 gross; 30 head of heavy ones sold Saturday at \$5 to a Milwaukee buyer; and 40 head, averaging 1280 lbs to a city butcher, at \$5.

Hogs of very heavy lots, or those weighing 250 lbs and over, would bring \$6 50 gross, and ordinary Hogs are selling at \$6 25. It would be a very common article to run so low as \$6.

Sheep are also in good demand at \$5 gross. It would be a very poor lot to sell so low as \$4.

NEW YORK CATTLE MARKET—MARCH 25.

The market for Beeves is dull, with a decline of $\frac{1}{4}$ c, chiefly on the lower grades; receipts 290 head; quotations are 8 $\frac{1}{2}$ to 9 $\frac{1}{2}$ c for inferior; 11 to 11 $\frac{1}{2}$ c for best quality, 12 to 13c for premium Cattle.

There was a falling off in the supply of Sheep and Lambs, but no improvement in prices, the market closing dull. Receipts 4,100 carcasses.

In Swine there is only a moderate supply, and prices are unchanged. Receipts 3000 head. Quotations are 7 $\frac{1}{2}$ to 8c.

THE ILLINOIS FARMER.

SIMEON FRANCIS, EDITOR.

BAILHACHE & BAKER, PUBLISHERS.

Vol. 2.

JUNE, 1857.

No. 6.

Soils of Kentucky and Illinois.

We have before referred to the Geological Report, made by D. D. Owen, State Geologist of Kentucky, to the Legislature of that State, last winter, professing to "compare the soil of Illinois with the Blue Grass Limestone soils of Kentucky." We give below extracts from that Report which will enable the reader to understand, clearly, the results of the analysis of the soils, and the deductions therefrom by Dr. Owen.

"The Illinois soil analyzed by Dr. Owen was taken from the prairie on the Mississippi, in Illinois a few miles east of Keokuk." The following is given as the result of the analysis:

Organic and volatile matter.....	9,060
Alumina.....	2,400
Oxide of iron.....	2,350
Carbonate of lime.....	590
Magnesia.....	526
Phosphoric acid.....	175
Sulphuric acid, not estimated.....	
Potash.....	197
Soda.....	100
Sand and insoluble silicates.....	84,470
	100,168

In communicating the result of this analysis, Dr. Peter remarks:

"Notwithstanding the luxuriance of the growth of the first crops on the prairie soil, occasioned partly by the large amount of available nourishing matter afforded by the decay of the thick sod, it is evident from the above analysis, that, taking into consideration durability as well as immediate fertility, as ascertained by the chemical analysis of the soil itself, apart from the sod there are many of our Kentucky soils which take the second rank, when compared with those of the blue grass region, which yet are fully equal to this prairie soil.

Compared with the first rate soils of Kentucky that of the prairies contains a much smaller proportion of alumina and oxide of iron, as well as lime, magnesia, phosphoric acid and alkalies. It contains a much larger proportion of fine sand and doubtless a larger proportion of the coarser sand than

our best soils, and, therefore, while its large quantity of organic matters is held in the soil with a small force of attraction, because of the large proportion which the sand and silica bears to the alumina and oxide of iron; and hence they are readily soluble and immediately available in the production of luxuriant crops; these very circumstances will cause its more speedy exhaustion; and when the accumulated store of organic matter has been consumed by thriftless husbandry, this soil cannot rank beyond a second rate position.

By a comparison of the constituents of this Illinois prairie soil with the average soils of Kentucky, for example with (a) of the following table, which is an upland soil of Franklin county, waters of Benson, near Hardinsville, and (b) a sub-carboniferous soil of the Barren limestone formation, Barren county, we perceive that these Kentucky soils are as a whole in no ways inferior:

	a	b
Organic and volatile matter.....	9,133	6,200
Alumina only in (b,) alumina including oxide of iron and magnese (a).....	3,100	5,460
Oxide of iron.....		2,266
Carbonate of lime.....	316	366
Carbonate of magnesia in (a,) magnesia alone in (b).....	517	205
Brown oxide of maganese.....		234
Phosphoric acid.....	243	159
Sulphuric acid.....	068	
Potash.....	173	197
Soda.....	049	090
Sand and insoluble silicates.....	90,754	97,886
Loss in (a,) loss and sulph-acid in (b).....	647	197
	100,000	100,000

The Franklin county soil is even rather richer in organic and volatile matter; both are richer in argillaceous matter, the Franklin county soil is considerably richer in phosphoric acid and the Barren county soil is almost equal to it and contains the same amount of alkalies.

If we compare the Illinois soil with the best Kentucky soils we find that there would require to be added to the Illinois soil, for each acre, to make it equal in the amount of fertilizer for only six inches in depth:

107,236 pounds of ferruginous clay.	
20,669 do of limestone.	
1,881 do of phosphoric acid, or	
3,802 do of unleached ashes.	
392 do of soda, or	
852 do of common salt.	

It is true that the Illinois soil contains 1.28 per cent. organic matter, which would contribute to produce heavy crops for the first few years, but the above inorganic constituents are the true elements of permanent productiveness, and the Illinois soil, with 84.47 per cent. of sand insoluble silicates, must of necessity be far sooner exhausted than the more retentive argillo-calcareous soil of the blue grass regions of central Kentucky.

The rich black, fat silicious prairie soils of the West are indeed wonderfully productive at first for the reason above stated, but they never can have that permanent productiveness of the best argillo-calcareous soils of Kentucky, cultivated with any degree of judgment.

Let not, then, the Kentucky farmer, without due consideration, leave the home of his nativity in the hopes of finding in the far West land more productive than his own; let him rather seek to gain an insight into the qualities of his soil and adopt a frugal method of husbanding the strength of his new land and renovating the consumed ingredients of his old.

D. D. OWEN, State Geologist."

We shall not undertake to depreciate the general importance of chemical analysis when applied to soils; but we may properly remark, that in this case, long and practical experience in Illinois is directly adverse to the deductions laid down by Dr. Owen.

Dr. Norwood, State Geologist of Illinois, in a circular addressed to many gentlemen, practical farmers and long residents of this State, solicited information from them in regard to their experience of the permanent productive qualities of our soil. He has numerous replies, all directly tending to the same point,—that our soils with a proper rotation of crops, will not wear out. Manure undoubtedly stimulates these soils,—crops will be the larger and better for manure,—but with proper rotation, they are the best soils to be found in our country.

We append a valuable communication on this subject, from Dr. J. M. Peck to Dr. Norwood, and this will be followed by others as we have room. This subject is important to our people, on account of what we deem the unfair report of the Kentucky Geologist. We have chemical theory on the one side, and practical experience on

the other. Let the world judge in the case:

On the Prairie Soil of Illinois, and its Productiveness for a Succession of Crops, especially Corn.

ROCK SPRING, O'Fallon Depot P. O., Ill., }
April 14, 1857. }

Dr. J. G. Norwood, State Geologist:

DEAR SIR: Your circular of the 18th March, making inquiries about the capability of our prairie soils to produce a succession of crops, and especially maize or corn, came into my possession on the 26th March. Being then extremely feeble from repeated attacks of illness, I was compelled to postpone an answer. Even now I am unable to over memoranda made and documents preserved, that would furnish collateral evidence of the correctness of the statements I send you.

At the very first of the discussion, I object against the mere chemical analysis of soils in settling the question of their certain and permanent productiveness, on the same principle that I object against chemistry as the ultimate arbiter on the question of aliment, digestion, assimilation, nutrition, and all other elementary principles in the animal economy. Chemistry analyzes and explains the nature and laws of matter in its inert state. It takes no note of the laws of physiology, or that occult, mysterious thing, called life, and its functions in animal and vegetable existence. This science has important uses, and also its limits, when applied to agriculture. But to rely on the science of chemistry as the sole and sure guide of the agriculturist is preposterous, of which the comparison of Dr. Peter of the "argillo-calcareous soil" of Kentucky with the prairie soil of Illinois, taken from a vague locality, "opposite Keokuk, a few miles back from the Mississippi river," for corn growing, is proof direct.

In the county in which I reside, we have the experimental facts of 150 years, to upset the chemical analysis and speculations of Drs. Owen and Peter.

Either the soil of Dr. Peter, was from a sand ridge, brought down by some of the great floods from the abraded sand stone in the Upper Mississippi, (for he denominates it "silicious") or the laws of chemistry are contradicted by the laws of vegetative life.

But in reply to your inquiries in a general way: I reside in the county of St. Clair, eighteen miles from the Mississippi river, due east from St. Louis. I removed from Missouri in the month of March, 1821, and resided that year on a farm that was settled and improved about 1810. The season

proved very unpropitious for corn, and yet I made a good crop, say forty bushels to the acre, on land that had been cultivated with corn, without change, for ten years in succession. True, the land when prepared for cultivation had been denuded of timber, but I am not old enough yet to find out any material difference between our timbered and prairie soils, on the uplands of this county in the production of crops, after many years of successive cultivation.

A portion of my old farm at Rock Spring, two and a half miles north of the farm I cultivated in 1821, was first cultivated in corn in 1822. I settled on a tract of "barrens," so called from the timber being shrubby, stunted and scattering; with patches of prairie, intermingled with patches of under brush, of oak and hickory, growing from grub roots. On such tracts of new country, the autumnal fires contend with the annual growth, and partially or wholly kill the young timber, until settlements are made and the prairie grass killed out.

Being like all my neighbors, unable to fence, break up and cultivate new ground to the extent desirable, with every farmer, I had to plant corn for many years in succession in the same field. The supposition that by such a process the rich soil would be soon exhausted, gave us no uneasiness, for it was a trifling matter to remove our fences and make a new cornfield, as some did. Congress land in great profusion for \$1 25 per acre, adjoined nearly every farm, and from 1820 to 1835, we had no fear of speculators annoying us. Very little wheat and but occasional crops of oats were grown in this and the adjoining counties. Corn was the staple commodity of agriculture, and grown on the same ground for many years in succession.

In this part of the State, the prairies lying near the timber were first cultivated. Very seldom would a settler make his pitch in the interior of a prairie. The same policy of successive crops of corn was pursued on these prairie farms. No difference in the character and quality of the soil was discovered in the farms near the timber, and those made subsequently in the interior of large prairies. The destruction of the peculiar grass of the prairies (*Poa pratensis*) by the feeding of stock in the summer, by the growth of hazel patches, shrubs, brushwood, and finally timber; and by the introduction of the Kentucky blue-grass, has destroyed the tough adhesive sward of our prairies that yet remain such, and modified, but not essentially changed the character of our prairie soil.

My farm at Rock Spring was badly managed for many years. Absence from home a large proportion of my time, in my professional duties, for more than twenty years, compelled me to depend on hired men who had no skill or training as agriculturists, or on annual "croppers," who were accustomed to skim over the ground with the primitive "Barshire" plow; or on my sons in boyhood. The surface in barrens is more undulating than the prairies, and while it drains off the water from excessive rains rapidly, it also has its soil washed away where the surface slopes, or small ravines exist.

All these circumstances were unfavorable to the successful growth of successive crops, and especially corn. Then these barrens had a thinner and lighter soil at first than the soil of the prairies in this part of the State. I have used very little manure, except on meadow land; and in favorable seasons I have mowed and cured from two to three and half tons of hay (timothy and red-top,) to the acre by measurement and weight. I have repeatedly exterminated the sour dock, when it has made inroads into my meadow. An industrious laborer, with a sharp grubbing hoe, by cutting off each plant an inch or two below the surface, and letting the hot June sun pour its scorching rays on the bleeding stump, need not give himself further trouble with this noxious weed. This operation should be performed when the weed is in blossom.

My farm was brought under cultivation at successive periods from 1822 to 1845, which then included about sixty acres of land in cultivation. My oldest field of ten acres was left to grow up in grass, without seeding, after the harvest of 1842, and it was broken up again and sown to wheat in 1844. The soil had been resuscitated, and the crop of 1845 exceeded twenty bushels to the acre: an average harvest that season. Another portion of a field of mine measuring nine acres, was first cultivated in 1825, and every year after run to corn, wheat or oats; the corn repeatedly three years in succession, with crops ranging from 35 to 50 bushels to the acre. This field had been skimmed over with the Barshire plow of "Croppers" till in 1845, it did not produce ten bushels of wheat to the acre. In the spring of 1846, on my return from Philadelphia, after an absence of seventeen months, I found my sons had sown this field to oats. The crop was a good one. After the stock had used up the scattering stalks of oats, and eaten the fresh grass, I instructed my sons how to break up the oat field for wheat.

To a large diamond plow, (an invention of this neighborhood,) they attached the fore wheels of the farm wagon, with a short axle and old cart tongue, drawn by two stout yoke of oxen. The plow was put in six inches deeper than ever a plow ran in that field before, and turned up the "argillo-calcarious" earth from beneath; and there is enough left below to supply the same field for a century to come. The result was a fine crop of wheat in 1847, not less than twenty five bushels to the acre.

My old fields, when properly cultivated, and where the soil has not been washed away by excessive rains, will produce as much corn as they did thirty years by-gone. My opinion has long been formed, that where our Illinois soils are properly cultivated, by a rotation of crops, deep plowing, subsoiling, and plowing under all the corn stalks, stubble and weeds, whether on land originally covered with timber or on prairies, it will last forever. The great chemical laboratory of Almighty God, in the atmosphere and on the surface of the earth, will keep our prairie soil in order, if man will do his duty in cultivation.

The general method of cultivation, till within a few years, has been unfavorable to deciding fairly the capability of our soil for a succession of crops. Our pioneer farmers raked into winrows and burned all their corn stalks before spring plowing. Wheat and oat stubble was also burnt over, and the prolific crop of weeds frequently were cut, dried and burned. The soils in this portion of Illinois not only need "humus" for the successful growth of cereals, but the earth should be kept loose with these articles in an undecomposed state, else, in a wet season the clayey soil will run together like melted lead, and when the drought comes, it bakes.

The French, who settled the villages on the American bottom, about the beginning of the last century made "common fields" for cultivation. Each owner cultivated his separate plateau, but all under a common fence. They raised for successive generations a small kind of white flint corn, and gathered from 25 to 35 bushels per acre—though no one recollects how long they cultivated this variety of corn on the same plat successively. More than thirty years since, I inquired of an intelligent and aged Frenchman how long corn had been raised each year on the land he was then working, but he could give me nothing definite. He remembered that his grandfather made corn on that plateau, when he was a small boy.

American immigrants came into the present counties of Randolph and Monroe, nearly every year from 1781 to 1800. They commenced making farms in the prairies and about the skirts of timber on the upland of Monroe county, near the present site of Waterloo, before 1790. Farms in that locality have been in cultivation ever since, and we hear of no failure of crops. The first American settlers came to the uplands of St. Clair county about the commencement of the present century. Captain Joseph Ogle, brought his family from Western Virginia, to the Illinois country in 1785. He and his three sons settled on the north side of a prairie, and long known as Ogle's prairie.

Each made a farm and cultivated it while life lasted. Corn was their principal, though not exclusive crop, for they raised wheat for domestic purposes and manufactured some flour for St. Louis market. They, and some other old settlers I shall mention, when preparing for a crop of wheat, threw open the field from which they had gathered corn the preceding autumn, to the inroads of all the horses, cattle and swine in the neighborhood, to destroy the grass and weeds. After corn planting was over, the field was broken up and left till about the last of September, when it was plowed again and the seed wheat put in, either with a light plowing, or with the harrow. When cultivated in this mode the yield was from 25 to 35 bushels. Our wheat in this county is regarded as defective, if it does not weigh from 62 to 66 pounds to the bushel. A common method of raising wheat in early times, was to sow among the corn rows, the latter part of August, and cover it with a light plowing between the rows. By this mode the farmers get from ten to fifteen bushels per acre. Next crop would be corn again with a successive wheat crop intermixed.

James Lemen, sr., brought his wife and two boys to the Illinois country in 1786. He settled first in the American bottom, and then in the prairie at New Design, (as the settlement was called, about four miles south of Waterloo.) His three eldest sons, Robert, Joseph and James, about fifty years since, settled with their young families on a prairie which they rightly denominated Richland. Their farms joined the north line of St. Clair county. The same soil makes the surface of all our prairies; on an average of three feet deep, that once existed between the American bottom and the Kaskaskia river.

The Lemens were among our most industrious and thrifty farmers. They made large farms, prepared their wheat ground after the method of the Ogles, and raised large crops of corn every year. No manure was ever hauled on their plow-land. I think their corn crop for half a century, would average on the lowest estimate I can honestly make, fifty bushels to the acre each year. Often have I seen seventy five bushels (or as Kentuckians reckon, fifteen barrels,) gathered from each acre, after continuous cultivation for fifteen or twenty years.

An observing and intelligent gentleman, and an old farmer withal, has just given me a fact from Jersey county, where he resided in 1851. He boarded with a Mr. Landon, who settled on a prairie farm eighteen years previous. His corn field had been broken up from the prairie the season before he purchased it. It had produced successive crops of corn each year, and the nineteenth crop was then standing in the field, and was estimated by the owner and my informant at seventy five bushels to the acre. This is no tale of romance about Illinois prairies.

I could give one hundred more individual proofs of the capability of the prairie soil of Illinois to last forever, under a correct system of cultivation.

I do not regret in discussing your questions, the very unfavorable circumstances under which our experiments have been made. They add force to the evidence in our favor. I add one more fact.

Within sight of my residence is a field of sixteen acres, once a part of my farm, but now owned by a neighbor. It was first cultivated in 1840, and produced crops of corn, wheat and oats, each successive year. Corn was repeatedly planted two years in succession. It now has the seventh crop of wheat on the ground in successive seasons. Each harvest has been a gain on the preceding one. Last harvest yielded more bushels to the acre, and of a better quality, than any preceding one. The straw has been removed each year, and no manure added.

Though not in consecutive order, I think I have answered your inquiries to a sufficient extent.

If other old pioneer farmers will furnish you the result of their observations and experiments, and those of their neighbors, you will be able to convince Kentucky emigrants to this State of the fallacy of the speculations of the distinguished Geologist of that State, predicated on the analysis of his "as-

sistant," who obtained "silicious" soil [from some sand ridge,] in 1855, "opposite Keokuk,"—"and a few miles back from the Mississippi river"—"from the newly upturned prairie."

Respectfully yours,

J. M. PECK.

Education of Farmers.

There is a capital weekly paper published at Richview, in Southern Illinois. The last number has a communication on the subject of Education for Farmers. We cut the following from that communication:

"Law, Divinity and Medicine have each their scores of colleges and seminaries; but the Farmer, upon whom all are dependent for subsistence, and who has more invested in fences, alone, than the entire professions in the country have invested in professions, houses, lands and all, has not even one school devoted to his exclusive interests. It has been the commonly received opinion that any one will do for a farmer. If a boy is so dull that he cannot acquire a professional education, and has no turn for a mechanic, he is turned over to the farm as the last resort. So the paramount interest—that upon which every other depends, is not deemed worthy of even a medium talent of the country. Millions are lavished on the military—Commerce calls for its millions—the professions have their millions—but Agriculture can only get its thousands, and that grudgingly given.

Prussia has her system of Agricultural schools and Universities. France has her's. Scotland has her's; and even autocratic Russia has them. Why should not we profit by these examples? Is the thorough, practical and scientific education of the sovereigns of this Republic of less importance than the education of the subjects of the King of Prussia, the Emperor of France, Queen Victoria, or the serfs of the Autocrat of all the Russians? Are our children to go on digging blindly for a subsistence in this age of magnetic telegraphs, locomotives, reapers and mowers and steam plows?

A few thousand dollars expended in an Agricultural and Mechanical University and experimental farm, would enable us to test the great number of new seeds and plants, and the thousand and one inventions offered to the public year by year; and thus save the cost of hundreds and thousands of troublesome and expensive, and, in many cases, useless experiments.

This subject is of such vast importance, and is so intimately connected with the well-being of millions of our fellow-citizens and their children, that the limits of a newspaper article will barely suffice to take a glance at it. I have almost lost sight of my text—Richview in particular. But why may not such an Institution be located here? Land is abundant. A suitable location can be found on the farms of some of our citizens in this vicinity. Our farmers have the means; if they will only exercise the will. Let us hear from you. If you will, say so. If not, tell us why."

Egypt Looking up!—Bright Prospects in the Future!"

This is the caption of an article in the *Southern Illinoisan* (Shawneetown,) giving a notice of the influx of population, and general improvement in the South. We regard it as a most appropriate head to the document we copy below from the same paper. Gallatin County is in earnest in taking measures to advance her agricultural welfare. She has set a worthy example to many counties which have not yet organized county agricultural societies. The arguments and facts here given so entirely accord with our own views, that we take pleasure in presenting them to our readers.

An Appeal to those Interested in the Developments of the Agricultural resources of Gallatin County.

The Gallatin County Agricultural Society call the attention of the citizens, especially the farmers of this and adjoining counties, to the necessity of their becoming members of the association.

The object of the society is to arouse the farming community to the benefits to be derived from an improved system of cultivating the land—to the adoption of a system of rotation of crops suitable to our soil and climate—to the introduction of new and better live stock and the dissemination of rural knowledge of every kind.

The farmer's past experience has taught him that his business is not progressive—that he has not advanced beyond the knowledge of his ancestors—and that, while his average crops have steadily decreased, his toils have as steadily increased. This is the natural effect of the system now pursued, of each man working without any information in his business, other than his own experience furnishes. No class of society can improve its condition without combination and a united effort to that end. Merchants have Boards of Trade and Chambers of Commerce, and Mechanics have Leagues, institutes and schools of design to sustain and advance the special inter-

ests of their occupations, while Farmers have totally lost the knowledge required in their profession for centuries, for want of some such medium of communicating and comparing their respective discoveries and experiments.

Within a few years Agricultural societies and Farmers Clubs have been organized in various parts of country, to introduce the same principle of combination in Agricultural pursuits that has given such power and knowledge to merchants, mechanics, and students; and, wherever they have been sustained by the community, they have developed unknown resources of the soil, added immensely to the knowledge of the farmer, and increased the value of real estate.

These desirable ends have been attained by encouraging the farmer to unusual exertions to produce large crops, to add to the number of staple products such grains, roots and grasses as may be adapted to the soil and climate, to increase the variety and value of orchards, and to induce greater care in breeding and rearing all kinds of live stock. They have also increased the health and comfort of families, by encouraging and rewarding the productions of the dairy, the garden and the apiary. They have urged mechanics to excel in their respective trades, and housewives to exhibit the fruits of their skill and neatness.

The results of these varied efforts have been exhibited at the annual fairs of these societies, and valuable and enduring premiums have been awarded to those who secured the merit of superiority.

All this we propose to do, and upon you it depends to sustain and assist us.

Farmers, this is your own business, and your interest and your local pride, both demand that the society shall be liberally supported. We call on all interested in agricultural and mechanical pursuits to come forward and enrol themselves with us. Let each man view it as his special business to bring the object of the society to the attention of his neighbor, and insist upon their becoming members. By such concert of action there is no doubt that a sufficient number of subscribers can be obtained to enable the officers to offer handsome premiums to every class of exhibitors at the next fair. Farmers of Gallatin and adjoining counties, come forward at once and take an active part in this movement for your benefit. It cannot succeed without your sanction and influence.

We should have at least one thousand members this year. Such a turnout will give a permanency and power to the society that will insure its future success. It is of vital importance to start with a large subscription—with the name and influence of every man, if possible, in the community—and an earnestness and determination on the part of all to do something toward making our next annual exhibition worthy of support and encouragement. One such exhibition will fix the character and permanency of the society; for no man, woman or child who has once seen and felt the exhilarating and beneficial influence of such struggles for superiority, among the producers of food and manufacturers, will consent to forego the pleasure and profit annually for

the small sum required to sustain it.

On the 16th of May the society will meet at Equality to locate the fair grounds. This is an important move and we desire all present members and as many new ones as possible, to be with us and assist in selecting the grounds. Those largely interested in the real estate of this county, should respond liberally to this call for assistance, and we confidently hope that we are not mistaken in expecting large donations toward improving whatever ground may be selected by the society at that meeting. Yearly memberships can be secured upon the payment of \$1 to either of the officers of the society; and \$10 will secure a life membership. Members are entitled to exhibit their contributions free of charge; they also have free admission to the fair grounds, and a voice in the selection of officers and the government of the society.

M. K. LAWLER, President.

ORVAL POOL,	} Vice Presidents,
B. P. HINCH,	
BENJ. F. WHITE,	
JOHN B. BAILEY, Treasurer.	
WM. T. CRENSHAW, Secretary.	
S. K. GIBSON, Corresponding Sec'y.	

EXECUTIVE COMMITTEE.

GEO. MOORE, and other officers.

VIGILANCE COMMITTEE.

Jo. B. Barger,	James W. Trousdale.
James Davenport,	Robt. Pierce,
G. W. Akers,	O. C. Guard,
Joseph Bowles,	Thos. Wilbank,
John T. Walters,	G. D. Sarks.

Drilling in Spring Grains.

Editor Farmer:

I am satisfied that the opinion among farmers is in favor of drilling in the seed of winter grains. The crops are less likely to be winter killed, are more uniform in their growth, and yield more grain to the acre. I do not think that there can be any doubts upon these points.

But is there any advantage in drilling in spring grains—wheat, rye, barley, oats? I have in vain inquired of my neighbors. Have any of your readers experience in this matter? If they have, they would greatly oblige the writer by communicating the same for publication in your paper. A.

The Coming Corn Crop.

Editor of the Farmer:

We have had the best kind of weather for putting in our corn. The season has been cool, so that our teams could do a great deal of work, and the ground is in the best order. But I am told that the corn used for seed is not in many cases good, and that it will be likely to rot in the ground. This would be a great calamity, considering the lateness of the season.

It may be too late now "to cry for spilled

milk," but we may learn some facts, by dear experience, which may be useful to us. We should secure our corn for seed in the fall. This can be done with little expense; and it should not be neglected. Corn will germinate if gathered from the field when in the dough. The process is simple. Go into your field and select the largest, finest, earliest ears, when the corn is in the dough. Take off the ears, leaving on them some of the inner husks. Hang them or place them where they will dry without moulding, and you will have reliable corn for the next season.

This corn when planted will send up strong shoots, with broad blades, and will grow off rapidly. On digging up a hill, you will find that the kernel has rotted or been absorbed in the plant. When you have done this, go to another where the seed has been taken from the crib, hard and dry. You will find the shoot weak, and the kernel will remain in the ground for weeks, inviting the crow and the squirrel to attack it.

I have known an old Tennessean practice the plan I have stated for providing himself with seed corn, and he never failed of a crop, nor do I recollect of his having to plant a second time.

You say that you haven't time to save your seed corn in the fall! Haven't time? Why you could gather enough, a single hand in a few hours, to plant a hundred acres;—and very likely you would save by the operation a thousand bushels of corn. Haven't time! You had better take your wife and other females of your family into the field than to lose the opportunity of saving your seed corn. EXPERIENCE.

For the Illinois Farmer.

Facts about Forest Trees.

VIRDEN, May 9, 1857.

Among the many kinds of trees of rapid growth, comprising the forests of Illinois, there is one kind in the cultivation of which I have had some experience; it is valuable alike for useful and ornamental purposes. I allude to the soft maple. It is of very rapid growth and is easily propagated by seed. The seed falls in this country about the sixth of June; they should be gathered immediately and planted in the same manner as Osage Orange or garden peas. If they are well cultivated, and the season is favorable, they will grow to the height 2½ or 3 feet the first year, and will be ready to transplant the following spring, for artificial groves or nursery stock. Plants one year from seed are best to use in making new timber plantations, because they are cheaper, more apt to grow and easier to handle. Last year, although the

drouth injured other crops, the maple seed sprouted finely and came up well; many of the plants grew to the height of three feet before frost. Mr. L. H. Thomas has on his farm, east of Virdea, a forty acre lot planted with forest and other trees, consisting of cottonwood, soft maple, overcup oak, elm, chestnut, walnut, locust peach, pecan and Norway spruce fir. He began the first planting in the spring of 1852, and continued adding new plantations yearly. The cottonwoods are the tallest, being on an average eighteen feet. The maples are next, averaging about fifteen feet. The outward branches of the locust and the entire grove of peach trees were killed by the cold winter of 1856. Last year the peach trees sent up thousands of new shoots making a fine prospect for future firewood. The last year's planting of locusts were partially killed last winter; with these two exceptions the young trees were unharmed by the long and hard winters of 1856-7.

JOHN P. WARD.

The Orchard.

MR. EDITOR: I passed by an orchard the other day—a beautiful and promising one, too—and it was calling out to its owner for help, to enable it to live under the attacks of an enemy. It spoke as plainly as trees could speak. Caterpillars were upon the trees and were spreading out their nets over the young leaves and blossoms, apparently with the determination to rob them of their beautiful foliage and fruit, and if not kill them. There was no voice in the air except that still, small voice addressed to the reason of man, to his love of the good fruit that God had proffered to him, as a reward of his care and industry, and which ought to find a response in every man whose heart is in the right place.

The caterpillar is an enemy which can be seen and can easily be destroyed. They disfigure the trees—destroy the fruit; and seriously injure, if not kill them—and, besides they pronounce the owner "slothful"—too much so to save his fruit, though we dare say in the fruit season he would enjoy the fruit of his neighbor's trees.

Go about killing these caterpillars. Have a ladder to reach them;—put on a pair of gloves and take hold of their nets and gather the rascals and squeeze and crush them. Do this a few times and the work will be done; and you will save your trees and fruit—and with these perhaps save the health of yourself and family—and you will certainly save the mortification that every sensitive man must feel when he knows his neighbors, and those passing by look upon his orchard given up to the ruin and destruction of caterpillars.

Mr. Editor, if you have been as I have within a few days, an observer of the depredations of the caterpillar in beautiful orchards, you would be likely to think these remarks

"A WORD IN SEASON."

Prepare in Time.

EDITOR OF THE FARMER: Many of our farmers would save themselves much bother, anxiety and

expense if they would prepare for contingencies in time. Our seasons are uncertain and we should prepare for contingencies. Last winter was a long winter. As a general fact there was not sufficient grain and fodder saved for stock. Many farmers and cattle suffered. The same state of things may recur again. Let us prepare in time. Many farmers have but little meadow. Fodder can be made of corn by sowing broadcast, and cutting and saving it early before the time of seeding is come. Millet can be managed in the same way, producing heavy crops. Ruta Baga, if sown early, often produces a plentiful crop; and the Maquel Wurtzell, a large beet for stock, can always be made to grow on good land—producing an immense amount of roots. Straw should be saved—everything that will answer for fodder should be saved—and you will find your advantage in attending to this matter, when otherwise your stock would be starving or dying, or you would have to depend upon the savings of your more industrious neighbors.

Stock is bound to bring high prices for years. The consumers of animal products are increasing faster than the products themselves. Too many people have left the business of agriculture and gone into professions, or engaged in projects for living by their wits. But never mind,—we can make such men pay for the beef and pork, and flour and other articles of consumption—and if they deem the price too high, they can get a piece of land and become farmers themselves. W.

Young Orchards.

EDITOR ILLINOIS FARMER: The last winter was hard on young orchards. Probably the trees if set out this spring, they may have been injured the winter before. If the young trees show unhealthful limbs or heads, they should be cut back; that is, the wood should be cut off until you come to healthy wood. This is less to be regretted in our open prairies, because low headed trees will do better there than if suffered to grow high and thus be exposed to heavy and destructive winds. Peaches do better also by being cut back, and many think that they do better as a large spreading shrub from the ground than as a tree. Indeed, a tree suffered to grow high, with a long naked limbs, will be either broken down by heavy winds or will be destroyed by heavy loads of fruit, which act as a weight upon a lever.

There is a great deal of bloom upon the apple trees; and where there peach trees alive, they promise fruit. The wild apple and plum are full of flowers. We have a fair prospect of a good crop of apples.

I have been over my orchard once and have killed thousands of caterpillars. They seem uncommonly numerous this season. But I am determined to rid my trees of them, if labor will do it.

Yours, &c

A movement is on foot in New Orleans to organize a State Agricultural Society, and make arrangements for holding annual Fairs in Louisiana.

Sheep — Wool.

The late severe winters, the high price of mutton, and the very great inducements which farmers have had latterly to go into the raising of wheat, have probably lessened the number of sheep in this country, and the result will be that our wool growers will obtain very high prices for their wool the present season. It is doubted whether the clip in Illinois the present year, will equal that of the last.

In the article we copy below from a New York paper, it is said that the coarse woolled sheep in New York, are taking the place of the fine woolled, and that there coarse woolled sheep are grown for mutton. In our own State we do not think this is the case. Fine woolled sheep make excellent mutton, but the coarser woolled are selected and killed and the fine preserved. In Illinois, fine woolled sheep pay much better than the coarse; and we do not know of any persons, who made themselves acquainted with the business of growing sheep, and who have steadily continued in the business, who have not been well rewarded for their labor. We are sure that this is the fact so far as our knowledge extends. Wool growing in Illinois is a profitable employment, and the finer woolled sheep pay the best.

WOOL.

We notice that there is more than the usual excitement in regard to the probable price of this year's clip of Wool. The opinion is generally prevalent among the farmers that the price will be seriously affected by the operation of the new tariff, which makes all wool free that costs twenty cents or under at the port of embarkation. If invoices are honestly made, this alteration will not materially affect the finer wools that have heretofore formed the bulk of the production in the United States. The competing wools are the Australian and part of the South American, which correspond to our merinoes. These wools are now comparatively higher in London than in New York; so much so, indeed, that it will be an object for manufacturers to purchase our wool at prices in advance of last year.

The change which has been going on in the farming of the older States since 1840 has been more marked in sheep husbandry than any other branch. From 1840 to 1850, the total increase in the number of sheep was not far from five millions, while the decrease was about three millions, leaving the actual increase at only some two millions in the ten

years, whereas by the natural law of increase the entire stock should have been at least doubled. The decrease was in the older States, most of it in New-England and New-York, and almost entirely in fine-wooled sheep. In the State of New-York alone, since 1840, the decrease exceeds four millions, and there were not as many sheep in this State in 1855 as in 1821. Since 1850 there has been no sensible increase in any State, while there has been during the last three years a decrease in Ohio and Michigan. But the lowest point has probably been reached in the older States. The fine-wooled sheep have been exterminated, and the coarse-wooled mutton sheep are now fast taking their place. We may henceforth look for a gradual increase in numbers, and a large increase in the amount of meat brought to market. It is this kind of wool that will be most affected in price by the introduction of free wool. The quantity, however, at present is not large and cannot be materially affected this year, nor until foreign wool markets show a decline from present prices.

The clip of this year will not be equal to that of the last, so that no surplus can be accumulated and held over to bear down prices, nor is there now any surplus for dealers or manufacturers to fall back upon. The only means they have to frighten the farmers into low prices, will be to make them believe that large stocks of foreign wool are to be brought in at low prices under the new tariff. We hope no farmer will be duped by any such story, for, if told, it will be a sheer fabrication. The present price of wool in all the foreign wool markets renders the whole thing morally impossible.

The price of the finer grades of wool has advanced from 10 to 12 per cent. in all the German markets over the last year's prices. The German wools are so high that the English find it difficult to get a supply there, and are thrown upon the better grades of colonial, and have thereby enhanced the value of all grades of Cape and Australian wools, as well as the better grades of South America. If it were not for the unsatisfactory condition of the market for Woollen goods, the price of wool, owing to the decreased production, would rule higher in this market than for many years past. So precarious and unsatisfactory has been the market for some two or three years that the manufacturing has not increased; for while our own clip has not increased, the importations of wool for the past year have fallen off nearly five millions of pounds as compared with the three past years.

There is no good reason why the farmers should dispose of their wool at any less price than they obtained last year. The rates at which it would be safe to sell, should be, for

Saxony.....	60 @ 75c	Fine grades.....	38 @ 45c
Merino	42 @ 55c	Low do & com'n....	32 @ 38c

It must be understood however, that these prices are only for wool in prime condition, clean, well put up, and light.

The Santa Fé mail to the last of April has arrived at St. Louis.

THE GRAZIER.

Green Food for Stock.

It is often the case that farmers and others would find it a convenience to keep up some of their stock, at least in portions of the season, when there is poor feed in pastures. Especially would this be a convenience in the case of milk cows. July, August and September, are the most trying months with them. Corn sown broadcast in June, and plowed in, makes a capital food cut green. Many farmers in the northern part of Ohio every year sow fields for this purpose, and the practice is constantly increasing. From the little experience that has been had with the Chinese sugar cane, it is believed that it will furnish a richer and better article for green food than corn; and besides being by far a richer plant, has this advantage—it may be cut at least twice in the season. We trust our farmers will not only try this plant for the purpose of making sugar and molasses, but for forage, green and dry. A few seeds, a pint or more, will furnish the means of making important experiments.

Foreign Stock.

Late letters from Messrs. Brown, Johns and Jacoby, agents of the Illinois Stock Importing Company, announce that they had made several purchases and were visiting and examining different herds, with the view of making other purchases. They represent themselves exceedingly gratified with many herds they had examined, and candidly acknowledge that some of the specimens pleased them better than any they had seen in this country. We anticipate some excellent importations.

We copy the following account of the travels and purchases of the agents referred to, from the Morgan Journal:

Blooded Stock For Illinois.

Mr. Geo. Anderson, of Lynville, has furnished us with the following list of purchases made by the Illinois Stock Importing Company in England, which he found reported in the *Yorkshireman* of April 11th:

At the sale of M. H. Ambler, Wilkinson Hall Halifax: Bull, Grand Turk, 300 guineas; Heifer, Western Cady, 175 guineas.

At the sale of Rev. T. Cator, Kelbrook Park: Heifer, Pomegranate, 90 guineas; Heifer, Cassandra, 58 guineas.

We understand the committee will return in June with all their purchases, of which the above are a part, when the stock will be sold, after proper notice, to the highest bidder at Springfield.

Since the above was put in type we have been shown a letter from J. N. Brown, Esq., one of the agents of the Illinois Stock Importing Association, to his brother, Hon. Wm. Brown, of this place, from which we have been permitted to make the following extract. It is dated Brumley, England, April 3d, 1857:

"We had a safe and quick passage (ten and a half days,) and rather a pleasant one. About two hundred passengers were on board, and among them several Western men.—G. T. M. Davis, Esq., formerly of Alton, was one. We left Liverpool on Tuesday, having spent Monday in forming acquaintances. We met Mr. Kercheval, formerly of St. Louis, a very polite and obliging gentleman.

We find that we shall have no trouble in shipping stock, and upon better terms than we had expected. We attended two short horn sales this week—one on the 1st, Mr. Ambler's near Halifax, consisting of 48 head—38 cows and heifers and ten bulls. The sales was largely attended, and the bidding was spirited, a large number of short horn breeders being present. The average of sale per head, was 38 guineas. We purchased three head, paying for one heifer 175 guineas.

On the 2nd of April we attended the sale of the stock of Rev. Mr. Cator, of Kelbrook Park, Yorkshire. His stock was good, the attendance large, and prices well sustained. We purchased at this sale two heifers, roans.

This morning we visited the herd of Fawks, one of the most spirited breeders in England. He has about 100 head. He asks high prices yet we hope to purchase two young bull of this herd.

This afternoon we examined Col. Towney's herd. His cows and heifers are fine, his bulls nothing extra.

To-morrow afternoon we will look at a large herd near Liverpool, and on Monday go to London, and spend the week in looking at the cattle and horse stock in the south of England. Next week, we visit Scotland, and from thence go to the Dublin Catt'e show, which comes off on the 21st of the month. There we hope to pick up more good stock. You may rest assured, and may say to our friends, that there is as good stock in England as ever left it."

From the Country Gentleman.

The Arabian Horse.

"A few wild horses," says a writer, "are yet seen on the deserts of Arabia. They are hunted by the Bedouins for their flesh, which is considered a delicacy if the animal be young, and also to increase their stock of inferior horses, which they often palm

off on the merchant as descended from the sacred breed. They are said to be even swifter than the domesticated horse." Mr. Bruer, however, doubts whether any wild horses are now found in Araba Deserta.

"Although in the seventh century," continues the writer, "the Arabs had no horses of value, yet the Capadocian and other horses which they derived from the neighbors, were preserved with so much care, and propagated so uniformly and strictly from the finest of the breed, that in the thirteenth century the Arabian horse began to assume a just and unrivaled celebrity."

There are said to be three breeds or varieties of Arabian horses:—the Attechi, or inferior breed, on which they set little value, and which are found wild on some parts of the deserts; Kadischi, literally horses of an unknown race, answering to our half-bred horses—a mixed breed; and the Kochlani, horses, whose genealogy, according to the Arab account, is known for two thousand years. Many of them have written and attested pedigrees extending more than four hundred years, and with true Eastern exaggeration, traced by oral tradition from the stud of Solomon. A more careful account is kept of these genealogies than belongs to the most ancient family of the proudest Arab chief, and very singular precautions are taken to prevent the possibility of fraud, so far as the written pedigree extends.

The Kochlani are principally reared by the Bedouin Arabs in the remoter deserts. A stallion may be procured without much difficulty, although at a great price. A mare is rarely to be obtained, except by fraud and excessive bribery. The Arabs have found out that which the American breeder should never forget, that the female is more concerned than the male in the excellence and value of the produce; and the genealogies of their horses are always reckoned from their mothers.

The Arabian horse would not be acknowledged by every judge to possess a perfect form; his head, however, is inimitable. The broadness and squareness of the forehead, the shortness and fineness of the muzzle, the prominence and brilliancy of the eye, the smallness of the ears, and the beautiful course of the veins, will always characterize the head of the Arabian horse. His body may be considered as too light, and his chest as too narrow; but behind the arms the barrel generally swells out, and leaves sufficient room for the play of the lungs. In the formation of the shoulder, next to that of the head, the Arab is superior to any other breed. The

withers are high, and the shoulder-blade inclined backward, and so nicely adjusted that in descending a hill the point or edge of the ham never ruffles the skin. He may not be thought sufficiently high; he seldom stands more than fourteen hands two inches. The fineness of his legs and the oblique position of his pasterns, may be supposed to lessen his apparent strength; but the leg, although small, is flat and wiry; anatomists know that the bone has no common density, and the starting muscles of the forearm and the thigh indicate that he is fully capable of accomplishing many of the feats which are recorded of him.

The Barb alone excels the Arabian in noble and spirited action; and if there be defects about him, he is perfect for that for which he was designed. He presents the true combination of speed and bottom—strength enough to carry more than a light weight, and courage that would cause him to die rather than to give up. We may not, perhaps, believe all that is told us of the Arabian. It has been remarked, that there are on the deserts which this horse traverses, no mile-stones to mark the distance, or watches to calculate the time; and the Bedouin is naturally given to exaggeration, and most of all, when relating the prowess of the animal, which he loves as dearly as his children, yet it cannot be denied that, at the introduction of the Arabian into European stables, there was no other horse comparable to him.

The Arabian horse is as celebrated for docility and good temper, as he is for speed and courage. The following anecdote of the attachment of the Arab to his mare, has often been told, but it comes home to the bosom of every one possessed of common feeling: "The whole stock of an Arab of the desert consisted of a mare. The French Consul offered to purchase her in order to send her to his sovereign, Louis XIV. The Arab would have rejected the proposal at once with indignation and scorn, but he was miserably poor. He had no means of supplying his most urgent wants, or procuring the barest necessaries of life. Still he hesitated;—he had scarcely a rag to cover him—and his wife and his children were starving. The sum offered was great,—it would provide him and his family food for life. At length, and reluctantly, he consented.—He brought the mare to the dwelling of the consul,—he dismounted,—he stood looking upon her;—he looked now at his gold, and then at his favorite;—he sighed—he wept. "To whom is it," said he, "I am going to yield thee up? To Europeans, who will

tie thee close,—who will beat thee,—who will render thee miserable? Return with me my beauty, my jewel, and rejoice the hearts of my children.' As he spoke the last words, he sprung upon her back, and was out of sight in a moment."

Sir John Malcom gives another anecdote to the same purpose, but of a more amusing nature: "When the Envoy," says he, "returning from his former mission, was encamped near Bagdad, an Arab rode a light bay mare of extraordinary shape and beauty before his tent, until he attracted his attention. On being asked if he would sell her—'What will you give me?' was the reply. 'That depends upon her age; I suppose she is past five?' 'Guess again,' said he. 'Four?' 'Look at her mouth,' said the Arab, with a smile. On examination, she was found to be rising of three. This, from her size and symmetry, greatly enhanced her value. The envoy said, 'I will give you fifty tomas,' (a coin nearly of the value of a pound sterling.) 'A little more, if you please,' said the fellow, apparently entertained. 'Eighty—a hundred.' He shook his head, and smiled. The offer at last came to two hundred tomas. 'Well,' said the Arab, 'you need not tempt me further,—it is of no use. You are a rich el-chee (nobleman,) you have fine horses, camels and mules, and, I am told, you have loads of silver and gold. Now,' said he, 'you want my mare, but you shall not have her for all you have got.'

Rats.—The Killing Operation.—A friend of mine destroyed some dozen rats at one haul, in the following manner. He took a door of the house from its hinges, placed it on the floor of the room, with a stick under one side of sufficient length to elevate it to suitable height. To this stick was attached a string of sufficient length to reach into an adjacent entry. After putting meat under the door, and getting the rats well baited, he secreted himself in the entry, and by the light of the moon discovering when the rats in numbers had assembled under the door, suddenly jerked away the stick and sprung upon the door.

Varnish for Rustic Garden Seats.—First wash the woodwork with soap and water, and when dry, do it over on a hot, sunny day with common boiled linseed oil; leave that to dry for a day or two, and then varnish it once or twice with what is commonly termed "hard varnish." If well done, it will last for years, and will prevent any annoyance from insects.

AGRICULTURAL.

Sweet Potatoes.

Messrs. J. W. Tenbrook & Co., are large and successful cultivators of the Sweet Potatoe, in Rockville, Ind. They have a variety, called Early Nansmond, which we have not seen surpassed for beauty or excellence. His experience gives to the following article great value:

Brief Directions for Planting and Cultivating the Sweet Potato.

Select land for this crop that is loose and dry, that is either sandy or a light clay loam, and not too rich, or the crop will run too much to vine; wet prairies, rich bottom and black walnut lands are the most unfavorable. Rolling land, either in the prairies, or timber, is preferable, and in the north, should be selected if possible sloping to the south or southeast, and if elevated would be less subject to white frosts in the spring and fall.

To avoid cutworms and weeds, the Sweet Potatoe ground should have been cleanly cultivated the season previous, and plowed late in the fall, that it may be pulverized by the frost. Early in the spring, or as soon as the soil is in good working order, it should be plowed, harrowed and rolled, if dry and cloddy, in which condition it should lay until the plants are ready to set out, then it should be thrown into ridges, and crossed with a small plow into hills about three feet each way, in the centre of each of which set one good plant, by making a hole with the hand or a transplanting trowel, large enough to hold one pint of water, in which place the root of the plant and pour the water directly on the roots, and draw the loose earth quickly about the plant without pressure. By this mode the roots are floated out in their natural position, and the soil settles around every little fibre more than by any other mode of planting; the water is just where it is needed, and the soil left dry on the surface will not bake, as is the case when the plants are watered on the surface, or are puddled into the mud after a rain. We never plant when the ground is so wet as not to need water, and if the plants are good, and the work well done, we do not expect to lose one per cent. in the driest and hottest days of May and June, and never water after the plants are set. Plants should be set so deep that one or two of the axils or leaf-buds are covered, that they may sprout if cut down by frost, or worms. After the plants are

set out they should be carefully plowed each way, so long as the vines will permit, and earthed up a little at each plowing with the hoe. Perhaps the most certain plan for farmers to get their potatoes planted in time and well cultivated, would be to select ground in their corn fields, and make hills to correspond with the corn rows, and cultivate the same as the corn, putting two plants in each hill when planted four feet apart.

The hills should be about as large as can be thrown up with a small plow, and where few are made the corners may be dressed up with the hoe, but it is not necessary if the ground has been well prepared, except for turning rows and near stumps.

The season for planting in this latitude is from the 10th of May to the 20th of June, or as early in the spring as we feel secure from frost. Those that want a few early potatoes may plant the 1st of May and cover with earth in cold or frosty weather, which will not injure the plants for a few days, if the ground is not too wet.

Plants can be carried a great distance in good condition, if the roots are packed in damp moss or earth, but care must be taken not to wet the leaves when closely packed, or they will rot in a day or two.

Sweet Potatoes should be dug before frost, or the vines cut off immediately after, or the quality of the potatoe will be injured for the table or for keeping, and should be placed in a warm, airy room for a cellar, or use, as they will not bear a low temperature without injury.

The proper time for taking up and shipping Sweet Potatoes from this country is the first week in April, from which time plants can be brought forward ready for setting in the open ground by the first of May.

Our agents and others, wishing to secure seed, should send in their orders early, as it is too late for us to dispose of our stock at the time of taking them up; and we would add that we now think our business sufficiently established to justify sending the cash with the order by those that wish to buy Potatoes, by which much time, disappointment and postage might be saved.

J. W. TENBROOK & CO.,
Rockville, Parke Co., Ind.

From the Country Gentleman.

Drill Seeding.

In the fall of 1853, I engaged a man who owned a drill to come and sow six acres with wheat in a field of ten acres. The part sown with the drill was the poorest and farthest from

the barn; consequently had not received so much manure as the other. The remaining four acres were sown broadcast. At the time of harvesting, the drilled wheat was much the best—probably four or five bushels to the acre. The same season, (some time the last of Sept.) I had another piece sowed with a drill—clover sod, second crop; the green clover turned under would hay probably $1\frac{1}{2}$ tons to the acre—of a long triangular form. The outside was sowed with a drill. A strip nearly the whole length of the piece in the middle, of about three-quarters of an acre, was sown broadcast. At the time of harvesting, the drilled wheat would yield 25 bushels an acre, while that sown broadcast would only go about three or four, and was badly shrunk and smutty at that. The winter with us here, was by far the worst for winter killing wheat I ever knew. Common sowed wheat here did not yield over one-third to one-half a crop that season.

Having so good luck with a drill that season I purchased one in company with one of my neighbors. Then I thought I would try an experiment with spring wheat. I had a piece of low unreclaimed bog swamp land of fifteen acres which had raised two crops of, and which I wanted to sow in wheat and seed down for a meadow, well drained with open drains. I fixed the drill, expecting to sow $1\frac{1}{2}$ bushels to the acre, but in consequence of white caps which clogged the feeding slides, it only put on one bushel and four quarts. Ten acres were sown in this way. The remaining five acres were sown broadcast on the furrows, $1\frac{1}{2}$ bushels per acre, well sowed and well put in. The wheat sown broadcast came up first, looked the best, and did the best until about knee high, when the drilled part came on, and after that did the best until harvest. When harvested the berry of the drilled part was nice and plump as wheat could be, while that sown by hand was some shrunk; the hands while cutting judged the drilled part would yield three or four bushels to the acre the most. The fifteen acres yielded three hundred and ten bushels and three pecks.

I think from my own experience and others about me, that drilled wheat will yield on an average 3 to 4 bushels to the acre over broadcast one season with another, besides requiring about one-half bushel less seed. Seed sown with a drill, are all deposited at an even depth and consequently can grow and ripen more evenly than if deposited at all depths, from the top of the ground to six inches below. E. DENNISON. *Forestville, Chaut. Co.*

Use of Arsenic in Steeping Grain for Seed.

Boussingault has communicated to the *Annales de Chimie* some experiments on the use of arsenic in steeping grain for seed. The process has two objects, the one to protect the harvest from disease, the other to prevent the seed from being devoured by vermin. The substances generally used are salt, glauber salt, lime and sulphate of copper. But although these may hinder the development of cryptogamic sporules, they have little effect in preventing

the seed from being eaten. The greatest part of the substance used remains in the husk, which the animal rejects.

The most effectual means is the employment of arsenic; this not only preserves the seed from decay, but if eaten by the vermin, it destroys them, being so strongly poisonous. By using arsenic in a soluble form, such as the arsenite of soda, it may be added to the grain in perfectly definite proportions.

Boussingault's process is as follows:—A solution of arsenite of soda is prepared, which contains 57 grammes of arsenious acid in the litre. Of this arsenical solution $3\frac{1}{2}$ litres are taken and added to $12\frac{1}{2}$ litres of water. A hectolitre of corn is placed in a large tub, and these 16 litres of mixture are added, the corn being continually stirred. In about an hour the whole of the liquid is absorbed, and the grain is then dried. It is, of course, necessary to exercise extreme care in using the arsenical solution and it is well to color it strongly by the addition of sulphate of iron and prussiate of potash, so that its presence would be readily betrayed.

This steeping is not an unprofitable affair, for it first effectually preserves the harvest, and, secondly, by killing the vermin which might devour it, converts them into useful manure.—*E. Atkinson Ph. D., Philosophical Magazine, (English,) No. 76.*

Over-Feeding Plants.

A correspondent of the *American Agriculturist* writes:

I have found by experience that young fruit trees and some flowering shrubs were often injured by over-feeding. For many years I lost all my cherry trees. I planted them around my yards, and gave them the richest soil I could gather. They grew finely; some bore good crops. In a few years they split from the branches to the roots, and in a few years more they died.

I found in journals that this splitting was supposed to be induced by the heat of the sun, for they generally occurred on the southwest side of the trunk, where the sun shone the hottest. I soon observed, however, that the cherry trees never split when they grew on a poor soil; so when I discovered them to check, I at once removed all the soil for five or six feet around them and supplied its place with loam or poor gravelly matter. Since then, not one has split, and I presume they never will. When cherry trees are large and old, they may be safely manured, for their energies are spent in bearing fruit, and they grow but slowly.

Pear trees are more easily surfeited than cherry trees, but it affects them differently. When overmanured, the leaves coming out of the new wood at the ends of the twigs, instead of being one inch or more apart, come out in a cluster or bundle, and the limb ceases growing at once.

A few years ago I procured a fine young pear tree, and wishing it to grow and bear as soon as possible, I planted it in the range of the lowest point of my barnyard, so as to receive the

drainings of the manure. The new leaves all over it came out in thick bundles or whorls. I immediately removed all the earth from over the roots and filled the space with yellow loam, and turned the drain from it. In two weeks the new wood shot out and put forth its leaves, nearly two inches apart, and made a fine growth. I once manured an apple orchard of seventy trees, and every twig threw out the same whorls—wood ceased growing. The tips of all dried, and I lost one year's growth. So I find trees as well as men and other animals can be over-fed and surfeited.

JAMES FOUNTAIN.

JEFFERSON VALLEY, N. Y., Jan. 25, 1857.

From the Ohio Cultivator.

Practical Hints on the Culture of Vines.

WATER MELONS.

SOIL AND LAYING OUT.—The best soil for the water melon is a rich black loam, such as our black ash swales, well drained and plowed very deep, and thoroughly pulverized. The rows should be marked out at least ten feet apart each way. I know that it looks like wasting land when planting, and in the early tending of the crop; but the reverse is true—if you wish to lose the use of your land and also your labor, plow about five or six inches deep, and plant four or five feet apart each way, and you will be very sure to succeed.

SEED AND PLANTING.—The next all important point is to select good seed; which is not difficult, as they can be obtained at almost any country town of any size. But most persons plant any thing, rather than pay fifty cents or a dollar for good seeds. The Mountain Sweet is the best in the list. I always buy the Wetherfield seeds, and have ever found them true to their kinds. Drop five or six seeds to the hill. It is better to raise the hills about three inches high before dropping the seeds, and then cover one inch thick with mellow soil.

CULTIVATION.—The best thing to tend with is the cultivator, and the young vines cannot receive attention too soon. As soon as they are fairly up and spread out their two broad leaves, hoe them up as high as possible without covering them up. This I have ever found to be the best preventive against the striped bug—that pest of all vines. Keep the ground well stirred, and the weeds under perfect subjection, till the vines are large enough to be beyond the power for harm of the striped bug, then thin to two plants in each hill. I would say one, but some mishap might kill that one, and then the hill would be lost. It requires some courage, Mr. Editor, after you have nursed your vines for a month or more, to pull them up and throw them away, but how disagreeable the task, it is absolutely necessary to obtain good crops. For the next dressing we plow them, throwing the furrow to the rows and finishing in the middle, thus making a ridge for each row wide enough to not dry out readily. All that is necessary afterwards, is to keep the weeds down till the melons begin to ripen.

SNEAKING THIEVES.—Look out that your

neighbors' boys, nay, even the neighbors themselves, do not come at night while you and yours, who perhaps are wearied from the toils of the day, are sleeping, and steal your melons and tear up your vines. On this subject I have scarcely patience to say any thing, being almost afraid to venture, for fear of saying too much; for I have heard otherwise good citizens and even professing Christians, tell their sons in a boasting manner how they used to steal melons and tear up vines, and never utter one word of condemnation, or say they had done wrong, but laugh over their folly; thus in effect advising their sons to do as their fathers had done before them. I wonder if such men ever consider that for such influence they will one day be brought to account. It is very provoking, after having raised fine large melons, and got them nearly ready for the knife, to go into your patch and find here a melon mashed with some unruly foot, and there one stuck through with a cane, till all the best ones are spoiled, and that too by persons who would scorn to injure you or any one else in any other way. It is time this evil was corrected.

MUSK MELONS.

BEST KINDS.—I can remember the time, Col., when melons were scarce, that I thought the musk melon was good; but now, after trying the finer kinds, I am willing to let others enjoy them, if they can, as Skillman's fine netted melon and other varieties of the same class suit me infinitely better. Skillman's fine netted melon is as sweet as sugar, and as luscious as honey; and what is more, every person in our country can have them by bestowing a little care and labor on their culture. If those persons who go prowling about at night stealing their neighbor's melons, would bestow half of the labor upon a patch of their own, which they are compelled to take in hunting up others, they would have plenty at home, and could enjoy them with "a conscience void of offense towards God and man."

CARE AND COMPENSATION.—Plant the rows five feet apart each way, and cultivate the same as the water melon, except leave three plants to the hill, instead of two. There is nothing that delights more in a good rich soil than melon vines, and nothing that such a soil and good culture makes more difference with. I would rather have one hill well managed, than a quarter of an acre botched over; and as a market fruit, nothing pays better. Indeed, they are a luxury that most people will have, when they can get them, at any price, even to the "wear and tear of conscience."

CUCUMBERS.

Should be planted not less than seven feet apart each way, and thinned to four stalks in each hill. Cultivate the same as melons, except being even more particular about hoeing them well up under their two leaves, while quite young, thus protecting the stalks from their natural enemy, the striped bug.

THE MARROW SQUASH

Should be planted eight feet apart each way. Summer squashes same. Parisian squash not less than twenty feet each way; the last men-

tioned being better adapted to amateur culture, as it is of little value, but very large and showy. The sweet pumpkin should be planted ten or twelve feet apart each way, and if well tended will pay well, as it makes most excellent Yankee pies.

G. S. INNIS.

Columbus, May, 1857.

Large vs. Small Beans.

I tried an experiment last season, to satisfy myself; which were the better beans to plant, and give you the result as follows: The small beans give nine and a half bushels from one of planting, and the large ones thirteen and three quarters from one of planting. The land was light, as you see by the crop, but equal in both cases. I concede that a bushel of small beans will plant as much land as three bushels of large ones, and many will conclude from this that there are four dollars saved in the item of seed. To such I would say, "don't be hasty, gentlemen." Don't you have to plant three times as many hills to get out a bushel of small as you do of large beans?—and then they fall four bushels short of the large ones in product. Here then is a saving in favor of the large beans of one-fourth in product from a given quantity of seed.

I plant beans north and south, if possible, rows three feet apart, and eighteen inches apart in the row, about six beans in the hill.

I planted last season three and one-half bushels of beans in my corn field, the product of which I sold for about \$100, expenses as follows:

Planting with Wakefield's Patent Corn Planter.....	\$3 50
Seed.....	7 00
Pulling and cutting.....	6 00
Threshing and cleaning.....	7 50

Total expense.....\$24 00

You will perceive that there is no item in the expense for hoeing. The reason of this is, that I plant the beans within four or five inches of the hills of corn, and they are both hoed at one and the same time, without extra labor.

I plant the beans the south side of the corn; pull the beans and hang them on the corn hills, and let them remain until the corn is ready to cut up. They are then thrown down into heaps, the corn cut and set up; at which time I can drive the team and get them, as I do hay in tumbles.—
W. L. B., in *Genesee Farmer*.

BRANDON, VT.

Dried Cherries.—Take 12 lbs. of the cherry; stone the same carefully, so that they may be as little broken as possible; put them in a pan with plenty of powdered sugar (9 lbs.) let them simmer gently for about twenty minutes; then take each cherry out separately on to a sieve to dry; shake a little sugar over them, and turn them for three successive days (in which time, if the sun is powerful, they will have dried;) when quite dry, put them into a tin box, with a layer of paper between each row. Then keep them in a moderately warm place for use.

HORTICULTURAL.

We have long supposed that the failure of the Heart Cherry in this region was caused by the exceeding richness of the soil. In the same latitude, east of the mountains in poor soil, Heart Cherry trees grow to a large size, and, it is said, will last for a century.

Mulching.

This is a term used by horticulturists for shading the ground around growing trees, shrubs and plants. There are many plants so delicate in their structure, that they absolutely require mulching the first summer, to insure their roots a firm hold in the ground. But as most of our summers are so dry and hot, there are few plants that are not benefitted by mulching.

If the ground around fruit trees is cleared of the weeds and grass, and mulched with leaves or straw, immediately after a rain, the tree will be invigorated, and a fine crop of fruit will be the reward. Roses that are wilting, and showing a sickly bloom will be revived, and bloom in beauty, by mulching when the ground is moist. The Dahlia, a plant that requires a great deal of moisture, will bloom in perfection until frost, if kept properly mulched throughout the summer. Now, when we recommend mulching, we do not mean a few leaves or straws placed immediately around the plant, but a coating so thick that the sun cannot penetrate through, and placed as far from the plant or tree as the influence of the roots extend. Anything that will shade the ground; rock, brick or plank, will answer to mulch with; but substances that in their decomposition will make a soil, are decidedly preferable. The native forests mulch themselves, and we see how rank and vigorous they grow. We think that, unless the surface be kept constantly stirred around a tree or plant, the rays of the sun should never rest upon it. Those who look upon labor and effort as a great bug-bear, may get along without mulching. But those who mulch properly actually save time and labor, for when it is well done, the labor is done for the year, and the soil is all the time being enriched, as the plant grows and perfects itself. Therefore we say to the orchardist, mulch around your fruit trees; to the vine-grower, mulch around the grape vines; to the gardener, mulch among the vegetables; to our fair lady florists, mulch among the flowers, mulch—mulch—mulch. Never tire of mulching.—[Soil of the South.

Transplanting Evergreens.

I wish to give your numerous readers my rules for transplanting evergreens, for I think them as easily transplanted as the apple tree. The time here is about the 15th of June, or after the tops have made from one to two inches new growth. First dig your holes for your trees, dig them large and deep, then take a stake six feet long and drive it down in the center of your hole two feet deep, then fill the hole with fine soil to within six inches of the top, then dig up your trees with as many roots as you can get, and set them out as soon as you can, filling around the roots with fine soil. After you have got the roots covered two inches deep pour in one pail of water, then wind some rags around the top of your stake, and tie the tree firmly to the stake, and keep it so tied for two years; and don't forget to cover the ground for two feet each way from your tree, with old hay or straw eight inches deep, and put on some stones to keep it from blowing away.

In this way I have set out Pine, Hemlock, Spruce, and Balsam Fir, without losing one tree.—[Country Gent. W.

To Make Cream Cheese.—The following are two recipes:—Take a quart of cream, or, if not desired very rich, add thereto one pint of new milk; warm it in hot water till it is about the heat of milk from the cow, add a small quantity of rennet (a tablespoonful is sufficient,) let it stand till thick, then break it slightly with a spoon, and place it in the frame in which you have previously put a fine canvass cloth; press it slightly with a weight; let it stand a few hours, then put a finer cloth in the frame; a little powdered salt may be put over the cloth. It will be fit for use in a day or two. Another Method.—If cream is scarce, so that a sufficient quantity cannot be had at once, take a fine canvas bag, and pour as much cream as you may happen to have into it, adding additional small quantities twice a day, and from its becoming naturally sour, the thin part will drain through the canvas, and the remainder will prove an excellent cheese. If one quart of cream can be had at once, and poured into a fine canvas bag, it will make a nice sized cheese, and of course equally good as those made by several small quantities added at convenient intervals. The cheeses made in this way are not fit for use so soon as those made with rennet.

THE GARDENER.

Garden vegetables will be late in maturing this season. Many of the seeds sown early will be lost, and perhaps even the second sowing. Most varieties, however, do well planted any time in May or the first half of June. The ground is now warm and the temperature such as to force their rapid growth. If the weather should continue favorable, the latest planted gardens will be the best. There is now ample time to plant the seeds of cucumbers, melons, squashes, beets, beans, corn, lettuce, okra, peas, radishes, salsify, spinach, turnips; cabbage plants for winter use can be put in the three first weeks of June.

Hoeing and stirring the ground about vegetables, greatly accelerate their growth. The man who hoed his cabbages once a day to beat his neighbor, was surprised to find that the plants of the latter kept ahead of his own. The secret was his neighbor hoed his twice a day.

GARDEN PEAS.—Persons are not generally aware, that these peas produce well when sown broadcast. At this season, they should be covered in the earth at least three inches. This could be done by the cultivator. We know of no better and profitable crop than a good patch of peas of the better sorts—a good supply of which could be gathered near night and brought to market early in the morning. In England, all peas are sown broadcast. The old white marrowfat, the dwarf marrowfat, blue Prussian and Champion of England, would be desirable peas for broadcast sowing, for market purposes.

ONIONS.—We are informed that Messrs. Francis & Barrell, at their seed store, in Springfield, since spring opened, have sold nearly 500 pounds of onion seed. With the exception of some fifty pounds of White Portugal and Yellow Silver Skin, this seed has all been of the variety known as the large Wethersfield Red. We have heard from some of the sowings, and the onions have come up and are doing well. If the

season continues favorable, onions will be plenty next fall and winter.

It is too late to sow onions now for a general crop; but the seed can be sown to make "buttons" for next spring's use. This is done by sowing the seed very thick, so that the onions cannot grow larger than a good sized cherry. Should the stalks remain green in August, a small roller should be passed over them of weight only enough to break and bend down the stalks. We make this statement that our country friends may supply themselves with little onions, for next spring's planting, if they choose to do so.

GARDEN BEANS.—If the season favors, the early sorts can be planted as late as July. The Refugee Bean, which has a full fleshy pod, if grown late, can be made into an excellent pickle.

TO GROW TOMATOES.—A writer in the American Farmer says, that "when the plants have grown sufficiently long to tie to the trellis, I select two or three of the strongest shoots and tie them loosely to the trellis, cutting away all other small laterals which may grow on the main branches. I let these main branches grow until they have come in flower and set the first bunch of fruit; then I pinch out the top, one joint above the fruit, leaving the leaf entire. I then allow it to go on again until it has flowered, and set another bunch of fruit, when the top is pinched out one leaf above the bunch, the same as the first, and so on of all the rest, taking care to cut out all the laterals which may grow on the main branches down to the axels of the leaves, as often as they are produced, but leaving the leaves entire."

The same writer goes on to say that "any person who will take this little extra trouble will be amply repaid and absolutely astonished at the immense clusters of fine large tomatoes he will have. If planted in a favorable situation, they will ripen at least as early as those grown any other way out of doors, and frequently three days or a

week earlier. When ripe, they will hang longer on the vines without decaying. The situation can hardly be too sunny. Deep, light, loamy soil, suits them best. I always save my own seed. I began by saving a few of the roundest and smoothest tomatoes I could find for seed; now I have them, not flat or wrinkled all up, but as round as an orange, and as smooth as can be and quite large."

THE FLORIST.

The garden shrubbery the present season will exhibit an unusual amount of bloom and beauty. The double flowering cherry, peach and almond, have already dropped their flowers. The lilacs and snow balls are in their glory. Several varieties of the spirae are in flower, and these unappreciated beauties will ere long be favorites in the parterre. The *Wiegela Rosea* is in full bloom, and its pink flowers show beautifully among the green leaves of the plant: they resemble greatly the *Azelias* of the green house. The upright honeysuckles are also in flower, and these miniature trees, when properly trained, make a fine show in borders. The season of hyacinths and tulips has passed. The *dielytra* is now in full flower, and is in our opinion the most beautiful of all the perennial herbaceous flowering plants. Perfectly hardy, it springs up early in spring and is in flowers with the lilac, and these continue a long time. Indeed, where the ground is rich, it has often a second flowering in autumn. Roses promise a fine show; the buds are now prominent, and in three weeks more they will exhibit a mass of beauty in the gardens of Springfield greater than ever seen here before.

Seeds of annuals are mostly planted, and many of the young plants have appeared. We are in favor of their being put into clumps or masses, because in that position we think they show best. The *Petunia* has become a very popular flower, as well from its beauty as its hardiness and from its blooming during the whole season. There

are now many varieties superior to the old sorts, and they are cultivated with much ease. The plant when once in cultivation sows its own seed, and the only difficulty is in thinning out the plants, so that each good plant shall have a foot of room, and the pulling up of such plants as show poor flowers. The *Verbena* is a most beautiful plant for bedding out, indeed, it has no superior. The annuals should be kept free from weeds, for they lose their beauty when surrounded or dwarfed by weeds.

In a few days, the time not yet fixed on, the Springfield Horticultural Society will have their annual exhibition of flowers. The prospect now is, that it will be a most gorgeous exhibition, probably exceeding in interest any that has been previously held.

Flower vases, when the plants are chosen with taste, discriminately arranged, and carefully attended to, are very beautiful. To succeed well in vases in a climate like this, where the sun strikes on any isolated object, as a vase, with extraordinary power, considerable attention is required in the watering, so that flowers never become parched. A mulching is of great benefit to arrest evaporation.

The scarlet geranium or a fuschia will do well for a centre plant. About this may be arranged some of the following, as fancy may dictate: *Galairdia picta*, or other varieties; *cuphea platycentra*; *heliotropes*; *verbenas*, and *petunias*; the two latter suffered to hang over the outside. Besides these, a plant or two of *mamandia*, *loasia*, and *thunbergias* may be introduced to hang in festoons over the side.—[Exchange.

The fly has been very destructive to cabbage plants the present season. They take the plants as soon as they appear above ground, and eat them off smooth. This can be prevented by sowing the seed in a hot bed; but some of our country friends have a way of raising plants which are entirely uninjured by the fly. They put a little manure into a trough or box, place earth upon the manure, and sow the seed as usual. They then elevate the box on a frame or fence, any thing that will raise the box three feet from the ground will answer the purpose, and keep the earth moderately moist. In this way good plants can be always secured.

EDITORIAL NOTICES.

The Season and the Prospect.

The almost cheerless spring, preceded by a long and dreary winter, has closed. The "leafy month of June," is upon us; and the fine weather, and the abounding and rapidly advancing vegetation, almost make us forget the past. Most farmers (and we should be sorry to believe that every one has not done it,) who under all the discouragements of spring, steadily went forward in the preparation of their grounds and in the planting of seed for future crops, have a fair prospect of abundant harvests. The early spring grains are looking well; generally, the corn is coming up well; early planted potatoes promise a fine return; meadows are rapidly improving; the orchards are loaded with fruit; health is every where; and farmers are receiving for the produce they have now to sell, good prices, and the prospect in advance is altogether promising. Rarely is it the case that industry, guided by judgment, and a steady determination to do our duty, does not meet with a suitable reward. The truth of the old adage of Dr. Franklin, that "God helps those who help themselves," has been strikingly illustrated for the benefit of the cultivators of the soil within the last few months.

"Be not weary in well doing." By the sweat of the brow man must earn his bread. The same industry, which has, with the aid of Providence, opened up the present fair prospects of crops for our farmers, must still be practiced to secure a successful end. It seems to be the universal fiat that an object, worthy of our desires, shall only be attained by labor. Let us continue in the way of "well doing," and "all will be well."

Great Trial of Reapers and Mowers in Southern Illinois.

It will be seen by the notice published elsewhere, that a great trial of Reapers and Mowers, under the supervision of the State Agricultural Society, will take place at or near Salem, about the 1st of July—probably not until the 4th. In the present state of the crop of wheat, it is impossible to determine when it

will be in a suitable condition for cutting. The day will be fixed by the President of the Society, and information of the same will be circulated as soon thereafter as possible.

We anticipate that there will be a great gathering at Salem, not only of the farmers of Southern Illinois, but from other portions of the State. The Reapers and Mowers entered for premiums are among the most popular in the country, and their performances will furnish a most exciting spectacle. We hope thousands and thousands will be present. We are told that the "latch-string" will be hung out in Salem and all the region round about, on this occasion.

We have learned that the wheat in Southern Illinois promises well. That whole country is now most beautifully clothed in herbage and green, and it will pay our northern citizens well to visit that favored portion of our State. Come, farmers of the North! let us go down together into Egypt—see the rich fields of wheat, the fine corn crops, the beautiful prairies, the excellent timber. Mark this prediction—those who ever rely on the predictions of newspapers—Southern Illinois is to become one of the most desirable portions, not only of our State, but of the great western valley.

Farmers of Southern Illinois! will you be at the grand Exhibition at Salem? Shall we see you there—old men, young men and boys? Shall northern farmers there give you the hearty grip of friendship over one of the most interesting exhibitions for your benefit that possibly could be gotten up? Southern Illinois is rich in minerals; but her best sources of wealth are in the agricultural advantages she possesses. She is to prosper as these are developed;—a truth not only applicable to that favored region, but to our whole State. We again express the hope that there will be a full representation at the Salem Exhibition from every county in Southern Illinois.

Emigration.

The ceaseless stream of emigration from the east, seems to increase in volume as time progresses. We must suppose that business and the value of property in the east, is seriously affected by this emigration. Long lines of cars on the Chicago and Mississippi road, are constantly filled with emigrants. They are wending their way to Kansas and Nebraska in such numbers as must soon

week earlier. When ripe, they will hang longer on the vines without decaying. The situation can hardly be too sunny. Deep, light, loamy soil, suits them best. I always save my own seed. I began by saving a few of the roundest and smoothest tomatoes I could find for seed; now I have them, not flat or wrinkled all up, but as round as an orange, and as smooth as can be and quite large."

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give to those territories a large population. These are but a small proportion of the numbers of emigrants who are pouring into the west. Crowds are rushing to Minnesota and western Iowa; and vast numbers are locating in our own State. The lines of our railroads are being settled by eastern emigrants, who rapidly change our beautiful prairie lands, into well cultivated farms. An eastern man in two years' time, will make of wild prairie a capital farm, and surround himself with many of the comforts of home. Southern Illinois is receiving many accessions to her population; land there is now in demand; and there is seen in that region a spirit of improvement and enterprise most certain and gratifying. The advantages of southern Illinois—its excellent climate, its fertile soil, its exhaustless stores of timber and minerals, its diversified surface—have been long overlooked;—but are now beginning to be appreciated, and this fact is followed by a steadily increasing emigration to that section of Illinois. We rejoice at this truth. We have long desired to see southern Illinois filled with an industrious, intelligent, enterprising population, which will develop the great natural advantages of that portion of the State, and make it, what nature designed it should, a most beautiful and desirable part of Illinois.

It might naturally be supposed, that there is much opposition manifested in the old States to this tide of people passing from them. We feel a sympathy for old communities which are losing their most energetic and industrious population, seeking homes in the great west. But this migration cannot be stayed. While the west offers such advantages as she now does to the right kind of emigrants, they will come. Every thing here is new—every thing evidences progress—and that human mind must be dull indeed which is not pleased and captivated by the scenes which mark the efforts of human labor in the west.

Agents for the purchase of wool, are now traveling over the country. The general opinion seems to be, that the price will be high, with a less than usual supply.

"In Peace Prepare for War!"

And in summer prepare for winter! Distinguished men who have made meteorology their study, by examining the history of the seasons for the past one hundred and fifty years or more, have come to the conclusion that there is usually a series of warm winters, continued for some ten years, and afterwards a series of cold and long winters for the same length of time. These savans gave it as their opinion two years ago, that we were entering upon the series of cold and long winters. The two late winters show that they did not err in their judgment; and we have reason to believe, judging from the past, that some coming winters may further confirm their opinions. Be this so, or not, we have been sufficiently admonished that farmers should, as a general thing, be better provided with fodder for their stock than they were for the two last winters. They should preserve their straw, their corn fodder, hay, and if necessary, they should go to the bottoms and add to their stock of hay. It is not too late for them to sow corn for purposes of fodder alone. It yields an excellent fodder. Millet does the same thing. Chinese sugar cane or sugar millet, as it is sometimes called, yields a rich fodder in large quantities, and it has this advantage—it can be cut twice in the season. But little seed, however, can be procured for the purpose of raising fodder the present year. Both varieties of the millet, as well as corn, can be sown as late as the middle of the present month.

Farmers, who have plenty of fodder, in the months of March and April, when the season compels them to feed their stock, it is said sleep, having no troubled dreams of starving cattle.

We have received a copy of the 3d vol. of the American Herd Book, by L. F. Allen, Esq. It can be seen at this office. We will receive orders for this work; as also for the previous volumes. The character of this work is well known. It should be in the hands of all the breeders of Short Horned Cattle.

"Make Food!"

Why is it that provisions, of all descriptions, over every part of the United States, are bringing the present high prices? This question is being pressed upon the attention of our people every where. There must be a cause for it, perhaps many causes, and it would be well if we considered them. In the eastern States, the soils, never rich, are to some extent exhausted of their fertility, and they do not produce as heavy crops as formerly. Agriculture, not paying well, farmers sons have crowded into the towns, into the manufactories, into mechanics shops and stores and into the professions. There are far more producers than consumers. Good business times has thrown into their hands means, and they have lived well, paying such enticing prices for western beef cattle and hogs, that they have drained the west to an alarming extent. In the west, too, men are speculating. There are more loafers in our towns, who make their living by their wits, than was ever known, and our railroads are employing vast numbers of men. Again the great emigration from the east to the west, even of farmers, must for some time be greater consumers than producers of food. It is thus, that while the demands for food are increasing, the supplies are not. There is not at this time, food enough produced in the country. We seriously believe this fact—and hence it is that our farmers should do their best to produce food. Stocks of cattle, hogs and sheep cannot be raised and grown for market in a moment; and it will be found true, that, do the best the west can, the prices for cattle, hogs and sheep must rule high for years to come. But we can make other food—corn, wheat, rye, potatoes, beans, and so on; and in doing this our farmers will be well rewarded for their labor. Living even in the teeming west is high. We are now paying ten cents per pound for fresh beef, pork, mutton and veal; \$4 50 per 100 pounds for wheat flour; 25 to 30 cents for fresh butter; 10 cents per dozen for eggs; \$1 75 per bushel for potatoes; 13 cents per pound for ham and clear side bacon; 15

cents per pound for lard—retail prices. What a contrast with the past? We recollect when beef was 2 1-2 to 3 cents per pound; wheat flour from \$1 50 to \$2 per 100 pounds; butter 8 to 10 cents; 5 cents per dozen for eggs; 25 cents per bushel for potatoes; hams 5 cents; meat less; and lard 4 and 5 cents. We do not desire to see these old prices again; but we do wish to see such an amount as will reduce the prices so that the purchase of articles of food will be within the means of every industrious man. At present prices, the most industrious laborers do well if they can support their families in comfort. We say to our farmers as we began this article—"MAKE FOOD! MAKE FOOD!"

Crops that can now be Planted.

The seed for crops required to be planted early, is now in the ground, and, we think, doing well. There are some other crops that even now can be made, which will increase the quantity of human food, and the sale of which will fill the farmer's purse.

Potatoes can yet be planted. The best crops of potatoes are often those planted late. Have you any good land left for this crop? If so, try and plant it

Beans for several years past have brought high prices, and a good article could scarcely be had. They are now worth \$4 a bushel! Can't this price be reduced, and still the raising of beans be made profitable? They produce 20, 25, and as high as 30 bushels to the acre. One dollar a bushel will, in a good season, pay a profit to the farmer for raising them. New land on which wheat was winter killed, would be capital for beans. All who can would do well to plant if not a field, a good "patch."

Turnips are a good crop for many purposes. They are valuable for stock, and excellent for the table. Sometimes the first sowing is destroyed by the fly. It would therefore be well to sow early,—so that if one sowing should be cut off, another should be tried.

The Ruta Baga turnip is larger and far richer than the common white turnip. It is better for stock, and most persons greatly

prefer it for the table. It is in season for the table from December until the next June. These are larger than the common turnips and the seeds should be sown by the 20th of this month.

Buckwheat is a very essential article in winter. Large quantities of the flour would be consumed if it could be had pure and at low prices. This grain is easily raised, and yields well. For the last two years, most of the flour consumed in Central Illinois was made from buckwheat raised in other States. Please, farmers, to do your best to prevent this in future.

Good crops of potatoes, turnips and buckwheat, the coming fall, will prove a sensible advantage to the pecuniary welfare of many industrious and poor families, as well as a great convenience to those better off.

The Chinese Sugar Cane, &c.

A few days ago we had an interesting interview with Mr. Hedges, of Cincinnati, (of the firm of Hedges & Scott,) who is at this time getting up mills for expressing the juice from the Chinese sugar cane, and boilers for converting the juice into sugar and molasses. Mr. Hedges informed us that his mills will cost from fifty to two hundred dollars, and his boilers (if we recollect right) five cents per pound. These are to be of cast-iron.

Mr. H. also informed us, that in order to test his apparatus in time for the fall crop of cane, he had planted in green houses, and which was growing at this time in the open air, a considerable quantity of the cane, now three feet high. So soon as it matured he designs to have a public exhibition of his machinery, and show the whole process of expressing the juice from the cane, and converting the juice into sugar and molasses. Of the time which this exhibition is to take place he will give us due notice, and he desires all interested to attend and witness all the processes.

Mr. Hedges has had already considerable experience in this matter, and has every confidence of entire success in his undertaking. He has had frequent interviews

with Mons. Wray, a French gentleman, who has cultivated the cane in France, and who is the discoverer of an easy and simple method of converting the syrup into sugar. Mr. Wray regards the climate here as better adapted to the cultivation of the cane, than that of France. He will remain in the United States and be present at the exhibition in Cincinnati.

England and America on the Turf.

We learn from Porter's *Spirit of the Times* that "Lecompte," "Pryor," and "Prioress," the three gallant coursers which were sent from this country last Fall, to confront the renowned champions of the English Turf upon their own ground, and at their own terms, are entered for the Great Goodwood Cup!

This great trial of speed comes off on the 29th of July, and at the latest advices, the American horses are in excellent condition. It is hardly necessary to add that the eyes of the wholesporting world of America are turned upon Mr. Ten Broek and the gentlemen engaged with him in this grand national affair. It is the first time the United States have ever measured themselves against England on the turf. Under the conditions of this race considerable advantages are offered to the American horses. Lecompte will carry 124 lbs., Pryor 121 lbs., and Prioress 109 lbs., four pounds being allowed to Prioress as a mare. It will be seen, therefore, that Lecompte and Pryor will run at an advantage of 14 lbs. less. On these items, therefore, our readers can begin to form their opinions and calculations.

Sugar is still advancing in price, and there is no prospect of its being any lower, unless the experiments now in progress in the United States, for making sugar from the Chinese sugar cane, prove successful. In the mean time, sugar must be used in families with more economy than formerly, or such families must incur great expense in using it. It will be a wonderful discovery, indeed, if at this moment, when the sugar enterprise has failed in Louisiana, and the crop sensibly decreased in other sugar growing countries, we shall find a supply in the cultivation of a plant at home. We believe that this will be the case, and that experiments will not fail of success when they are properly made.

Drilling vs. Broadcast Sowing.

We have heard the question often asked, whether there would be any advantage in sowing spring grains with the drill, over the old plan of sowing them broadcast. We have published two communications asking information on the subject. We find the following article in the *Country Gentleman*, which is directly to the point:

Having noticed a number of different opinions in regard to drilling and broadcasting, I am willing to give my opinion on this subject. I purchased, in company with a neighbor, a drill of J. M. Harvey & Son's manufacture, Amsterdam; N. Y. (J. P. Ross' patent.) In the spring of 1855, the first sowing was a piece of spring wheat. Not knowing anything about the drilling system, I sowed part with the drill and part broadcast in the same field and on the same day. That put in with a drill was more than a quarter better than that sown broadcast, both in straw and grain. I tried my oats in the same manner; they were also better where they were drilled. I have sowed all my grain since with the drill, being satisfied that it is the only proper method of putting grain into the ground. My neighbor, in sowing his buckwheat, had part sown with the drill and part broadcast, and when harvested, the drilled was about half better; it was all well filled, while the broadcast was hardly filled—both put in the same day and in the same field.

I think it is better on other accounts than broadcasting. It saves a quarter of the seed; besides it cultivates the land, and leaves it in good condition for the crops, better than can be done with the harrow. The grain is all put in at an even depth in the soil, and I am satisfied that it is a paying machine:

I also have a thresher and mower, and I think they are good machines; but my drill pays me the most of any. It takes less time and seed, and betters the crop, and in dry seasons they are indispensable. Knowing what I do about the drill, I think farmers cannot afford to sow broadcast if they can obtain a drill. I would like to have others give their experience on the same subject. SARATOGA FARMER.

The Spring Exhibition of the Alton Horticultural Society will take place at the Hall of the Mutual Insurance Building, on Wednesday, June 10th. A splendid exhibition of fruits, flowers and vegetables is anticipated. We hope a large number of our citizens, as well as citizens from other adjacent towns and the country will be present.

The Lew Chewans are great gardeners. Com. Perry's work says that they grow radishes to weigh fifty and sixty pounds.

The Imported Stock.

Our readers are aware that Messrs. Brown, Johns and Jacoby, as agents for the Illinois Stock Importing Association, have been absent several months in England, purchasing different kinds. They have completed their purchases and we may expect the gentlemen named, and the stock purchased, to arrive in this city in a few days. We find a very satisfactory communication in relation to the stock purchased, in a letter from London, published in the *Missouri Republican* of the 3d instant. That letter says:—

I but speak the concurrent testimony of all competent judges, who have seen their herd, that they are shipping, for the number, the best and choicest lot of stock that has ever been exported from this country into the United States. I am well aware that this is taking very high ground, but I am perfectly willing to abide the judgment of the stock growers of Illinois and the surrounding country, upon their inspection of the stock, after it shall have reached Springfield, Ill. Messrs. Brown, Johns and Jacoby first visited all the principal herds they could obtain information of, throughout the United Kingdom, before making any selections. They also attended the Royal Cattle Show of Dublin, Ireland; and were present at several public sales of choice herds in different sections of England, and that had been advertised for some time previous to their arrival at Liverpool. The result of their seven weeks labor in this country has been the purchase of thirty head of short horn cattle, ten of which are bulls, and twenty heifers and cows, principally the former; twenty-six head of sheep, eight of which are bucks, and eighteen ewes; twenty-one pigs, eleven of which are Irish and the remaining ten are Berkshire, and three head of horses, two of which are stallions, and a brood mare.

Six head of their cattle were purchased at the Royal Cattle Show of Dublin, and were the *premium* stock of the choicest short horns on exhibition; three head were purchased from a Mr. Ambler, near Halifax, at his public sale, and who is confessedly one of the most distinguished herders in England; two head were procured from Rev. Mr. Caton, in the vicinity of Mr. Ambler's; three head from Mr. Cruikshanks, of Aberdeen, in the north of Scotland; two at Lancaster, from Mr. Boulden, and the rest from various persons throughout the kingdom. Those purchased from Mr. Cruikshanks are beautiful heifers, and were selected from a herd of one hundred and fifty head, said to be the largest and finest herd of short horns in the kingdom. The two heifers purchased from Mr. Boulden have also been regarded with universal admiration. One of them is a two year old, out of a dam by Grand Trunk, that was sold at Mr. Ambler's sale, and was purchased by Mr. Thorne, of New York, at an enormous cost, as the best bull in England. Mr. Boulden also sold to Mr. Thorne two Grand Dukes—one for

eleven hundred and the other for a thousand guineas.

The sheep are all Southdown and Cotswold—very fine selections—and regarded as the best for mutton that are bred in this country. A portion of the sheep were selected with great care from the extensive flock of Mr. Jonas Webb, near Cambridge, the most celebrated Southdown breeder in England.

The eleven Irish pigs they have purchased were selected from the premium stock at the Royal Cattle Show at Dublin; and the ten Berkshires were purchased south of London, and were the choicest they could find anywhere.

Both of the stallions are beautiful animals, bright bay, with black mane, tail and legs, and very much admired. One of them is a three-year old, thorough bred, and of the best blood in the country. He is fifteen hands three inches high, and has the reputation of being one of the finest colts of his age in England. The brood mare is thorough bred, bright brown, and was purchased in York.

All the above described stock is now going on board a first class ship at Liverpool, for Philadelphia, and is to sail on the 20th inst. The necessary room for the stock was paid for at the cost of £300, and will have every attention during the voyage. From Philadelphia the stock will go by rail to Pittsburgh, thence to Cleveland, and by the most direct route from Cleveland to Springfield. The selections have been made without regard to cost, and will reflect great credit upon the gentlemen whose unwearied exertions will have secured this great acquisition to the stock growing interests of the West.

State Fairs for 1857.

The following State Agricultural Societies have designated the time for holding their exhibitions:—

- Pennsylvania, Sept. 29, 30, and Oct. 1, 2.
- New York, at Buffalo, Oct. 6, 7, 8, 9.
- Ohio, at Cincinnati, Sept. 15, 16, 17, 18.
- Canada East, at Montreal, Sept. 16, 17, 18.
- East Tennessee, at Knoxville, Oct. 20, 21, 22, and 23.
- Illinois, at Peoria, Sept. 21, 22, 23, 24.
- Iowa, at Muscatine, Oct. 6, 7, 8, 9.
- Kentucky, at Henderson, Oct. 12, 13, 14, 15, and 16.
- Maryland, at Baltimore, Oct. 21, 22, 23, 24, and 25.
- Massachusetts, at Boston, Oct. 21, 22, 23, 24.
- New Hampshire at Concord.
- U. S. Agricultural Society, at Louisville, Ky., Sept. 1, 2, 3, 4, 5, 6.
- Vermont at Montpelier, Sept. 30 and Oct. 1, 2.
- Virginia, Oct. 28, 29, 30, 31.
- West Tennessee at Jackson, Oct. 27, 28, 29, and 30.

Remedy for Sweney.

In the Rural American, a correspondent says sweney in horses is not a complaint

seated in the shoulder, but is caused by some disease elsewhere. From my experience I think otherwise. I have a horse which was lame, and getting lamer; for upwards of two years, till it became unpleasant to drive him off of a walk. A secret mixture given me—(formed, I judge, principally of stimulating or irritating oils)—I had rubbed on the place daily, and omitted for two or three days when the part became tender, and lard rubbed on instead, to prevent the hair coming off; then the irritant renewed. In about three weeks the horse was cured, and is free from lameness. W. T. L.

Illinois State Agricultural Society—Trial of Reapers and Mowers

A sufficient number of entries of Reapers and Mowers having been made, a trial of the same will take place under the resolutions of the Executive Committee of the State Agricultural Society, near Salem, Marion county, Illinois, at a time to be designated by the President of the Society, which time, judging from the present appearance of the wheat-fields will be about the first of July next.

Reapers and Mowers entered, or to be entered for trial, may be consigned to the care of C. W. Webster, President of the Society, either at Salem, on the Ohio & Mississippi Road; Sandoval, on the Illinois Central Road; or at Tonti on the Chicago Branch of the Central Road—the two latter stations being near Salem.

Anticipating that a large number of persons will be present at this trial from different portions of this and adjoining States, arrangements will be made for their reception at Salem.

By order of the President, C. W. WEBSTER.
S. FRANCIS, Cor. Sec'y

Illinois State Agricultural Society.

SALEM, Marion Co., Ill. June 4, 1857.

Editors in this State are most respectfully requested to publish the above in their respective papers, and also to draw the attention of their readers to it by an additional notice.

Cumberland County Agricultural Society.

ED. ILLINOIS FARMER: At a meeting of the Agriculturalists of this County on the 11th inst., a Society was organized under the name of the "Cumberland County Agricultural Society, and the following officers were elected for the year 1857:

President—George Hentig.

Vice-President—George W. Pickering, Michael Ruffner, W. L. Morton.

Recording Secretary—A. G. Caldwell.

Corresponding Secretary—C. C. Jones.

Treasurer—G. W. Albin.

Yours Respt., GEO. HENTIG.

THE ILLINOIS FARMER.

SIMEON FRANCIS, EDITOR.

BAILHACHE & BAKER, PUBLISHERS.

Vol. 2.

JULY, 1857.

No. 7.

The Season.

In the month of May the weather was unusually cool. It suited the spring grains, but not the corn. Indeed much of the corn ground remained unplanted on the first of June; but the ground was in good order, and if planted by the 10th June we feel quite sure of a good crop.

At this writing the spring sown wheat and barley look well. Early planted potatoes have come up finely, and some farmers are already plowing their corn. Spring weather very fairly commenced on the 7th, —about fourteen days before the longest day in the year; but with warm weather and seasonable rains, crops sown or planted in spring, in this section of the State will be good.

But few crops can now be put into the ground for harvesting the coming fall. Buckwheat can be sown as late as the middle of the present month, and it has yielded sown as late as August. Buckwheat pays well in favorable years, and makes a capital article of food. Ruta Baga turnips can now be sown, and they sometimes yield immense crops, valuable for the table and stock. The common white turnip can be sown later, and if on good ground, suitably prepared, will yield large crops. The fly is troublesome both to the Ruta Baga and white turnip—and if they take off the first sowing, another should be tried. It is said that the fly will not trouble the young plants if the seed is soaked in fish or other offensive oil.

We take this occasion to recommend again to our readers to save all the fodder, for the next winter, in their power. You had better have a few tons over, than a few

tons too little. "Stock well wintered, is half summered," is an old and true saying.

You have now busy times. Your corn, your grain, your potatoes, your meadows, need all your care.

Farmers are already making inquiries for grain drills. These instruments have fairly fought their way into public favor. We heard one man say, who had a hundred acres of tolerably fair wheat, that if it had been sown with a drill, he would have been five hundred dollars better off, with an increased crop. But farmers, in using the drill should recollect, that to have the drill work well, the weeds should be buried beyond the reach of the teeth. It is possible to drill in wheat in badly prepared ground; but it cannot be done well. Farmers who use machinery in the cultivation of their farms, should adopt a thorough system of cultivation. It will pay well,—besides the handsome appearance of a cultivated field, the beautiful crops must afford great pleasure to the farmer.

Comets.

Comets have been much talked of within the last few months. Our cold spring has been laid to the influence of one of those wandering bodies which it was said would come near the earth about the middle of last month. The expected visitant has, however, not appeared to unaided vision, and some who profess to know, say he will soon be out of the reach of the telescope.

The interest, however, which exists on the subject of comets, will render the following history of their appearance in past

time worth perusing. We find it in several literary periodicals without credit.

At the time of the birth of Mithradates, one hundred and thirty years before Christ, we have an account of a comet whose magnitude must have been far beyond anything subsequently seen, as its splendor is said to have surpassed that of the sun. In the years two hundred and forty-eight, three hundred and twenty-four, and three hundred and ninety-nine of the Christian era, remarkable comets are recorded to have appeared; and in the year one thousand and six one is described as presenting a frightful aspect, exhibiting an enormous curved tail, in the form of a scythe. The appearance of the comet of fourteen hundred and fifty-six spread consternation throughout Europe. The same comet returned again in fifteen hundred and thirty-one and sixteen hundred and seven; and it is recorded that, in sixteen hundred and thirty, a wonderful comet appeared, which, by its splendor and swiftness, excited the deepest interest throughout the world. Newton examined this remarkable comet with great attention, and was led, by the general laws of the motion of bodies in free space, as well as by his own particular observations, to conclude that the orbits of comets must, like those of the planets, be ellipses, having the sun in one focus, but far more eccentric, and having their aphelions, or greatest distance from the sun, far more remote in the regions of space. The idea thus thrown out by Newton, as also the observations upon comets made by Tycho Brahe, were taken up by Dr. Halley, who collated the observations which have been made, touching the appearance and aspect of comets from the primitive ages down to his own time, and found that, with but few exceptions, they had passed within less than the earth's shortest distance from the sun, some of them within less than one-third of it, and others about one half. He examined with much care the comet of sixteen hundred and eighty-two, and discovered a wonderful resemblance between it and the comets of fourteen hundred and fifty-six, fifteen hundred and thirty-one and sixteen hundred and seven. The time of the appearance of the comets had been at nearly regular intervals, the average period being seventy-five and seventy-six years. Their distance from the sun when in perihelion varied but little from each other. The inclinations of their orbits to that of the earth had also been nearly the same—between seventeen and eighteen degrees; their mo-

tions had all been retrograde. Putting these together, Dr. Halley came to the conclusion that the comets of fourteen hundred and fifty-six, fifteen hundred and thirty-one, sixteen hundred and seven and sixteen hundred and eighty-two, were re-appearances of one and the same comet. The variations in the time of its revolution around the sun having been something like fifteen months, was accounted for by him upon the supposition that the form of its orbit had been altered by the attraction of the remote planets, Jupiter and Saturn, and passed near them; and he thereupon predicted that its next appearance would be in the year seventeen hundred and fifty-seven or seventeen hundred and fifty-eight; and its actual re-appearance in seventeen hundred and fifty-nine, according to this prediction, established the fact decidedly, that they were regular and permanent bodies, obeying the general laws of matter. The only difficulty which remained in arriving at a greater degree of accuracy in calculating the return of comets was on account of the disturbance to which they are exposed from the other bodies of the solar system. This was overcome, in a good measure, after the death of Dr. Halley, by the calculations of D'Alembert, Encke and Clairault, in regard to the length of time this comet would be retarded by the attraction of Jupiter. The latter Professor, (Clairault,) read his investigations upon this point to the Academy of Science, in November, seventeen hundred and fifty-eight; and in a little more than a month afterwards, Halley's comet made its appearance, and it reached its perihelion on the thirteenth of March, seventeen hundred and fifty-nine—being thirty days earlier than he had calculated. Subsequent calculations enabled him to reduce the error to nineteen days. The perihelion passage of the same comet, on its return in eighteen hundred and thirty-five, was predicted within nine days of its actual occurrence—a most astonishing approximation to truth, when it is remembered that this body, far as it penetrates into space, never, even at the remotest point of its orbit, escapes from the sensible influence of the planet Jupiter.

Besides the comet of seventeen hundred and fifty-nine, of which there have been five authenticated returns, there are several others of which something like a return may be traced at long intervals. One of these passed its perihelion at about eight o'clock on the morning of the sixth of July, twelve hundred and sixty four, and again at a little past eight o'clock on the evening of the

twenty-first of April, fifteen hundred and fifty-six. Thus its period is about two hundred and ninety-two years. Another appeared in fifteen hundred and fifty-two, and again in sixteen hundred and sixty-one, having thus a period of about one hundred and twenty-nine years. The return of that comet should have been in seventeen hundred and ninety. In that year three comets made their appearance, but neither of them resembled the one of sixteen hundred and sixty-one.

While the periods of most of the comets examined are comparatively short, those of others have been ascertained to extend to many thousand years. The great comet of eighteen hundred and eleven remained visible for upwards of two months, and was considered one of the most brilliant of modern times. After a careful investigation, M. Argelander fixes its period of revolution at two thousand eight hundred and eighty-eight years. The periodic time of the return of the comet of eighteen hundred and seven was fixed by Bessel at one thousand five hundred and forty-eight years.

A comet, denominated Encke's comet, appeared in eighteen hundred and eighteen, and Encke's observations upon it enabled him to identify it with the one described by Messieurs Michier and Messien in seventeen hundred and ninety-five by Miss Herschel, and the one in eighteen hundred and five.

Encke predicted its re-appearance in eighteen hundred and twenty-two, and his prediction was realized by its being discovered on the second of June of that year, by Thomas Bristure; and its return was noticed again in eighteen hundred and twenty-five and eighteen hundred and twenty-eight, and attracted much attention from the astronomers of that day.

Another comet was discovered by Beila on the twenty seventh of February, eighteen hundred and twenty six, which revolves around the sun in about six years and seven tenths. Its return in eighteen hundred and forty six attracted a good deal of attention, on account of it having been discovered, by Lieut. Maury, of the Washington Observatory, that what had hitherto appeared as a single body was actually composed of two distinct and separate comets. In the same year one of the comets which is now visible was supposed to be identical with the third comet of eighteen hundred and forty six, discovered by Brorsen, and which is now the second which has made its appearance this year; its return perihelion is calculated to be on the twenty fifth of June—and as the first one is now in Aunges, and receding from the sun, the second (or Brorsen's comet) is in Persens, and is now visible in the northwestern part of the heavens, and will be during the whole of May.

All the comets that have heretofore been observed have made their progress through very different parts of the solar system; twenty four have passed within the orbit of Mercury, forty seven within that of Venus, fifty eight within that of the earth, seventy three within that of Mars, and the whole within that of Jupiter. Of a hundred comets, or thereabouts, mentioned

by Lalande, about one half have moved from west to east, in the same direction as the planets, and half in the opposite direction.

Although the superstitious fear of comets, as portending harm to the inhabitants of the earth, has vanished before the light of philosophy, there are still a few remaining who entertain fears of a collision with some of the comets that might cross the earth's path. It has often been predicted that that sad calamity would ultimately take place. It will be recollected that no longer ago than eighteen hundred and thirty two it was predicted that the comet of that year would cross the earth's track, and great fears were entertained of a collision. But there is no evidence that such a collision ever did happen, either with the earth or with any other planet; and there is no correct means of so calculating the place of a comet as to be able to say with certainty that on a given day it will cross the orbit of a planet. The motion of the earth in its orbit is, in round numbers, more than a million and a half miles in a day, and as Clairault, with all his care, did not come nearer the truth than nineteen days, in regard to the return of Halley's comet, and his followers, with all the additional light they possessed, could not come nearer than nine days of its re-appearance at the point nearest the sun, on its last return, in eighteen hundred and thirty five, and this comet will not return again till the earth would in its rapid course around the sun, be within nine days far enough removed from the influence of the comet to be out of the way of all harm. Professor O. M. Mitchell, who is eminently distinguished for his learning and scientific attainments, makes use of the following language upon this subject. He says: "It is useless to speculate with reference to the probable consequences of a collision, which there is scarcely one chance in millions can ever occur. Science has as yet discovered no guarantee for any planet against the probable shock of a comet; but an examination of the adjustments of our system, and those of Jupiter and Saturn, would seem to indicate to us, that in all past time no derangement has ever occurred from such a cause." We will dismiss this subject, by giving Professor Arago's division of the comets. He divides them into three classes, with reference to their physical constitution. He thinks they occasionally appear round, and with well defined planetary discs, showing them to be solid opaque bodies, in all respects resembling planets and only differing from them in the great eccentricity of their orbit. A second class of comets comprehends those in which there is a nucleus, but devoid of opacity, permitting the light to penetrate through even that portion which may probably be solid. The third class, and that by far the most numerous, comprehends those comets destitute entirely of solid nucleus, consisting of matter so attenuated as to compare with nothing of which we have any knowledge on the earth's surface. The comets named Encke and Beila appear to belong to this class, and even Halley's comet, according to the opinion of Sir John Herschel, at its last return, appeared to belong to this class also.

From the Ohio Cultivator.

Mrs. Gage in Illinois.

New Towns in the West—Enterprise, Thrift and Fertility.

I am in Lincoln, Illinois, the county seat of Logan, for the purpose of lecturing to the people on education and kindred subjects. Lincoln is on the line of the St. Louis, Alton and Chicago Railroad. The land hereabout is a dead level, stretching off to the horizon, with scarce shrub or tree to relieve the weary eye. Three years ago last September, I passed here, and not a permanent house, if I remember rightly, graced the waving green. A few shanties, built for the railroad operators, gave all the sign of home life that could be seen. Here we took stage for Bloomington. Now there is a "right smart" village, and it gave me a larger audience than I could dare to expect to gather together in Columbus, Ohio. Five really neat churches, one in process of erection—churches, some of them with a style of architecture that would do credit to any town or village—gothic windows, heavy cornice, stately belfries, and every indication of taste and refinement. Beautiful cottages, too, are growing up like magic, with observatories on the tops, and a kind of city air that would throw some of our old towns quite into the shade. The court house is a large substantial brick columned and corniced building, in genuine modern style, and all this in three years.

Such a soil! Pure lampblack and oil, in a state of liquid solution about the consistency of batter cakes, little less than a foot deep. But like the old lady's eels that were skinned alive, it don't trouble the people much, they've got used to it. Pavements, green trees and shrubbery, will come one of these days, and Lincoln will be a beautiful prairie town. These prairie towns grow up like mushrooms, upon the line of the railroads; not like new places in a timbered country, crawling along at a snail's pace for years, but here you find them with all the appliances of wealth and prosperity, as if by magic, with lecture halls, school houses and churches at the starting point, to induce settlers to come among them; and you can hear the thrummings of the piano and the soft strains of the melodeon, from many a house that has hardly had time to settle quietly in its new place. These villages will never be large towns, but they will help to stay the monstrous growth of cities, and diffuse more elevated and progressive feelings among the people. There is a roughness and freshness, a deter-

mined go-ahead hopefulness, that is to me delightful.

I have found here in the country a half score of old Ohioans, who left Morgan county a few years ago, poor boys and girls, seeking their fortunes, as the story books say. They seem to have found them on the rich prairies, and are substantial farmers, raising hogs and cattle, corn and wheat, with (as they aver) one half the toil that was required to cultivate a farm among the hills of Morgan. The west is the place for young beginners; but those who are established, let them stay where they are, for the old tree pulled up by the roots will never fasten itself fully in a new soil.

April, 1857.

F. D. GAGE.

The Horse and his Improvement.

It is not possible for any one to describe in advance, the size, form, or particular conformation of parts in the horse, best suited to the fine development of the foal, unless those peculiarities of the mare are carefully considered; and hence the absolute necessity of attention and study on the part of every individual who attempts to breed animals. The experience, suggestions, and practices of the most successful, are not sufficient guides to insure success to those who rely on them alone. "What man has done, man may do," and more; but although in dealing with inorganic matters—chemistry, for instance—any given experiment may be described, and repeated by others, with almost infinitesimal exactness, there are such a multitude of ever-varying influences modifying all the operations of animal life, that it becomes a necessity to study those influences and their relations, and then to manage them as they occur. And now that the curse of the agricultural community, the prejudice against "book-farming," as it has been contemptuously styled, is rapidly dying out, and those who do not pay for and read at least one periodical, devoted to agricultural improvement, and the dissemination of that knowledge most useful to the farmer, are beginning to wince under the conviction that their reading, and, consequently, more intelligent brethren are leaving them to hug the phantom of their delusion in the dark shades of old fogyism, there are encouraging indications of general improvement of both master and horse. It does not pay to be in the rear of the battle while those in front are gathering both the laurels and the spoils; neither does it pay to be ignorant of facts, of scientific truths, which, when understood, put money in the

pocket, and happiness in the heart; and so fast as the clouds of vision are dispelled, and the crusts of bigotry and prejudice broken up, will attention to this, and kindred subjects, secure desirable and profitable results. Ignorance is not bliss; neither is it foolish for even farmers to be wise.

The farmer who has good land, but inferior seed, does not expect the same return as from good seed; and, if the seed be the best, but the soil poor, he does not expect the product of a better soil; neither does he, while depending on his labor on the soil for living and profit, sell the best soil he may possess, and rely upon poor or worn-out lands—unless he have the means to bring that land into a more productive condition—and expect the heavy crops of his rich lands. And, yet, while they do not so with their lands, they do it with their horses; and the same policy, that, in reference to land, would be regarded as foolish in the extreme, and suicidal to their best interests, they practice with their stock, and reap the rewards, unfavorable though they be, and unnoticed and disregarded as they have strangely been.

If it is more laborious and difficult to raise a second-rate crop from poor soil than a good yield from rich land, it is equally more unpleasant and expensive, comparatively, in the end, to raise inferior animals than good ones. If a person feels that he is in any way responsible for the kind and condition of the stock he keeps, as all must, to some extent, he cannot but entertain a degree of pride and self-satisfaction in the possession of the best specimens of his own raising, and that feeling is a most potent stimulus to further improvement. But the possession of inferior stock produces quite as marked an influence upon the owner in the opposite direction. Each and every ill-formed or bad-conditioned animal is not only a "standing monument," but a living, moving, telling placard, setting forth his want of knowledge or care, which the most ignorant may read as they run; and a "hard-shell" indeed must he be who is insensible to the effects.

There is one source of disappointment, however, to those having good mares, which is but little understood, and which, so far as I know, has been noticed in agricultural journals only by Professor Cleaveland some time since, in the *American Agriculturist* and *Albany Cultivator*. I allude to the effect of progeny upon the mother. Farmers have frequently taken much pains to secure the services of a blooded horse for a favorite mare, and been disappointed and

mortified to find the foal resembling neither sire nor dam in the particular points sought for, but being rather a representative of an inferior horse, who had served previously. Many valuable facts are related in the articles referred to, illustrative of this subject, and showing its existence in the human family, as well as among the lower animals; and the opinion is entertained that inasmuch as the same blood must circulate through the veins of both mother and offspring, that the system of the dam becomes thus modified, and rendered, to a greater or less degree, similar to her mongrel young. This condition seems to continue, and hence, having her blood contaminated in the first instance, by that of the foal resembling the male parent, and retaining that contamination, thus affects future offsprings—the effect more observable if in the second instance the mare has been served with a horse much unlike the first one.

While there is no question in the minds of the few who have studied this subject, as to the rationale of its action, and its general application, it has doubtless been the source of many failures, and discouraged hundreds from further efforts to improve their stock, as well as furnished occasion for unfavorable and injurious reflections upon really excellent animals. It is an important fact, and a very good illustration of the necessity of beginning right, and of the disadvantages of a single mis-step; besides, furnishing ample and reasonable evidence of the fact, that he who changes the sire each season, can form no safe opinion as to what the progeny may be, farther than that they may have the general outline of the horse, and certainly be hornless quadrupeds. Those who are known as the most successful stock raisers, have always carefully avoided such changing of sires and confounding of stock.

Not to occupy too much space in a valuable journal, at present, a single remark as to the profits of stock raising, and especially horses, will be added. It will be evident, the writer thinks, to any one who will take the trouble to make careful estimates of the value of land in wheat and corn growing regions, of the expense of raising and getting to market each of those crops, compared with the receipts for them, that much more attention to the raising of horses,—good ones, both for draught and saddle,—would be highly remunerative. And, considering the very great demand for horses, that such demand is not confined to any one locality, but is general, and increasing, there can be little doubt, that present prices will be

maintained—at least for several years—and those who go into the business with a will and a reason, can scarcely fail to be well rewarded for their pains. Will they not look to it, think of it, act on it? Some who have worn themselves out in the toil and exposure of wheat, corn, and hog raising, and others younger and more active, who see a like fate before them, may take the hint, and profit by it. The same routine of life and labor best and most profitable for our fathers, may not be equally so for their sons, in the changed condition of surrounding circumstances.—Ohio Farmer.

Wheat and its Enemies.

When the enemies of the wheat crop are so prevalent, with a prospect of increase, let our friends take a few timely hints. There is no known remedy for the depredations of fly, chinch-bug, joint-worm, &c.; but we think experience will bear witness that there is a grand preventive in good cultivation. A vigorous and thrifty growth successfully resists, when the most promising appliances are powerless before, their ravages. And not only so, but throughout nature it will be found that where there is least power of resistance, the subtle enemy is most likely to make his attacks. It is not the sound and healthy, those who have enjoyed wholesome atmosphere and good food, who are swept off by epidemics, but those whose constitutions, enfeebled by any cause, predispose them, as we aptly say, to disease. The sleek and well-kept animal is not troubled with lice, when they swarm upon the ill-fed, "ill-conditioned" beast. And the enemies of plants seek their food upon the poor and sickly, where they find as it were the least resistance against their encroachments. The principle is universal, that "from him that hath not shall be taken away that which he hath."

But however this reasoning may be questioned, the philosophy of a sound, vigorous, healthy constitution for man, beast, or plant, as a safeguard against all natural enemies, no one will question. For the wheat plant, then, begin in time, and make the most thorough preparation for its reception. So get ready the ground, that it may do the very best of which it is capable. To those who plough deep, and aim to deepen their surface soil at every ploughing, we suggest that some judicious farmers, who would plough deep generally, think it not advisable for the wheat crop. We adopt the opinion to this extent, that we do not think a portion of fresh subsoil should be now brought

to the surface. The natural range of the roots of wheat is within about three inches of the surface, and for that reason it is desirable to have there the richest portion of the soil.

As to manures, he who properly uses all other means of success, should put on enough to secure him thirty bushels to the acre. The nearer he approximates that point, the less liable is his crop to suffer from its natural foes.

Early seeding is a point of great importance. A good growth of root in the fall preserves from winter killing. The plant having well withstood the winter, is prepared for an early, vigorous start in the spring. This enables it to resist and outgrow the attack of fly and other insects. And the early ripening is almost an insurance against rust. Where it is practicable, we should sow by the last of September. The only objection to early sowing is, that the crop is more liable to the fall attack of the fly. This objection seems in practice, to be far outweighed by the advantages on the other side.

Another important point is that of good, plump, well-ripened seed, of a hardy and early ripening variety.—[Am. Farmer.

Prize Essay on Hens and Hen Houses.

For the Premium offered by the Union Society of Va. and North Carolina

BY MRS. CATHARINE GREEN, OF DINWIDDIE.

In view of successful fowl raising, first—due regard should be observed as to the hen house, roosts, nest and hovels. My hen house is 10 by 12 feet, built of pine poles; my roosts are supported by four forks, driven in the ground, and pine poles extended from one to the other. My boxes or nests are made of plank, 12 inches wide, with partitions 12 inches apart, giving each nest one foot each way. They are also supported by forks, say about three feet long, driven into the ground, taking particular care that neither roosts nor nest should have any connection with the house. This prevents the lice, should there be any, from sheltering in the logs or roof, the house answering only for protection to the fowls. In the spring, the house, roosts and nests should receive a coat of white-wash, and at intervals, say about once a month, the roosts and nests should be taken out and scalded, new nests made, and thus cleansed, returned to their places. The floor should be kept well supplied with fresh earth to re-

ceive the droppings, and once in 15 or 20 days removed to the compost pile, and a fresh supply of earth put in. My hovels [coops] for spring use, cover a space of about 3 feet square, those for summer use about 5 feet. For summer, the ends are left a little open, to admit air. They are also white-washed on the inside, and moved about every 15 or 20 days. In spring, for early use, the hens are set as they take their nests, and carry what chickens they hatch; later in the season, I never put the eggs under less than two hens at a time, and frequently from 4 to 6. These hatch out at the same time, and I make a selection of the hens, and give a hen from 50 to 75 chickens, and put her under one of the largest hovels. The remainder of the sitting hens are stopped for a few days, to wean them from their nests, and again turned out for laying. In this way I keep the largest portion of the hens for laying and sitting. We feed the chickens three times a day with corn-meal dough, with a good portion of bran added. [Give them also a plenty of lobbered milk.—Ed.] They are never turned out early in the morning, nor allowed water, except in long spells of dry hot weather. My average this season, has been about 25 chickens to the hen. I have tried most of the different kinds of chickens, and greatly prefer the Dominique crossed on the Shanghai. First, they are very thrifty, of quick and large growth, soon attaining the size to fry; their flesh or skin is of a rich yellow, which adds very much to their appearance, when brought to the table.

Prairie Breaking; Small, vs. Large Farms; Magnificent Farming with small Comforts; Draft of Breaking Plows; what Teams to use.

To the new settler, Prairie Breaking is enveloped in a cloud of fog. He has no data but guess work, and finally, concludes his span of nags must be turned out to grass, and a long string of oxen and steers purchased, or the job let out to some native of the prairie, who has had ample practice with the long whip, and which requires almost as much expertness as in the driving of a team of dogs among the hummocks of the arctic ice. In the northern counties, the prairie team is seldom seen, and the ordinary farm team does the breaking. The tramping out of prairie grass weakens the turf and facilitates the process. But here in central Illinois, the blue grass soon makes a tougher sod than the ordinary prairie grass, and here too the red root, that anomalous plant, whose root is like solid oak, and top of annual herbaceous growth, is found in great profusion. It is the dread of the prairie breaker, throwing his plow out of

the ground, making bad balks in the plowing, or snapping pieces of steel from his favorite plow share.

We have ever been the advocate of small, well cultivated farms, with machines and instruments adapted to the use of such; and consequently are no great friend to the threshing machines that take in their train a small army of men, nor of giant headers, that sweep down a whole prairie in a day, nor of long lines of half broken steers turning broadnag furrows. We are more utilitarian in our views, though we might make less show on paper, or less laud the teeming soil of the mighty west.

We farmers of the west are too apt to become magnificently great in our farm operations, from the turning of three foot furrows to the tying of the bag string of our last load of wheat, which in too many cases is designed to pay two per cent a month on the last magniloquent essay in upper tendom farming. For ourself, we prefer to jog on in a quiet way and do our work cheaply yet effectually, so that it will make a fair return for our labors. We have no ambition to encumber our little farm with great appliances to do small work; nor do we wish to sit down to a summer meal of fried bacon, stewed dried apples and bread; though we might own a two thousand acre farm with forty Durham calves sucking the milk of eighty cows, while milk and butter is ignored for family use.

Those who prefer this kind of farming, have our sympathies, for though rich in broad acres of swelling prairies and noble herds; yet they are poor in comforts, and in those surroundings of home, that fill up the measure of domestic happiness, and give zest and enjoyment, commensurate with our wealth of soil and climate.

But we have digressed from prairie breaking with which we intended to fill up this letter, and will now return to the subject.

We will commence by saying that prairie breaking can be chiefly done with a single span of horses, and as effectually as with half dozen yoke of oxen. Three horses make an admirable team, cutting a furrow sixteen inches wide, while two horses will cut a foot; plowing one and a fourth to one and a half acres per day. Six yoke of oxen are generally used to cut two feet, breaking one a half to two acres per day. The plow is a huge, expensive affair, and the wear and tear of whip and lungs no small item. We are now breaking for sod corn with two horses, using a sixteen inch plow, (made for three horses,) and cutting a furrow one foot wide and two and a half inches deep. Through the kindness of S. FRANCIS, the Secretary of our State Society, we have the Elliptic Dynamometer, made by Gibbs & Co., of Canton, Ohio, by which we have tried the draft, and which we intend to use on several plows in old ground, to show their relative value. The plow used is one made at Moline originally, but from bad material and poor workmanship, has been almost remade here. It is of excellent form, runs first rate and cuts like a knife. The average draft is four hundred and fifty pounds; on fine, smooth prairie, shows between three and four hundred; hummocks, or tussocks of grass, carry it to five

hundred, and the cutting of large red roots, from ten to twelve hundred pounds. It will thus be seen that the draft is little if any more to break prairie than to stir old land for corn, when done as it should be,—from six to seven inches deep. When well understood, prairie breaking will be divested of its terrors, as it is a simple process requiring only the ordinary team of the farm; but great care should be taken to keep the colters and share in perfect order. We prefer the rolling cutter.

A friend who is on a visit from New York, says he would rather break up our prairie, than their old meadows and pasture land, nor does he think it requires more team to do the work. Did they attempt the work with a two or three feet plow, they would need the long string of cattle used here. We intend to try the draft of various breaking plows during this month, and can then arrive at more definite data on this very important subject.

RURAL.

West Urbana, June 8, 1857.

From the Freeport Journal.

How to Break Brush Land.

I have a small farm, and farm it upon rather a small scale, but I find that a little land well tilled, is better than a large farm not half cultivated. About five years ago I commenced making my improvements on eighty acres of what is called "Brush" land, which is very difficult to plow on account of the roots and "grubs." My manner of plowing such land is this: In the first place I cut the brush and saplings all off as near the ground as possible, particularly the hazle and sumach, with a brush scythe. The larger saplings I cut with an axe—grubbing nothing. I then take a good stout shovel plow, stoutly stocked, sufficiently strong for two horses, and having a good strong coulter or cutter, inserted through the beam of the plow and extending down within an inch of the nose or point of the shovel, and about half an inch below, to keep the shovel from getting under the roots. The coulter should be made of bar iron two inches wide and three-quarters thick, laid with steel, and made rounding at the point, and kept sharp, so that it will cut all small roots, and slide over the large ones, giving them such a wound at the same time as to cause them to die in the course of the season. It should be set in a standing position, standing a little back at the top, so as to make the plow go into the ground freely. If set too straight, the plow will not keep in the ground well. Ground cleared and plowed in this way will yield forty or fifty bushels of corn the first season, and the second year it can be broken very nicely with a common two horse plow.

I think this is the best plan for any one who has not money to pay \$3 per acre for plowing, and from \$10 to \$12 per acre for grubbing. The plow will not cost more than \$5 at the highest estimate, and any one that can use an axe and auger can make the stock. Two horses are a sufficient team to plow with.

S. V. SHOCKLEY.

From the Boston Post, June 9.

Hints to Horse-dealers.

Tompkins bought a fine horse paid \$300 for him. The horse after a few months proved to be lame in the right shoulder. Tompkins was distressed about it. Tried all sorts of remedies of embrocations, liniments, Mustang included, under the advice of the very best veterinaries, still the lameness was obstinate, and grew rather worse. He became desperate, and hit upon this device to sell the horse. He drove a ten-penny nail plump into the right fore foot, and left it there for ten days; when he led the tortured animal limping to a neighboring blacksmith to be shod. The blacksmith was a dealer in horses and quite a jockey in his way. After a while Tompkins called at the shop for his horse. "That's a splendid gelding of yours Mr. Tompkins; pity he is so lame," says the blacksmith. "He is indeed" replied Tompkins "but he is very lame, and I am afraid he can't be cured." "Perhaps not, and may be he can," says Vulcan. "How much would you be willing to take for him, just as he stands, Mr. Tompkins, money down?" "Ah, well, I don't know what to say about that. If he is cured he is worth all I paid for him, and even much more, as horses go now; but if his lameness should continue, you see he is worth nothing—not a dollar. The blacksmith began to chaffer. First he offered \$50, then \$100, and at last \$200 for the animal. Tompkins was persuaded and accepted the last offer. The money was paid and the horse delivered on the spot. "Now," says the blacksmith, "as the bargain is finished, I will be frank with you, Mr. Tompkins. I suppose I can tell you exactly what ailed that horse." "Can you?" says Tompkins; "well I shall be glad to hear it. I thought you knew all about it, or you would not have paid so much money for him." The blacksmith produced the nail, and assured Tompkins, with great apparent satisfaction, that while paring down the horse's hoofs, he had found that infernal long piece of iron, and drawn it out of the frog of the near fore-foot. "Is that all you know about it?" Tompkins asked, quietly. "All!" replied the blacksmith; "All! isn't that enough for conscience's sake?" "Well," replied Tompkins, "I don't know as it is. I will be equally frank with you, since the bargain is finished.—I drove that nail into the foot, but the lameness is in the shoulder, I think you will find."

When once infidelity can persuade men that they shall die like beasts, they will soon be brought to live like beasts.—Southey.

THE GRAZIER.

Pork Feeding in the West.

BY LEWIS F. ALLEN, BLACKROCK, N. Y.

What I have already said of a change in the manner of feeding beef cattle for market, will apply with greater force to fattening swine. I do not propose a change in the mode of rearing shoats to an age at which they are sufficiently matured to fatten easily, which is, varying somewhat according to breed, from sixteen to twenty months. The breed of Western hogs in general can be much improved, particularly if an improved method of fattening them is adopted. The old way of feeding on raw, unground corn, and then driving them to market, varying according to circumstances, from fifty to five hundred or more miles, required a stout-limbed animal, heavy in constitution, and rather coarse in bone, thus enabling him to travel. Eighteen to twenty four months was required to give the animal growth, and sufficient bone and muscle to carry his fattened carcass on foot, over the long journey to market, which, by the present railway mode of transportation, is not required; consequently, a lighter breed of animal, and one taking on fat more readily, at an early age, say at thirteen to eighteen months, is sufficient for profitable feeding in the way that I am about to recommend. What the breed should be, I am not disposed to say, as in the present condition of Western swine, neither of the improved breeds in their purity, can for many years to come, be adopted, so numerous are the hogs for annual consumption required. I will only say that a snug, compact animal which will get his full growth in eighteen months, light in bone, prolific in breeding, fattening readily after six months old, and of a quiet temper, is the breed which every farmer should strive to obtain and adopt.

The hog is a cold animal, thinly haired, and sensitive to changes of weather. He requires a warm and dry bed, and this at all ages. He should have, or he will not thrive, or thrive but slowly, in comparison to what he would do with such accommodation. Therefore, for the most economical and profitable results, good shelter and warm bedding he should have in all seasons, whether as a growing shoat, or a fattening hog.

To state the subject more plainly, let us look at the present method of pork feeding, as usually practiced in the West, in opposition to an improved method hereafter to be stated. Of the past and present practices in fattening hogs, there are several, and all of them imperfect. I say little of the plan of letting lean or store hogs follow the cattle in their feeding lots. That is indispensable to the mode of feeding shocked corn to cattle. According to the abundance of corn fed to the cattle, can the hogs, which glean after them, gain flesh. Some, I believe, are fattened in this way: but the number is comparatively few to those fed off by themselves for market. But to the present ways of feeding:

First. Turning a drove of hogs into a field of standing corn. This is manual labor-saving of the primitive kind. The hogs eat a great deal of corn, and a great deal of dirt with it,

and they do a great deal of hard work as they proceed in breaking down the corn before they can get it, and this is not labor-saving to the hog, who should do nothing but eat. Hogs are no economists in the consumption of their food, all will allow. Of course, a considerable percentage of the corn is trodden under foot, buried under the soil, and so dirtied over that none but a lean and a hungry one will ever follow them to root the soiled ears out of the ground for food, so long as any standing corn is left in the field. The hog here lies out without shelter, or bed, except what a fence corner, and the withered grass or leaves in it will give him.

Second. Turning the hogs into a grass field, where the corn is drawn, ready husked, into cribs, or pens, and thrown out with shovels, or the hands, by the sides of the aforesaid cribs, or pens. In a few days the ground is thoroughly trodden and rooted up by them, and the corn daily fed out becomes as filthy as in the field where they do their own harvesting. Here they have no more shelter nor warmth of bedding than in the other.

Third. In a field like the last, the corn is brought in daily with a wagon, and scattered promiscuously over the lot—a better way than the last, as it gives them a clean feeding place daily, but the same want of shelter and bedding.

Fourth. The same as the last, only that a load of corn is taken inside, and the team taken away, leaving the wagon and corn standing until the corn is all fed out, when the team is again hitched on to the vehicle, and the process repeated. I have seen multitudes of fields and droves of hogs fed in these various methods. In fair and warm weather, the hogs looked tolerably well; but in foul weather, so deep in mud, and so besmeared and filthy were they, that their original colors even could not be discovered. So have I seen them in deep snows, where they were running, squealing about with upturned snouts over the fields, perfect pictures of misery and despair—cold, wet and hungry, even in the midst of plenty, such as the plenty was.

Now either of these methods, a merciful and a tidy man will say, at the first look, is not the real way to economically fatten a hog, throwing out of the question the humanity of the thing. On inquiry of the farmer who practices either of the above plans of feeding, the uniform answer is—or what amounts to it—he can't afford to do it in any other way; in short, it saves labor. It is no labor, of course, to raise the corn they wasted, but it is a shocking waste of labor to feed it out as it should be fed, and by so feeding save a third of it, which might either be sold at a fair price, or feed an additional number of hogs! In this relation, I do not blame any body; I only state facts as I have witnessed them. Perhaps it is the best way. We will see.

A hog loves cleanliness quite as well as he loves filth. He likes both, in fact; but each in its place. He prefers his food clean, although he will eat it when filthy. He loves to wallow in the mud when he is hot, provided he cannot get clean water to wallow in. If he can, he

prefers the water, and only takes the mud as an alternative; and when his wallowing is done, he loves to go and rub the dirt off his sides, and lie down in a clean, comfortable bed. Such is what the hog likes, and what he will always do, if he can. If he grovels in dirt and filth, it is a matter of necessity, not of choice. Thus, then, the modes of feeding that have been noticed, are not what the hog would choose, if he had a choice, but what he is obliged to submit to, and therefore not natural to him.

I will now speak of what I believe to be the most economical way of fattening hogs, even at the West, where corn "costs nothing," but labor everything. In the first place, a small field, or yard, of an acre or two, more or less, according to the number of hogs to be fed, should be inclosed. If a spring, or running water, is inclosed, all the better. Within this inclosure, near the water, erect a building thirty feet wide, and as many feet long as you have hogs to feed; lay a good tight floor in it; through the centre lengthwise run an alley or passage, six feet wide, which will leave a room twelve feet wide on each side; partition each room into apartments of 16, 20 or 24 feet, as you please, allowing a hog for every two feet of length, measured on the alley; put a good plank feeding trough next to the alley, inside of each room so partitioned, with stanchions on the side of the trough next to the hogs, to keep them from getting into it; six feet back of that lay a plank edgewise, and six inches high, parallel with the trough, well secured, so as to make a partition, separating their beds from the feeding floor, and in that bed room lay straw, or not, as you please—it will be warmer with straw than without it; let one or two open windows, say eighteen inches square, with sliding shutters, be cut in the rear, three feet above the floor, to let in air and light, or shut the light and air out, and to throw the manure out, which ought to be done at least twice a week. Thus you have two rows of parallel pens, each fronting on the alley, allowing two feet to a hog, as he stands with his head to the trough. Then, at one end of your building, which is one story high—and that is enough, unless you want storage for some of your corn, or other crops, over-head, when you may have it a story and a half, or two stories—put up another building, say forty feet long, by thirty wide, and two stories high—depending on the number of hogs you feed. If the establishment is a large one, I would have this additional building in the center, letting the long way of it run crosswise of the hog house, and project five feet from each side, and run the roof the other way from the pens, so as to give it an agreeable architectural appearance. In this building should be set a cooking apparatus, somewhat like that described for the cattle, but without a false bottom in the cooking vat, as the vats are to hold meal or shelled corn. The corn should be ground, if possible, and then thoroughly cooked; or if not cooked, large vats or tubs should be used, in which to mix up the food with hot water,* and leave it to ferment before feeding. It will go much further in that way, and the hogs like it better. For choice, I should cook it. If

the corn cannot be ground, it should be cooked whole; that is, boiled perfectly soft, so that the hog will chew it as easily as if made into mush, and every particle of it be digested.

There are several matters of detail which might be noticed, to carry out the plan of building, cooking, &c., but I here give the general idea, which is suggestive to any ingenious man to understand it. In this way, I venture the assertion, that full one-third the corn that is fed in the old way will be saved, and the pork be of a much better quality; and the extra quality of the pork, and the price it will bring from those who wish to put up a choice article, will pay the increased expense of feeding on this plan. The hog is always dry, comfortable and quiet; when not feeding, he is at rest, and has nothing to do but grow fat.

The idea of having a better quality of pork, by this way of feeding, may be a new one, and I will explain. There is not so sweet pork made as dairy pork—that made on butter milk, skimmed milk and cheese whey, thickened with ground corn, oat, rye, or barley meal, boiled potatoes, &c. Every house-keeper who has used the article knows this to be a fact; and the other fact, that such pork will bring him a cent or two on the pound, in our Eastern markets, more than Western pork sells for, settles the matter. Now this pork, made on cooked food, is as good as dairy pork—the same article, in fact, only that there is no milk in it.

Here the objection, of "too much labor," may come up again. My answer to this is: Get an Irishman to tend your hogs; he had rather do this than any other work you can put him at, for Paddy cleaves to a pig "like a verra brither."

Your hogs will then be fat in half the time they would on the old plan, and the pork be better. You save all the manure, and the business is done up tidily and well. The breeding sows can be put in the pens, when the fattening hogs are turned off, and rear the young pigs safely, and with little trouble or loss, and thus pay you twenty-five per cent. annually on its cost, in saving grain.

Think as little of this plan as you may, you must come to it at last, my Western brethren, as we at the North have done for the last half century.

LEWIS F. ALLEN.

*If there be no spring, stream, or well on the place, cove troughs may be made to the roof, and a large supply of water may be saved in cisterns.

POSTAGE ON WEEKLY PAPERS.—The Post Master General has recently decided that bona fide subscribers to weekly newspapers can receive the same free of postage if they reside in the county in which the paper is printed and published, even if the office to which the paper was sent is without the county, provided it is the office at which they receive their matter. This will be an item of interest to newspaper subscribers living near the county lines.

AGRICULTURAL.

Turnips.

The Rnta Baga Turnip can now be sown. A half pound of seed will be sufficient for an acre of land, and then they will require much thinning; for when they grow they should have at least eight inches of ground to extend on. The English make great use of this root in fattening cattle and sheep. It produces immense crops in favorable seasons;—such as the present seems to promise.

The middle of this month is time enough to sow turnips. Turnips have a mortal enemy that often takes whole fields; a little fly, which cuts off the plant as soon as it appears above ground.

It is said that the fly will not attack the turnip when the seed is soaked in a solution of arsenic.

Buckwheat.

This should occupy good ground,—light, rich and well prepared. There should be no green manure put upon it. The seed may be sown as late as the middle of July. When ripe, it should be cut and placed in small stacks, where it will not heat, and threshed as soon as the houlm and grain are dry. The houlm had better be cut than torn up by the roots, because in the latter case it is filled with dirt and entirely unfit for grinding, or market. Three pecks is enough seed for an acre of ground.

A Singular Discovery.

In 1853, a few grains of wheat were discovered in the tombs of some mummies found in the south of France, supposed to have been two thousand years old. These grains of Egyptian wheat were planted and produced, to the surprise of every one, 1,200 to 1. The Government took the affair in hand, and consigned the management of it to the farmers of the Government farm at Rambouillet. The result has been most astonishing. Each year the product has been multiplied in such an immense proportion over the preceding year that the Minister of Agriculture is now enabled to distribute over France a large quantity of wheat to each of the departments gratuit-

ously, with instructions from the Government farm as to the best mode cultivation. At a late meeting of the Academy of Science, the Baron de Menneville presented several stalks of this regenerated Egypt wheat which were six feet high, and bore each several fine ears. A French lady explained in my hearing the other day this great multiplying power of the Egyptian wheat by the long rest it had. It is a great and important discovery for the study of agriculturists.—[Cor. N. Y. Tribune.

Farming Near Large Cities.

No profession more sternly requires the exercise of economy than that of the farmer, and during the last ten years the improvements in methods of culture have been so rapid, that those who have not kept pace with such advance in economic culture, can scarcely compete with their more energetic neighbors. Enterprising farmers residing near large cities are becoming more like merchants, and are adapting themselves to the growing of such crops as pay large profits, and such as cannot be brought from great distances. It is quite curious, however, even at this date, to observe many of the farmers near large cities and towns, who still continue on in the old style, to grow hay, oats, corn and potatoes, the latter not often included, for fear too many will be raised for the demand, while an energetic gardener in their neighborhood will realize larger profits on two or three acres of root crops, than does the farmer of one hundred acres with his regular crops, as he would call them, being an exact copy of the crops of his great-grandfather, before the demand of the city called for those of a different character.

First, then, the farmer should inquire what crops are wanted at the highest prices, or rather what crops will give the greatest amount of produce per acre. If he can obtain 50 cents, or even 30 cents per bushel for carrots, he cannot afford to raise hay at \$30 per ton for sale. If he can get 75 cents for potatoes, he cannot afford to raise oats at 50 cents per bushel, nor corn at 80 cents. If beets can be sold at 50 cents per bushel, or onions at \$1 per bushel, or cabbages at \$4 per hundred, he cannot afford to raise wheat or rye at the usual market prices. If he be a stock grower he will have a market at home for many of the root crops, at four times the profit which could possibly accrue from the same land devoted to what are usually termed the staple crops; and to those who refuse to alter their style

of crops, in the fear that too many may do the same thing, and the prices thereby be reduced, we would say that the same fear in relation to potatoes has been expressed for the last twenty years, and still every year they have proved to be among the more profitable crops; and notwithstanding that carrots can be grown at the rate of a thousand bushels per acre by those who pursue the improved methods of culture, still they have been, and continue to be, sold at as great a price per bushels as oats; and when their true value shall be understood, thousands of acres will be devoted to their culture that are now devoted to other crops — [Working Farmer.

An Acre and a Half of White Beans.

A correspondent of the Genesee Farmer, writing from Springhill, Bradford county, Pa., says: "Allow me to give the facts respecting the cultivation of one and a half acres of beans last year. The soil is free from excess of wet, but not what would be denominated dry, the subsoil being tenacious but a reasonable depth below the surface. The field was cultivated with corn and beans the preceding year. Last spring, after having put it in good condition with plow and harrow, I drew shallow furrows with the plow for planting, say two to three inches deep and three feet distant, and running north and south. Planted in the furrow from six to eight beans in the hill, scattering them a little, say six to eight inches; then leave a space of twelve inches and plant more beans, and so forth. I have tried drilling and find no difference in the product, as in both cases they make a close row; but in pulling, the former method is preferable, when by using both hands we pull a hill at each grasp. When the beans were fairly up, I passed the plow once around each row, turning the earth towards the beans; and when nearly putting forth blossoms, plowed them again in the same way, one hand with the hoe following the plow at each dressing. Under ordinary circumstances the bean lot is easily kept free from weeds, from the fact that as soon as the plant is up its large foliage takes a horizontal position, and almost bids defiance to intruders. From the one and a half acres I had twenty-four bushels of beans, (small white,) worth one dollar and fifty cents per bushel, at the barn.

Cure for Bots.—Make some sage tea, and sweeten it well; when about milk-warm, drench the horse with it. If it turn out to be the choleric, and not the bots, the sage tea will be good for that.

HORTICULTURAL.

Planting Trees.

BY ROBERT L. BELL.

No man should undertake to plant a tree unless he has judgment enough to know the character of the tree he desires to move; some have roots similar to a sponge, and contain water enough in store to subsist on till the proper fibres are grown to sustain them; such, for instance, as that curse of our country, the *Alianthus*, (which is a greater nuisance than the Canada Thistle, and never could be sold until the importer called it the Tree of Heaven, and raised the price from one shilling to one dollar each, by which scheme he made in one year \$6,000.) the *Paulonia*, *Imperialis*, Willow, *Catalpa*, and half a dozen *Poplars*.

A dozen maples, half a dozen evergreens, the ash and horse chestnut roots, are very thick and fleshy, and contain considerable moisture, enough, in fact, to sustain them through much dry weather, after being removed, and therefore do not suffer half as much as the beech, birch, oaks and hickories, the roots of which are not well supplied with fibres. The generality of trees should be planted in the fall, immediately after the leaf falls; this gives them several months before the ground becomes thoroughly frozen to form rootlets, and prepare them to undergo the vicissitudes of a changeable spring.

I planted last fall some 10,000 trees, and with the exception of the locust, and a few evergreens, consider the fall the only safe season, because the root has an opportunity of fixing itself permanently in the earth, through the medium of its numerous ramifications, and thus forming at its extremities spongelets to absorb the necessary fluids, as these become the only true roots to supply the tree with nourishment. There are in roots two fluids of different densities, the one flows inwardly, and is called endosmose; the other outwardly, and is called exosmose; the fluid in the interior of the root is rendered dense, by mixing with the descending sap, and as long as this difference exists, the roots absorb fluids; this may be proved by growing plants in water, when it will be found that a gummy matter is discharged, impregnating the water with a taste peculiar to the plant; therefore, if the planter desires his plants to continue in a healthy state, he must maintain the conditions of exosmose and endosmose.

As we scarcely see in nature a large number of the same variety of forest trees grow.

ing together, except perhaps pines and hemlocks; therefore, when we plant it would be well to follow nature, and plant varieties; deciduous trees always succeed better when planted among firs; pine leaves, pound for pound, yield thirteen times more ashes than pine wood; the annual fall of these leaves give alkalies to the land, a source of fruitfulness advantageous to deciduous trees.

Why do pine trees succeed oaks and beech pine? The soil must be rendered by a growth of pines uncongenial for a second growth; but congenial for another, or else the labors of man cause it. I have found that nature protects trees in exposed situations, first by allowing them three times the quantities of roots that would be necessary in the forest; second by clothing them with many more branches, and they so formed as to balance the tree perfectly; thirdly, their stems are shorter, and consequently stouter; and fourthly, the bark is much thicker. Nature remembers, and man should do the same, that the trees, as well as animals, are organized beings.

We know that in nature there are two great kingdoms, the vegetable and animal; the distinctions between which are daily disappearing, as nearly all the organic matters which were supposed to distinguish the vegetable from the animal, have been discovered in both, and motion even no longer separates the two.

You often hear persons say that it is difficult to make tap rooted trees live, because in taking them up, the tap root is necessarily cut off. This is an error that cannot be supported by my experience. The tap root is only of advantage during the infancy of the tree, and at mature age cannot be discerned from the other roots. It is only those who are unacquainted with the physiognomy of plants that meet with bad success in planting. Trees must be adapted to their proper soil, and appropriate climate, or the efforts of nature will be counteracted. Plants should always be headed down when two years old. I have often tried this experiment with different species by heading a row, and leaving a row; those headed in, made several feet of growth in a year; those not headed, two feet; some of the headed rows grew twenty feet in two years, while those not headed grew six feet. Many persons when they remove a large tree head it in, upon the principle that the roots have been much reduced by transplanting, and that the heads should be so in proportion. This is wrong; though I have

practiced it largely, for without the heads, the roots cannot receive nourishment, and the sap is lost not only at the top, but the bottom of the tree also.

Try the experiment, and you will find that the tree with the top left on will do the best by one-half; showing that the treatment which is proper for a small plant, is not so for a large tree.

The idea that trees when transplanted should be replanted in the same position and exposure in which they stood, although a prejudice of very great antiquity, is fallacious, as I have never observed any difference, and have made repeated trials. In planting trees, the roots should be trimmed instead of the tops.

I regret to be compelled to make one statement in this connection that militates against trees in pasturage fields, because I so delight in forest trees, that I dislike to say anything that will have a tendency to induce the farmer to cut them down. Still, I cannot deny that animals will increase much more rapidly in open fields, exposed to the hot burning sun, not only in fattening, but milking qualities, than they will if permitted to enjoy the shade of trees. In the first instance they are continually eating, and taking on fat, secreting milk, &c., and in the second instance, only digesting the morning meal, as they will remain almost the entire day in the cool shade.

Transplanted trees should never be watered, after they are set out. If set properly, we all know that trees require a great deal of moisture, and that it is absorbed through the instrumentality of the spongioles and rootlets, which pierce the soil in every direction; as holes retain moisture nearly in proportion to their depth and size, therefore they should be large, and widest at the bottom; the ground must be thoroughly pulverized, and just before the tree is set, fill the hole with water; then throw in a sufficient quantity of the pulverized earth, and mix it until formed into a perfect mortar; spread the roots of the tree by hand in this mass, and cover them with the finest surface soil, without pressure, then tie your tree firmly to one or more stakes, and it will never require water at your hands.

When trees are watered after planting, the ground becomes hard and baked by the action of the sun's rays, and prevents the absorption of moisture, air and heat.

If you ever find it necessary to water trees that have been planted after the usual fashion, draw away the earth for a considerable distance around the tree, to the depth

of several inches, fill the basin with water, after sunset; let it stand until the next morning, and then fill in the soil in its former position without pressure.

THE GARDENER.

Hints for Gardeners.

Cultivate nothing carelessly. Whatever is worth cultivating at all, is worth cultivating diligently and well.

Many kinds of garden seeds lose their germinating power when more than a year old. Therefore, be careful to sow fresh seed whenever practicable.

But melons, cucumbers, pumpkins, and members generally of this family, are an exception to this rule. The seeds of these should not be sown till after they are several years old.

The seeds of most kinds of weeds retain their germinating power for an almost indefinite period. Hence, weeds should always be carefully gathered and burnt, as the most effectual mode of destroying the seeds.

The first leaves which appear on the surface (in many cases called cotyledons,) are for the time, sole supporters of the life of the young plant,—sustain it till it has formed roots, and, if prematurely destroyed or much injured, the plant will die.

Seeds will not germinate unless exposed to the influence of moisture, air, light and heat. They should, consequently, not be covered too deep, or they may fail to sprout.

It is, in ordinary cases, not profitable or advisable to raise your own seeds. Your soil and your time should be of more value and importance to you than the cost of new seeds. Besides, such as are raised on a soil different in composition from your own, will most probably thrive better.

The roots of very young plants are rarely hardy enough to bear transplanting well. The best time for transplanting seedlings, is when they have formed five or six leaves; because, at about that period the young roots and radicles are able to perform their proper functions more successfully than earlier.

Roots essentially require the admission and presence of atmospheric air. The surface soil should, therefore, always be kept loose and porous, and clayey ground should be frequently broken up or stirred in dry weather, or whenever it has become parched or baked.

When a bed has been dug over in the fall, it should be suffered to lie, during the win-

ter, in the roughest condition in which the spade has left it. A greater amount of surface will thus be exposed to the effects of frost, and the ground become more thoroughly pulverized in the spring.

Frost acts with greater severity on roots or tubers which have been pulled or dug up, than on such as remain in the ground.—Hence they should either be effectually protected, or remain together undisturbed.

The various kinds of plants extract different substances from the soil; and a well chosen rotation of crops is consequently highly advantageous, and deserves attention.

Leaves absorb moisture from the atmosphere, and again part with it; they inhale and exhale air, and thus constitute the more important organs of plants. If injured or removed, the entire plant suffers accordingly.

The pores of the leaves, through which air and moisture are transpired, are exceedingly minute, and very liable to be closed by dust. The foliage of stove plants should therefore be frequently well sprinkled with pure water, to prevent or remove obstruction to healthy action from this cause.

In their natural condition or growth, the leaves and branches of plants rarely touch or cross each other. We should hence learn not to crowd our plants close together, or to place even a single plant in a confined position, where its leaves and branches have not room to expand or develop themselves fully and freely. Air and light are as essential to their vigorous and healthy growth as earth and water.

The falling off of the leaf of a newly-set cutting, is an indication that the cutting has begun to grow. But, if the leaf wither and dry without dropping from the stem, it is an evidence that the plant lacks vigor to effect the natural process of shedding the leaf, and will probably fail to grow.

When plants produce an abundance of foliage with few buds or blossoms, they should either be transplanted into a poorer soil, or some of the principal roots should be pruned off.

Drying winds are injurious, as they rob the leaves of plants of moisture more readily than it can be supplied by the roots. Plants need as careful protection from such winds as from frost.—[Farmer and Gardener.

Unable as we are to withstand the ills of time and life, it often happens that through disease and misfortune we become gray in early life and bald before we reach the full grace of womanhood or the full stature of manhood.

The Farmer's Garden.

What can be more grateful to the feelings of the husband and father, than to look upon the garden of his own creation, wherein he finds growing in healthful vigor all those vegetables and fruits and flowers that are to supply his family's wants, gratify their tastes, contribute to their health, and excite their admiration. If there be anything better calculated to warm into activity the kindly feelings of the heart, we are certainly strangers to it. For ourselves we want no better evidence of a good husband and kind and indulgent father than can be found in the possessor of such a garden as we have imperfectly described. And we venture the assertion that the owner of such a garden loves his home and its inmates all the better because of that garden.—[American Farmer.

VITALITY OF SEEDS.—The vitality of seeds, with proper care, and under favorable circumstances, can be depended on for the following periods: Indian Corn, Wheat, Rye, &c., for two years. Of course every farmer will sow fresh seed when it is possible to obtain it of equal quality.

Millet, Buckwheat, and the grasses generally, will grow the second year, if saved over with proper care, but not with the certainty and vigor of fresh seed.

Hemp will grow the second year, only when kept dry, and in a small quantity together, and not exposed to too great heat.

Parsnips, Rhubarb, and other thin, scaly seeds, for one year.

Carrot, Cress, Leek, Onion, Peas, Pepper, Sage, Salsify, Tomato, for three years.

Asparagus, Egg Plant, Lettuce, Mustard, Parsley, and Spinach, for three years.

Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Radish, Sea Kale, and Turnip, four years.

Beet, Celery, Cucumber, Melon, Pumpkin and Squash, from eight to ten years.—[Valley Farmer.

THE ROCHESTER RAPPERS.—The Boston *Traveler* says that Mrs. Brown and Katy Fox, the original Rochester Rappers, have arrived in that city to meet an arrangement with Dr. Gardner, who proposes through their mediation to convince the Harvard College professors, among other things, that sounds expressing intelligence are made without conscious human agency. The investigation by the committee of professors is about to commence.

THE FLORIST.**Palestine in May.**

The temperature in Palestine becomes warm in May; varying from about 87° Fahrenheit to 86°, but it seldom varies more than 10° in any one day. Westerly winds prevail, and the nights are cool.—The snows of Lebanon now melt rapidly, but still in the early part of the month the cold is severe on the higher parts of the mountains, and the snow is frozen hard enough to bear a horse's weight. The heat at all seasons in Palestine is greatest in the Plain of Jericho, and through the Valley of the Jordan. Violent thunder storms now occur, particularly in the mountainous districts.

The borders of Lake Tiberias are richly fringed with the Oleander, (*Nerium*), presenting a magnificent scene, from the contrast of their dark foliage with the delicate roseate tint of the flowers.

The Arbutus, or Strawberry tree, (which is unfortunately too tender an evergreen to bear the winters of any but the more southerly states of this continent,) grows in all its native luxuriance; and together with the oak and the fir, (*Pinus Sylvestris*), gives the character to the woodland scenery of the hills of Bashan and Gilead.

The Oriental Plane is one of the most beautiful of the forest trees in Palestine, and is spoken of with great admiration by most travelers. This is of the same family as the Button Ball or Plane of this continent, but it is not subject to the influence that has spoiled the native Plane here, by the peeling of the bark. The Oriental Plane can be obtained at the nurseries here; and should be planted by all who love fine forest trees.

Acacias, from the Shittim wood mentioned in the sacred writings was obtained, are still luxuriant in Palestine. Acacia gumifera is one species which yielded that wood; and it is supposed it was obtained also from another, having the Arabic name of *A. Seyal*.

Barley harvest commences in May, and the wheat harvest a fortnight later. The Flora of last month continues to enliven the Eastern landscape.

CALCEOLARIA AS A BEDDING PLANT.—The English florists use the *Calceolaria* for bedding out in summer. It is more hardy than the verbena, and flowers freely.—When a good number are set out so closely as to cover the ground, they have a very pleasing effect. Those who possess green

houses, and can raise a sufficient stock of these plants, should try them in the open ground, in this country. If they should be hurt by our ardent sun, then shade. If they pine for want of moisture, water freely. We see no reason why we should not add this beautiful flower to our garden list.

Cattle Plague on the Continent of Europe.

There is a cattle plague now in Germany. Measures have been taken both in England and France to prevent its importation into their respective countries. It has destroyed vast numbers of cattle. The disease and its progress in the neighborhood of Mecklenburg is thus described:

"From the taking, or first attack of the disease, till its breaking out, seven days generally elapse, during which the cattle attacked are at times more dull, at times more lively than usual. They hold down their heads, but with their horns, frequently low, and when driven to water often jump about and become quite unruly. Sometimes they take their food and chew the cud with unusual quickness, sometimes not at all. Towards the fifth day respiration becomes somewhat affected; they are attacked by an unrequited but short dry cough; the back is somewhat bent, and when stroked is unusually sensitive. On the eighth day the disease breaks out: the hair stands on end, the eyes are fixed and dull, nostrils and muzzle hot and dry, inside of mouth hot and of a deep red, gums spongy and swollen and marked with red spots; front teeth loose; hide hard like parchment, and adhering to bones; ears and horns febrile, with intermittance of great heat and cold; respiration accelerated but deep, with visible motions of nostrils; cough more frequent, violent and ringing; pulse hard, from 70 to 75 pulsations per minute; appetite entirely gone. Though some cattle in this stage of the disease take their food as usual, most of them are unquiet, toss up their heads, shiver and gnash their teeth. If stroked on the back, they bend down and low moanfully, seldom lie down, and when they do so instantly get up again; they void excrements frequently and urine seldom. In voiding excrements the back is much bent, the animal turning its head towards the rump and striving to lick it. Excrements are dark colored, hard, dry ustulious pellets, urine red and clear. The fever is more intense in the evening than in the morning; and as it increases, the animal shakes its head, shivers, gnashes its teeth, and refuses to take food—Cows give but little milk, which is however more creamy than usual. Nine and tenth day fever becomes putrescent; small white pustules break out in the mouth, which, when they burst, leave dark red spots that easily bleed. Similar pustules appear in the nostrils and between the clefts of the hoofs, the hide is in some places tumescent, the eyes are dim, the eyelids hanging down. From the eyes flows a watery humor which dries up at the edge of the nostrils;

exude a dingy white viscous humor; the tongue is shrivelled, and often hangs loose out of the mouth, covered with an impure saliva; the teeth are loose; the mucous membrane of the mouth sabbaceous, and falling off in large places; breath putrid and nauseous; muzzle hard and cracked like the bark of a tree; hair rough, and without the least gloss; parchment-like hide, now covered in some places with nodules, on which appear small pustules containing a yellowish humor; pustules burst, humor drives up, and a mangy eruption ensues, commonly on the back, anus, and udder; rumination ceases; animal reduced to a skelton; pulsation 80 to 100 per minute; respiration quick, wailing, and painful; intermitence of heat and cold; on the sides of the more diseased lung heat greater, and of longer duration; excrement previously hard, now soft, loose and watery. This state is followed by choleric diarrhoea, with acrid, purulent, brownish, or blackish green scæces, smelling like carrion. If constipation now ensues the animal swells up and soon dies; if, instead of diarrhoea, a more natural evacuation of the bowels takes place; if the animal warmth becomes more normal, respiration more free, pulse slower and fuller; if the hide scales off, and regularly running sores (abscesses) are formed, recovery may be expected. This is, however, very seldom the case; the above-mentioned symptoms generally increase, after a short illusory amelioration. The animal then staggers, falls, rolls on the ground, gasps for breath, swells up, is seized with convulsions, and dies.

A FALL IN SUGAR.—For the past month high as sugar was before, it has continued to advance a quarter or a half a cent a week, and is still rising. But there is reason to hope for a decline before next Christmas. The crops are promising. Production has been highly stimulated by the high prices of two years past. Consumption has somewhat diminished. Stocks have increased, and the Louisiana crop, which will be in by October or November, will be four times greater than last year. The maple production has been enormous, and if the experiments with the Chinese cane should result in nothing but syrup the increase of saccharine matter will be large;—so that speculators who have bought for a rise will find that sugars must have a fall. Louisiana, maple and Sorghum with a restraint on consumption, will prove too strong a combination for them.—*St. Louis Republican.*

BEAN CULTURE.—A farmer of West Gaines, New York, states that cultivating four acres of winter beans, it cost him, including interest, \$62 10; and that he received from the product, which was 94 bushels of beans and two and a half tons of bean straw, \$197, or a profit of \$134 90, which was \$33 72 per acre.

HYGIENE.

Sleep, Its Physiological Use.

Just when all the animals, except a few, retire to rest, when all the useful laborers of every class have finished the labors of the day, the votaries of fashion begin the toils of the night, and like the flies and moths, that are woke and roused up by the splendor of chandeliers, they buzz around the objects of their admiration and worship, until they are exhausted. Even the pauper patient at our hospitals, enjoys sleep—whereas the lady, whose income counts by thousands, can not have one night's good sleep. Oh! ye poor rich!

Almost all headaches arise from deficient circulation in the brain; and nothing is so beneficial, nay, so absolutely requisite, as plenty of sound sleep. The remedy for Tic Douloureux, or Neuralgia, is sleep. One good night's sleep is of more use to a cough, than any remedy of the entire materia medica. If, on "taking cold," as it is called, we can lie down, wrap up warm, and sleep, our fortune is made—we are recovered. The best medicine that we can give in fever, is sleep.

Sleep restores to the brain its circulation and functions; and the healthy and active condition of the brain causes a healing and healthful circulation of blood in every other part of the body. We have known of cases of fever of the lowest and worst kind, cured completely by the taking of some interdictioned substance, as cold water, ale or wine, causing a sound and long sleep. The patient has awoke to health.

In most cases of simple insanity, if sleep can be induced and repeated, the symptoms will disappear. External and internal warmth are requisite to induce sleep.

In one of our tours in a foreign land, in search of the picturesque, we had been out all night, moon and star-gazing, and then spent the morning in exploring the ruins of an ancient castle. About noon we were exhausted, and it being the middle of summer, we lay down in a field of grass, and slept for three hours. We awoke, refreshed in mind, but shivering in body. The sun warmed one side, but the dampness of the ground cooled the other, and we felt there was a serious illness coming on. We had four miles to walk to our resting-place, and never did we walk four such miles! Each mile seemed to be four.

Arrived, we drank two tumblers of hot brandy and water, and as much hot tea, and then lay down before a good fire, upon,

and wrapped in blankets. We slept from eight to eleven there, and then went to bed and slept till five, then we awoke as well as ever, ready for a new tour. Sleep saved our life.

During one of the hot summers, a child three years of age, crawled up one of the houses in Eleventh street, and fell out of the fourth story window, to the ground, which was not paved. The child was taken up, apparently dead, and laid upon a bed—we being sent for, more for the purpose of giving a certificate for interment than for medical aid. We found the child asleep, and the breathing not stentorian, that is, not hard, forced, loud. We examined the limbs and head, and found no fracture. We bade the mother leave the child to its sleep, and said we would call again. In two hours we called again, and the young one was running about, as well as ever.

One of the ablest scholars and finest writers of the age, when a student, attempted a voluntary Latin task, and was obstructed in the middle of it by a passage in Virgil's *Aeneid*, which seemed to be incapable of translation; he bored his brain with it to no purpose, until he fell asleep. He slept four hours, and when he awoke, the passage translated itself. Afterwards, when he was puzzled, he tried a reasonable time, and if not successful, he put the difficulty and himself to sleep together, and the solution invariably occurred.

If every person who suffers a loss, sustains an injury, receives an affront, is subjected to an insult, or placed in a difficulty, could have a good sleep before the trouble is examined and disposed of, one half of all the hardship would usually be gone, and what was left would be more readily dealt with.

As a rule, those discourses, lectures and sermons which induce sleep, ought to be slept out. If the air be bad from closeness or heat, or the position be unfavorable, or the light be weary, the fault may not be in the discourse; but as a rule, discourses which make us sleepy are not worth hearing.

We had a fellow student who had in him some of the spice of life, fun and wit. He had fever, and his good aunts were very anxious about him. One day they were questioning the physician as to the best means of obtaining sleep for him. He recommended a hop pillow and a composing draught. "Oh!" said my fellow student, "bring our minister here, and let him preach to me; I shall be sure to go to sleep in a quarter of an hour."

Students and men of business, who deprive themselves of sleep, only deprive themselves of capacity for their pursuits. The great Pitt, who was Prime Minister of the British Empire at the age of twenty-five, died at forty-two, for want of sleep. Kirk White died when but a youth, for want of sleep. On the contrary, those who sleep too much, are fat and heavy, being what is familiarly known as pudding-headed.—Sleep enough, but sleep not more than enough.—The Scalpel.

Horses' Ears.

The ear of the horse is one of the most beautiful parts about him, and by this is the temper more surely indicated than by its motion. The ear is more intelligible than the eye; and a person accustomed to the horse, can tell by the expressive motion of that organ, almost all that he thinks or means. When a horse lays his ears flat on his neck he most assuredly is meditating mischief, and the bystander should beware of his heels or his teeth. The hearing of the horse is remarkably acute.

In driving a horse in a carriage, he appears to be sensitive to the least motion, or talking, or noise, in the carriage behind him. Hence a horse, well-trained, readily knows every word of command. When he is in full gait, and all appears right behind him, his ears will look forward, if I may be allowed the expression—that is, his ears will be erect, straight ahead; but if you lay the lash upon him, his ears immediately turn back to perceive what you are about. But if you strike him very lightly, or give him a light tap on his right side, he will immediately turn back his right ear, but not the left; but if you just touch his left side, he will turn back his left ear only.—[New England Farmer.

Hygienic Influence of Trees.

The cultivation of forest trees is becoming more and more a subject of serious consideration among public economists.

The relation of trees to the comforts and conveniences of life, and the great question of a future supply, which arises in view of the continual destruction of our forests, has attracted the attention of the best intellects of our country.

To the physician the subject has an additional importance in view of the hygienic influence of trees upon the human system, both in health and disease.

It is well known that new diseases make their appearance as the forests are cleared away; and the superior physical power and

health of backwoodsmen over the inhabitants of treeless plains, has always been acknowledged.

The influence of animal and vegetable life, one upon the other, has not escaped the attention of observing men; but little or no effort has been made to inform the public of many facts in connection with this subject which it is vitally important should be known; and a wholesale destruction of our forest trees has gone on to an extent that threatens to leave us, at a time not far in the future, comparatively destitute of the great pride of America, its forests.

The physiological influence of trees of all sorts is apparent to every one who knows the avidity with which they absorb carbon and ammonia, the two great extractions of animal life, which, if left free in the atmosphere, render poisonous the air we breathe.

The planting of trees in our cities, and the preservation of forests, would do more to preserve the public health than many other more expensive hygienic measures.—N. H. Jour. Med.

Rye for Fall and Spring Feeding.

EDITOR FARMER:—There is a good deal of hard labor saved to the farmer when he can make his stock help themselves to food in fall, winter and spring—and more especially if this can be done without waste. We know that if we have plenty of corn in the shock it is a work of great labor to haul it from the field in all kinds of weather to feed out. I am going to try for fall, winter (when the weather will enable stock to get it,) and spring food, a field of rye. I intend to sow it in the second week in July, will feed it off in late fall, winter and spring, and if it is effectually used up by stock in the spring, why I will plough up the land and sow it or plant it with a spring crop. I know that this is not a new project, but a little experience has satisfied me that the plan is a good one. I intend, if possible, to have enough food next winter for my stock; and that now is the time to secure this object.

I am told that corn, sown broadcast, at this season of the year, produces a large amount of excellent fodder, and that the new Chinese sugar cane, sown in July will produce fodder superior for stock to any known thing—grass, corn or other article. I shall try a small quantity of the seed of this cane for this purpose the present season; but my main reliance, in addition to the food in ordinary use, is a field of rye, to be sown early.

MISCELLANEOUS.

From Dwight's Journal of Music.

The Preaching of the Trees.

At midnight hour, when silence reigns,
Through all the woodland spaces,
Begin the bushes and the trees,
To wave and whisper in the breeze,
All talking in their places.

The Rose-bush flames with look of joy,
And perfume breathes in glowing;
"A Rose's life is quickly past!
Then let me, while my time shall last,
Be richly, gaily blowing?"

The Aspen whispers, "Sunken day!
Not me thy glare deceiveth!
Thy sunbeam is a deadly dart,
That quivers in the Rose's heart—
My shuddering soul it grieveth!"

The slender Poplar speaks, and seems
To stretch her green hands higher;
"Up yonder life's pure river flows,
So sweetly murmurs, brightly glows,
To that I still aspire!"

The Willow looks to earth and speaks:
"My arm to fold thee yearneth:
I let my hair float down to thee:
Entwine there in thy flowers for me:
As mother her child adorneth!"

And next the wealthy Plum-tree sighs:
"Alas! my treasures crush me!
This load with which my shoulders groan
Take off—it is not mine alone:
By robbing, you refresh me!"

The Fir-tree speaks in cheerful mood:
"A blossom bore I never:
But steadfastness is all my store;
In Summer's heat, in Winter's roar,
I keep my green for ever!"

The proud and lofty Oak-tree speaks:
"God's thunderbolt confounds me!
And yet no storm can bow me down,
Strength is my stem and strength my crown;
Ye weak ones, gather round me!"

The Ivy vine kept close to him,
Her tendrils round him flinging;
"He who no strength has of his own,
Or loves not well to stand alone,
May to a friend be clinging."

Much else, not half forgot, they said;
And still to me came creeping,
Low-whispered words, upon the air,
While by the grave alone stood there
The Cypress mutely weeping.

O! might they reach one human heart,
These tender accents creeping!
What wonder if they do not teach?
The trees by starlight only preach,
When we must needs be sleeping.

Proportion of Milk to Butter.

The following account is compiled from Johnston's statement of the yearly produce of a cow, in Scotland, England, Holland and Switzerland: Ayrshire cow—135 lbs., or 1 lb. of butter to a little over 8 quarts of milk. In Holstein and Lunenburg it is considered, on an average, that 15 quarts of milk will yield only 1 lb. of butter. In most districts the average of the whole year is much less than a pound a day, even for ten months only. In Devon, for the first 20 weeks after calving, a good cow will yield 12 quarts of milk a day; from which, by the method of scalding, a pound and a

quarter of butter can be extracted. In South Holland a good cow will produce, during the summer months, about 76 lbs. of butter. In the high pastures of Scarain, Switzerland, a cow will yield during the ninety days of summer, about 40 lbs. of butter, or less than half a pound a day. In Holstein and Lunenburg it is considered a fair return if a cow yields 100 lbs. of butter; and even in England [British Husbandry, 11 p. 404,] 160 to 180 lbs. is reckoned a fair annual produce for a cow, or from 8 to 9 ounces a day for ten months in the year. —[Johnston's Ag. Chem. p. 552, 553.

Timothy Seed.

MR. EDITOR:—Within the last few years our timothy seed has been mostly imported from abroad. This ought not to be. It can be saved by our farmers with little trouble; and the present season they can have no excuse for not doing so—the timothy fields yielding good crops and of course a perfect article of seed. Farmers who have mowing machines can cut it, so as to gather it in bundles, and place it where the rains will not injure the seed; and afterwards they can get it out when they can conveniently spare the time.

We must sow more timothy and have larger meadows than we have been accustomed to have. We can get less expensive food for stock by cultivating timothy than by growing corn. It requires less labor than corn, which is a matter of great importance with farmers. I am aware that the seasons for the two last years have been against the grasses,—but the present season is excellent, and I hope we may have future favorable seasons.

It is a more difficult business to raise and secure clover seed than timothy. We must have headers and cleaners for the purpose of getting the seed into marketable order, which cannot be done without considerable expense;—so much, probably, that small farmers may find it economy to buy their seed.

I have thought, Mr. Editor, the subject of this short article an important one to my brother farmers, and that now is the time for making the suggestions given in it most useful.

A SMALL FARMER.

A dentist presented a bill for the tenth time to a rich skinflint. "It strikes me," said the latter, "that this is a pretty round bill. "Yes," replied the dentist, "I've sent it round often enough to make it appear so, and I have called now to get it square."

EDITORIAL NOTICES.

The Season as it Progresses.

All the great interests of community depend upon the productions of the soil. In Illinois we more sensibly realize this fact than in, perhaps, any other portion of the country. Hence on the opening of spring there is a nervousness and anxiety among farmers and business men in regard to forthcoming crops. Last spring the public were astounded when the fact became apparent that the whole immense sowing of wheat in Central Illinois, was lost—that the sown wheat would not produce a tenth part of the seed to sow on the same wheat grounds the ensuing fall. But most farmers went to work immediately and procured spring wheat, and sowed it where winter wheat had been killed—not enough to cover all the grounds devoted to winter wheat, but sufficient, if it does well, to produce nearly as much wheat as was raised in the country the year previous. The present spring wheat crop now has a fine appearance, and if nothing should injuriously affect it, the crop will be large.

An unusual breadth of land has been planted with corn. It looks well wherever there was a good stand from the first planting; and the replanting will, with the present weather, soon be up with first planting. Seed corn this year was defective; although in appearance good. Indeed, farmers are always liable to be deceived in their seed corn when selected from the crib. The seed which was selected in the field last fall, has in every case come up well. The neglect thus to save seed, is a serious one. Considering the risks of every season, a farmer better pay four dollars a bushel for seed corn thus saved, than to have it given him for nothing, if selected from the crib in the spring. Many farmers the present year would have made fifty dollars a day, had they spent one day, last fall, in their fields selecting seed corn.

The potatoe crop, planted early, is looking remarkably well. We hope that the vines will escape the flies the present season;

but if they do appear, try the remedy found successful in the south part of this county last season, by Mr. Smith Davenport—sprinkle the vines with brine. It is not too late to plant potatoes for a late crop. The late crop of potatoes is better than the early crop for table use.

It is still in time to sow buckwheat, to plant beans, Mangold Wurtzell Beet for stock, and Ruta Baga turnip for ditto, Millet Seed can yet be sown for fodder.—The prospect of hay is good.

Our farmers are having busy times, and in their toils are cheered by the fine prospect for crops. The vegetation about looks as it did in other years, when our farmers had scarcely means to save their abundant crops.

Springfield Horticultural Society.

Seven years ago, last month, the Springfield Horticultural Society was organized, and the first exhibition held. The room of the Supreme Court was then sufficiently large for the display of all the fruits, plants and flowers presented for exhibition, and for the comfortable accommodation of those who visited it. The labor of getting up the exhibition was done by a few young men, assisted by several public spirited ladies. The next season, public opinion called for another exhibition, and these exhibitions have been repeated yearly until last season, (when it was found absolutely necessary to relinquish the undertaking on account of the paucity of flowers, occasioned by the severe drought,) and now the annual floral exhibition seems to have become one of our city institutions, which cannot, with satisfaction, be dispensed with. S. Francis was the first President of the Society, and to his labors, with the able assistance of N. Divilbiss and several other young men, it was sustained for three years. Since then N. Divilbiss has been at the head of the Society, and he has had able and reliable assistance from some young men of the city. At the last festival, from press of business, some of the veterans of the Society were unable to give their time to the preparations necessary, as they de-

sired; and in this emergency Harry C. Watson was induced to take the principal lead, and he well answered the public expectation in getting up the festival, and bringing it to a successful close—though there were others, among them R. M. Ridgely, T. Mathers, Volney Ellis and John T. Jones, who were efficient auxiliaries, and to whom the public also are greatly indebted.

The receipts at the exhibition, with great economy in the expenditures, have been sufficient to pay the necessary expenses. That was all that was desired or expected. Whenever there has been a surplus of funds, they have been used to purchase flower seeds for gratuitous distribution among the ladies of the city. The receipts at the last exhibition will just pay expenses.

The beautiful scene presented at the State House on Thursday night, of the 18th June, in the great collection of flowers and plants, and the immense throng of pleased and happy men, women and children, has passed. It only remains among our recollections as a bright and beautiful vision. It has left no unpleasant reminiscences, and all can recur to it, in the witnessing of the perfect creations of beauty by the Great Author of Nature, and in the gathering together of our eminently social, liberal and intelligent people of both sexes, on the platform of a common brotherhood; we repeat, all can recur to it with the conviction that the few moments spent at the exhibition, taken from the time usually devoted to the routine of business or in domestic avocations, were not lost.

A few weeks ago our shrubs were devoid of foliage, our plants presented no marked evidence of life; there was a great apparently natural death over all trees and herbs and plants, until the Almighty, by fixed rules and laws, gave to the earth the genial heat of the sun and the refreshing showers, and vegetation sprang as from the grave—the dead came to life, and again earth and tree and shrub were decked with gorgeous and glorious beauty.

Shall man ever be so intense in pursuit of the objects that make up the great struggle of

life, as to disregard these new and wonderful creation's of beauty, coming from the hand of Him in whom we live and move and have our being? Would not such a fact evidence a want of appreciation of some of the most obvious emanations from the power of Deity; and which are especially designed to elevate our perceptions and lead us from an admiration of the beauties of nature, to adore and worship at the footstool of nature's God?

What a glorious resurrection is now manifest! Pass round and through our city, go through our country, recollect their bleak and desolate condition a few weeks ago, and now behold them arrayed in their robes of beauty, as a bride prepared for the bridal? We repeat, what a glorious resurrection? a work worthy of God, a type of that in which man is even more deeply interested.

The Time of Trial.

With farmers now is the time of trial. The duties of the farm require constant attention—the labor of the hands and the labor of the head. Crops are to be secured; corn is to be cared for, the plow must be kept going; the grass is to be cut and the hay put into stack; preparations must be made for fall seeding; the farmer's eyes must be every where, his labors every where, and all this must be done coolly, calmly, steadily, until all these objects are accomplished. A farmer, performing his work in this manner, will accomplish far more, and with greater comfort to himself and those around him, than one who do every thing by fits and jerks, talking large, planning large, and the result of which is half crops, poor stock, poor comforts around him and poor every thing. The farmer should ever recollect the sentiment of Poor Richard:

"He that by the plow would thrive,
"Must either hold himself or drive."

We are sending off \$2,000,000 in specie from New York to Europe, weekly, to pay for silks, brandies and fancy articles, and other things. There is little foreign demand for American breadstuffs at present. John Crapeau and John Bull want our specie.

"Doing Good."

An old farmer of Sugar Grove said to us: "Your Farmer is doing good. I found my wheat, 200 acres, winter killed. I took your advice, did not grieve about it, did not spend any time complaining; went to work, bought spring wheat and spring barley for seed, sowed over the whole land, and I verily believe that I shall make more money by my spring wheat and spring barley, than I would have done if my winter grain had lived. My spring wheat looks well, and my barley I believe will yield more than fifty bushels to the acre. My fields are beautiful. I never had so fine a prospect for crops. Some of my neighbors followed my example, and they have fine prospect.—Others delayed, sowed no spring grains, rented out their lands, and I am afraid will see hard times next winter. Give me your hand, old friend, I must be going."

This was the language of truth; and those farmers who went to work at once in the spring, when they discovered their wheat was killed, sowed spring grain, and occupied all their grounds with different crops, will find that the year will not be an unprofitable one with them. Provisions of every kind are bound to rule high, not so high perhaps as when a scarcity of food brings starvation prices, but high enough to pay well for labor.

The farmer's life is one requiring the exercise of untiring energy. When crops are made, they must be secured; and scarcely will the present crop of grain be harvested before preparations must be made for growing others. The present season affords a fair prospect for the success of a future crop of winter wheat. The earth is fully saturated with rains, a fact which has not been the case for the two previous seasons. Preparations are now already in progress to devote more land to winter wheat the next season, by one-third, than ever before was done in Illinois.

Indeed, it would surprise any one, in passing over our railroad lines, to notice the vast tracts of prairie land already broken up for a crop of wheat the next season.

Some of these tracts of land thus broken, are miles from timber and settlements. Crops of wheat will be raised without even fencing them; for they are beyond the present range of stock.

There is an abiding confidence among our agriculturalists that the raising of produce will pay, and pay well, in this section of the country for years.

Illinois Stock Importing Association.

Since the return of Messrs. Johns, Brown and Jacoby, a meeting of the Association has been held, and a report of the proceedings of the committee was laid before it. The Association passed a vote of thanks for the able manner in which they had performed their duty. The following is the substance of other proceedings had at this meeting:

It was resolved that the sale of the stock purchased should be as follows: ten per cent. in cash, and the remainder on a credit till January 1st, 1858, with approved security; that the animals shall be sold to citizens of Illinois, with a proviso that they shall remain in the State for two years, unless the owner shall move, when he shall be allowed to carry his stock with him. In selling the stock again, the preference shall be given to purchasers residing in the State.

Upon the arrival of the stock in this city, due notice will be given and ample arrangements made for their sale at public auction, when it is probable that a full attendance will be present from all parts of the State. A resolution was adopted appointing a committee to procure refreshments on the grounds, to accommodate the public that may be present.

The stock had not arrived when this article was written; but was daily expected.

The question now presents itself—In what manner can this valuable stock be rendered most useful to the farmers of this State? In answer to this question, we present the suggestions which have been made to us, and which have our entire concurrence.—Associations should be formed in the different counties to buy in such portions of the stock as is most desired. The burden of the expenses would thus be distributed among a number of persons, and would not

be so severely felt as if borne by a single individual, and many counties which otherwise could hardly hope to obtain any of this fine stock, can by this means secure it beyond a peradventure. Such county stock associations have been formed in Ohio and Kentucky, and have answered a very fine purpose in distributing and retaining some of the best importations ever made to this country. We doubt not they would be equally beneficial in Illinois. Who of the enterprising farmers in the different counties will lead in such a movement?

Pie Plant.

MR. EDITOR:—I see lately every time I go to town, large quantities of pie plant exposed for sale at some of the stores, and have lately eaten it, made up into fruit puddings and tarts, and found it a most agreeable and to me a healthy article of food. I would be glad to know how I am to get the plants and how, when I do get them, they are to be grown so as to furnish a good supply of the stalks. This information here called for may be useful to many of your readers besides
MYSELF.

We have often stated the manner of obtaining the plant and of growing it. The best kinds are propagated by cuttings from roots of approved varieties. Get roots in the spring and separate them so as to preserve a bud on each piece of root, and plant these buds out about three or four feet apart in the richest soil possible. If the soil is not rich, make it so by mixing it with a large supply of well rotted manure; and afterwards, when growing, if you wish to grow the plant in the best manner. The plant is what may be called a gross feeder.

New hands will greatly improve in making tarts of the pie plant, by practice. When well made, most persons will consider them fully equal, if not better, than the gooseberry or currant; and they require less sugar, which is an object in these times. They also make a superior "roleypoley pudding," (we believe the phrase is.) This is done by cutting the stalks into lengths some five or six inches long, place three or four of them on the pastry, rolled out, adding to them sugar, then roll them up, and

boil as usual. In this way they are converted into a superior and cheap article of food, doing away with the necessity of using dried fruit,—a fact of some importance in the present state of the fruit market.

Drill Seeding.

In putting in fall grain, the fact is now well established that the drilling system is by far the best. It puts the seed in to an even depth; it puts it at the right depth; the plants of seed put in the drill are not likely to be winter killed; the crop is greater, more even and uniform; three pecks of wheat drilled in will seed the ground better than five pecks sowed broadcast.

To be successful in drill seeding, the ground should be well prepared; plowed to a good depth, and not be filled with weeds and trash, which would seriously interrupt the progress of the drill.

High Price of Beef.

There has been a meeting in Philadelphia to consider whether means could be adopted to reduce the price of beef, so as to place it within the means of the masses. It was said at the meeting that the people of Baltimore had an agent west, to purchase beef, and the result had been that the price in Baltimore had been reduced to \$10 37 per 100 lbs. net. There was much discussion, but no plan agreed upon. One individual recommended the purchase of beef cattle in South America, to be shipped to Philadelphia and New York. They could be purchased in the corral at \$1 and \$2 per head. To this it was replied, that the cattle would not fatten here and the beef would be poor. The prospect is that Philadelphia and New York will continue to receive supplies as at present.

The Wheat Crop in the West.

The wheat crop in the Great West, as a general thing, promises to be great beyond precedent. We do not believe that wheat will be worth more in market in July next than it was in the same month one year ago. In Central Illinois it will probably be higher—because here we have no winter

wheat, and the wheat for seed, which will be required the coming fall, will be immense and must be brought from a distance.

Within the two last weeks the demand for flour in Eastern cities, for transportation, has sensibly decreased;—and whether there will be a greater demand than now will depend upon crops in France and the British Islands.

THE PRICE OF WOOL.—The better qualities of wool are selling readily for a trifle more than they brought last year. We would urge our readers to be in no hurry to dispose of their clips at less than last year's rates. We quote the market in Springfield steady at 30 to 47 cents per pound for common to full blooded Merino. The great McConnell lots are sold.

Goodale & Co of Cleveland are getting on all qualities, from two to five cents per pound more than last year.

The "Wool Grower's Reporter," (Cleveland,) for July says: "The customary prices paid by merchants, throughout the State, are from forty to fifty cents, averaging forty-five cents. It add, "the pleasant weather we have had for the past ten days, has caused great activity in the wool trade, and more than three-fourths of the wool has been purchased. Judging from the eagerness of buyers, they would have paid an *average* of fifty cents, as readily as forty-five. But growers seem to be satisfied."

COMMERCIAL.

Springfield Market.

OFFICE OF THE ILLINOIS FARMER,
July 7, 1857.

FLOUR—Extra white, \$8 50; superfine \$8 00; common \$7 50
WHEAT—In demand. Red \$1 20; White \$1 30.
CORN—Sales at 40@50 cts. $\frac{1}{2}$ bu.
OATS—Sales at 45 cts. bu.
HIDES—Dry flint 12@13 cts. $\frac{1}{2}$ lb.
BRAN—15 cts. $\frac{1}{2}$ bu.
SHORTS—25 cts. $\frac{1}{2}$ bu.
CHICKENS—\$1 50@1 75 $\frac{1}{2}$ doz.
TURKEYS—7@8 cts. $\frac{1}{2}$
ONIONS—\$2 $\frac{1}{2}$ bu.
POTATOES—\$1 50@1 60 $\frac{1}{2}$ bu.
APPLES—Dry \$3 50@4.
BUTTER—15@18 cts. $\frac{1}{2}$ lb.
CHEESE—12 $\frac{1}{2}$ @15 cts. $\frac{1}{2}$ lb.
EGGS—12 $\frac{1}{2}$ cts. $\frac{1}{2}$ doz.
HAY—\$10 $\frac{1}{2}$ ton.
CORN MEAL—30c. $\frac{1}{2}$ bu.
HAMS—Smoked 12 $\frac{1}{2}$ @15c $\frac{1}{2}$ lb.
MOLASSES—80@85c $\frac{1}{2}$ gal; sugar house \$1.
GOLDEN SYRUP—\$1 20@1 25.
SUGAR—Brown, 12@15c $\frac{1}{2}$ lb.
TALLOW—10@12c $\frac{1}{2}$ lb.
BACON SHOULDERS—10@12c.
SIDE MEAT—13@15c $\frac{1}{2}$ lb.
LARD—12@15c.
BEANS—3 50 per bush.
COFFEE—Rio, 14@16 $\frac{1}{2}$ c $\frac{1}{2}$ lb; Java 18@20c.
RICE—7 $\frac{1}{2}$ c.
CLOVER SEED—\$8@10 per bu; Timothy, \$3 $\frac{1}{2}$ @4.
CANDLES—Tallow 15@20; Star 30@35c per lb.
PEACHES—Dry \$4 50.
SALT—G. A. \$2 25 $\frac{1}{2}$ bag; barrell \$3.
WHITE FISH— $\frac{1}{2}$ bbl \$8.

COD FISH— $\frac{1}{2}$ lb 6 $\frac{1}{4}$ c.
MACKEREL—No. 1, $\frac{1}{2}$ bbl \$18.
BROOMS— $\frac{1}{2}$ dozen \$1 50@2.
BUCKETS— $\frac{1}{2}$ dozen \$2 50@3 25.
WHITE BEAD— $\frac{1}{2}$ keg \$2 50.
LINSEED OIL— $\frac{1}{2}$ bbl \$1 10.

St. Louis Market--July 3.

Flour—Sale of 200 sks at \$3; 30 bbls superfine, \$5 60; 106 do, \$5 70; 40 do on board, \$5 60; 119 do extra, \$5 80; 315 do, in lots, \$6.

Wheat—Sales of 62 sacks spring at 1; 184 do at \$1 03@1 05; 164 do mixed, at \$1 12; 90 do at \$1 15; 175 red at \$1 17; 130 do at \$1 20; 351 white, at \$1 30; 167 prime red at \$1 35, all without sks; 88 red, sks included, \$1 55 $\frac{1}{2}$ bu.

Corn—Sales of 1516 bags on private terms; musty at 57c; 400 yellow at 68c; 190 do at 70c, new gunnies included.

Oats—Sales of 570 sacks, private; 330 in two lots, at 65c, sks included.

Bran, etc.—525 sks bran 65c $\frac{1}{2}$ 100 lbs; 300 do shorts 75c $\frac{1}{2}$ 100 lbs.

Beans—Small lot white \$2 35 $\frac{1}{2}$ bu.

Potatoes—57 bags prime old, \$1 80 $\frac{1}{2}$ bu.

Whisky—Sales of 85 and 116 bbls at 25 $\frac{1}{2}$ c; 85 do 26c $\frac{1}{2}$ gallon.

Wool—5 bags washed 34 $\frac{1}{4}$ c $\frac{1}{2}$ lb.

Bacon—Sale of three casks country shoulders, 9 $\frac{3}{4}$ c; 3 do country clear sides, 12 $\frac{1}{2}$ c; 4 and 8 do 13c.

Pork—25 bbls mess, \$22 50 $\frac{1}{2}$ bbl.

Sugar—Market feverish and nothing reported. We quote at 10 $\frac{1}{2}$ @12 $\frac{1}{2}$ c for fair to choice.

Coffee—Prime in demand at 11 $\frac{1}{2}$ c $\frac{1}{2}$ lb.

Molasses—Inactive at 68@74c $\frac{1}{2}$ gallon.

[By Telegraph.]

New York Market--June 6.

Flour 5@10c better; sales 5,000 bbls; \$8 30@6 50 for superfine State; \$6 75@7 for extra [State; 6 40@6 50 for superfine western; 6 60@6 75 for common to medium extra western; Canadian steady; sales 300 bbls at 6 90@9; rye flour dull at \$4@6.

Wheat market a shade firmer; sales 7,000 bu at 150c for inferior; 195c for choice spring.

Rye dull at 115@118c.

Corn lower; sales 40,000 bu at 83 $\frac{1}{2}$ @84c; mixed western.

Oats quiet.

Pork heavy; sales 1200 bbls at \$22 35 for mess; \$19 85@20 prime.

Beef hams easy; cut meats unchanged.

Lard dull at 14@14 $\frac{1}{4}$.

Whisky lower, sales 300 bbls at 42c.

Money—supply offering is liberal, and demand active; 6@7 per cent. on call; 8@9c for short best paper.

Stocks—M C 80 $\frac{3}{4}$; Erie 27; O & T 56 $\frac{1}{4}$; Lacrosse & Mill 44 N Y C sixes 84 $\frac{1}{2}$; California sevens of 1865, 55.

New Orleans Market--July 3.

Cotton firm; sales 500 bales.

Pork very dull; \$23.

Exchange on London 10 $\frac{1}{2}$; on New York $\frac{5}{8}$.

Other articles unchanged.

New York Cattle Market--July 1.

The receipts for the week were from the following sources; Ohio, 1160; New York, 567; Illinois, 1126; Kentucky, 80; Texas, 57.

The average prices to-day, as compared with last week, are about 1c@1 $\frac{1}{4}$ c lower. We quote premium cattle, none; first quality, 12 $\frac{1}{2}$ @13c; medium quality, 11c@12c; poor quality, 10c@10 $\frac{1}{2}$ c; poorest quality, 9c@10c; general selling prices, 10c@12c; average of all sales, 10 $\frac{1}{2}$ @11c.

St. Louis Cattle Market--July 4.

BALDWIN'S YARDS, BROADWAY.—An ample stock of Cattle offering. Butchers pay 7 and 8 $\frac{1}{2}$ for fair to choice; inferior to fair sell at from 5 to 7, nett. No shipping demand.

Hogs—A good supply in market. Good butchers' Hogs retail at 7 $\frac{1}{2}$ and 8c, nett. Shippers pay 5 $\frac{1}{2}$ and 6 $\frac{3}{4}$ c. Demand moderate.

Sheep—Plenty and selling at prices ranging from \$1 25 to \$3 00 $\frac{1}{2}$ head, according to quality. Lambs sell at \$1 50 to \$2 50 $\frac{1}{2}$ head

Cows and Calves—In demand at \$25 to \$50 per head.

Philadelphia Cattle Market--July 1.

Beef Cattle—The offerings at both of the yards amounted to 1,100 head of Ohio, Virginia, Texas and Pennsylvania stock. The prices averaged from \$10 to 11, \$12 and \$12 50 $\frac{1}{2}$ 100 lbs; only the very best realizing the latter price. Nearly all offered were sold.

THE ILLINOIS FARMER.

SIMEON FRANCIS, EDITOR.

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No. 8.

Agriculture of the Natives in Early Times.

We do not expect to learn much of value from the agriculture of the natives of this country at an early date, but the subject has some interest for the general reader. When the northern part of the country now known as the United States, was discovered, it was found that the natives cultivated corn, to some extent, probably about as much as the Indians of the Upper Missouri and Mississippi do at the present day. They did not aim to procure their subsistence from the grain of this plant; but only raised it to a small extent, by the labors of the women, as a luxury, and the maturity of which was generally announced by the "green corn dance." In the southern part of the country, however, considerable crops of different articles were raised as food, and the Indians themselves, it is said, were delighted with the labors of the field. Of course (in the words of Frederick Kidder,) their efforts were not to be compared with those demanded in our own time. Their circumstances and necessities did not require it; for with a mild climate, the virgin soil yielded abundant harvests, without the manures or deep ploughing now required. But that their main subsistence was acquired from the productions of their fields, there can be no reasonable doubt. The variety of their productions must have been much greater than has been generally supposed. The most important of these was the Indian corn. To what particular part of the continent this plant was indigenous, has never yet been fully ascertained; but certain it is, that nowhere does it seem to be more prolific, or show a more splendid appearance, than on the alluvial lands in the eastern part of North Carolina. There many fields have continued to produce large crops for two centuries without showing any apparent diminution of fertility. Cultivated as this plant is over the entire extent of our national domain, it may be considered as the best symbol of our country, more expressively representing plenty than any other production of our soil.

The ease with which it was planted, gathered and preserved, without risk of injury from insects or the elements, as well as the rapidity with which it could be prepared for use, made it invaluable to the aborigines.

They also cultivated extensively a great variety of beans; some of which, particularly calavancies, are in use among the white people at the present day. Watermelons, squashes, pumpkins and gourds, were quite abundantly raised, as also ground-nuts, and undoubtedly potatoes.

With regard to this last vegetable, considerable doubt has been expressed whether it had been known to the aborigines of this part of our country previous to the arrival of the Europeans; but if we consider it a well authenticated fact that the earliest colonists carried it to England, and that Raleigh took great pains to cultivate it on his estate in Ireland, and disseminate it through that island, it would seem but a fair inference that it was once a native of Roanoke Island or its immediate vicinity. But as botanists have in vain looked for the plant in its wild state in that neighborhood, it has been decided that it could never have been indigenous to that locality. May it not, like the corn, have been a native of some more southern clime, and cultivated and perpetuated by the Indians, as no other vegetable would seem to answer as well the description which Hariot (the historian) gives of one of their principal productions.

Perhaps the most remarkable production of their fields was tobacco. This plant was indispensable to their comfort and happiness, and was highly valued. The only use made of it was in smoking, and this was the manner in which it was consumed in Europe for a long period after its introduction there; and it is certainly to be regretted that its use was ever extended to chewing.

To FARMERS.—Take care of all your manure, and especially the liquid portion, as that contains a larger per centage of fertilizing matter than the solid part.

The Grain Crops.

A good or bad crop of grain in the United States, in a given year, affects the markets of the world. A great foreign demand in a bad crop year stimulates prices, and makes the article of bread a dear food to all classes of our people. Hence it is for these and other reasons that the masses regard the grain crop as a subject of great importance to them, and hence they watch with great solicitude the developments of the crops through the year.

We are constrained to believe that the wheat crop will be a more than an average yield the present year. In some localities the winter crop may have been winter killed, but taking the whole country together the yield will be better than usual. The effect of this fact is already felt in the markets. Flour has already fallen in Cincinnati to \$6 50 per barrel, and the price of wheat is going down. Even here, where the winter crop has failed, winter wheat at this time is not worth more than \$1 30, and we apprehend it will be less. On this subject, however, we copy two articles from the United States Economist, which will be of interest to those who desire a more full investigation of this matter. Our opinion is that wheat and flour will be bought in market at reasonable prices for the next year.

GRAIN CROPS.—At this season of the year and particularly this year, after so many years of short harvests, the probabilities in relation to the crops, at home and abroad, are invested with more or less interest. In the last few years, the capital of America has been absorbed, to some extent, in railways; and in Europe, railways, war, and speculation, have combined to absorb a larger than ordinary proportion, at the same time the earth has everywhere yielded less than its ordinary supplies. Hence it is chiefly that capital has been scarce, or, in other words, money has been dear. The corrective is now to be applied. The eternal law of compensation which nature seems to obey in all her works, is manifesting itself in her crops, and everywhere the supply is abundant, while the demand is less. The quantity of grain which England and France have purchased in the last year, becomes in this connection a matter of interest, and it is

the foundation of every man's business interest in the community. The *Moniteur*, of France, published recently the quantity of grain admitted into France from August 1, 1856, to April 1, 1857; that is to say, eight months of the present year since harvest. Comparing that with the British return, we have results as follows:

Imports of Grain into France and Great Britain, August 1 to April 1.

	Bushels.	Value.
France, hicto.....	8,080,755	\$40,186,204
Great Britain, q'rs.....	5,419,055	78,172,104

Thus, the demand of these two countries was 66,243,549 bushels, at a value of \$118,368,308. The stock in France, April 1, was 1,000,000 bushels, against 1,500,000 bushels same time last year. The crops are everywhere represented as good, comparatively, but the small stocks prevent any decline in prices. If France has enough for her own wants, it is as much as can be expected. She can no longer rival the United States in supplying England, who, according to the Mark Lane Express, requires 40,000,000 bushels of wheat per annum, on an average of good and bad years. That demand will suffice to take off the whole surplus of the United States.

WHEAT CROP OF THE UNITED STATES.—The growing crop of wheat is everywhere reported as promising great abundance, and as the time of harvest in some portions of our varied climate is soon at hand, will in others be prolonged into August, giving a great access of agricultural capital and promising cheap food to the mass of people, it may be interesting now to look back upon the estimates of crops for the last few years. The following table is one that we have continued from year to year, based originally upon the census report of wheat crops for 1840 and 1850:

Year	Population.	Consumption at 3½ bush.	Actual Export.	Price in N. Y.
1840.....	17,069,656	64,565,447	11,198,098	\$5 44
1850.....	23,267,726	64,182,986	8,829,017	5 01¼
1851.....	24,023,916	64,483,895	12,948,490	6 68
1852.....	24,780,106	66,730,815	18,600,680	4 87
1853.....	53,356,296	89,377,025	18,958,990	4 94
1854.....	26,292,486	93,023,690	28,148,595	9 25
1855.....	26,048,673	94,670,355	7,821,584	9 50
1856.....	27,804,863	97,317,020	25,708,007	8 00
1857.....	28,561,053	99,963,670	27,000,000	7 05
1858.....	29,317,043	102,609,650	20,000,000
	Seed.	Crop.		
1840.....	8,482,727	84,827,272		
1850.....	11,479,922	104,479,923		
1851.....	12,000,009	110,032,394		
1852.....	11,689,803	117,511,501		
1853.....	12,500,000	121,136,038		
1854.....	13,000,000	133,172,285		
1855.....	13,500,000	114,991,839		
1856.....	15,000,000	138,025,021		
1857.....	15,500,900	142,400,000		
1858.....	16,000,000	150,000,000		

The population of each year is given by the department according to the regular annual increase, per census. The assumed

consumption of 3 1-2 bushels per head is what apparently took place, deducting from the crop, as per census, the known quantity exported and the estimate required for seed. It is no doubt the case that this ratio is diminished in dear years and increased in cheap years. From estimates for 1856 we placed the aggregate export in face of the great wants of England and France as high as 30,000,000 bushels, out of an estimated crop of 140,317,000 bushels. The fact turned out to be an export of 25,708,000 bushels, per official figures, accompanied, however, by a fall in prices, which indicated that the crop was as large as the estimate. For 1857, year ending June 30, we estimated the exports at 30,000,000; they thus far figure for 27,000,000 bushels, and prices have fallen. Thus, the export has been large while the high prices and extent of land put under plough have caused a greater demand for seed wheat, nevertheless prices have largely fallen. The crops abroad now promise well, and prices in both France and England have fallen to very low points. In Great Britain wheat is 50 cents per bushel lower than at the same time last year. The export will, therefore, in all probability be smaller, even although prices and freights may be lower in face of large crops. These are circumstances which, with the probably abundant heavy crops indicate a return to moderate prices for food and raw materials, promotive to a consequent restoration of business activity in the commercial and manufacturing districts.

THE WHEAT CROP AND THE RAILROADS.—The Cincinnati Railroad Record, concludes an article on this subject, with the following remarks, which are of interest as furnishing a tolerably just estimate of the coming crop of wheat in the west—the amount of consumption here, the probable amount of surplus, and the benefits which will accrue to the railroads in the transportation of that surplus:

- 1st. The wheat crop will be much greater than usual, unless the rust, the last enemy of wheat, should cut it off. We have accounts from every portion of the northwest, which agree in two facts—that generally the wheat crop promises a most abundant harvest, and that in some districts there is an apparent failure, but that is much more than made up by the greater breadth of land sown. The conclusion from these facts is, that the whole crop will be a large one.
- 2d. The oat crops and the hay crops will

be good; for, without a Providential misfortune, there is nothing to injure them; and the grass has never appeared better.

On the whole, the late spring has proved advantageous; for it has kept back the plants till they cannot be injured by frosts or severe weather. Besides this, the heavy snows and spring rains have brought the ground into a very mellow and good condition. Looking, then, at all the existent facts, we cannot avoid anticipating good crops. We except, of course, those extraordinary Providential events, which may interfere with the current course of events.

Supposing the crops to be as good as we anticipate, the following will be something like the difference produced by the increase of crops. The estimate is made by a comparison of all the facts within our knowledge:

	Wheat crop of 1856. No. bus.	Wheat crop of 1857 estimated.—No. bus.
Ohio.....	16,000,000	22,000,000
Indiana.....	7,000,000	9,000,000
Illinois.....	10,000,000	12,000,000
Michigan.....	4,000,000	4,500,000
Wisconsin.....	4,000,000	6,000,000
Iowa.....	3,000,000	3,500,000
Aggregate.....	44,000,000	57,000,000
Number of inhabitants.....		6,500,000
Consumption at 5 bush. per head.....		32,500,000
Surplus of 1856.....		11,500,000
Surplus of 1857, at an increase of 10 per cent. for consumption.....		21,250,000

It will be seen in our estimate, that while the crop increases 30 per cent., the surplus increases 100 per cent. The consumption we have placed at a low rate. We doubt whether the northwest has really sent out 11,500,000 bushels of wheat, of the crop of 1856.

If the crop of 1857 yields a surplus of 21,000,000 bushels of wheat, the railroads of the northwest will increase their receipts for that single article full two millions of dollars. This will be done, too, at an increased expense of not exceeding 10 per cent. on that amount. For the locomotives will not be increased, and probably not the cars, or the repairs of the roads. The increase of fuel and oil will be the principal increases of expense.

We give this estimate as an example of the influence of good crops on the roads of the northwest. Should the corn crop be a good one, of which scarcely anything can now be known, the aggregate in the profits of railroads, this year, will be several millions of dollars. Thus the prospect now is, that this will be a very good year for railroad business.

Thalberg and Strakosch have returned to New York from their Western and Canadian tour, having cleared some \$20,000, it is said by their performances.

THE GRAZIER.

From Porter's Spirit of the Times.

The American Horses in England.

Mr. Ten Broeck has thought fit to enter two of the American horses, viz, Pryor and Pryress, for races to be run at the York August meeting, commencing on Wednesday, the 19th of that month, or three weeks subsequent to the conclusion of the Goodwood gathering, whence they will have to be sent per railroad upwards of three hundred miles. Prioress alone is entered for the first event, namely, the Chesterfield Handicap. For the second, the Great Ebor Handicap, (Ebor being the ancient name of the City of York,) both Pryor and Prioress are named. We cannot but express our surprise that Mr. Ten Broeck should have ventured to enter the American horses for any English handicap race—or entrust the weighing of them to any English handicapper. Our readers are, by this time familiar with the method adopted of affixing such weights to each horse entered, as will, in the opinion of the handicapper, or disposer of weights, bring good, bad and indifferent animals to one common level, and give each and all an equal chance of winning. From his decision there is no appeal; his will is autocratic, and, if not content to run at such weights as he thinks proper to impose, nothing is left you but to withdraw your horse or horses, and of paying the lesser forfeit nominated in the bond.

The system of English handicaps was instituted for the express purpose of giving profitable employment to inferior horses, and not with the view of rewarding merit, or equine superiority, which is, whenever found among the entries, and publicly known as such, "crushed down" by weight to the level of the veriest "leather flapper" that ever started for a race. Out of the immense number of race horses annually bred in England, but a small minority exhibit that degree of excellence which fits them to become contestants for great "weight for age events," with any probability of success; for the balance of "weeds and the wasterells," it was necessary to do something, or else their owners would have been compelled to have sent them into the horse market for sale at any price they would fetch, which would be a mere trifle, as the modern English thoroughbred is unfit by breed and nature for any laborious work. There was a time when the English coaching system was at its zenith, and speed was required, when cast off blood stock was in demand; but that time is past, for the rail-

ways have annihilated the fast stages of other days, and "park hacks," "ladies' horses," and "street cabs," are, with a few hunting and steeple chase exceptions, the only uses to which inferior race horses could be applied, were it not for that comparatively modern racing innovation, "the handicap." Well designed, it is true, to encourage inferiority, and yet like all other systems, imperfect and obnoxious to censure from the fact that the participators will disguise, as far as they can, the quality of the animals they intend entering, in order to get them as lightly weighted as possible, whilst it is no uncommon occurrence for a horse to be "run to lose" an entire season, with the view of his reputation being sufficiently damaged to enable his winning some one or other of the rich handicaps of the ensuing one, to be calculated on as next akin to a certainty. Many such instances we could cite, whilst others have occurred, and will again, where several parties have "played the same game" and the would be victimizers have themselves been victimized.

It is for such a scramble as this that our horses are entered.

The Period of Gestation in Mares.

[From an Essay written for the Nottoway (Va.) Farmers' Club, by Geo. Fitzgerald.]

The rearing of colts possesses sufficient practical interest to make it worthy of such inquiries and observations as will tend to render it most successful and profitable. After a mare has been let to a horse, it may become a question of some moment to her owner, at what time to expect her to bring forth her foal. There is a tradition among us, to the effect that this event takes place, if I mistake not, at the end of eleven months, with as many days added as the mare numbers years of age. How nearly this period would conform to actual results in the multitude of cases, I am not prepared to determine. But from some observations which I have been enabled to make and researches into natural history to which my attention has been drawn, it would seem that there are many cases in which it bears but a faint semblance of truth. In the year 1848, I put two mares to a jack on the same day, the 5th of May, and without being put again, they foaled respectively on the 14th and 25th of April following. In the one case 11 months and 9 days, and in the other 11 months and 20 days. One mare supposed to be 6 years old, and the other was 8 years old about the time of

foaling. In the year 1855, one of the same mares was put once again to a horse, and brought forth her foal in 12 months and 1 day, at the age of 15 years. These personal observations coincide with the investigations of Tessier, the naturalist, in showing the inconstancy of the period to which the mare, in common with some other animals, carry their young. The investigations of the latter inquirer led to the following conclusions:

"In 277 mares, with foal for the first time, 23 foaled between the 287th and 329th days, average 322 days; 226 between the 329th and 360th days, average 346 days; and 28 between the 360th and 419th days, average 372 days; average of the whole, 347 days; difference between the extremes, 132 days.

"In 170 mares which had foaled before, 28 foaled between 290th and 329th days, average 321 days; 128 between 329th and 360th days, average 341; and 14 between the 360th and 377th days, average 370; average of the whole, 341 days; so that between the shortest and the longest period, there was a difference of 97 days, more than one-fourth of the mean term."

Animals Sometimes Get too Much Salt.

Necessary as salt is to the healthy condition of most animals on a farm, and though there are probably more who give too little than there are who give too much of this article to their stock, yet there are times, and seasons, and conditions of an animal when salt is administered in too large quantities. A brief indication of some of the occasions when animals get more salt than is good for them may be of service to some, who may never have had their attention directed to the mode in which this substance operates.

1. Animals sometimes get too much salt in consequence of having been long deprived of it, and then having access to it in too large quantities. Disease, and even death has resulted from this cause. Cases of this kind have been put upon record, and may have come in this way or otherwise to the knowledge of the reader. The mode of preventing such mishaps consists in keeping salt, with the addition of leached ashes, a little sulphur, perhaps, within reach of stock at all times, or in feeding it more frequently, or in giving it in small quantities after long abstinence.

2. Another occasion when salt is given in too large or improper doses is when animals are first turned out to grass. As

scouring is a natural and common consequence of making this change it only aggravates the matter to give them salt in liberal doses. Dry hay, or bran or meal in a dry state, with a very small dose of salt, would be a better corrective; while making such a change slowly and gradually, not suddenly, would be the proper preventive.

3. Some give salt to their milch cows when feeding them on turnips, in order to correct the peculiar taste which they are apt to communicate to the milk and butter. Now, if the turnips are given in such quantities as to produce more or less scouring, the administration of salt will only aggravate the evil, and diminish the secretion of milk. Indeed; according to the authority of Stephens, in his Farmer's Guide, it is the large amount of common salt in turnips, as also in mangel wurtzels, which causes cows fed exclusively upon them to fall off in milk.

4. It is the opinion of some at least, that stock put up to fatten will lay on fat much faster without salt than with it. This fact, if fact it be, is attempted to be accounted for by theorizing in this way. Salt increases the secretion of the bile, and, as bile is composed of fat, oil, gum, and other carbonaceous matters, all of these which are carried off in an excess of bile are just so much taken from the materials from which the fatty parts of the animals are built up. In a word, it is supposed that the more bile an animal secretes and passes out of his system, the less fat it will produce. When the secretion of bile is so great as to produce scouring, fat will not be produced of course; but if salt comes short of this result, are there facts sufficient to support the above theory?

A Trap for Catching Sheep-Killing Dogs.

Make a pen of fence rails, beginning with four, so as to have it square, and as you build it draw in each rail as you would the sticks in making a partridge trap, until your pen is of sufficient height, say five feet. In this way you will construct a pen that, when finished, will permit a dog to enter at top at pleasure, but out of which he will find it difficult to escape, should he have the agility of an antelope. All that you have to do to catch the dog that has killed your sheep, is to construct the trap, where a dead sheep is left, as directed, as soon as possible after an attack has been made on your flock, put a part or the whole of a sheep that has been killed in it, and remove the balance to some other field. In a majority of cases the rogue and murderer will return the suc-

ceeding night, or perhaps the next, and you will have the gratification next morning of finding him securely imprisoned. Some may object to the plan, perhaps, on the ground that you might catch an innocent dog. If so, he can content himself by not trying it. For my own part, I should pronounce the sentence of guilt on any dog caught on my farm within three nights after my sheep had been killed, and execute the law speedily without any qualms of conscience.—
[Southern Planter.]

Ladies' Saddle Horse.

A correspondent of the Boston Cultivator, speaking of the different styles of horses, closes with these just observations:

There is a class of horses but little known amongst us in this country—it is the ladies' saddle-horse of England, where only I have known it in perfection. It would repay the expense of a visit to that country, to take a stand at the entrance of Hyde-park London, and observe the lady equestrians and their superior horses in the ring on a fine day; the ease and gentleness of manner, so conspicuous in both being worthy of imitation in this and every other country that I have visited. Such a class of horses, if well bred and properly trained—not tied up and screwed down, as is customary amongst us, but left free and untrammelled, would find good markets amongst those who would be able and willing to give good prices, especially amongst rich families having unmarried daughters.

The Jersey Cow and her Cream.

We cut the following paragraph from the Maysville Eagle, some weeks ago, when winter was down upon us in earnest. As good cream is always seasonable, the statement it contains is just as interesting now as it was then; but we mention the fact on account of the allusion to the circumstance that the milk was "frozen hard."

Mr. John B. Poyntz, one of the most enterprising farmers of old Mason, and the only one we believe who has imported foreign cattle, single-handed, for his own farm, showed us on yesterday morning a gallon crock of milk, frozen hard. This was from the milking of his fine pure blood Alderney or Jersey cows, mixed, however, with that of some excellent native cows. The curiosity was the amount of cream upon the top of it, which we measured and

ascertained to be from three-fourths of an inch to an inch (averaging seven eighths) in thickness. Mr. Poyntz, in speaking of his Alderney cows, always refers to this peculiar and remarkable richness of their milk, as proving their superior excellence as milkers. He assures us that if this milk had stood in a warm room, more cream would have risen to the top, and that in summer it is uniformly thicker than in the crock shown us, whose top or surface was only nine inches across. The quantity of cream is always in proportion to the surface of the milk, so that the yield of this would have been still more remarkable if the crock had been larger and shallower. Can anybody beat this?"

The Owner of the Soil.

The man who stands upon his own soil, who feels that by the laws of the land in which he lives, by the law of civilized nations, he is the rightful and exclusive owner of the land he tills, is by the constitution of our nature under a wholesome influence not easily imbibed by any other source. He feels, other things being equal, more strongly than another, the character of a man as the lord of an inanimate world. Of this great and wonderful sphere which, fashioned by the hand of God, and upheld by His power, is rolling through the heavens, a part is his—his from the centre to the sky. It is the space on which the generation before moved in its round of duties, and he feels connected by a link with those who follow him, and to whom he is to transmit a home. Perhaps a farm has come down to him from his fathers. They have gone to their last home! but he can trace their footsteps over the scenes of his daily labors. The roof which shelters him was reared by those to whom he owes his being. Some interesting domestic tradition is connected with every inclosure. He sported in boyhood beside the brook which still winds through the meadow. Through the field lies the path to the village school of earlier days. He still hears from the window the voice of the Sabbath bell which called his father to the house of God; and near at hand is the spot where his parents laid down to rest, and where, when his time has come, he shall be laid by his children. These are the feelings of the owner of the soil. Words can not paint them; they flow out of the deepest fountains of the heart; they are the life-spring of a fresh, healthy and generous national character.—[Edward Everett.]

MURRAIN IN CANADA.—The Quebec *Mercury* says that an alarming disease prevails among the cattle in the parishes of La Beauce, on the south side of the St. Lawrence, the origin of which cannot be traced. Upwards of fifteen hundred animals, chiefly cows, have perished.

AGRICULTURAL.

The Proper Time for Cutting Timothy.

BY JARED P. KIRTLAND, M. D.

The proper time for cutting timothy meadows, with reference to securing the best qualities of hay, has been a fruitful subject of observation and remark. Little or no attention has been paid to the influence of the time and manner of cutting, over the health, permanency and productiveness of such meadows. A vague idea prevails, among farmers, that if the mowing be performed before the seed of this species of grass is ripe, it will run out, from a failure to re-seed the ground. Every observing farmer has noticed that, in some instances, extensive tracts of timothy sward have suddenly died, soon after the removal of the crop of hay, while, in others, the sward continued healthy, and for a series of years produced abundantly of this grass. The rationale of such opposite results, under apparently similar circumstances, had never been explained, so far as my information extends.

My neighbor, Richard McCrary, an intelligent and practical farmer, has recently presented me with the annexed propositions and conclusions, as the results of his experience on this subject. These he illustrated by specimens of the grass, in every condition which he alludes. It is hoped they will be thoroughly scanned, by persons competent to test their accuracy. If they bear this test, to Mr. McCrary the credit of the discovery of the facts solely belongs; and I have no doubt the community will consider him as having conferred an important benefit.

1. Timothy grass (*Phleum pratense*) is a perennial plant, which renews itself by an annual formation of "bulbs," or, perhaps, more correctly speaking, tubers, in which all the vitality of the plant is concentrated during the winter. These form, in whatever locality the plant is selected, without reference to dryness or moisture. From these proceed the stalks which support the leaves and head, and from the same source spread out the numerous fibres, forming the true roots.

2. To insure a perfect development of these tubers, a certain amount of nutrition must be assimilated in the leaves, and return to the base of the plant, through the stalk.

3. As soon as this process of nutrition is completed, it becomes manifest by the appearance of a state of desiccation, or dryness, always commencing at a point directly

above either the first or second joint of the stem, near the crown of the tuber. From this point the desiccation gradually progresses upwards, and the last portion of the stalk that yields up its freshness is that adjoining the head. Coincident with the beginning of this process is the full development of the seeds, and with its progress they mature. Its earliest appearance is evidence that both the tubers and seeds have received their requisite supplies of nutrition, and that neither the stalk nor the leaves are longer necessary to aid them in completing their maturity. A similar process occurs in the onion, just above the crown of the bulb, indicating the maturity of that organ.

4. If the stalk be cut from the tubers, before this evidence of maturity has appeared, the necessary supplies of nutrition will be arrested, their proper growth will cease, and an effort will be made to repair the injury, by sending out small lateral tubers, from which weak and unhealthy stalks will proceed, at the expense of the original tubers. All will ultimately perish, either by the droughts of autumn or the cold of winter.

5. The tubers, together with one or two of the lower joints of the stalk, remain fresh and green, during the winter, if left to take their natural course; but if, by any means, this green portion be severed, at any season of the year, the result will be the death of the plant.

From the foregoing considerations it is concluded:

1. That timothy grass cannot, under any circumstances, be adapted for pasture; as the close nipping of horses and sheep is fatal to the tubers, which are also extensively destroyed by swine.

2. The proper period for mowing timothy is at any time after the process of desiccation has commenced on the stalk, as noted in proposition 3. It is not very essential whether it is performed a week earlier or later, provided it be postponed till that evidence of maturity has become manifest.

3. All attempts at close shaving the sward should be avoided, while using the scythe, and, in guaging mowing machines, care should be taken to run them so high that they will not cut the timothy below the second joint above the tuber.—[U. S. Patent Office Report.

WOOL.—The South Bend *Register* hears that wool sold last week at Niles, Michigan, at 40 cents per pound.

What a Man Can do in the West.

A correspondent of the New York Tribune who gives the facts in his own experience, shows what a man who has the will to do, can accomplish in Illinois. Six years ago, the man came to this State from Haverhill, Mass., bought him a quarter section of land for \$5 an acre, and had only money enough to make one payment. He went to work himself, and hired a boy to help him for \$10 a month. The following paragraph explains the rest: "At the end of the third year I had the whole farm paid for, with a house worth \$1,000 and three miles of fence on it. The same year I had a crop of white winter wheat which yielded 27 bushels to the acre and sold for \$1 25 per bushel, making a cash income of \$33 per acre. Twenty bushels of wheat and forty bushels of corn per acre is a fair average crop, although corn, if cultivated as at the East, would yield from 75 to 100 bushels per acre. A man and boy, with four horses, can plow and cultivate 100 acres—say 30 of wheat, 20 of oats, and 50 of corn. He will need the assistance of a reaper to cut the wheat and oats, and a thrashing machine to thresh it. All the rest of the labor he can do without additional help."

These are the actual figures of a kind of "land speculation," which has no ups and downs about it. Such cases are numerous all over this State, and the west. We can go into every town in Stephenson county and find scores of good well to do farmers, who are wholly out of debt and have money to loan, whose experience is but a counterpart to that related above. That "farming pays" in Illinois, where lands cost not half what they do east where labor costs no more, and where the nett receipts from the soil are equally as large as they are east because the lack of a few cents per bushel is more than made up by the extra crop, it needs no discussion to show. Any young man with energy can in a few years build up for himself on the fertile acres of Stephenson county, a beautiful home, and an independent fortune, relying solely upon the product of honest toil for his returns. There is no need of western farmers turning speculators. They can have no more tempting inducements held out to them, than offered by the legitimate business in which they are engaged. The ready advance in wealth among our agricultural classes in the west is one of the grand facts of his era. The annual conversion of bone and sinew into substantial commercial value, is beyond computation. Every year

is adding to our already bountiful resources, and the broad expanse of prairie which has for ages been but the play ground of creation, where buffaloes roamed at will and sweet scented wild flowers bloomed all unseen by civilized man, is being converted into one vast garden. Of the future of the west, when all these acres are producing what God intended them to produce, when farm houses are sprinkled over our land in rich profusion, and orchards bend with the weight of abundant fruit, no man can form an adequate idea. He who lives to see that day will behold the great Valley of the Mississippi the garden of the world, and Illinois the Empire State. With the present rate of increase, that day is not far distant.

While the best of farming lands, all ready for the plow, can be bought here at less than half what average farms cost east, a large number of the most enterprising will certainly come west. Men will go where they can make their labor pay the best, especially where they are not obliged to sacrifice the advantages of school, churches and good society, to do it. Hence it is that Northern Illinois is now filling up with a good class of eastern emigrants; hence it is that this process of "filling up" is certain to continue until the vacant acres are all occupied. Come while there is room.

From the Rural New Yorker.

Less Land or More Labor.

'Is it true that we want less land or more labor?' asks Prof. J. A. NASH, of the New England Farmer. In a review of our former article on this subject, the Professor enters into a further discussion of the question, but his remarks occupy too much space for our columns. We will try to give a brief idea of the argument.

It is the nature of land to be productive, whether cultivated or uncultivated, but the value of its products depends on their uses to man. An acre of wood is very valuable near a large city; it is worth nothing on the Rocky Mountains. It is the province of man to make land produce the greatest value, in demand, above the cost of production, or the greatest profit. To do this there must be the requisite proportion between capital and labor.

A hundred acres of high priced land, with one man's work put upon it, is, in great part at least, so much dead capital. Its products will pay the interest on the investment. Its capabilities are not drawn out—they are unused and profitless. It is the same as though a shoemaker should build a shop one hundred feet long and then occupy a few feet space in one corner. It is as if a merchant, should lay out all his capital in building a fine store and filling it with goods, and then refuse to hire clerks to sell them.

A due proportion between fixed and floating capital is observed in every business, more carefully than in farming. The 'track' is not only laid, but the 'rolling stock' is provided and kept in motion.

A thousand acres of wild land might support an Indian hunter and his family. Set a thousand strong men to work on these acres, one man to each, and the whole would shortly be cleared, drained, fenced and cultivated—the whole would soon be a garden. Instead of feeding one lone family, it would yield food for ten thousand persons. But all this would involve a large outlay. Ten thousand dollars a day is a large sum to pay for labor, and might not prove profitable. There might be other work which would produce a better return for a portion of the labor.

These are the extremes. The golden mean is between them. Hundreds, however, invest the last penny in land, for units who give their land too thorough culture. Thousands of dollars are spent for 'more land,' where tens are laid out in reclaiming water, in underdraining and irrigation.

Never was there better encouragement to increase the productiveness of our farms than now. Never, in this country, did it take less produce to pay a day's wages than at present. But how many farmers have profited by this? How many have lost the high prices by having nothing to sell? And why? Not because their farms could produce nothing—but because they were not worked. The farmer himself has labored as hard as any one ought, perhaps too hard, but what is one man on a hundred acres. He cannot amend soils; cannot half cultivate those good by nature; cannot gather materials for manure nor find money to buy them. If he had cultivated ten acres well with his own hand, or if he had put through a hundred acres with the help of four men, (five men can do about as well with a hundred acres as one can with ten,) it would have been otherwise. In the first place he might have had a little to sell; and in the latter he could have shown an improved farm, at least. Land well cultivated pays better than land run over. It is true that "more labor or less land" is wanted.

But which is it—more labor, or less land? The first, beyond question, if circumstances favor enterprise. You cannot afford, for a small farm, the variety and excellence of implements that are necessary to a good and profitable production of crops. The best implements—buildings ample and convenient—cheapen the cost of production upon large farms, but increase it in small ones. On a few acres crops are grown at a higher cost than on a larger farm—hence they cannot be made as profitable. Still small farming pays as well as other small business. It suits some men better than others, and if one has the desire to farm within himself, let him reduce his acres until he can work them. It will be his course, without question.

To make farming truly profitable, give us more labor and land enough to employ it fully. With talent for the business, a love for it, and the faculty to manage workmen, a big farm, is

better than a small one. A large farm well tilled is a mine of wealth to the owner.

THE DAIRY.

The Cheddar Cheese.

The particular manufacture of cheese, which has acquired a considerable notoriety for superior excellence, is made in the following manner:

As soon as the morning milking is over, the milk is mixed with that of the previous evening, and the whole is warmed to 80° by heating a small portion of the night's milk. As soon as it is of the exact temperature, which is ascertained by the thermometer and not by guess, pure, well-flavored rennet is added in the usual manner, and the whole allowed to stand one hour for coagulation. Next gently break the curd and take off a small quantity of whey, to be heated in a tin vessel placed in water.

Break the curd carefully and minutely, and add as much of the heated whey as will raise the temperature to 80°, leaving it another hour, when a few pailfuls of the whey are heated so as to raise the whole mass to 100°. Previous to pouring on this latter, the curd is broken as carefully as before, and the whole is actively stirred to mix it regularly, and not allow any portion to become over-heated. After standing half an hour, remove the whey by dipping out the greater part of it from the top, and drawing off the balance from a spigot at the bottom.

When most of the whey is thus drawn off, cut the curd from the sides of the tub and heap it in the middle, where it should remain an hour longer. The curd is next cut in large slices, and turned over in the centre of the tub as before, leaving it to drain for half an hour. After this interval, it will be ripe for pressure, but must first be cooled to 65° by breaking with the hand and placing on a cooler. Having reached the proper temperature, put it in one or more vats (moulds,) and subject it to a moderate pressure for fifteen or twenty minutes.

The next process consists in taking the curd from the vat and passing it through the curd-mill to break it finely, when it is salted and made into a cheese. A pound of good salt is sufficient for fifty pounds of curd.

The cheese is now carefully put into the press, where it remains till next morning, when it is reversed in the vat, and another cheese-cloth is put on it. The morning following, a fine cotton cloth is used, to give it a smooth surface, and it is again reversed in the vat, and pressed twenty-four hours, after which it is laid upon the shelf. When the cheeses are taken from the press, they are each placed in a piece of canvas to preserve their shape. At first, they should be turned daily, but as they become firmer, they require it less frequently. A temperature of 55° to 65° is regarded as the best for ripening Cheddar cheese.

~~is~~ The proverb, the longer a man lives, the more he'll see, can't allude to money now-a-days.

New York Premium Butter.

At the last New York State Fair, H. N. Kimball, of Rutlan, Jefferson county, obtained the first premium for 50 pounds of butter, made that season.

The following are his answers to the questions proposed to him by the Committee of Examination:

1st. Butter was made in September, from fifteen cows.

2d. Milk is placed in a well ventilated room, with as much surface exposed to the north as possible, the rest shaded so as to keep cool; is warmed in fall and winter by means of a stove. The cream is taken off as soon as the milk becomes thick, and sometimes before; it should be taken off before any specks show themselves on the cream. The cream is kept at about 56° or 58°, by means of coolers suspended in the well. Milk should be closely watched, and not let the cream stand too long, as it injures the quality of the butter.

3d. The butter is rinsed with cold water.

4th. Water is used as being the best and most expeditious way of freeing it of milk; and good butter, I think, cannot surely be produced in hot weather, without the use of water.

5th. We use the Ashton salt, three-fourths of an ounce to the pound, or rock salt.

6th. Use no saltpeter, as I think it does no good.

7th. I think the Syracuse salt injurious, as there seems to be an earthy substance that does not dissolve readily, and it shows itself in small scales on the butter.

8th. We pack the butter in shaved ash tubs, made from heart stuff; as all sap timber in the tub will soak the brine and become mouldy. Pack as solid as possible, and cover with a cloth and a thick coat of salt, and exclude from the air as much as possible.

The cows are native stock, with no extra feeding.

RUTA BAGAS EXTRA—A Correspondent writes: To-day we have taken a lot of ruta бага seed ($\frac{1}{2}$ lb to $\frac{1}{2}$ acre) and sown it broadcast all over our garden, dropping it thickly wherever there is likely to be a single foot of spare room, as for example, between the rows of early corn and potatoes, peas, &c. The hoeing is now going on which will cover the seed; and hereafter the growing young plants will be cut up with the hoe like weeds wherever they are in the way; but left to grow where there is room for a single turnip. A useful plant may as well occupy the ground as a useless weed, and in autumn we shall most likely gather several bushels of turnips for the bare cost of the seed, or 25 cents. This plan may be pursued not only in gardens but in fields, at any time in June, July and even into September. After, say July 15, some of the later varieties of turnips should be substituted for ruta bagas.

HORTICULTURAL.

The Strawberry Culture.

Cincinnati is confessedly ahead of all other cities and localities in the United States in the cultivation of the strawberry. Nicholas Longworth may be regarded as having led the way to the extraordinary amount of production, not only there, but in every other part of the United States. This has been the result of a discovery made by Mr. Longworth, which has been often told, and is merely thus: An ignorant market woman, first in Philadelphia, and afterwards in Cincinnati, was famous for raising large crops, beating all her neighbors. Every spring she was observed to carefully go over her beds, pull up numbers of the largest blossoming plants and throw them over the fence. The rival gardeners, emulous of her success, carefully picked up these rejected plants and set them out in their gardens. But not yet had they caught the goose that laid the golden eggs. Her castaways did no better than the old ones, if as well, and still she raised five times as many berries as any one else. On coming to Cincinnati, she still distanced all competitors—why, no one could discover. At length her son carelessly dropped a hint in the hearing of Mr. Longworth who caught it up and experimented, until he found out the curious fact that the strawberry is sometimes male, sometimes female, and sometimes hermaphrodite, having both organs more or less complete—a fact, the judicious use whereof has brought the price of strawberries from 40 to 50 cents down to 4 and 5 cents per quart, and made them a staple of the State. It was the male strawberries, whose blossoms are always the largest, that the market woman threw over the fence, keeping just gentlemen enough in her beds for the ladies. Too many not only taking up too much room, but as their energies are not exhausted in bearing fruit, grow and spread so fast as seriously to encroach upon the harems, so that if not looked to in time, they are likely, as Mr. Longworth says, "to kick all the women out of bed."—Hence it is that many people find that they have fewer and fewer strawberries, though the blossoms are larger and larger every spring. On the other hand, the female can do nothing without intercourse with the other sex, of course. Hovey's seedling, so long the favorite strawberry of the east, is a pure female, and bears only when it has companions in the bed, as it is almost sure to have few or none. The English strawberries are said to be always her—

maphrodite, which renders it difficult for John Bull to believe that there are pure males and females. Not the least curious thing is the way in which the male impregnates the female. He does it by proxy, honeybees and other insects playing the go-between. They carry the dust on their feet as they fly from flower to flower. This fact has been established I believe, beyond cavil, by a series of experiments, such as covering some of the female plants with gauze, they are sure to be barren, but begin to do their duty the moment the gauze is removed. There is, therefore, no need of putting the male plants in the same bed with the females, and in practice each is now placed by itself, from a foot to a yard apart from its conjugal companions. Of the three varieties just mentioned as Mr. Longworth's seedlings, now in general cultivation here, the Superior and Extra Red are females, and the Prolific is hermaphrodite.

The amount of strawberries raised and brought into Cincinnati, is immense. Hundreds and hundreds of bushels, are brought in each day. One man, it is said, had three hundred bushels in market at one time, and the price places them within the reach of all.

Strawberries do well planted out in the next and following month, August and September, if the weather is suitable.

THE GARDENER.

THE STRIPED BUG.—M. B. Bateman, in the Ohio Cultivator says that he effectually protected his cucumbers and melon vines by placing four or five bricks round the hills on edges so as to inclose them. Who will remember this?

Thinning Out Vegetables.

It seems a pity to put a hoe into those luxuriant rows of beets, carrots, parsneps, and onions, that already give promise of an abundant harvest. But full two-thirds of them must still be sacrificed, before you can get a full crop. They are cramped for room. The carrot sends out its roots on all sides of the main tap, and if it have a chance, will completely occupy the soil on all sides of it with its fine rootlets. One root will appropriate the aliment in a square foot of soil, much better than a half dozen, and will make a greater weight of nutritious food at the harvest. This is what wise cultivators are seeking for,—the most food upon the least surface. Thin out then to six or eight inches apart, and if you want very large specimens for the fairs, make the spaces a foot wide. The roots that are pulled up are excellent fodder for cows and pigs, and if you throw a few into the poultry yard, they will be appreciated. Try it and see.

THE POULTRY YARD.

Gapes in Chickens.

For a couple of years after commencing the raising of poultry, I was subjected to the loss of a large number of young chickens, and almost the whole of them by gapes. I inquired of an old lady, who has had great success in the chicken line, if she could tell what made the gapes. The reply was, lousy hens, and the cure, or I should say preventive, simply to grease the hen under the wings thoroughly, and around the neck as soon as she came off the nest.

Well, I tried it, and the result has been, the more I did not grease the hens, the more chickens died, and vice versa. The whole matter, in my experience, is perfectly simple, and so far as practiced with my chickens, has been successful. When a hen comes off her nest with a brood, she is well greased, and from time to time, while confined to the coop, the operation is repeated, with occasional changes in the position of the coops. Should any of your readers try the experiment without a favorable result, I should be glad to know it.—[Am. Ag.

Lice on Fowls.

F. A. W., of Missouri, wishes to be informed how to exterminate the vermin that frequently infest hens and hen roosts, &c. Prevention, when practicable, is always better than cure. Strict cleanliness about the roosts and nests will always prevent hens from becoming lousy. The droppings under the hens should be removed frequently, the nests often renewed and air-slaked lime and ashes scattered around the floors, boxes and roosts. Boxes of dry ashes and lime should always be kept under cover where the fowls can have constant access to them, that they may wallow in at pleasure. With these precautions fowls that are free from vermin will never be infested. But where they have become lousy, the roosts should be thoroughly swept and cleaned, the straw and litter from the nests entirely removed and the wood work and roost poles of the house white-washed with fresh slaked lime, into which a quantity of sulphur or tobacco has been mixed. A day or two before this operation, the fowls should be fed with coarse corn meal wet with milk or water into which a quantity of sulphur has been mixed. Feed with this several days, it may then be omitted for a few days, and repeated again at intervals of three or four days, and continued in this way until all the nits have hatched, when the insects will drop off and leave the fowls. Thorough cleanliness after this will generally exterminate them. Fowls are always poor and unthrifty and setting hens are seldom successful in hatching their eggs when annoyed with vermin. A little care is all that is necessary to prevent it.—[Valley Farmer.

ILLINOIS CENTRAL RAILROAD.—The sales of Illinois Central Railroad lands, during the week ending the 23d, were 15,697 73-100 acres, for \$187,946.15.

What is the matter with the Hens?

"Have not had an egg for a week, and the corn they eat is a caution in these hard times." They are shut up in a yard, of course, and cannot have access to the green grass, and to the insects, which Providence has provided for them in summer. "Man shall not live by bread alone." And the proverb is true of fowls. What could you expect of sensible hens, but that they would stop laying when you cut off the supplies. Now get a liver from the butcher's stall, or any other cheap meat, and see with what avidity they will devour and almost quarrel for the last morsel. Offal from the fish market, or any animal food, will answer quite as well. If at a distance from markets, upon the farm, and you confine your hens, mix coarse meal with whey, or skimmed milk, to satisfy their craving for animal food. Supply them also with clear water, and grass or weeds daily, and ashes and oyster shells. Look also at the roosts, and keep the droppings well sprinkled with plaster and muck. Attend to these things, and you and the hens will soon sing a new song over fresh laid eggs.

Bugs.—We met a friend the other day, who "let on" in this style:

"I say, Mr. Editor, what'n thunder did you publish that whole column about bugs for, when you know of a much better way to get ride of the plaguey things?"

"Do we?" we asked.

"Why, yes—sperits turp'tine! Don't you know you told me of it? Well, the little torments were destroying my water, musk and other "millions" tremendjusly; so I got a quart of the sperits, went home and sprinkled it about the hills, dipped some feathers in it, and stuck them down all around, and, oh, scissors! you ought to have seen 'em travel. I don't know how fast a bug ought to fly, but I'll bet high that at any bug sweep-stakes they'd take the pile, for they did make beautiful time."

"But they will return again," we said.

"Just so; and then you will have the fun of giving 'em another dose. I only gave 'em the sperits twice, and I haven't seen nary bug for about two weeks. I think you ought to put that plan in your paper, for it's worth a V to any one."—Ottawa Free Trader.

BUGS AND CUCUMBERS.—Mr. Bergen of Logg Island, recently stated that some farmers in his neighborhood plant as many as ten acres each of cucumbers, and that the way they save them from bugs, is to use plenty of seed at first and then at four or five successive periods they plant on a new side of the hill, a lot more of seed. This supplies an abundance of young plants for the bugs to feed on, and they leave the stronger growing plants untouched. When well out of the way of bugs the surplus plants are dug up with the hoe. This is a similar plan to one we have recommended strongly for years past, and have found it successful in practice. See *Agriculturist* Vol. XII, page 88.

THE FLORIST.

The flower garden should at all times be kept free from weeds. If you commence this in season, the work will be comparatively light.

Do not crowd your flowering plants. They must have space if you wish them to show their flowers in perfection. Some require a good deal of room. The Petunia will cover a space of ground too feet square, and will be all the better for having this room in which to unfold its beauties. So of most other flowering plants. The Verbenas sometimes have a disposition to grow erect, and at others to trail on the ground. They look well when made to spread over the ground, but if you desire to make them grow erect, you can train them on frames or sticks.

Some hardy shrubbery has a disposition to spread and make unsightly plants. Their growth can be checked by pinching off the terminal shoots. This is very early and quickly done.

Hardy perpetual roses, to make them blossom in the fall, should be cut back, so as to make them throw out new wood. Both these and the tender perpetuals would be greatly benefitted by liquid manure. This should be applied to the ground within their reach and not on the plants. A liquid manure can be obtained from hen or pigeon or animal dung; the two first are the best. Be careful that it is not too strong, and afterwards, and repeatedly, give good waterings.

To Preserve Flowers.

The secret of preserving flowers and leaves in their original colors, yet perfectly dry, is drying quickly, and under sufficient pressure to prevent the shrivelling of the leaf. This may be done thus: Prepare an abundance of bibulous paper—this is such paper as common newspapers are printed on, and which absorbs water so fast that you cannot write on it with ink, and when you touch your tongue to it, it wets through directly; lay this paper in the sun to become warm and dry.

The plants which you wish to press, if they are to be preserved as botanical specimens, should, if possible, show the whole plant, characteristic of the season in which it is picked; that is, root, root-leaves, ground-sprouts or "suckers," if these are characteristic of the plant, leaves, flowers and seed at the highest state of maturity at which it will press well. Generally plants press best when fresh, but if slightly wilted, stiff, brittle leaved plants do better.

The specimen should be laid down on a sheet of white paper, of the kind described, in its most becoming position, withered and deformed portions being removed. Wherever leaves lie one upon another, and especially when flowers or

petals lie thus, lay pieces of bibulous paper between them, but so as not to make too great a thickness in any one spot. Then lay another piece of white paper upon it, and then place a couple of the warm dry newspapers on each side, making at least eight thicknesses of paper. Make then a pile of the flowers to be pressed, lay a board on it and then put on weights, 50 pounds or more—not enough to crush the succulent parts, however.

In three hours, if you wish to be very particular about retaining the color, change the newspapers, not removing the white paper on each side of the specimens. Use the absorbing paper as dry and warm as you please, heating it in an oven, if it can be done without scorching, and if it can stay in long enough to become not only hot but dry.

Change twice a day for the commonest plants, and the oftener at first the better. The specimen is known to be dry when no part of it is in the least damp, nor has any cool feeling when pressed to the lips.—[Homestead.

THE NEW SUGAR CANE.—Among all the experiments with the Chinese Sorghum, very few instances have occurred where the granulation of the syrup has been secured; but the following, from the Cincinnati Gazette, shows that it is practicable to obtain this result:

“Mr. Hedges, of our city, has shown us samples of sugar made from the “Sorgho,” which, in flavor and appearance, is equal to the Brazil sugar. This is the first reliable and satisfactory evidence of the success of the Chinese cane as a sugar crop. This was made by Mr. Leonard Wray, of England, who has devoted many years to the sugar business in various parts of the Indies, as well as France, Algeria and South Africa; and to his efforts we are indebted for the process for granulating this new species of cane syrup. Mr. Wray has just arrived in this country, at the solicitation of some influential men of the South, who were aware of his great skill and success in the manufacturing. He brings with him the seed of several species of the “Imphees,” found by him in Caffaria, which he says is more precocious and better suited to our northern latitude than the Chinese variety, although he speaks in high terms of the latter. Mr. H. has also a sample of alcohol, made from the fermented juice of the cane, of a most superior quality. He has also some of the simple juice, considerably resembling the white wines of the Rhine.”

—A Western editor whose subscribers complained very loudly that he did not give them news enough for their money, told them that if they did not find enough in the paper, they had better read the Bible, which, he had no doubt, would be news to them.

—A French writer is represented as calling dyspepsia “the remorse of a guilty stomach.”

DOMESTIC ECONOMY.

Cheap and Good Roofing.

S. K. R., writes to the Valley Farmer from Saline county—

The cheapest roof that we are acquainted with, and one that we prefer to shingles, particularly as many shingles are now made, is covered with cloth. We know from an experience of more than fifteen years, that when properly made they are not only cheap but good.

For the foundation for the cloth a substantial covering of boards should be laid, giving the roof any desired pitch, sufficient to run off the water. Cloth known under the name of bur-laps, which is made of hemp, is the best for this purpose. It is woven from one to six yards wide and is much used for oil floor cloths. That which is 1½ yards wide is usually bought for about 14 cents per yard, but the widest is the best for roofing. It should be spread lightly over the roof and lapped at the seams and well tacked down with small pieces of cloth under the heads of the tacks, a few tacks should also be put in the middle to secure it from the wind until painted and finished. It should now receive a thick coat of paint; spruce yellow, or what is termed mineral or fire proof paint, costing but a few cents per pound, with linseed oil, makes a cheap, substantial paint. After the first coat of paint is laid on, small wood strips, half an inch square running up and down the roof should be nailed on twelve or sixteen inches apart. Slim nails with small, neat points should be selected for the wood strips. Then one or more coats of paint should be applied. If the house is strong and the boards for the roof are well laid on, such a roof will outlast the common shingle roof.

Candles for Summer.

Mrs. C. H. Price, of Ky., sends the following item of household practice to the editor of the American Agriculturist:

As I have just made some of the nicest tallow candles I ever saw, I will give my recipe for the benefit of young housekeepers. I bleached and hardened 34 pounds of very soft and yellow tallow and one pound of black beeswax by gently boiling the tallow out-doors in the sun two days, in two gallons of weak lye, stirring and skimming it often. Each morning I cut out the tallow and scraped off the bottom that was soft and put in fresh lye, for two days. The third day I put in fresh water, in which was dissolved one pound of alum, one of salt-petre and a little blueing. After simmering, stirring, skimming and straining it, it was as clear and white as sperm, and ready to dip.

I bleached my wick very white, and gently twisted it around small cane rods; allowing for one dozen candles to weigh two pounds, I put on wicks for fifteen dozen candles for the 34 pounds tallow. When the tallow was hot, I put half an ounce of oil of bergamot in, which perfumed it sweetly. I then dipped the candles in the usual way, making them rather shorter for summer, but as large as mould candles. When done, the end of the wick should be dipped in turpentine to cause them to light quickly, and the candles are ne plus ultra. Talk of a perfumed breath, it is not more agreeable than a perfumed candle. (I think I deserve a patent for my invention, but I will give it to your readers gratis.) We dipped them in two hours, and did not have one drop of tallow on the floor! We had two or three pounds left—it is not well to dip too close. We dipped them twice over after cutting off the ends, and as the weather was cool we boxed them immediately, to keep them from cracking, putting paper between each layer. I am sure they will be hard all summer, and as good as the star candles.

To Keep Butter Hard and Cool.

A writer in the Scientific American recommends to the ladies a very simple arrangement for keeping butter nice and cool in the hottest weather. Procure a large, new flower pot of sufficient size to cover the butter plate, and also a saucer large enough for the flower pot to rest in upside down; place a trivet or meat stand, (such as is sent to the oven when a joint is baked) in the saucer, and put on this trivet the plate of butter; now fill the saucer with water, and turn the flower pot over the butter, so that its edge will be below the water. The hole in the flower pot must be fitted with a cork; the butter will then be in what we may call an air-tight chamber. Let the whole of the outside of the flower pot be then thoroughly drenched with water and place it in as cool a place as you can. If this be done over night, the butter will be as "firm as a rock" at breakfast time; or, if placed there in the morning, the butter will be quite hard for use at tea hour. The reason of this is, that when water evaporates, it produces cold; the porous pot draws up the water, which in warm weather quickly evaporates from the sides and thus cools it, and as no warm air can now get at the butter it becomes firm and cool in the hottest day.

A Talk with Farmers' Wives.

BREAD.—Dry bread, crusts, stale biscuit, etc., I always soak in warm water, mash fine, and mix with milk, when I make bread. The loaves will not be so white, but will be moister—besides, it is economical, and every housewife must be saving, these hard times. All the cold potatoes that are not hashed with meat, come to our table the second time metamorphosed into light loaves of bread.

MEAT.—The best way to use pickled pork, if it is too salt, is to cut it in slices, and soak it over night in milk and water, then roll each piece in flour, and fry in a little butter, the same as fresh fish. It is nice for a change.

BEANS.—For laboring men at this season of the year, there is nothing more nutritious and wholesome; besides, there is no other food of which a little will go so far and do so much good. Boil them three hours in plenty of water, with a piece of pork to flavor them just right. Put in pepper as soon as they come to the boil; when cooked, a lump of butter and some cream or good milk. The meat and butter generally makes salt enough. If there is plenty of soup about them, take them to the table in a deep dish lined with bread crumbs.

SALT FISH.—My way of cooking salt fish, is to soak them well, then wrap and tie them in a piece of old thin white muslin, and boil them in plenty of water. Untie carefully, so they won't break to pieces, and season with butter and pepper.

RICE.—My way of cooking rice, is to boil a pound or more until every grain is soaked through and swelled to its biggest, salt to the taste, and put it away in the coolest corner of the cellar. For supper, I pour cold thin cream well sweetened over it, and season with nutmeg or lemon. It is cheap and healthy food, and very good for children, but no better than

THICKENED MILK, made the good old way of rubbing an egg or two in flour, and then dropping the thickening into new boiling milk. Set away till cold, and pour over it sweetened milk or cream, and season the same as the boiled rice. One would be surprised at what a nice light dish it makes for a farmer's supper table.

MATRIMONIAL MEMORANDUM.—A gentleman who did not trust to his memory, wrote in his memorandum book—"Must be married when I get to town."

☞ Regard the interests of others as well as your own.

EDITORIAL NOTICES.

Mower and Reaper Trial.

A trial of mowers and reapers took place near Salem, Marion county, under the supervision of the officers of the State Agricultural Society on Wednesday and Thursday, the 8th and 9th July.

We learn that three combined reapers and mowers were put on trial, viz: Brown's of Alton; Whiteley & Fassler's, Springfield, Ohio; and Ruggs', Ottawa. Reapers,—Haynes & Hawley's, Pekin; and Flagg's, Bloomington. Also, Haynes & Hawley's Illinois mower.

On Wednesday, all the reapers, with the exception of Haynes & Hawley's (called a header,) were on trial. They all performed well. All had their admirers. On Thursday, the Header was tried. It is a ponderous machine, but did its work well. In the afternoon, the combined mowers and the Illinois mower were put upon trial in a beautiful meadow of timothy. Every machine stood up to its work nobly. There were differences of opinion in regard to the manner in which the mowing was done,—but while some performed better than others, it was conceded that they all did good work.

There was a deep interest manifested by the spectators during the last trial. Every man present felt a glow of triumph on the success of American mechanical genius. Three of the inventors were present to work their machines. The whole trial passed off without a single unpleasant circumstance to mar the enjoyment it afforded.

We cannot say which were the successful machines. Much calculation is required and many points are to be understood, such as,—cost of the machine, simplicity of construction to do its work; facility of management; durability and reliability; adaptation to cut at different heights; freedom from clogging; motive power required; labor in raking; rapidity of work; the manner of leaving wheat for binding; saving of grain in cutting, binding and handling, &c. All these points deserve careful consideration; and we learn that the decision of the com-

mittee will not be made public until the next State fair.

The committee speak in the highest terms of their kind reception by citizens of Marion, and the gentlemanly deportment of all those engaged in running the machines. To the credit of Southern Illinois be it spoken, that there was no liquor seen upon the trial grounds and not a case of intoxication was witnessed during their visit to Marion county.

Preserving Fruit.

Peaches, preserved in cans or glass jars, are a great delicacy in the seasons, when the fruit cannot otherwise be had. Within a few years past, large quantities of this fruit have thus been preserved, and the practice is rapidly increasing. Scarce a family can be found, when peaches are to be had, where this is not done.

The following plan of preserving peaches in glass jars has been recommended:

Take the peaches, either just ripe or fully ripe—this does not matter. Pare them, and if you desire to preserve them whole, throw them into cold water, as they are pared, to prevent them from losing color. When everything is ready, place them in the jar, adding merely as much sugar to each layer as is sufficient to render them palatable. Set the jar in a kettle of cold water and heat it, keeping the water in a boiling state until the fruit becomes heated through. This will require, if quart jars are used, twenty minutes, and larger jars longer. When heated sufficiently, seal at once. To do this the corks must be soaked in water and put into the jars so as to make them air tight. Then the corks are to be covered with sealing wax, and it will still add to their security if a cloth of proper size, dipped in the sealing wax, should be passed over the cork and tied down on the neck of the jar, while the wax is warm. It is a point not to be lost sight of, that the jar should be air tight. It is not absolutely necessary to use sugar in this process, but, as it assists in the preservation of the fruits, they can be sealed at a lower temperature than if it is not used. As sugar is used to render the fruits palatable, there can be no objection to using it when preparing the fruit for family use, as it will, in any case, be necessary, and there is no reason why the sugar should not as well be used before the can is sealed, as afterwards.

Southern Illinois.

A distinguished Horticulturist, who was at the Reaper and Mower trial, in Salem, on the 8th inst., in a private letter to the editor, thus writes:

"I had the pleasure of visiting Mr. Reynolds' farm and saw the pear trees you speak of, and it really made me feel a regret that I was not located in as good a fruit region, especially for pears. The soil of Marion county is the kind for pears. The deep green hue of the foliage of those veteran pear trees was ample proof of that fact. I noticed a singular circumstance as exhibited in that section, that whilst the apple trees were injured somewhat by the severe winter one year ago, the pear trees escaped injury. I am captivated with this portion of the State, as the fruit region of the West. It is not too far south for the apple, and not too far north for the peach. Could I by some legerdemain ("presto change,") transfer our establishment, with other advantages, I would do it and pay one half I am worth "to boot."

"Do not think I am too enthusiastic, for am only speaking forth the words of soberness and truth. Our black soil will never do for the pear and cherry, unless, for the first, the clay and warm subsoil is well incorporated with the surface soil, and for the latter, only when our gravelly subsoils are brought to the surface, or otherwise, the soil is impoverished, and then only the hardier kinds will answer. We are throwing out of culture all varieties of cherries, except Dukes and Morellos. We have had good crops of the Dukes when the trees were standing on gravelly subsoil. Those standing in the prairie soils have borne but very slightly; making always too much wood.

"Had I spare time, I would like to spend a few weeks with you this summer in strolling through Southern Illinois. Southern Illinois within the next half score years will take the lead in many products of the soil; and enterprise and improvements, and all those conveniences and comforts found in any portion of the West, will be found there."

We were about writing a short notice of our impressions on a visit to the Central Southern counties of our State; but the above extract contains the gist of what we could say. Our impressions, like those of our friend, are that Central Southern Illi-

nois is to become the great fruit region of our State. The noble pear trees spoken of, are some six or eight in number, and stand on the farm of J. P. Reynolds, Esq. They have been growing thirty-six years. They are more than two and a half feet in diameter. The limbs spread out beautifully and naturally, the foliage is a deep green, and the trees are manifestly, at this time, in a high state of health, and if no untoward casualty happens, they are likely to live a century after this time. They remind one of the noble old pear trees in the east, which have furnished fruit for many generations. The lands of Marion county, so far as we could examine them, will not only produce fruit in perfection, but will bring more certain crops of wheat and grass than the lands of Northern and Central Illinois. For corn and oats, in our opinion, they are not equal to our northern black prairie soils. We obtained some statistics of health while visiting for a brief day the farm of Mr. Reynolds, and we were surprised and gratified with the results. A large family who had resided ten years on his place, before he purchased it, had not paid ten dollars for doctors' bills. A near neighbor, an old settler, had never had a severe sickness in his family, and he had brought up a large number of children. We judge that the county is far healthier than the most healthy portions of the eastern States. There are no local causes for sickness—no swamps or stagnant waters.

We have no pecuniary interest in Southern Illinois, (we wish we had.) We have a strong desire that the country should be settled, and soon, with an intelligent and enterprising people. The present settlers will take the kind and good hearted emigrant by the hand, and will do him all the good they can. Improved farms can be purchased at from \$15 to \$18 dollars per acre, and wild lands from \$7 to \$10, depending on their location. These prices will not last long. The great wave of emigration is to pass into Southern Illinois, and ten years will not go by before improved farms in Southern Illinois will bring

the full value of other farms in any part of the State.

Marion county is beautifully divided into prairie and timber land. Judging from a map we have seen, we estimate that more than half the land is prairie. And yet the timber sends its arms into the prairies in such a manner that hardly any portion of them can be more than two and a half miles from timber. The means for sending produce of all kinds to market, are entirely ample and convenient. There are seventy-four miles of railroad in Marion county. The Central Road, the Ohio and Mississippi Road, and the Chicago Branch Road, all pass through Marion. We regard it as a misfortune that so many towns are springing up in Marion county, all contending for the mastery. If the energies and capital employed in these towns, were centered in one, there would soon be a very large city in the interior of Southern Illinois. That the best position ultimately will take the lead, and become a large place, we regard as certain.

We should be most happy to accompany our friend in a leisurely excursion through the counties of Southern Illinois. But that pleasure must be deferred for the present. We doubt not other southern counties have many of the natural advantages of Marion—perhaps not equally so in regard to railroad improvements. We hope the time is not distant when every county in Southern Illinois will have the advantages of railroads. Railroads make a country. What have they not done and what are they not doing for Illinois? The answer is seen over our whole land, and Southern Illinois, though later than some other portions of the State, in feeling the influence of railroad improvements, is manifestly now brought into notice, her advantages appreciated, and she is at this time undergoing a transformation most marked and gratifying.

☞ The Buckwheat is looking well.—We shan't have to go to New York, Ohio, or even Chicago, next winter for shorts mixed with buckwheat flour, for the raw material whereof to make cakes.

Aspect of the Crops.

At the time of this writing, we have dry weather. The wheat crop is about cut, and the grain saved in good order. The yield has been very great. Corn looks well and is rapidly advancing in growth, though some three weeks later, apparently, than usual. If the latter part of the summer and fall are favorable, there will be a heavy crop of corn. Potatoes have suffered from drouth, but still hope for a good crop. Oats and barley have yielded well. Hay is abundant and sold at reasonable prices. A good deal of buckwheat has been sowed, and more could be. The early sown looks well. On the whole we are likely to have a great crop season; and the prospect is that breadstuffs and vegetable food will be sold at lower prices than at present. Meats will continue high.

☞ Preparations are now being made for putting in Fall Wheat. A greater breadth of ground will be sown by far than last year. The drill will be used in sowing to a greater extent than ever. It is quite certain, that in ordinary seasons, the increase of crop on twenty acres of ground, sown with a drill over the broadcast plan, will more than pay the cost of the drill;—besides there is a great saving of seed. A most excellent way of putting wheat into corn land is by using the Cultivator,—especially if the ground is tolerably clean. The time has gone by for slovenly and half cultivating for crops. That system won't pay;—thorough cultivation will.

EDWARDS COUNTY AGRICULTURAL SOCIETY.
—John Brissenden, President; Samuel Thompson, Secretary.

A letter from Edwards county, of the 12th July, thus speaks of the crops: "We have little agricultural news. The wheat crop and oats are very fine;—the wheat some little rusted; in quantity largely more than the usual crop. Hay—appearances in favor of a large turnout. The army worm did some injury to the meadows; but the late rains revived a good deal of the grass supposed to have been ruined. Corn, except in low lands, not so good;—prospects for corn, unless we have some good rains, bad. Potatoes—prospects fine."

The spring grains throughout Central Illinois have made a most extraordinary yield. Flax has been grown in a few cases for seed, and has done well. The drought has injured the potatoe crop to some extent; but corn is growing wonderfully. There is an immense breadth of land planted with corn, and if the latter part of the season is favorable, double the corn will be raised in Central Illinois than was ever done before in one season.—Farmers, surely, have much to be thankful for. They ought not to distrust Providence; but ever bear in mind the truth, that "God helps those who help themselves"—as has been abundantly proven the present season.

The stock imported by the Illinois Association, arrived here on Sunday evening. When taken from the cars, they had arrived at their journey's end. Those who best understand the matter, say that the stock justifies all their expectations.—The sale is to take place on the 25th of the present month, and we shall be much surprised if there are not 5,000 people at the sale.

The horses, cattle, hogs and sheep are at the fair grounds, and can be examined at all times except Sundays.

A letter from Randolph county says: "There was a great breadth of fall wheat sown in this county last season, and the yield is unequalled in this section. It is nearly all housed now (27th July,) and the samples coming to market are of a very superior quality, most of it of the White Genesee variety. Farmers think it yields better, is not as easily winter killed, nor is as apt to be injured by rust, as some formerly favorite varieties. Oats and hay harvest are progressing—the yield is good. Corn is in tassel and is most luxuriant. Farmers are in high spirits."

There is a new drill—a single one—on sale at Francis & Barrell's, for putting in newly broken up sod ground.

The July number of the Valley Farmer had a criticism on Dr. Peck's communication on the soils of Illinois. The statements of Dr. Peck do not seem to be shaken by the Valley Farmer. The great question at issue is—will the soils of Illinois produce as well, for a long period as those of Kentucky? Dr. Peck, and hundreds of other long residents of our State, say that they do—and they prove the truth of the declaration. Our opinion is, that the Geological Report of Dr. Owen was intended for Kentucky consumption only.

At a mower and reaper trial in Maryland, on the 7th and 8th July, the following premiums were awarded: Manny's combined mower and reaper, with Wood's improvement, first premium, \$100. For the best reaper and self-raker, Dorsey's, \$50; for the best reaper Allen's, (of New York,) \$50; for the best mower, Manny's with Johnson's improvement, \$50.

At a trial in Ravenna, Ohio, Manny's, with Ellsworth's improvement, took the first premium.

Opening of the State Normal University.

We have received a circular from Chas. E. Hovey, Principal of the State Normal University, from which we learn that the first session is to commence at Bloomington on the fifth of October. Candidates are required to be, if males, not less than 17, and if females, not less than 16 years of age. To produce a certificate of good moral character, signed by some responsible person. To sign a declaration of their intention to devote themselves to school teaching in this State. To pass a satisfactory examination, before the proper officers, in reading, spelling, writing, arithmetic, geography and the elements of English grammar.

Tuition and text-books will be free to all students appointed under the following provision of the statute:

§ 7. Each county within the State shall be entitled to gratuitous instruction for one pupil in said Normal University, and each representative district shall be entitled to gratuitous instruction for a number of pupils, equal to the number of representatives in said district, to be chosen in the following manner: The School Commissioner in each county shall receive and register the names of all applicants for admission to said Normal University, and shall present the same to the County Court; or, in counties acting under township organization, to

the Board of Supervisors; which said County Court or Board of Supervisors, as the case may be, shall, together with the School Commissioner, examine all applicants so presented, in such manner as the Board of Education may direct, and from the number of such as shall be found to possess the requisite qualifications, such pupils shall be selected by lot; and in representative districts composed of more than one county, the School Commissioner and County Judge, or the School Commissioner and Chairman of the Board of Supervisors in counties acting under township organization, as the case may be, of the several counties composing such representative districts, shall meet at the Clerk's office of the County Court of the oldest county, and from the applicants so presented to the County Court or Board of Supervisors of the several counties represented, and found to possess the requisite qualifications, shall select by lot the number of pupils to which said district is entitled. The Board of Education shall have discretionary power, if any candidate does not sign and file with the Secretary of the Board a declaration that he or she will teach in the public schools within the State, in case that engagements can be secured by reasonable efforts, to require such candidate to provide for the payment of such fees for tuition as the Board may prescribe.

In conformity with the above, application for admission to the school should be made to the several County School Commissioners, and the 15th of September is suggested as the day for the examination of applicants. Of course the officers having this matter in charge can appoint any other time they see fit. All students not provided for by the statute will be charged tuition. Students are expected to be present on the first day of the session.

It is presumed that board will be furnished the students by the citizens of Bloomington at moderate rates.

MONMOUTH, Ill., July 25, 1857.

S. FRANCIS, Esq.—I send you some statistics in regard to our Agricultural Society. We call it "The Warren County Agricultural Society." It is incorporated under the late law. The Society last year purchased and inclosed with a close fence, eight feet high, fifteen acres of land, about one mile from the centre of the city.

The officers for the present year are as follows, to-wit:

J. L. MILCHNER, Pres.

ELISHA NYE, Sec.

EXECUTIVE COMMITTEE.

Joseph H Kirby	James McCay	John G Willson
Samuel William	John B. McGinnis	Samuel Douglas
Seth Smith	William Laferty	C L Armsby
J C Morgan		

C. L. ARMSBY, Treas.

J. G. MADDEN.

Trial of Mowers.

The following is the Secretary's Report of the Reaper Trial on the Farm of the Hon. James Curtis two miles west of West Urbana. Illinois, July 22nd, 1857:

About 9 o'clock, A. M., we came on the ground selected for the Reaper Trial. It is field of winter wheat on breaking of last season, containing two hundred and fifty acres. That part situated for the trial stood well, was even throughout, and would turn fifteen to twenty bushels per acre. Mr. C. estimates it at fifteen bushels, while several good judges put it at twenty. The morning was cool and cloudy, giving promise of a comfortable day for the trial. Quite a large number of farmers were on the ground at this early hour, and soon the machines that were to try their prowess were seen coming over the rolling prairie.

First, we have the Self-Raker of Seymour and Morgan of Brockport, N. York, under charge of D. D. White, General Agent. It was drawn by two horses. The sickle is obtuse scolloped, sickle edged, cutting over cast guards. The cutting is four feet five inches, inside of guards. It has a side draft, but which is in part relieved by placing the driving wheel outside of the tongue, and the driver's seat is so arranged as to make his weight also compensate, in part, for this arrangement. A large number of these machines have been sold by Mr. Bacon this season, and are giving excellent satisfaction. They are well made of good material, and do credit to their makers who are so well known for their Reapers, Grain Drills, and other valuable agricultural implements. It will be recollected that this Reaper took the first prize at the Bloomington Trial, held by our State Agricultural Society, in the harvest of 1854.

Next, we have the centre-draft Machine of G. H. Rugg of Ottawa, Illinois. This is the one that won so much applause, both in wheat and grass, at the late trial at Salem. The sickle is obtuse scolloped sickle edge, with very fine serratures, and cuts six feet one inch inside of the guards, which are of wrought iron three-fourths of an inch square. Alonzo Lyons of Urbana, is the Agent having it in charge assisted by Mr. A. L. Vowel, who also operated it at the Salem and St. Louis trials. But few of these Machines have been sold here, and the general impression was against them on account of the position of the team. Had betting been the order of the day, large odds would have been against it.

in the morning, but it will be soon that before the close of the trial that the odds were as largely in its favor. This was driven by two horses.

Next came in line the automaton of J. S. Wright & Co., Chicago, under charge of W. C. Barrett & Co., West Urbana, Agents, and operated by Mr. Webster of Bloomington and Mr. Dexter. No one can see this machine in motion without admiring the life-like evolutions of the raking apparatus, and regret that the giant genius of Atkins was so early stilled in death. But his name will long live when waves the ripened harvest, on the wide savanahs of the West. This has a scolloped sickle-edged, sickle cutting over wrought guards. It cuts five feet two inches inside of guards and was driven by four horses.

Next came the Manny Reaper, by J. N. Boutwell, Agent West Urbana, also driven by four horses. Over sixty of these machines have been sold by Mr. B. decidedly taking the lead in this market and before the trial sharing with the Atkins Reaper the general admiration. The sickle is acute scolloped sickle edged, after the pattern of the Hussey Cutter, cutting over cast guards, which are placed to an even surface, giving a close fit and enabling it to cut grass without clogging, with a smooth knife.

Mr. Curtis entered one of Danford's Reapers, but it broke down early in the trial, and no record was made of its operation. A Reaper is made at Urbana but from some cause was not on the ground. Whether the makers had no confidence in sustaining its reputation, in competition with machines of such world-wide reputation as those on the ground, or a lack of that public spirit landable in such trials, we know not; but we do know that a great many farmers were disappointed in its non-appearance.

Lands were laid off,—66 rods long and 12 rods wide containing five acres each. At about 11 o'clock the meeting of farmers was called to order by Mr. Curtis, and on motion, Col. Stuart of Champaign County, was elected chairman, and M. L. Dunlap secretary. A committee consisting of J. Curtis, Archa Campbell, and Dr. Pearce were appointed to nominate an awarding committee of seven, who would take charge of the trial and report the proceedings. They nominated B. S. Buckley of Iroquois county; Joseph M. Sullivant; Dr. Page; Ezekiel Boyden; E. O. Chester; P. Steadham and John S. Beasley, of Champaign county, such committee,—which nomination

was adopted by the meeting. An adjournment was then had for dinner, and most of the large number present availed themselves of the hospitality of Mr. Curtis, where they partook of an excellent dinner. For our part, we drove to the farm of Messrs. Kelly and Campbell, not only for the purpose of enjoying a good dinner, but to see the farm which is probably under the best management of any farm in the County. Our old friend Campbell, always does up things to a T. whether selling laud, playing mine host at the Doane House, or farming. Last spring C. K. purchased this farm, containing 760 acres including the crops in the ground, for \$34 acre, old fogies predicted that John would hold this a long time before he would see his money; but before three months he had sold it for \$40 per acre, retaining the crops and use of the farm to the next April. It is one of, if not the very best, located and beautiful sites for a farm in this County, containing as it does so many advantage and adjoining the farm of Mr. Curtis on the north. The fine farms, crops consist of:

80	acres	winter wheat,
25	"	spring wheat,
200	"	Corn,
30	"	Timothy Meadow
10	"	Clover "
10	"	Rye, in which a drove of

hogs are filling themselves for the corn crops. A fine bearing orchard, garden, Ac., closes the catalogue.

At 20 minutes past one o'clock the signal was given for the machines to start, which they did in fine style, followed by a large concourse of farmers, mostly on horseback. We followed on foot, intending to make a careful examination of the work of each. We first examined the work of the Atkins Reaper. The parties in charge fancy they are on a horse race where speed is the only consideration; and the arm of iron, with its sinews of steel, is hurled through its evolutions to the discredit of a still, sober individual as it should be, and the consequence is that scatterings abound, and the bundles are made of all sizes depending on the growth of grain, while the clutch, that ingenious contrivance by the use of which the bundles are made of any size at the driver's pleasure, remaining in its place. We suppose the object of the Self-raker is to save labor, but in this case we cannot perceive it; when the bundles are small and unequal, requiring them to be doubled before binding thereby taking the time of an extra hand. We would like to see this noble machine used as intended by its inventor, walking majestically into the standing grain and with a deliberate and graceful sweep of its iron fingers, grasp a

full grown bundle and quietly place it beside the Reaper. No spasmodic twitching from the driver's whip making it scatter grain, is at all to our taste. This machine should be driven slow and steady when it will do first rate work, but it was never intended for horse racing.

Rugg's machine looks a little awkward, like a great tumble spider, rolling up the sheaves which it does expeditiously and neatly, leaving a very clean stubble. It is winning laurels, and the farmers are gathering about and hovering in its track.— "Didn't think the awkward thing would work so," was a common expression. It is driven by two horses, cutting six feet one inch inside the guards, laying down bundle after bundle with a steady hand, all of which are of the right size for binding. They are laid so compactly that the binder can grasp them without extra effort.

Manny's machine is evidently in the hands of experienced men, and doing itself great credit. It was taken out of an adjoining field and not in first rate order, the sickle had been used some days without grinding, and one of the boxes was loose; but the cutting was excellent and raking almost as perfect as that of the Rugg's machine,—occasionally a few heads fall out of line, but this was mostly owing to the horse racing spirit that the driver was imbibing from the Atkins' machine. The silk was soon freely used on this team, and the race was fully under way. The Atkins' machine was five feet two inches inside of guards and that of Manny's five feet five inches,—a round must be gained by the former if he won,—an extra whipper volunteered for the Atkins' team, and the Oiler was soon begrimed with oil and dust. On they drove, kicking up a cloud of dust amid the shouts of their respective friends,—sinews of steel and iron against those of flesh and blood; oil was poured freely into the joints of the iron Rake, and running down over the unconscious automaton, it was soon begrimed and its polished beauty marred. Water was poured into the other as freely and oozing out from the thousand pores, the gathering dust soon disguised him, so that, but from his stalwart form, his own mother would not have known him. In two hours and twenty-minutes and the cloud of dust settled down, the last sheaf was cut by both machines at the same time, and the excited multitude became quiet and turned their attention to the other machines. Rugg's machine after cutting part of its work, failed by the breaking of a spur wheel which

was cracked in driving it on the shaft, and not noticed until in the field. A new one was sent for, but only arrived in time to try the draft.

The Self Raker of Seymour & Morgan, which we have before called Old Shark Mouth, from the peculiar way in which it pounces on the bundle, was working steadily away, doing excellent work, but does not lay the bundles so compactly as from the hand rake, yet doing this part of the work much better than the Atkins' rake. It made many new friends and confirmed the wavering of old ones. It was drawn by two horses of ordinary size, and had no appearance of being in hurry, but aiming at doing the work well. This, we think, the true way of making a fair trial.

The machines were then put in position to try the draft.

	Width of cut in'de guards.	Am. cut.	Time of Cut'g	Rate for 10 h's av.	Draft.
Atkins.....	5f 2 in	5,00	2 20	21,44	350 lbs
Manny.....	5 5	5,00	2 20	21,44	425 lbs
S. & Morgan....	6 5	4,44	2 45	16,15	400 lbs
Rugg.....	4 1	2,20	0 56	23,57	350 lbs

Rugg's machine was driven at a fair moderate pace, and having a wide cut, the raker could sweep his bundle off without much interference of the falling grain. This must account for the superior form of the bundles, as the raker was a new hand, and as it could not be attributed to superior skill. Mr. Lyon contended that the draft would have been much less had the machine been worked a day or two to get the machinery smooth.

In this he was probably correct as Mr. G. does not put on as nice a finish as he might or should do, both for his own credit, or the value of the machine. Taking this machine as a standard of speed, the Atkins' machine would cut twenty acres in ten hours, which, we think, no team can do with it, judging from the trial. Taking the same standard, Seymour & Morgan's would cut 17 11-100, but its actual cutting was less, the higher draft probably making the difference.

Manny's would cut in the same time twenty-one acres. But it is evident that the Rugg machine on trial will cut an average wider swath than either of the others as compared with the measurement inside of guards. The cutting of all the machines was first rate, the difference being in time of cutting, draft, raking, and binding. It appears that what is gained by the Self-raker in raking is lost in binding, by not having the bundles of full size and placed compact so as to be bound readily.

The farmers should be proud that so many excellent machines are offered to them, and the competition growing out of it among different makers, will also tend to their advantage.

The Committee proceeded to make up the award and first balloted on the Self-rakers. The Atkins Reaper having five votes and Seymour & Morgan's two. The next vote was between Rugg and Manny, when Rugg's machine received seven votes. The next vote was, on the question, all things considered, which is the best Reaper. On this Rugg had five and Atkins, two.

We cannot but look upon this trial as of more practical importance than the late trial at Salem. The same number of machines were used; the work in all respects was superior. The Committee went at their work with system and performed their duties with a staid impartiality that is highly creditable.

In making this Report the Committee are not responsible for the language or opinions offered, only so far as their action is indicated. We have taken the liberty to make it more lengthy than was perhaps necessary for a trial Report, but looking upon this trial as one rather of equity than of law, we have entered more largely than we should otherwise have done in the premises.

We were directed by the Committee to hand this Report to the Agricultural Press, published at West Urbana, and that through it the local papers, friendly to the cause of agricultural progress, be requested to give it a place in their columns.

All of which on behalf of the Committee, we respectfully submit to the reading public, and that power behind the throne through whom Reaper builders make or lose a fortune. M. L. DUNLAP, Sec'y.

JULY 23, 1857.

To-day, in company with Mr. Chase, Editor of the Agricultural Press published in West Urbana, and J. N. Boutwell, Agent for Manny's Reaper, we examined several machines where they were at work in the field in the ordinary condition, as used by the farmer. No notice was given, and no preparation of the machines could be had to better fit them for the test. First, we tried the draft of the Grain and Grass Harvester, made by Messrs. Sylla & Adams, of Elgin, Kane county, which is owned by us. This machine is novel in its construction, as it is so arranged that the binders (three of them) ride on the machine, the

raker raking them alternately a bundle each, while a platform extending back receives the bundles, until about a dozen accumulates when by pushing a lever the platform cants down letting the bundles slide off, and a spring then brings it back in place. It was cutting in heavy wheat, cutting five feet, and required four hundred and seventy-five pounds. Three men have no difficulty in binding; nearly or quite the labor of one hand is saved in shocking. If this machine will not do as much work as some others, it has the quality of saving more grain, and doing the work better, than any other machine. We are not aware that any of these machines are now made or sold; this and one in Coles county are the only ones of the kind that have found their way into this section of the country.

The next was an Atkin's machine on the farm of John Walkington, adjoining the Urbana Nursery. This was working with three horses, and Mr. W. says cutting 13 to 15 acres per day. The draft was 450 lbs. This machine was doing excellent work in heavy wheat, that will probably turn thirty bushels to the acre. We next went to the fields of Messrs. Carle and Thomas, in which is a thousand acres in one field, about dozen machines were cutting in this field, the first of which we tried was the Urbana Reaper, made by Wilson & Robinson. The measure inside the guards is five feet nine inches, draft 375 pounds in wheat of twenty bushels per acre, does excellent work and runs easy.

A hand raking reaper, of Seymour & Morgan's Patent was tried, cutting inside of guards, six feet, with a draft of 325 pounds, doing the work to a charm. The raking is well done, and stubble quite creditable.

A two horse machine of Manny's owned by Mr. Archer, measuring inside of guards — feet, required 450 pounds. This was a last year's machine, and not in the best order. Another machine, of same size, owned by E. Pierce, of this year's make, worked 375 pounds, and a four horse Manny machine of five feet five inches, draws 425 pounds; all of these machines did good work, satisfactory to the owners. The Seymour & Morgan patent works remarkably easy, and its owner, Mr. Carle, was delighted with it. All of these machines were drawn by four horses or mules, and no farmer here thinks of putting on less than three or four horses, even on the small machines. It is probable that spring wheat cuts easier than winter wheat, which may

account for the very common practice of using only two horses to the small size reapers in the north part of the State, where spring wheat predominates, but in cutting the heavy winter wheat of this section, two horses would make but poor headway with the great majority of reapers. We leave this subject with its weight of facts subject to the criticism and deductions of the farming public; for ourself we have no pet reaper whose claim we wish to advocate, but feel just pride that the swelling prairie, on which now glitters the golden harvest, has received so many valuable gifts from the hand of genius, to enable us to gather in with ease our vast harvest, which otherwise would return much of its rich burden back to the earth that gave it.

M. L. DUNLAP.

Traveling Pedlars.

MR. EDITOR:—We are certainly favored with Eastern tree pedlars. We have laws against persons going about in our State and selling goods on samples presented. Our legislators think such a practice not only favors imposition on our people generally, but takes business from those who pay taxes and support our institutions, and gives it to those who have no further interest than to take money from us and carry it to other States.

The tree peddling is liable to great abuse. I have heard several persons say who ordered trees by tree pedlars, that they were invariably deceived in their purchases—the trees were not such as they expected, and they are without any security that they are not the most worthless seedlings.

We have now a new species of peddling. Agents are about getting orders for drills, and farmers are giving orders without knowing what they are buying. There is a great difference in drills. Improvements are made every year; and some drills are worth nearly as much again as others. Stocks of drills are kept at Farmers' Implement stores, and there farmers can see them and take their choice. Vast improvements have been made since drills were invented, and it is not unreasonable to suppose that the first drills made, or poor drills, are put on to those farmers who buy them on the recommendation of peddlars.

We have men engaged in growing and selling trees, living in our State, who have come here to make a living out of the business, and who are responsible for the goodness of the trees and for the varieties they sell; and justice to them, as well as safety

to our farmers, require these nursery men to be patronized. They sell their fine trees, grown in our soil, larger and better, than do the peddlars.

The same general fact can be stated in regard to drills. No man should buy one without comparing the different kinds, and ascertaining for himself which is best.

“ONE WHO HAS BEEN BITTEN.”

HOW TO SET CABBAGE PLANTS.—Under a burning sun, it is sometimes difficult to make the young plants live. The rainy day, so much coveted for this purpose, is sometimes a stranger for two or three weeks, and much time is lost upon the crop. With proper care the plants may be put out and live, even in dry weather. The best time, if a rainy day cannot be had, is just at evening. The seed bed from which the plants are to be taken, should be thoroughly saturated with water to the depth of three or four inches. Then by taking up the plants gently with a small spade or trowel, a ball of earth will adhere to each plant, and if put out carefully they will live and soon become established. They should be watered as soon as set out to settle the dirt around the roots. If the sun comes out very hot it is a good plan to put a green leave of pie plant, burdock or cabbage, over them by day, removing it at night. By managing in this way, ninety-nine in a hundred of good plants will live. Never set cabbages in ground manured with the contents of the pig sty.

LAKE HURON GRINDSTONES.—We invite the attention of farmers, mechanics, foundrymen, and all who have occasion to use grindstones, to the card of J. B. Johnson, who is extensively engaged in the manufacture of these superior stones at Cleveland, Ohio. A supply of them is now kept in this city for sale.

ILLINOIS LAND FUND ACCOUNT.—An account has been adjusted by the Commissioner of the General Land Office between the United States and the State of Illinois for the three-per-cent fund accruing to the latter during the year 1856, under the provisions of the act of Congress, approved April 18, 1818, and a balance of \$13,791 69 found to be due the State of Illinois.

THE PIONEERS OF THE LEAD REGION.—It is proposed that the pioneers of the lead Region of Illinois, Wisconsin and Iowa unite on a jubilee sometime this season at such time and place as would be the most convenient, and compare reminiscences of their struggles, success and disappointments in the mines.

COMMERCIAL.

Springfield Market.

OFFICE OF THE ILLINOIS FARMER }
August 6, 1887.

FLOUR—Extra white, \$8 50; superfine \$8 00; common \$7 50
WHEAT—In demand. New \$1 10; White \$1 20.
CORN—Sales at 40@50 cts. $\frac{3}{4}$ bu.; white shelled for bread, 60 cts.
OATS—Sales at 42@50 cts. bu.
HIDES—Dry flint 14 $\frac{3}{4}$ lb.
BRAN—15 cts. $\frac{3}{4}$ bu.
SHORTS—fine, 100 $\frac{3}{4}$ cwt.
CHICKENS—\$2 00 $\frac{3}{4}$ doz.
TURKEYS—None
ONIONS—\$2 $\frac{3}{4}$ bu.
POTATOES—\$1 25; new \$2 $\frac{3}{4}$ bu.
APPLES—Dry \$3 50@\$4.
BUTTER—15@20 cts. $\frac{3}{4}$ lb.
CHEESE—11 cts. $\frac{3}{4}$ lb.
EGGS—12@12 $\frac{1}{2}$ cts. $\frac{3}{4}$ doz.
HAY—\$6 $\frac{3}{4}$ ton.
CORN MEAL—80c. $\frac{3}{4}$ bu.
HAMS—Smoked 15@16 $\frac{3}{4}$ c $\frac{3}{4}$ lb.
MOLASSES—80@85c $\frac{3}{4}$ gal; sugar house \$1.
GOLDEN SYRUP—\$1 20@1 25.
SUGAR—Brown, 12@15c $\frac{3}{4}$ lb.
TALLOW—10@12c $\frac{3}{4}$ lb.
BACON SHOULDERS—10@12c.
SIDE MEAT—13@15c $\frac{3}{4}$ lb.
LARD—12@15c.
BEANS—3 50 per bush.
COFFEE—Rio, 14@16 $\frac{1}{2}$ c $\frac{3}{4}$ lb; Java 18@20c.
RICE—8@10c
CLOVER SEED—\$8@10 per bu; Timothy, \$3 $\frac{1}{2}$ @4.
CANDLES—Tallow 15@20; Star 30@35c per lb.
PEACHES—Dry \$1 50.
SALT—G. A. \$2 25 $\frac{3}{4}$ bag; barrell \$3.
WHITE FISH—\$8 $\frac{3}{4}$ half bbl.
COD FISH— $\frac{3}{4}$ lb 6 $\frac{1}{4}$ c.
MACKEREL—No. 1, $\frac{3}{4}$ bbl \$18.
BROOMS— $\frac{3}{4}$ dozen \$1 50@\$2.
BUCKETS— $\frac{3}{4}$ dozen \$2 50.
VINEGAR— $\frac{3}{4}$ bbl 12 $\frac{1}{2}$ @15c.
WHITE LEAD— $\frac{3}{4}$ keg \$2 25@2 50.
LINSEED OIL— $\frac{3}{4}$ bbl \$1 10.
LARD OIL—\$1.15 $\frac{3}{4}$ bbl.
WHISKY—Common $\frac{3}{4}$ gal 35c; rye 60c.
ROPE—Manilla 15@20c $\frac{3}{4}$ coil.
NAILS—\$4.75@5.75 $\frac{3}{4}$ keg.
SOAP—Palm \$7@8 $\frac{3}{4}$ box.
CARB. SODA—7 $\frac{1}{2}$ c $\frac{3}{4}$ keg.
WOOL—Firm at 30 to 48c for common to full-blooded Merino.

St. Louis Market--August 1.

Flour—Sales 50 bbls scratched, at \$5 25; 180 do low grade extra and choice superfine, in lots, at \$6 50.
Wheat—Supplies consisted in most part of damp and dirty new, which were dull and sold at irregular rates—good and prime dry qualities are sustained. Sales comprise about 1600 bags, damp, dirty and mixed from \$1 10 to \$1 17; 385 bags slightly damp at \$1 20@1 22; 850 bags private; 258 bags good dry at \$1 25; 310 bags prime do at \$1 30; 116 bags choice old red and white at \$1 35@1 37 $\frac{1}{2}$.
Corn—Inactive, but firm. Sales comprise 620 bags prime yellow at 69@70c, and 56 bags white at 70c, in new gunnies.
Oats—Sales 170 bags poor at 57 $\frac{1}{2}$ c; 25 bags new at 65c, and 200 bags to arrive on Monday at the same; 50 bags old at 68c, and 300 bags prime do at 70@72c, in good bags.
Rye—Sale 51 bags at \$1 30, in bags.
Barley—600 bushels spring were sold to arrive at \$1.
Cheese—Sale 50 boxes in lots at 10c
Whisky—Sales comprise 428 bbls in lots at 26c, cash.
Rice—50 tcs were reported at 6 $\frac{1}{4}$ c.
Bags—Sales 2500 new osanburgs at 19c, 60 days, and 3000 No. 1 second-hand gunnies at 10c—an advance.
Apples—7 boxes new, containing about one bu each, sold at \$1 60 $\frac{3}{4}$ box—a decline.
Coffee—Sold during the week by one house 1500 sacks fair to prime at 11 $\frac{1}{2}$ c to 12c $\frac{3}{4}$ lb.
Sugar—100 hhd's during the week at private terms.
Molasses—Nothing heard.

New Orleans Cattle Market--July 24.

Arrived to-day, 230 Attakapas and Texas cattle. The market during the week was well supplied with hogs, sheep, milch cows and veal cattle. Western beeves were scarce. The market was moderately active at our quotations, viz:
Beef Cattle—Texas, Attakapas, etc., inferior. \$14@19; fair and choice, \$20@38.
Hogs 9@9 $\frac{1}{2}$. **Sheep** in lots $\frac{3}{4}$ head, choice \$5.50; inferior and ordinary \$2.50@4.50. **Milch cows** $\frac{3}{4}$ head \$40@75. **Veal cattle** \$6.50@10.50.

[By Telegraph.]

New York Market--August 6.

Flour 5c better in com. grades. Sales 5,000 bbls at \$6.25@6 50 for superfine state; \$6 70@6 80 for extra do; \$6 20@6 50 for superfine western; \$6 60@7 for common to medium extra do; Canadian steady; sales 300 bbls at \$6 35@6 50 for superfine; \$6 80@9 for extra.
Wheat firmer, sales 8,000 bushels; \$1 44 $\frac{1}{2}$; Chicago spring; \$1 51@1 53 Mill club, and \$1 90@2 05 new red and white southern.
Rye dull, \$1 10@1 13.
Corn market lower; sales 15,000 bushels, 86 $\frac{1}{2}$ @88 $\frac{1}{4}$ c for mixed western.
Oats firmer, 60@66 for state and western.
Provisions—Pork market firmer; sales 200 bbls; \$24 30@24 35 mess; \$19 50@19 60 prime.
Beef steady.
Cut meats firmer.
Lard better; sales 800 bbls 15 $\frac{1}{2}$ @15 $\frac{3}{4}$ c.
Whisky—sales 400 bbls; 31 $\frac{1}{2}$.
Stocks are dull and all down. Money firm with good demand and supply. Sterling exchange \$1 09 $\frac{1}{2}$ is firm; C & R I 95c; I C 99 $\frac{1}{4}$ c; M S 49c; N Y C 6s-85; Mo 6s 80; Lacrosse & Mil. 32 $\frac{1}{4}$ c; G & C 95 $\frac{1}{4}$ c; Erie 35c; O & T 59 $\frac{1}{4}$ c; M & M 54c; Harlem 10 $\frac{1}{4}$ c; Panama 91 $\frac{1}{4}$ c; Del & Hudson \$1 20; M S preferred 78c; Erie bonds 71-68.

New Orleans Market--July 31.

Cotton firm. Sales 900 bales at 14 $\frac{3}{4}$ @15c; sales last week 4300 bales.
Rio Coffee—10 $\frac{1}{4}$ @11c; prime 11 $\frac{1}{4}$ c; sales last week 590 bags; stock in store, including that at quarantine, 118,000 bags.
Mixed Corn—75@80c.
Mess Pork—\$24; stock in port 12,500 bbls; shoulders 11c.
Freight on cotton to Liverpool 7 $\frac{1}{4}$ c; to Havre 1c.
Sterling Exchange—10 shillings.

St. Louis Cattle Market--August 1.

Baldwin's Yards, Broadway—A light stock of good offering, with an ample supply of inferior and common. Fine to choice sell rather slow at 7 $\frac{1}{2}$ @8 $\frac{1}{2}$ c $\frac{3}{4}$ lb. The lower grades sell at 2 $\frac{1}{2}$ @3 $\frac{1}{2}$ c gross. Feeders are buying at those prices.
Hogs—Supply ample for the demand. Fair to choice sell at 7 $\frac{1}{2}$ @8 $\frac{1}{4}$ c. Shippers pay 6 $\frac{1}{2}$ @7c and the demand limited.
Sheep—Light stock offering and demand limited at prices ranging from \$1.25 to \$3 $\frac{3}{4}$ head, according to quality. **Lambs** sell at \$1.55 to \$2 25.
Cows and Calves sell at \$25@45 $\frac{3}{4}$ head and demand light.

New York Cattle Market--July 30.

The market at Forty-fourth street was abundantly supplied with Beeves to-day. In addition to 2,646 fresh cattle received during the week, there were some 150 head remaining from last week's sales, making the real supply 2,900 head. The footings at all the markets give 3,317 fresh cattle; against 2,953 for the previous week.

The following shows from what States the supply of beef cattle at Allerton's came:
 New York..... 334 Kentucky.....109
 Ohio..... 486 Indiana.....673
 Illinois..... 1014

The current prices for the week at all the markets are as follows:

BEEF CATTLE.		
First quality, $\frac{3}{4}$ cwt.....		\$11.50@12.00
Ordinary.....		10.00@11.00
Common.....		8.50@ 9.50
Inferior.....		7.50@ 8.00
General selling prices.....		9.50@10.50
Average of all sales.....		9.75@10.00

Land Warrants.

For a few days past, says Thompson's *Bank Note Reporter*, the call for land warrants has been quite active, and caused an advance; but the supply now is about equal to the demand. We now (July 27) quote:

Warrants.	Buying.	Selling.
40 acres	\$1.10	1 15
80 do	95	1 00
120 do	91	95
160 do	95	99

Chicago Cattle Market--July 20th.

Cattle—Market for common beeves is dull. Good fat cattle will bring \$4 50@5 $\frac{3}{4}$ $\frac{3}{4}$ 100 lbs gross, though 60 head of very fine cattle averaging some 1,200 lbs, sold to a city butcher at about \$4 50 $\frac{3}{4}$ 100 lbs.
Hogs—The range for fat hogs is \$5@6 gross, with few sales.
Sheep—They are dull sale at.

THE ILLINOIS FARMER.

SIMEON FRANCIS, EDITOR.

BAILHACHE & BAKER, PUBLISHERS.

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Inventors.

We can scarcely take up a paper at this time which does not contain accounts of the trials of mowers and reapers. We have now lying by us notices of the trials of these machines in St. Louis, in Indiana, Ohio, Maryland and New York. New machines have been presented for trial, and with few exceptions, it seemed to be admitted that the new inventions, in some particulars, had advantages over the old. Perfect as the old inventions have appeared to us, it is not doubted that, to borrow the language of the inventor of "Brown's reaper and mower"—"other inventions and improvements will follow until the farmer can attach his horses to a reaper or mower, with as much certainty that it will perform its work well, as he now does when he attaches his horses to his wagon or plow." These trials and those which will follow, will test the value of the new as well as the old machines.

At the recent trials great admiration has been expressed with the performances of the machines on trial. The farmer saw how much mechanical genius and science had done to lessen his labors in harvesting his grain and grass crops. Illinois Farmers could realize, that without these machines, their immense grain crops could not be secured. There are not laborers enough in Illinois to cut the wheat, rye, barley, oats, millet and grass, by the old mode of using the sickle, cradle and scythe. The agricultural machinery of this State—including thrashers, drills, broadcast sowers, horse rakes, &c—supply the place of an hundred thousand laborers. This machinery does more for our State than all the slave population of Missouri does for its owners.

We were glad to see that at one of the trials noticed, the hard-plodding, the laborious, the patient, the untiring, the worthy mechanics, who have brought into existence the agricultural machinery of the country, were not forgotten. And, indeed, they never should be forgotten by our right-hearted farmers.

The history of our Illinois mechanics, who have successively brought into notice, "Manny's reaper and mower," "Atkin's self-raking reaper and mower," "M'Cormick's reaper and mower," (this last machine was perfected in Illinois,) "Rugg's reaper and mower," "Haine's harvester," "Brown's reaper and mower," "Flagg's reaper,"—their first efforts, their frequent disappointments, their renewed efforts under great discouragements, and their final success—would be deeply interesting to those who can feel a sympathy in their struggles, in poverty, in opposition to the views of friends, and even, sometimes, when they almost lost confidence in their own powers to accomplish the object of their toils:

Hon. Marshal P. Wilder, President of the United States' Agricultural Society, at the recent trial of reapers and mowers at Syracuse, New York, delivered an address, in which he thus paid the homage due to the inventors and manufacturers of our agricultural machinery:

Reaping machines were in use in England towards the close of the last century. Since that period many improvements have been made and patents have been secured, but no very marked progress had taken place until towards the middle of the present century. A new era then commenced, and the entry of our American machines in the Loudon fair, awoke and directed to improve-

ment in this department, the inventive genius of America and Europe.

Much time, experience, and large expenditure have been involved in the production of improved implements of husbandry. Consider for how many centuries capital, science and practice have been at work to produce our present model ploughs. But the dispatch of our time requires a more rapid march towards the culminating point of excellence in this department of human industry.

The importance of labor-saving machines to the cause of American agriculture, it is scarcely possible to overrate, and the degree of excellence which we have already attained is a distinguished national honor. What American does not feel a generous pride in the success of these implements at the great Industrial Fairs of Europe, especially in our ploughs, reapers and mowers, distancig all competition, and exciting the astonishment and admiration of the world?

For these honors we would not forget our special obligations to you, gentlemen, the inventors and manufacturers of these implements. We welcome you as the authors and almoners of these blessings, as the benefactors of mankind. You have promptly and generously responded to our call, and have come up here as "Greek met Greek," in the ancient Olympic games. It was not the simple sprig or wreath of myrtle which fired their ambition, but the love of approbation, the desire to inscribe their names upon the roll of fame. But you are here for higher and nobler purposes, to relieve the fatigue of labor, to aid the conquest of mind over matter, to ameliorate the condition of your fellow-men, to make valuable contributions to the cause of civilization and improvement. Those who shall be crowned with success in this exhibition, we trust will bear mind that it is not the intrinsic, but the relative value of these national prizes which gives them pre-eminent importance. Those who obtain no other prize, will certainly enjoy the high satisfaction of increasing an honorable competition, multiplying facilities for improvement, and brightening the prospect of victory, on the return of our next annual contest.

NEW PATENTS.—Among the list of new patents issued from the Patent Office last week, are the following:

Grain Separators—Amasa Curtis, of Lena, Illinois.

Corn Harvesters—Israel Dodenhoff, of Bloomington, Illinois.

Crops in Illinois.

When it was found in spring that nearly the whole crop of winter wheat was destroyed in Central and Northern Illinois,—and added to this, a spring of unusual coldness and backwardness, our farmers were almost appalled by the prospect before them. It was, indeed, discouraging. The broad fields which they expected to see covered with grain, were as bare as the lands of the desert. But they went to work—procured all the spring wheat for seed possible—sowed this seed,—sowed barley, oats, flax seed, corn, millet;—the spring season was cold, backward,—but this weather, which kept the corn back, was just that required for the spring grains—and the result is, that we have now matured and harvested most wonderful crops of spring wheat, barley, oats, flax and millet—(the two last crops small in amount, because little seed was sown;)—and when the spring crops had advanced to a point beyond great danger, the weather became excellent for corn, and we have now in prospect a far greater and better crop of corn than was ever grown in Illinois!

From a well-founded calculation by the Chicago Press, taking into consideration all the facts of increase of population, increase of land cultivated, increase of products to the acre, the Press arrives at the following result as to the production of grain in the State of Illinois for the present year:

Production of Illinois, 1857.

Indian Corn, bushels.....	190,000,000
Wheat, bu.....	35,000,000
Oats, Rye, Barley and Buckwheat, bu.....	60,000,000
Total bushels.....	220,000,000

We are aware, says the Press, that these figures will startle by their magnitude many of our readers; but those of our own citizens, who are familiar with the productive capacity of the State, and who are aware of the impulse which railroads, agricultural machinery and high prices of breadstuffs have given to agricultural industry, will not be disposed to question their accuracy. If any one, however, either at home or abroad, is disposed to have doubts upon this sub-

ject, let him in addition to what has already been said above, consider what follows.

After some other comparative tables, tending to show that the above figures are not up to the ratio of former increase, the Press proceeds to bring more surprising evidence.

In 1850, the area under cultivation within the State of Illinois was 5,039,545 acres. There were little over 12,000,000 acres under fence, but only the foregoing area was actually under cultivation that year, a year of depression and of short crops. If we deduct from this area the amount devoted to meadow, to orchards, to turnips, potatoes and gardens, we shall have probably 3,500,000 acres of corn, wheat and oats, and by the census returns this area gave a total yield of 77,232,184 bushels, or an average of about twenty-two bushels per acre. At the present time there cannot be less than 12,000,000 acres under cultivation within the State, of which we suppose at least 10,000,000 are devoted to grain. We have already stated that the yield per acre in 1849, was unusually small, and that the yield this year is about the average. But in 1842 the average of wheat, oats and corn was about twenty-two bushels per acre; this year it will certainly not be less than thirty bushels per acre. If this estimate is not too high, then the production of this year should be 300,000,000 bushels, which is fifteen million bushels in excess of our estimate.

What is here shown by perfectly conclusive facts in regard to Illinois, may with like ease, to a considerable extent, be established in the case of every Western State. They are all marked by the most amazing growth in population, and increase of production. They are all turning out an incalculable yield on the capital and labor employed in them; and the "West" will show a heavier dividend, this year, in corn, wheat and oats, in beef and pork, and in railroad earnings--yes, and in "corner lots," too--than has been made on capital anywhere else invested in the civilized world.

Importance of Attention to the Breeding of Stock.

The Gardeners' Chronicle, London, gives some excellent advice; through a correspondent, Willoughby Wood, on this subject. It is equally important in America as in Great Britain. The points insisted on are: 1st, The propriety of using none but a pure bred bull to improve a herd: 2d, The stock to be liberally kept during the first year. "Bad breeding and early starvation, are the two main causes of deterioration among stock, and ought to be abandoned, along with undrained land, foul crops and crooked fences, as relics of an age less enlightened than the present."

The contrast between good and bad management in breeding cattle is thus graphically urged by Mr. Wood:

"He who wishes to lose by breeding," says Mr. Wood, "has only to follow the example of Mr. Thriftless, who buys at hazard any animals he may see at market, being guided solely by their nominal cheapness. He disregards the indications of breed, and pays no attention to uniformity of character, provided he has to pay a trifle extra for the qualities. Health and strength of constitution he considers as utterly unworthy of notice. When he has got together a heterogeneous assemblage of cows of all breeds and crosses, the next step is to find a bull. Here again, cheapness being the main consideration, he takes the first male animal which a neighbor offers him. He makes no inquiry as to pedigree, because 'he is not one of your fancy breeders.' For a similar reason, he is contented to overlook the most glaring defects of shape, and the fatal absence of quality. He deludes himself with the idea that the worthless mongrel is cheap, whereas, in reality, he is dear at any price.

"Thus does Mr. Thriftless glide down the easy slope of ignorance and indolence, until after the lapse of years, he finds, to his astonishment, that no entreaties will induce customers to buy his weedy, raw-boned mongrels, while they are eagerly contending for the thriving stock of his neighbor, Mr. Thoughtful, who has pursued a course in every respect the opposite to that which has entailed such heavy losses upon him.

"Mr. Thoughtful had a few good cows, of the ordinary Short Horn breed, on his farm, which he considered as well adapted for producing promising stock as they had

proved themselves for filling the milk pail—having discarded all which did not answer to this description, he neglected no opportunity of filling their places with others of a similar character, and thought little of giving a couple of pounds or so, over the market price for such as come up to his standard. But while he deemed liberality to be sound policy, whenever he recognized superior shape, high quality, and superior blood, he carefully avoided paying extra for mere condition, which was the result of high keep—for he possessed that rarest and most money making of all qualifications, the power of discerning merit in an animal when out of condition

“As regards his bull, Mr. Thoughtful actually had the extravagance to give a celebrated breeder 20 guineas for him at a week old. His reasons for committing this piece of folly, as it was regarded by Mr. Thriftless and his school, are, perhaps, not unworthy of consideration. In the first place, he knew the dam not only as the possessor of a high pedigree, but as one of the finest cows and best mothers in the country. He had seen former calves of her's grow up to fetch enormous prices. He was aware that his sire had cost 300 guineas, and that his stock proved him to be worth it. And he well knew, too, that if he waited until this calf was a year old, there would be no chance of his obtaining him for a sum within his means. He, therefore, deemed himself most fortunate that his offer, made before the calf was born, had been accepted, for he had thus become the owner of one of the best bred bulls in the neighborhood, at what he rightly deemed a very low price.

“Disregarding the offers which flowed upon him to part with the young animal, for which he even refused to name a price, he was in due course rewarded by witnessing the annual arrival of a healthy, even, handsome, lot of calves, from which he selects the healthiest and most promising to rear. Having an object in view, he keeps it steadily before him, turning neither to the right hand nor the left till he has attained it; and, therefore, declines the most tempting offers for his young stock. At last, the long-looked for day of his sale of heifers arrives. The concourse of buyers is numerous and influential, and the competition which ensues is such as had never before been witnessed in that neighborhood. His cows are well known as milkers, while the heifers are not only by Herd Book Bull, but are in calf to another of equal value.

His name is now established; he has by common consent achieved a success, henceforth all is plain sailing before him.”

The same judicious course pursued with Devon, Hereford, Ayrshire and Alderney cattle, produces a like result.

Seed Wheat, &c.

The following article should have been published in our last number. It may be of service even at this time. Much of the wheat is sown. The experience of the past years has proved that early sown wheat produces the best crops; that failures are much more frequent with late sown wheat than with that which is sown early. Experience has also abundantly proved that good crops are most likely to follow good cultivation. We cannot now afford in Illinois to cultivate crops badly. It is a great misfortune to a farmer to lose a crop. The land should be well and deeply plowed for wheat, and in nine cases out of ten the crop will be better if the seed is drilled in. Especially is this case with the late sown wheat. If the wheat is sown broadcast, the land should be afterwards passed over by the roller. The cultivator is an excellent instrument for putting wheat in corn land. We are told by those who ought to know, that a far greater breadth of land will be sown with wheat in Illinois, the present fall, than there was last year.

The following rules for the selection and management of seed wheat have the sanction of experience:

SELECT GOOD SEED.

1st. Choose a kind which has succeeded well in soil and climate similar to your own. Intelligent neighbors, who have raised good wheat, can help much in this matter. It is not well to try new experiments on a large scale, unless one is prepared to risk a considerable loss.

2d. Accept only that seed which is perfectly ripe and plump. Let no man impose on you by saying that smaller kernels will produce a greater number of plants from a bushel of seed. What is wanted is a strong vigorous growth of wheat plants. This you cannot effect from half-grown or shriveled seed.

3d. Never sow any but the cleanest

seed. You can tell by examining it what its condition is. If the seed is good in other respects, but is foul, clean it yourself. But be sure to have it clean at all events.

4th. Reject seed that has been kept damp, or has been heated. Seed that has suffered either or both of these injuries may germinate, but it has lost a part of its vitality, and should never be used for seed if better can possibly be secured.

5th. Do not sow mixed seed on the same ground. Let the seed of one sowing in the same field be of one kind alone. You will thus know what kind you are growing, and be able to compare results, with an approach towards accuracy.

6th. If possible, never sow seed which is more than one year, or at most, two years old. Old seed may grow well. But it may not. Prudence will suggest that seed should be used before it has been exposed to decay, to insects, to dampness, or to other injurious agencies. Experience has taught that some of these are likely to injure the kernel, if it is kept after the first year.

One way to get good seed is to select the cleanest and best spot in your wheat field; where the grain grows most perfectly and is most mature. Then harvest and thresh these portions separately, with the greatest care, and save the seed for sowing. Pursue this course for a number of years, and you will produce what will seem to be a new variety of wheat. But it will only be the same, developed and perfected in a higher degree. This operation for securing good seed will pay in every department of farming and gardening.

A good mode of preventing smut is the following: Spread seed wheat on the barn floor. Upon four bushels of wheat dash from 12 to 16 quarts of human urine. Stir the whole well together. Then add about six quarts of fresh slacked lime, and shovel the wheat over till the lime is evenly diffused in the wheat. It should be sown as soon after this preparation as practicable; for a long delay would injure its vegetative powers. This mode of treating seed wheat is deemed, in England, a specific against smut. It has been practised in America also by some wheat growers, who say it has been uniformly successful. Tar water will answer instead of urine, and is preferred by many.

☞ "Waiter, if you call this bread order me a brick. I want something softer."

☞ Many complain of neglect who never tried to attract regard.

The Nursery Business.

Of all the avocations in society, there is none more responsible than that of the nurseryman. In the various kinds of business pursued by our fellow men there is more or less opportunity for deceit and fraud. In the Nursery business there are peculiar facilities for deception. The purchaser depends entirely upon the representation of the Nurseryman, as it regards the various trees and plants which he obtains. If the Nurseryman is an honest and intelligent man and has managed his business with the strictest system, having his grounds so arranged as to have each variety of fruits and plants in its separate department, and has also given his personal attention to the grafting budding, &c., of the different varieties, so there shall be no chance for mixture or confusion, then, we say, the purchaser may and will obtain the varieties of fruit trees, &c., he desires. But if the nurseryman is not honest and lets his business run to loose ends, depending upon the help he hires, the purchaser will be disappointed. And what disappointment can be greater than for one to purchase a large collection of fruit trees, prepare the ground and plant them with the greatest care, watch over and nurse them year after year, trim and train them into nicely formed trees, with expectations that they will repay him for all the care and anxiety bestowed upon them, and hoping in the evening of life to enjoy the fruits that have been cultivated and nourished by his own hands, and as he thinks he is about to enjoy them, finds that he has been deceived. That the money paid for the trees has been squandered and worse, that the use of the ground, the labor bestowed upon them, have been lost, that the affection which had been formed from his long intercourse with them must be turned into hate, and the trees in all their beauty must be cut down because they do not bear good fruit. Instead of the finer varieties of fruits which he bargained for, he finds he has only the poorest seedling trees. What must be the feelings of a man, we ask, to find that he has been so outrageously deceived by his nurseryman? His work must all be done over again. But the next trees we warrant will come from a man whose word can be relied upon. Now this is no fancy sketch.—Cases like these we have heard of repeatedly.

The above, from the Valley Farmer, is well said. We are aware that our farmers, in this fast State, have little leisure on their

hands. Hence they credulously listen to the tales of tree-pedlars; and pay their money for stocks of trees, at high prices, on the bare word of men who are here to-day and gone to-morrow. They can buy any variety of trees from these men. They are sometimes known to transform an apple tree into a cherry, with just the label the applicant desires. When their eastern stocks of trees are exhausted, they sometimes supply themselves with the refuse stock of our nurseries.

We say to the farmers of Illinois, that we have as good nurseries in our State as there are any where; that they are conducted by responsible men, who will send trees true to the name; and all must be aware that trees grown in our soil are better fitted for planting out here than those brought from a distance and much injured before they arrive.

If our readers desire fruit trees and will send us orders, we will forward such orders, to be filled, by responsible nurserymen of our State.

The Chinese Sugar Cane.

There was a good deal of the seed of the Chinese Sugar Cane planted in the spring, in this and the neighboring counties. Generally it promises well. Some has already attained the height of eight feet. Wm. G. Cantrall, Esq., of Cantrall's Creek, has already some of this height (August 5.) Many inquires are made for mills to express the juice. It is not expected that persons who have a small patch can afford to purchase good and effective mills at a cost of \$110. Mills must be got up cheaper than such to make experiments. The lamented Mr. Orth, of Wabash county, informed us that his mill for making his first experiments cost \$10;—that it was made of wood, and precisely in the form of the old cider mill, only the cylinders were smooth.

We have an abiding confidence that good molasses can be made of the juice of the Chinese Sugar Cane. We have seen many specimens of such, and know that the mo-

lasses was fine. But every one will not succeed in making molasses. We like the following remarks of the Pennsylvania Farm Journal on this point—

There will be a multitude of disappointments, or all the past has taught us nothing. Some may make sugar out of it—some may make syrup—some will get molasses, and some a stuff which neither men, dogs nor mules would like to own—and some will get just nothing at all. Some will fail because failure is inevitable in their circumstances—some because some men always fail, and some because they have no suitable light on the subject. Why should there not be failures, even though the thing be as good as claimed? Do not some men fail in taking care of a flock of sheep, or in running a Reaper, or in churning butter? How much more in a new thing, the suitability of which to our climate is yet to be proved?

Still, some men will succeed, and ultimately with more experience, knowledge and care, all may succeed.

Messrs. Hedges, Free & Co., of Cincinnati, are manufacturing mills for expressing the juice from the cane, and also boilers or pans for evaporating it. Their circular will be interesting to those who are growing the cane, and others who are looking to its cultivation in the north for supplies of the saccharine.

Strawberries.

August and September are suitable months for setting out new strawberry beds, and if the plants are set out well, in properly prepared ground, they will be likely to produce some fine fruit next summer. The ground should be enriched with rotten stable manure, and if trenched two feet deep it will be the better. Plant out immediately after a rain and when the weather is cool, if possible. Put the plants about nine inches apart, and after bearing next summer take out half the original plants. The plants should be in good order when put out. Mr. M. L. Dunlap, at his nursery at West Urbana, Ill., has three varieties of the strawberries, the most hardy kinds, and which ripen successively through the whole strawberry season. He says that he has tried numerous varieties and has discarded all but these. They can be sent

from his nursery, by express, to all the principal points of this State. Every farmer should have a strawberry bed.

We annex communications on this "strawberry" subject, from the Pioneer strawberry cultivators in Cincinnati and Newark, New Jersey:

CINCINNATI, July 12, 1857.

Editor Western Farm Journal:

SIR—In the publication, in which the strawberries I sent to your Horticultural Society, is named, the root containing 104 berries, is called the McAvoy Superior. It was the Extra Red, which I deem the most valuable to cultivate for market, from its great beauty of color, large crop, and uniform good size. In aroma, flavor, and size, I deem that McAvoy's Superior has no pistillate rival. That where raised for family use, it has no competitor. But is too soft to carry, even one or two miles, except in a spring wagon. I had a crop of Wilson's Albany Seedling in fruit this season. My impression is, that it will be a valuable market fruit. It is hermaphrodite, and my impression is, that it will bear a full crop of perfect fruit, and proves, as our Prolific does, that from seed, we may raise a chance seedling, perfect in both male and female organs. We have never seen one of its perfect character from England, where they hold to the doctrines of the great Linnæus, that all strawberry plants, are perfect in both male and female organs; that a plant entirely defective in stamens, or one entirely defective in pistils does not exist. Yet, where we raise seedlings, hermaphrodites, like angels' visits, are "few and far between." They believe if we have such plants, in their soil and climate, they would change their character. The justly celebrated Mr. Downing, published that this change had taken place in his garden. I shall believe these statements to be true, as soon as the Boston spiritual committee allows me to believe in spiritual rappings. Until they do, I shall believe that Mr. Downing had a "strange bull jump into the pen." Mr. Boyden, of Newark, New Jersey, has a new hermaphrodite seedling, that I saw in fruit, recently in his garden. It is of extra large size, great vigor of growth, and ripens later than other plants, and appeared to bear a full crop. Seth Boyden ranks as their first inventive, manufacturing genius, and leading horticulturist. I had them in bearing this spring. I called on him last spring, to buy plants. He refused to sell, but insisted on giving me all I wanted. I was com-

pelled to yield. He has been recently induced to sell. His integrity is undoubted, and I would advise persons to purchase from him. He resides two miles below Newark, New Jersey. His Post Office is Irvington, New Jersey. Yours, &c.,

N. LONGWORTH.

P. S. The city of Newark has been benefited greatly by his inventive genius. But he knows not the value of money, and is poor.

NEWARK, N. J., June 16, 1857.

To the President of the Farmer's Club:

DEAR SIR: Desiring to benefit the public, and at the same time incidentally to serve an old and valued friend, induces me to send with this, a strawberry plant in fruit. This strawberry is the results of experiments, by Mr. Seth Boyden, one of the most intelligent horticulturists in the country—resident in Essex county, New Jersey, near this city.

The fruit, it will be observed by the specimens herewith, is of extra large size, measuring four and a quarter to four and a half inches—some of the berries last year measured five and five-eighths inches—is of good flavor, fine color, firm, and of a glossy waxy appearance. It is a seedling of the Scotch Goliath, hybridized with Hovey's Seedling, and although it has some of the characteristics of each of those fruits, it surpasses them both in several particulars. The plant is thrifty, growing and hardy—the original plant, now four years old, being as thrifty as ever—more than an average bearer, and like Longworth's "Prolific," every flower produces a perfect fruit. It is about ten days later than the Hovey and Longworth, but it compensates for its tardiness in commencing, by its constancy and continued productiveness after it does begin—continuing to fruit after other varieties have ceased to bear, yielding a much larger amount of fruit than either of its progenitors. Though Mr. Boyden has done much in advancing horticulture, it is mainly as an inventor and manufacturer that he has benefited his country. It is to his genius we are indebted for the introduction of the manufacture of Patent Leather and Malleable Iron into this country; and it is to him the world is indebted for the invention of the "cut off" to the steam engine, now universally adopted, the first one being made and put into operation in this city. Retiring from these pursuits, which have conferred so much benefit on his fellows, though yielding him nothing, he has, during the

past few years, devoted himself to the more agreeable and quiet pursuits of horticulture, and the plant before you only foreshadows something better to come from his fruitful experiments.

Mr. Boyden's method of "hurrying up" nature in producing plants from seed the same season, struck me as curious and valuable, and will doubtless be new to many. He picks the first ripened fruit, and having mashed it upon sheets of paper and dried it, he places the paper which contains the seed under a tin pan in which he has previously placed a freezing mixture, when having become frozen sufficiently, say in about half a day, the seed is presumed to have passed through a winter. The seed is then planted, and in about six days the young plants appear. Mr. B. has, in one instance, with the seed of the "Alpine," produced fruit in this manner the same season, but in all cases the fruit is obtained the next season, thus saving one year by the freezing process.

Should any of your club or correspondents desire to obtain plants from Mr. Boyden's variety, (and everybody should have them,) they may be procured by addressing him at Irving, New Jersey.

Very respectfully, &c.,
MARCUS L. WARD.

Directions for Sugar Making.

PHILADELPHIA, July 16, 1857.

Editor of the American Agriculturist:

DEAR SIR: A reply to your inquiries in relation to the requisite instruction for arranging mills, boilers, tanks, fitters, coolers, &c., and then also, the "modus operandi," after all are ready, will be rather difficult to give in a manner satisfactory, even to ourselves, with the light before us. We have spared no pains or time in collecting information to enable us as far as possible to give to others engaged in the pioneering of this new sugar cane movement. We shall do the best we can, however, and urge those engaged in it to be thorough in experimenting, try all the modes and means known, and be sure to keep some careful record for future use. In the course of two weeks we expect to be in possession of the results of a test in Florida, near Orange Springs, which shall be made public whatever it is. Mismanagement has deprived us of the use of the cane we had planted in the hot house for early test. The first that will be worked besides that in Florida, will be at Gov. Hammond's about the 10th or 15th of August. Col. Peters tells us that his 70 acres of "Sorgho," is now about six feet high and will be ready from 1st to 15th September; he has some earlier planted that he will work about the 20th of August. On this he uses a two horse mill just being shipped by us,

and a steam power mill for his large crop. He only designs, making syrup or molasses except, perhaps a small experiment with sugar.

The cane must be allowed to mature fully, not attempting to work it until the seed is fully out of the milk, and as some of the tillers will be rather later than others it will no doubt be better to throw them out for fodder than jeopardize the rest. The leaves should be stripped off before cutting and the top cut off with the seed some two and a half or three feet down, as there is not much saccharine juice in the upper end. Then, if your apparatus is ready, cut and grind as fast as you cut, and boil as fast as you grind, since the less time the stalks or cut cane is exposed the better. The juice, if concentrated by the usual process will pass through two sieves—first No. 8 and then No. 16 set over a large tin funnel immediately under the mill (which will be set about three feet from the ground upon three posts firmly bedded in the ground about three feet.) This funnel is contracted to a pipe of two inches diameter and running under ground past the horses track, and entering a tank either lined with tin or painted thoroughly, and varnished so as to be impervious to the juice and easily washed clean, when left idle for even one hour. The juice is raised by tin buckets or tin or copper pump from this to a clarifier. This may be of sheet iron No. 8, and about 12 inches deep and large enough to fill your first kettle, and set higher with draw off pipe and stopcock entering at the bottom. This clarifier is set so that the heat is applied under it after leaving the range of boilers and may be shut off by damper into another side flue, while you discharge this pan. The heat being applied slowly, a thick scum rises and when near boiling you change dampers and draw off until the juice begins to show sediment or scum, then clean the pan and fill again, and so on. Now in this first kettle you add lime well slacked and sifted, until your juice will not change the color of litmus paper (which can be got at any drug store quite cheaply.) While the juice is acid it will change it to a reddish hue, and if thus boiled will neither granulate nor keep sweet as molasses. With our two horse mill of rollers 17 inches long, we use three boilers holding 60, 40 and 20 gallons, with the latter immediately over the fire and set with flaring walls or jambs, rising above each about 6, 8 and 10 inches, and completely cemented with water-lime. The last or 20 gallon boiler should be higher than the 40 and that above the 60, so that the scum will run through the gap into the next kettle behind successively. The scum should also be thrown back whenever accumulated into the hindmost kettle. If you have no experience in testing the syrup in the "battery," a thermometer made for that purpose, can be obtained in most large cities for a dollar or so. It requires to be graduated up to say 250°, as about 240° Fahrenheit is considered the proper point. Should the heat rise above this you must open your fire doors and throw over the fire, an armfull of begasse from the mill, and then discharge the syrup as quickly as possible and refill from the next kettle, thus continuing successively.

The coolers into which you discharge may be of good clear white pine without paint inside, and 12 inches deep, and large enough to hold four charges, and then left to cool and granulate or if you make molasses only, you will use barrels, staves of oak and heads of pine or cypress thoroughly made.

In regard to crystalizing the sorgho sugar, we, to-day, went with Col. Peters, to the sugar refinery of Messrs. Eastwick & Brothers, No. 73 Vine street, of this city, carrying with us some sugar made from the sorgho, by Col. Peters, in Georgia, and by Mr. Wray, in France. These specimens were subject to the severest chemical test, and examined under a powerful microscope and both proved to be true crystalizable sugar and not glucose. As the examiners are perhaps not surpassed for accuracy in this country, not even in Boston, we deem these experiments highly satisfactory. They promise a public report of the examination soon.

Yours &c., HEDGES, FREE & CO.

From the Cleaveland Wool Reporter.

Wool Trade of the United States.

A Philadelphia merchant has received in reply to a note forwarded by him to an Eastern manufacturer now in the West, the following communication, respecting the present condition of the Wool-trade:

"OHIO, July 7, 1854.

I could recount transactions enough that would require a longer letter than I am disposed to write, which confirm all you say of the foolish system of buying wool in the West. Incompetent and irresponsible men, who buy for one cent. per pound commission, do a vast amount of injury. I know an instance where an agent from ——— came to the lower part of this county last week, and said 'he was going home that night, for he expected when he did go, to find an order to stop buying.' He continued purchasing for three days, and then returned and found his employer, who was a sub-agent under an agent in C., who was an agent for an Eastern house, and he was withdrawn. I saw the wool which he bought at 48c., between one half and three-fourths blood, and rough at that. Good wool growers are discouraged, and all incentive to improvement is lost, because four and a half pounds of fleeces of grease and some wool, sell as high as two and half and three pound fleeces. ———'s agent has paid here 55c. for wool that you or I would think dear at 45c. and the same price for best clips, that were well worth the money. Farmers complain and justly too, and the consequence is that only few good clips are left in the country. Spanish, French, and all manner of hybrid stock is introduced to obtain weight of fleece, and then to encourage the farmer, and give him a premium for fraud, some reckless buyer will pay this class of growers for their filth, grease, and a little wool, about as much as for clean wool, providing the price is within the limit given him by his employer, and all this that he may get one cent per pound for purchasing. I have ridden through this county for two weeks, and closely scrutinized the

flocks, prices asked and obtained, and must say, as the result of my deliberate judgment, that unless a change is made in the system of buying wool in this country, not another five years will pass before our manufacturers must abandon their business, or rely on foreign wool. No mill can make money and pay 50 and 55 cents for grease and dirt, when they think or believe they are buying wool. Many manufacturers never know this fact until it is shown in their 'loss account,' and then it is not attributed to its proper cause. In one evening, there was 30,000 pounds bought in this place—much of it never seen by the buyers—on contract closed with farmers who came into the village just at the right time to profit by the excitement in the mind of ——— and ——— agents for ———, and all because I had calmly and coolly examined and bought one good clip at 55 cents, and while ——— was buying 50,000 pounds in forty hours, and ———, say 25,000 pounds, I bought just five clips. You can see the effect upon the minds of growers by such operations. Mr. ——— of your city, has an agent here who has bought 25,500 pounds for him, at high prices, without any discrimination or judgment. He is a good scavenger to take up that which a good judge does not want. His lot as a whole, is rough and low for a fine wool section. What we want is men of brains and experience, when we may hope for improvement in the manner of western wool buying."

From the Wool Reporter.

I have been looking at the law upon "foot rot in sheep," and without reflecting upon those who made or passed it, I will set forth my views thus:

1st. Foot rot is an epidemic but not contagious.

2d. I would be as much mortified to have it in my flock as I would to have my family die with itch, and so should every man.

3d. That (if we have a law at all) it should be on the ground of brutal abuse, and its penalty penetrating to the man allowing it in his flock 24 hours. This is somewhat new ground, but I hold myself prepared to prove if necessary.

The above is an outline of an article I was preparing for publication, but concluded to just throw the thing up to you in this paper and see what the demand might be for more.

C. C. HUDSON.

TO DESTROY GRUB IN THE HEAD OF SHEEP.—Make a hole in a standing board, 24 inches from the ground, and large enough to let a sheep's nose through up to the eyes. Let one man hold the sheep in this position, and another with a syringe throw up each nostril of the sheep a slush of yellow snuff and water, strong enough to make them sneeze, and they will thus throw out the eggs of the fly that are deposited in July and August. A. W. ALLEN.

NORMAL UNIVERSITY.—We understand that the contractors have already commenced operations on the ground where the building is to be erected, and that the work will be pushed forward to a speedy completion.

THE GRAZIER.

The opinion appears to be coming general, that the English horse cannot be farther improved by a cross with the Arabian. If running qualities are to be the test of value, the following article from the London News would seem to show that an English mare of not remarkable qualities was able to beat in a race some of the best Arab horses in Egypt.

From the London News.

"FAIR NELL," THE IRISH MARE THAT BEAT THE PACHA'S ARAB.—A short time since, some sensation was created by a paragraph which went the rounds of the press, stating that an English mare, in a race of eight miles, had beaten the best Arab in Egypt, by a full mile, doing the distance in 18½ minutes, and pulling up fresh. On inquiry, it was found that the Arab was the property of Haleem Pacha, a son of Abbas Pacha, who, it will be remembered, about three years ago, challenged the Jockey Club to run any number of English horses against his Arabs, for any sum not less than ten thousand pounds sterling. The Jockey Club, which makes rules for racing, and by its stewards fixes the weights of certain matches and handicaps, does not own or run horses in its Club capacity, and declined to take up the challenge. It was said that Abbas Pacha would not accept a challenge from any private individual; and the reputation of his stud (which had been collected at an unlimited expense, with the power of despotism,) was so high that the owners of good horses were afraid of risking their reputation in a foreign country, over a long course of sand and gravel.

However, the other day a party of Cairo merchants made up the match above referred to, for about £400, and won it so easily that they now find it impossible to make another. We learn through private sources that El Hami Pacha, the youngest son of Abbas Pacha, who inherited his studs, not less than 300 in number, still fancies that he could find a horse that in a twenty-mile race would beat the European mare; but, although quite young, he is so indolent that he seldom leaves his harem; and it is doubtful if he will take the trouble to make the necessary preliminaries for a race. About the result there can be no manner of doubt. No Arab in the world can go through a day's racing with our best thorough-bred steeple-chasers and hunters—not even the stock of Disraeli's Star of the Desert, jockeyed by Sidonia.

Fair Nell is supposed to be thorough-bred; her sire, according to the best information, was the celebrated Irish horse Freney, to whom she bears a strong resemblance, both in appearance and temper, but she is not in the stud book. She is a beautiful light bay, with black legs, standing fifteen hands one inch and a half high, with a game, determined head, very lengthy, with beautiful shoulders, arms and fore legs, back and hind quarters, with very powerful thighs. She is a delightful mare to sit when going; her

stride is great, strong and elastic, and from her form, she gives the feeling of "plenty before you." She is a hard puller, with a good mouth, graceful and easy even when plunging most violently. In hunting, she rushed at her fences at a terrible pace, but never made a mistake. As a hack, she was most luxurious, but at times it was a real work of danger to cross a crowded road with her. In the stable she was perfectly quiet. She was purchased in Ireland, by a well known old Irish steeple-chase rider and groom, Andy Rogers, for a gentleman of Bath, who found her too spirited and uncomfortable for a hunter, and sent her to be sold at Hethrington's stables in the Edgeware road. Not finding a purchaser, she was put up at Tattersall's, where she was set down by the crowd as a "raking Irish devil," and found no favor.

After being withdrawn, Mr. Edmund Tattersall, the junior partner of the firm, was so struck with her shape and beauty that, against the advice of his friends, he bought her as a park and cover hack. She often carried him sixteen miles within the hour, including stoppages, to meet, and back again in the evening, at the same rate, without showing the least fatigue; and was perfectly pleasant as long as ridden alone, and with fine hands. Although more than once offered on loan to racing men, by her owner, who felt sure she must win a long race over deep ground, no one ventured to try her; a mistake evidently; for it turns out, that, on her trial in Egypt, before the race, she did five miles in ten minutes and a half.

Eventually, Mr. Hethrington applied to Mr. Tattersall, to purchase Fair Nell back for the merchants of Cairo. She was in low condition when she was shipped, yet ran and won her race within two months from the time of landing.

At various times, our Indian Generals and Governors have imported the best Arab blood they could procure. Among these the Welsley Arabian was one of the most celebrated. Our sovereigns have received presents from Arabian and Egyptian Princes, which have been crossed with the best blood of the Hampton Court stud, but nothing brilliant ever came of the cross, although we have heard of some fair hunters, and astonishing ponies. Of course it will not pay to breed small hacks or ponies, which, if ugly or blemished, cannot be sold for omnibus work.

Cattle Breeding.

It is stated in the London Quarterly Review that the effect of Sir Robert Peel's tariff in abolishing the duty on the introduction of live stock into England in 1844, was to revolutionize the character of Dutch and Danish farming. Before that event the pastures of the two countries were chiefly devoted to dairy purposes; but immediately after, "the farmers began to breed stock, and consequently turnips and mangel-wurtzel have been creeping over fields, where once the dairy-maid carried the milking pail." The Jutland beef is described as being especially savory, and some of the animals sent to England by the Danes are acknowledged to

be equal to the Durham short-horns. The Americans are said to be the best customers of Great Britain for fancy specimens of stock; and the prices we pay them for bulls are described as fabulous by the Reviewer, who instances as in point, the fact that an American gave last year a thousand pounds for the celebrated bull bred by Earl Ducie, which, by the way, unfortunately broke its neck in the passage out; and that, for another from the same breeder, six hundred pounds was paid.

Diseases of Sheep.

JOHNSWORT SCAB, OR ITCH.—That pestiferous weed called Johnswort, if growing abundantly where sheep are pastured, will cause an irritation of the skin, often over the whole body and legs of the sheep; but generally it is confined to the neighborhood of the mouth. If eaten in too large quantities, it produces violent inflammation of the bowels, and is frequently fatal to lambs, and sometimes to adults. Its effects when inflammation is produced internally are singular. The writer has witnessed the most fantastic capers of sheep in this situation and once a lamb, while running, described a circle with all the precision of a circus horse; this was continued until it fell from exhaustion.

TREATMENT.—Anoint the irritated parts with hog's lard and sulphur. If there are symptoms of inflammation of the stomach, administer—putting it into the mouth with a flattened stick. Simply hog's lard is used frequently with success. Remove the flock to pasture free from the weed, and salt freely. It is said that salt, if given often to sheep, is an effectual guard against the poisonous properties of the weed.—[Morrell's Shepherd.

PELT ROT.—This is a disease of the skin, as the name implies. It causes a premature falling off of the fleece in the spring of the year. It is produced by exposure during the winter, and low condition—the latter principally.

PREVENTIVE.—Good shelter and good keeping. Let the wool fluid be kept healthy and abundant, and there will be no danger of any attack from this disease.—[Ib.

INFLAMMATION OF THE LUNGS.—This is by no means an unfrequent disease among sheep. It is caused by cold and wet pasture—chills after hard driving—washing before shearing, when the water is at too low a temperature—shearing when the weather is too chilly and wet, and other circumstances of a similar description. Its first indication is that of fever—hard and quick pulse—disinclination for food—ceasing to chew the cud—unwillingness to move—slight heaving of the flanks, and a frequent and painful cough. The disease soon assumes a more aggravated form, but farther description is useless; it is sufficient for the farmer to know the first stages of the malady, and then pursue the course of treatment which experience determines as best.

TREATMENT.—Bleed and purge freely, and secure the sheep in some comfortable place, free from all exposure to the vicissitudes of the weather. Let no irritating food be given.—[Ib.

HORTICULTURAL.

The Rebecca Grape.

This is a new grape, which was first brought to notice near Toronto, Canada. A writer at that place thus describes it:

I am with the merits of this vine. In the first place, I will say that I did not tell the whole truth about its size and productiveness in my first notice of it, because I thought the story was large enough as it was; but now that it is depreciated by some, I will say that instead of producing three barrels, it will produce five if the grapes were all made up into wine. And now, as to the quality of the wine. I have submitted it to the best judges, these in parts, and without exception, they have pronounced it a superior article, quite equal to the best Port wine, which it very much resembles. It sells readily at \$2 per gallon, and some has been sold for \$2 50. Now Uncle Sam, beat this—five barrels wine, 36 gallons each, is 180 gallons, which at \$2 per gallon would bring \$360. This \$300 worth of wine is from one vine in one season, while 75 cents would cover all expenses.

I will give you as correct a description of it as I can. In its general appearance it more nearly resembles the Clinton than any other with which I am acquainted, yet it differs very much in some particulars. The vines of the Clinton are of a dark color, while this is more like the Isabella. The leaves resemble the Clinton very much, but are larger, and have a more glossy appearance. It is also the hardiest and earliest grape with which I am acquainted. At this present date, the fruit is as large (in a few instances) as buck-shot. I measured to-day one of the longest shoots of this year's growth, and found it to be nearly seven feet. The clusters are not very compact, and sometimes very loose, and will hang on the vines for a long time after being ripe, without injury from the weather. For culinary purposes it is esteemed above every other kind which we have here, making a splendid jelly and preserve. It yields of wine 100 per cent., a gallon of grapes making a gallon of wine.

Currants as a Market Crop.

We have just seen a single branch or limb of the Cherry Currant, raised by Messrs. Wells & Provost, at Yonkers, N. Y. This branch is about 15 inches in length, and half an inch in diameter, and yet contains fully three-fourths of a pound

of berries, the smallest of which are 1 1-2 inches in circumference, and the largest over 1 3-4 inches. These cultivators are putting out thirty acres of this variety, to raise fruit for preserving. We have also before us splendid bunches of the Cherry Currant, grown by C. F. Erhard, of Ravenswood, L. I., who is raising a large stock of the plants for market. The berries before us are 1 1-4 to 1 5-8 inches in circumference. Another gentleman, whose name and residence we did not learn, recently brought into our office specimens berries still larger than either of the above.

These, and many other specimens we have seen, give abundant evidence that there is sufficient opportunity to improve upon the old stereotyped small varieties, hitherto the standard crop. We are testing several varieties of the newer sorts, and shall be able to report by another season. So far, we incline to place the genuine Cherry Currant ahead of all others. There are some sold as such, which are not the genuine.

Common small currants now sell readily in this market for 5 to 6 cents per pound, and the best large improved varieties bring 10 to 12 cents.

Let us look a moment at the profit of raising currants at present market rates. Planted in rows four or five feet apart, they can be plowed and hoed between with ease. At four feet apart, 2,722 busdels will occupy an acre. At a very moderate estimate, each plant will yield five pounds. These, at only five cents per pound (less than half the present price,) will give \$685 50 as the product of an acre. This certainly shows a fair chance for profit on this crop. Usually the yield will be much larger than we have given above, on plants three years old and upward, and the price of the improved varieties we have named, will seldom, if ever, be so low as five cents.—Am. Agriculturist.

THE GRAPE CULTURE.—Since the failure of all attempts in this country to legislate a temperance reform, or coerce by law the disuse of intoxicating liquors, the next movement, and it seems to us a very salutary one, is to extend the cultivation of the vine and the manufacture of wine, so as, if possible, to make native wine take the place of native whisky as the common drink of the people. In various quarters we hear of the planting of vineyards and renewed attention to grape culture. Every friend to temperance must wish success to these efforts. It is very certain that if wine drinking could

be substituted for brandy or whisky drinking there would be less drunkenness than there is throughout the land, because experience has proved the fact in other countries. There is now a salutary dread of drugged, medicated and manufactured alcoholic liquors. Pure wine would have a better chance now than pure other drinks are hard to obtain.—[Alexandria Gaz.

Washington, A Horticulturist.

We are apt, from all that has been published, to look upon Washington as a farmer on a large scale, but when we approach him nearly, we find him also a gardener and a horticulturist. In reading Irving's new life of the great Statesman, it is difficult not to extract a passage here and there, and to-day we must be indulged in this respect.

In a letter to the Chevalier de Chastellux, for whom he felt an especial regard, he says:

"I will only repeat to you the assurances of my friend, and of the pleasure I shall feel in seeing you in the shade of those trees which my hands have planted; and which, by their rapid growth, at once indicate a knowledge of my declining years, and their disposition to spread their mantles over me before I go hence to return no more. (Vol. iv. p. 455.)

A few pages forward, we come upon the following passages, from the graceful pen of Mr. Irving:

"He had a congenial correspondent in his quondam brother-soldier, Gov. Clinton, of New York, whose spear like his own, had been turned into a pruning hook.

"Whenever the season offers, and an opportunity offers," writes he to the Governor, "I shall be glad to receive the Balsam trees, or others which you may think curious and exotic with us, as I am endeavoring to improve the ground about my house in this way." He recommends to the Governor's care certain grape vines of the choicest kinds, for the table, which an uncle of the Chevalier de Luzern had engaged to send from France, and which must be about to arrive at New York. He is literally going to sit under his own fig tree, and devote himself to the quiet pleasures of rural life.

At the opening of the year 1785, the entries in his dairy show him diligently employed in preparations to improve his groves and shrubbery. On the 10th of January,

he notes the white thorn is in full berry; on the 20th, he begins to clear the pine groves of undergrowth.

In February he transplants ivy under the walls of the garden, to which it still clings. In March he is planting hemlock trees, that most beautiful species of American evergreens, number of which had been brought hither from Occoquan. In April, he is sowing holly berries in drills, some adjoining a green brier hedge on the north side of the garden gate, others in a semicircle on the lawn. Many of the holly bushes thus produced are still flourishing about the place, in full vigor. He had learned the policy, not sufficiently adopted in this country, of clothing his ornamented grounds as much as possible with evergreens, which resist the rigors of our winters and keep up a cheering verdure throughout the year. Of the trees fitted for shade in pasture land, he notes the locust maple, black mulberry, black walnut, black gum, dogwood and sassafras, none of which, he observes, materially injure the grass beneath them.

Is, then, for once a soldier's dream realized? Is he in perfect enjoyment of that seclusion from the world and its distractions, which he had so often pictured to himself amid the hardship and turmoils of the camp? Alas, no! The "post," that "herald of the noisy world," invades his quiet, and loads his table with letters, until correspondence becomes an intolerable burden.

The Apple Tree Borer.

This is a great pest. It is believed to have been imported from Europe. Orchards are often ruined before the cause is suspected. The farmer should have an eye upon his orchard at all times;—especially should he examine the trees for the borer during the spring, summer and fall months.

An exchange contains the following which furnishes as much information on the subject in a small compass, as can be found any where:—

MESSRS. EDITORS—Can you or any of your numerous correspondents, give me any information in regard to "borers" in apple trees—their nature, and the remedy to be applied? In examining my trees I find that nearly all are more or less injured by "borers," and some past recovery. In a new country like ours, this is a very serious matter, and I should like much to hear from

some of your correspondents upon this subject. I find in talking with my neighbors, that the trees all through this part, are troubled like my own. C. E. BLOSS.

Shiawasse, Mich., July 15, 1857.

There is no doubt that the apple tree borer has become widely spread through several States, and that many have their orchards infested with it, who do not at all suspect its presence, who never saw it, and indeed who may know that such a depredator exists. Its inconspicuous appearance leads to this oversight.

The perfect insect or beetle varies from 5-8ths to 3-4ths of an inch in length, the males being smaller and more slender. It is covered with a fine whitish down, and has three brownish stripes. These insects deposit their eggs in the bark of the tree, near the surface of the earth, in the early part of summer, and only by night, when they are numerous, they often lay their eggs higher up, and in the forks of the larger branches. To prevent laying their eggs, soft soap deposited in the forks and rubbed about the bottom, has been found efficacious. Downing applied a mixture of tobacco, water, sulphur and soap, with success; but Dr. Fitch thinks all its virtue lay in the soap. When the eggs hatch, they produce a small maggot, whitish, with a yellowish head. It eats into the bark, and discolors it for a small distance around and if the dry outer bark be scraped off at the end of summer or first of autumn, these dark spots will show where they are commencing their depredations, and now is the time to kill them most easily, which may be done at this stage by washing the scraped bark with strong ley.

At a latter stage they cut into the sapwood, and throw out their saw-dust, when they may be punched to death with a small twig. Still later, and when larger, they go into the heart wood, and now for the first, pack their saw-dust excrements into the hole after them, rendering it more difficult to reach them. Hence the importance of taking them early.

We would recommend every orchardist to look closely to his trees at all times—to coat with soft soap early in summer—to scrape the outer bark later in summer, for the dark spots, if he has any reason to fear their presence, and to kill the young maggot at once. If left later, their presence is shown by the saw-dust appearances around their holes in the bark, when they must be cut out with a knife, or punched to death. At any stage the knife may be

freely used to cut them out, for wounds by cutting are better than death by the borer. At all times exercise watchfulness and vigilance, and be satisfied with nothing short of actually killing the insect.—[Country Gentleman.

AGRICULTURAL.

Benefits of Agricultural Fairs.

No fact is more apparent to the reflecting mind than the immense benefits Agricultural Fairs have contributed to our material prosperity. They have contributed more to our vigorous growth as a nation than all the gold California can pour into our country for ages. They have awakened a spirit of inquiry in the breasts of thousands, who have elaborated and made known their experience to the world, through the agricultural press, contributing their experiments to the general stock of information (which at best is made up of atoms) garnered together—a rich legacy of facts, from which the principles of truth shall be deduced by the hand of the future historian. All this has been done quietly. The silent step of agricultural progress has not been noted by the world, as it should have been, for the simple reason that it took time to nurture in man the high obligation he owed to his Maker, his country and himself, to so use and develop that which was entrusted to his hand, that it might be improved, and the true design of our Creator carried out.

And what is an Agricultural Fair? Is it a place where the most superior specimens of agricultural produce are exhibited to the view of the visitors? Yes. What then? is that all the object, the aim, the end, to be accomplished? If so, let them go by the board. But a higher object to be accomplished—has been, and will continue to be—the interchange of thought among those who have produced the articles on exhibition. It is in this light that Agricultural Fairs are accomplishing the grand results which will continue to rank us as a practical farming and progressive people. It is not enough that we should see the superior crop of grain, &c., but we

should have the man before us, and know by what process he produced it, so that we may know and realize the facts which are brought before us in its most practical term. It is not enough that we see fat cattle, but that we see the husbandman who produced them, that our less fortunate husbandmen may, by inquiry and observation, be aroused to the necessity of doing likewise—so that the object of the Fair may be the means of perpetuating the progressive spirit of political and rural economy.

Fairs, rightly conducted, are great stimulants to good and thorough cultivation of the soil. Nothing is so well calculated to create as healthy a feeling, or develop so thoroughly the true dignity of Nature's noblemen, as this theatre, where all meet in the exhibition of the arts of peace and usefulness; where those who have failed to realize their fond anticipations from the exhibition of their products, rejoice in the success of their neighbors. It is this feature which endears them to all good men who know the wants of our farmers, and who have, from the earliest stage of their existence, stood by them, believing they were destined to accomplish as much good in their sphere of usefulness, as education has in hers.

The benefits accruing from Agricultural Fairs are of a two-fold nature, and apparent to all. Where the Fairs are made an object of attraction, you will find the greatest amount of thriftiness and prosperity prevailing in the sections which contribute to and take an interest in their prosperity. The benefits flowing from them are not to be estimated in a pecuniary sense. There are benefits conferred on the agricultural interest through the influence of this institution, which command our most hearty admiration and respect for those public benefactors of our race who have nurtured and expanded this germ, so that agriculture should take once more her rank as one of the most honorable pursuits of man.

—Eli Thayer has purchased seven steam engines, equal to 540 horse power, for the saw and grist mills, to be erected at his free soil city, Ceredo, Virginia.

The Chinese Sugar Cane.

The time is now rapidly advancing when the value of this new plant, for saccharine purposes, will be determined. If it should prove what many anticipate, it will add a most valuable article to our list of plants, and but less valuable than corn or wheat.

We feel a deep interest in the results of experiments the coming autumn. Generally the plant will not be sufficiently advanced in ripeness for trial until next month. We have heard of one small experiment in this county, by Mr. Lucius C. Francis. He had some forward plants, and near the middle of last month he expressed the juice from some of them, boiled it and made a beautiful molasses. He has an acre of the cane, and will make a mill for the expressing of the juice. He feels encouraged to persevere in an effectual trial.

Some trials have already been made in South and North Carolina, which are noticed in the newspapers.

The following are the earliest notices we have seen of this year's crop of Chinese Sugar Cane: We should be pleased to hear from any of our friends upon the subject.

A correspondent of the Columbia, S. C., Times says:

On Saturday last I had the pleasure of inspecting a very good quality of molasses, produced from the Chinese Sugar Cane, grown by Dr. D. W. Ray, a planter in the Fork.

The specimen proved to be of superior quality, a half gallon of which (molasses) had been extracted from only twenty stalks.

I learned that Dr. Ray, who is one of our most successful and influential citizens, has planted only four acres in this cane, and that he is satisfied he will be able to extract from it fifteen hundred gallons of syrup, which, if equal to the specimen inspected, will be regarded by the heads of families quite acceptable for table use, to say nothing of plantation purposes.

Richard H. Smith, Esq., of Scotland Neck, N. C., writes to the Raleigh Register that he has made an experiment with the Chinese Sugar Cane, with the following results:

From three unripe joints of the cane, about one gill of juice was imperfectly ex-

tracted, and after having been boiled for half an hour, a table spoonful of very good molasses was obtained—superior to the common grades of molasses.

I write this to encourage those persons who have planted the cane, to go to work and make their mills, and give it a fair trial.

If they have not cane enough to justify the expense of a mill with wooden rollers, let them extract the juice, as I have done in this instance, by using the edge of a piece of thick plank or scantling as a lever-power. Make the experiment if with a pint of juice only.

From the great yield of juice and the simple process required in making the molasses, I have no doubt of its complete success, and that the day is not distant when the sugar-mill will be as common with our people as the cider-mill was years ago—when every family will make their own molasses—and the children—white and black—will eat bread and molasses, and drink “switchel” to their heart's content.

SUGAR FROM THE CHINESE SUGAR CANE.--

Some of our theoretical college professors, in public lectures, have labored to produce an impression on the public mind, that sugar, made from Chinese Sugar Cane, would be of the variety known as grape or manna sugar, technically termed glucos. In a communication transmitted to this country from Alexander Vattemare, in Paris, and written by the distinguished French Savan, Vilmorin, this opinion is directly opposed; Mons. Vilmorin knows of what he writes. The following is his letter:

[Translation.]

PARIS, April 20, 1857.

To Mr. Alexandre Vattemare:

SIR:—The crystalization of the sugar of the Sorghum, it seems, should be easily obtained in all cases where the cane can be sufficiently ripened; and as the proportion of the sugar is an unfailing index of ripeness, it follows that we could always be sure of obtaining a good crystalization of juices whose density exceeds 1.075, while weaker ones would not yield satisfactory results after concentration. I attribute this peculiarity to the fact that the sugar is preceded in the juice by a gummy principle, which seems to be transformed at a late date, for its proportion diminishes in exact correspondence with the increase of the sugar. The uncrystalizable sugar, or glucose, undergoes the same changes; that is to say, it is more abundant before than

after the complete maturity, but its action seems less prejudicial to the progress of crystalization. The gummy principle obstructs it in two ways; for, beside being a serious obstacle to the commencement of crystalization, it afterward renders it almost a matter of impossibility to purge the crystals if obtained. However, as I observed, this difficulty only presents itself in the employ of unripe canes; for, as soon as the juices acquire a density of 1.080 and more, they contain but little else than crystalizable sugar, and their treatment presents no difficulty. The lime employed, to a slight excess, is not detrimental, it seems to me, in practice, as theory would perhaps indicate. Perhaps a slight fermentation, which is inevitable, may disengage enough carbonic acid to destroy the uncrystalizable compound formed by its union with the sugar. The fact is, that the best crystalizations obtained have been had in those experiments in which I feared to have used too much lime. I should remark that heretofore my operations have been but on a small scale, and it is necessary to be very prudent before applying the experiments of the laboratory to practical operations; but at all events, it seems to me, after all these trials, that the crystalization will not meet with serious obstacles wherever the plant attains a complete maturity.

[Signed]

VILMORIN.

To Clean Cockle out of Wheat.

MESSEES. EDITORS:—Having written you about chess, I will say a few words about cockle, which I have found far more trouble in clearing out of my wheat and land than chess. I sifted the cockle out by hand for some years when I first began farming here; but this I found a slow process, the scives here being so small. Afterwards I went to a fanningmill maker, and ordered him to get a screen made for my fanningmill, considerably coarser than those in use. After getting that, and by letting the wheat run slowly through the mill, and turning slowly, all the cockle ran through the screen into the box under the fanningmill. In that way I got clear of cockle. True, a considerable quantity of small wheat ran through the coarse screen along with the cockle, but it was not lost, and I had made clean seed far better to raise wheat, in place of the chess and cockle. I guarantee that the plan for cleaning both chess and cockle will answer. I also guarantee that neither will grow unless sown either by man or beast. So long as my woods were not

fenced, I saw lots of chess, cockle and pigeon weed growing there, from the droppings of my neighbors cattle.—[Genesee Farmer.

— In many places the potato vines are infested with ravenous bugs. Mr. J. Myers writes from Whitehall, New York, July 24, a remedy as follows:

On the 16th instant I discovered my potatoes affected in the same manner, and immediately caused them to be thoroughly dusted with slaked lime and plaster, which was repeated two or three times while the dew was on, which has effectually cleared them and the tops are now looking as fresh and green as ever. Ashes no doubt will answer a good purpose in the absence of lime. Plaster I consider of less importance. I have great faith in the experiment, and advise ever one to test it immediately who have potatoes effected."

Hereditary Diseases of Cattle.

Mr. Finlay Dun, in a prize essay on this subject, in the Journal of the Royal Agricultural Society of England, mentions as the most important hereditary diseases of cattle, diarrhoea, rheumatism, scrofula, consumption, dysentery, malignant tumours, and the affections depending on a plethoric state of the body. The characters which cattle should possess, in order to perpetuate in their offspring a healthy and vigorous constitution, he gives amongst others the following:

"The head small, muzzle fine and tapering, nostrils large and open, the eyes full and lustrous, ears small, and not too thick, the head well set on the neck, the distance between the ears and the angle of the jaw short, but the width behind the ears considerable (no dairy cow should have a short thick neck,) the chest wide and deep; the girth, taken immediately behind the shoulder, should closely correspond with the length from behind the ears to the rise of the tail; the carcase of a barrel shape, for a tain, flat-ribbed animal eats largely, thrives badly, and is unusually liable to diarrhoea; there should be little space between the prominence of the hip and the last rib, the quarter large, the measurement from the prominence of the haunch backwards to the rise of the tail, and downwards to the hock, as great as possible; the lower part of the haunch thick and broad; the hide thick and pliant; smallness of bone is a sure indication of early maturity and aptitude for fattening: These, amongst other characters and qualities enumerated by Mr. Dun indicate the possession of a vigorous and healthy constitution and freedom from all inherent disease."

— "Let us, then, be up and doing,
With a heart for any fate;
Still achieving, still pursuing,
Learn to labor and to wait."

THE DAIRY.

The great cause of the neglect of the Dairy in our own region of the State, is the want of female help acquainted with the process of making butter and cheese. The ordinary female help upon our farms does not enable families to give attention to this very profitable part of farming business. There is a great lack of good butter and cheese in our markets;—so much so, indeed, that if we desire to supply the demand, we must go into some other State to procure the butter and cheese demanded by consumers here.

We repeat the poor supply of butter and cheese in our market, arises from the want of suitable help in farmers families. Our foreign born young women, who go out to work, will not go into the country. They prefer to live in the cities; and indeed, but few of them have sufficient knowledge of the art of making butter and cheese, to get up a good article. Milk can be had. Our prairies and our pastures furnish feed for cows in summer, and we usually have an abundance of food for them in winter.

What we want is a supply of young women from the butter regions of the Eastern States to come here and also from the Dairy Districts of England, Scotland, Ireland and Germany. Such women, accustomed to country life, would find full and profitable employment in the families of our farmers—should they choose to accept such situations—and emigrants, with some means, who are acquainted with the Dairy business, and who would locate in the neighborhood of our cities and towns, could also find profitable employment in turning their attention to this branch of farming. Butter has been worth since January last until this time (close of August) from fifteen to thirty cents a pound—generally twenty and twenty-five cents. These would be deemed great prices in the dairy districts of New York and New England. Cheese brought to market, in a green state, has sold here at eleven and twelve cents per pound. Cannot the Dairy business here be made profit-

able? We think so. Let families provide themselves with competent butter and cheese-makers, and we think they can make it a profitable business. We are sure it would be of great benefit to the country.

THE POULTRY YARD.

What are the most profitable variety of fowls for keeping? This depends on circumstances. If you live on a farm, where fowls have plenty of corn and grain for feed, and which if not used by them, would be wasted, I believe a cross of the Shanghai, Brama or Cochin China, would pay as well as any other. These fowls crossed on the common dunghill, make chickens which will weigh five or six pounds. Their flesh is not as fine for eating as the common dunghill, being coarser and less juicy; still, they are good eating, have substance, and are good layers. The large race of chickens, however interesting in their appearance, however musical in their crow, are monstrous feeders, and a half dozen of them, kept in the city, will cost as much to keep them as it would to keep a good sized hog. They are a nuisance in the cities—at least they have been to me. What we want is a race of small fowls which are good layers, and will give us eggs pretty much the year round with liberal keeping. In the towns, there is no use in trying to raise chickens. They are very annoying and a great deal of trouble.

Can you tell, me, Mr. Editor, what kind of fowls are best for my purpose, and where I can get the fowls I desire? **A.**

[They books say if you want fowls to lay, the Bolton Greys or Creoles, Black Spanish and Poland, are best. These have little disposition to set; but where you can get these fowls, is more than we can say. Probably you can supply yourself at the State fair, if you should be there.]

 The crop of corn is ripening slowly. The probability is that a good deal will be injured by frost, unless we have hot weather and the frosts keep off later than usual.

FLORIST.

It will soon be time to plant out hardy bulbs. This may be done in the latter part of this month, and indeed they will do well if you wait a month later. This should be done in the fall. Spring planting will give little satisfaction. You should now provide yourself with tulips, hyacinths, crocus, snow drops, narcissus, hardy gladiolus, &c.

If you desire that these bulbs shall put on their handsomest dress in spring, you should prepare a bed for their reception that will secure the best development of their flowers. In doing this, in our black soils, the bed should be made some three feet wide and as long as you please; it should be raised eight inches above the surface and the soil improved by a mixture of one-third river sand and some thoroughly rotted manure. The bulbs should be put into the grounds in rows, at least eight inches apart. Do your work in this manner and you will have a show of flowers that you may be proud of.

Fine bulbs of the varieties named can be had at the nurseries.

The American Short Horn Herd Book.

THE THIRD VOLUME.

The following very just remarks are from a correspondent of the *Ohio Farmer*. We shall be breaking no confidence, and to many telling no news, in mentioning that his signature is that of Rev. Dr. Breekinridge of Kentucky.

Lewis F. Allen, Esq., of New York, published in 1846. "*The American Herd Book*" in one vol. 8vo., of 240 pages. In 1855 he published an additional 8vo. volume of 608 pages, with the title "*American Short Horn Herd Book*," vol. ii. And now, in 1857, he has published a 3d vol., containing 718 pages 8vo., under the title "*American Short Horn Herd Book*" vol. iii: this volume being just issued from the press of Jewett & Co. Buffalo New York, and in the course of distribution to the subscribers for it.

All three of these volumes, and especially this third one, are illustrated with numerous engravings, showing precisely what the Short Horn is. This last volume contains also, several prints of very great value, showing what the Short Horns *were*: for example a superb likeness of Collins' famous bull Comet, and of Bates' famous cow Dutchess—likenesses which may well make the breeders of the present day pause, before they assert that we have made

any great improvement in this stock, in the last half century; and which ought to put to rest, with us, the question of close breeding, when we reflect on the pedigrees of these two animals, and on the pedigrees and character of their principal descendants, down to our own day.

This volume is got up in a beautiful manner and brings down with great completeness the history of the Shorthorns in America, to the present moment. We are now in possession, through the skill, intelligence, and industry of Mr. Allen, of an almost perfect *record* of all the animals of this race, and of nearly all their breeders and owners, in this country—a record as indispensable to those interested in this stock, as a public repository of land titles is to the owners of the soil. If, with such advantages, breeders see fit to remain in ignorance on these vital points, or to stand aloof from this common movement of our great brotherhood, for our common interest and security, they have, of course, a perfect right to do so, upon condition, however, of the inevitable risks attending any such course. Moreover, a great deal is due to the enterprising gentleman, who at considerable risk, and with so great labor undertook and has carried through a work of such magnitude and difficulty, the more so, as he is undoubtedly the fittest man in America, for the work he has done. It is not less our duty than our interest, to see that he shall not fail either of just remuneration or the sincere respect, to which he is so eminentiy entitled. We have no interest more clear, as Shorthorn breeders, than that Mr. Allen should continue to preserve and issue in volumes, from time to time, these permanent records for us; saving us alike from the evils of ignorance, and the dangers of imposition, and securing to us the cheapest, the surest, and the most enduring method of knowing each other, and all the herds in the nation, while we advertise our own under the guarantee of an upright and competent judge.

The immense and continued extension of the Shorthorns in this country and the perpetually increasing demand for them in all countries suitable for them, and always at remunerating prices, have already brought this race of animals into such a position as to make them one of the great *staples* of all the Middle and Western States. Their present owners and breeders have a mine of wealth in their hands; and the satisfaction, besides, of knowing that they are conferring a lasting benefit on the country, while they are pursuing one of the most rational, engaging and remunerating forms of rural economy. Let us be at once wise and just in our treatment of Mr. Allen, who has reduced to perfect order, out of great chaos, the vital matter of our pedigrees, and to whom we are so much indebted, by this means, for the prosperity of this great interest. AGRICOLA.

—The total value of real and personal property in Chicago and Cook county, for the year 1857 is \$42,875,543.

EDITORIAL NOTICES.

The Orchard.

No farmer can afford to be without an orchard. The great object with him is to know how to make one. In the first place, the land must be suitable. Technically it should have a dry bottom;—that is, when trees are planted out, the roots should not stand in water half the year. It should be a warm and generous soil. Then seek for your trees. Get them where you can rely that you obtain the varieties you want; and see to it that you get good trees. They should not be kept out of the ground so long that the trees, although the bodies may look well, are sure to die. We have known trees brought from a distance to do well. This is the exception, not the rule. Packages of trees thrown on to the deck of a steam boat, placed near the boilers or where they are heated by sun or fire, will soon lose their vitality. And this will be the case too, when brought from the east, and suffered to remain for a time by the road-side, or on open cars, or otherwise exposed to the weather. Some of these trees may live; but there are five chances to one that many will not. We venture to say that of the thousands upon thousands of trees brought from the east and set in our prairies, not ten per cent. of them are alive.

If you want good apple trees, take some one of the catalogues of our nurseries (and you can find many of them at the Illinois Farmer office,) and select the trees you want, make out your order, direct where they are to be sent, send a reference, if you are not known to the nursery man, that you will pay, and when the season arrives to receive your trees, you can have them;—you can rely upon the variety sent you and of the excellence of your trees. Plant them out as directed in the catalogue furnished you, and you will be quite sure of having a good orchard, when your neighbor, who pays for foreign trees, will be likely to be cursing the "Yankees," when he ought to curse his own stupidity and folly.

Now is the time to plant strawberry beds.

Illinois County Fairs.

We wish we had a full list of the times at which the different County Agricultural Societies will be held. Some of them commence on the 1st of the present and others as late as the first week in October. Of the counties in our neighborhood, Cass has already held her fair; Morgan commences her's on the 8th September; Tazewell on the 18th; Logan on the 9th; Macon on the 30th; Menard, October 7th; Christian, October 21st. The Sangamon Fair will commence on the 15th September, and continue four days. We understand that the farmers of Macon county are determined to make an exhibition which will throw into the shade all the previous exhibitions in that county. Every farmer should attend his own county fair and as many others as he can find it convenient to do.

Hams, Bacon, Lard.

This is a great country. It produces hogs in abundance. Pork pays a profit at \$3 a hundred pounds; and yet at this time, with a large crop of hogs the last year, our market is, we may say, entirely bare of Hams, Bacon and Lard.

Why is this so? Pork brought a high price last fall, and our farmers sold every thing of the hog kind to packers (saving a scanty supply for themselves,) that would bear the name of pork hogs. These hogs were cut up, packed or smoked, and the lard worked up, and the prices of all were so high in distant markets, that the packers sent the whole production out of the country.

Now if some of our farmers had kept their hogs, packed them, or made bacon of them, saving their land, too, for our home market, they would have nearly doubled the amount for which they sold their hogs! This is so, and some farmers see their folly. They sold their hogs for about five cents and have since been glad to buy bacon at fifteen cents, and lard for the same price per pound.

And this is going to be the case next

year—if not worse. Hogs will bring this fall six cents per pound—at these prices they will sell all they have—and the next year will see the same state of things that we do now! We make this prophecy—and we base our judgment on the fact that but few people learn anything by experience—not enough to change the general result; but those who do, “will put money in their purses.”

Be Cautions in Time!

There is abundant evidence, that while foreign demand is lessening for our agricultural productions, the importation of foreign goods is increasing. What is to be the result? We know that when a family buys more than they sell;—when they purchase a thousand dollars worth of goods in a year and sell but five hundred dollars' worth, they are in a bad way. They must have money on hand to the amount of five hundred dollars to pay over, or they are very likely to suffer serious distress and have to give up their stock or farm to their creditors. Loss must result in this case:—if we do not sell as much abroad as we purchase abroad, the nation must be growing poor, and though we may have the cash to pay the balance against us, yet the paying out of this cash and sending it out of the country will be very likely to produce commercial distress and hard times, which may be felt even in the Far West.

The New York Journal of Commerce presents the following statement:

“The imports of foreign produce and merchandise at the port of New York, for the month of July, are larger than were ever before landed at any port in the United States during a single month. The total value landed during the month was \$10,083,874 larger than for July of last year; \$19,491,259 larger than for July, 1855; and \$15,571,856 larger than for July, 1854.

The quantity thrown upon the market was still greater, as it included \$10,470,820 withdrawn from warehouses, while only \$6,796,835, were entered for warehousing. Thus the total on which duties were paid was \$36,513,563, and to this may be added the free goods, making \$38,968,898 of mer-

chandise thrown upon the market. The value of foreign goods entered at this port during the first seven months of the current year is \$22,711,393, in excess of the corresponding total for 1856, \$72,473,257 greater than for the same period of 1855, and \$41,687,908 greater than for the same period of 1854. The cash duties paid in July amounted to \$6,987,019, against \$5,441,544 in July of last year.

The total foreign exports from New York since January 1st, exclusive of specie, is \$3,178,175 less than for the corresponding seven months of last year, but \$7,137,699 greater than for the same period of 1855, and \$5,257,673 greater than for the same period of 1854. The specie exported during the last seven months amounted to \$26,026,439 against \$19,501,927 for the same time last year.

We must exercise caution in time. This policy of the country, long pursued, will produce hard times. This cannot be doubted. We have money yet to pay our foreign debts, but this will not last always. The sending of money away will make it scarce at home. A great demand of money by importers, is felt by jobbers, then by the retail merchant and then by the consumer. All we wish to say is—be cautious. Buy only what you need. Pay your debts as fast as you can. And be especially careful about promising to pay for wild land when you have more now than you can properly cultivate. Better by far expend your labor on your present farm, making it yield double its present amount, than to half cultivate and get half crops from twice as much land. We repeat, buy only what you need and pay for it. Paying time must come. The merchant must pay, and you must pay him. There is no dodging in either case.

A NEW SEED DRILL ON A NEW PRINCIPLE.—We have often thought that, at the present time, there was more mechanical genius engaged in inventing, perfecting and manufacturing agricultural machinery, than was likely to receive its proper reward. We are often surprised and astonished at new inventions of agricultural machines. Scarcely a week passes that there is not some new machine presented for the patronage of farmers.

One of the new machines is called “Em-

mert's Patent Roller Tine Wheat Drill, Broadcast Sower and Corn Planter." We have seen the instrument which, it is said, will perform all this work, and it is not a complicated machine. The improvement claimed in this machine over others, consists in the placing of wheels similar to rolling cutters on plows, so that the axles of the machine are in front of the drill teeth or plows, thereby preventing, in the progress of the machine over the ground, any obstructions from collecting on the points of the plows, and thus closing the machine. These obstructions are often met with by the ordinary drills, by coming into contact with sods, stubble, or corn stalks. The cutters also open the soil, cut through obstructions, and will cut down into the toughest sod, where the seed will be deposited. One man and a good team can, with this machine, plow and sow from eight to ten acres per day.

The owner of this machine warrants it to work in cornstalk or stubble ground, and at the same time sow the seed as deep as if the ground had been plowed. This machine can also be made to sow broadcast and cover the seed better than it can be covered with a harrow; and it can also be changed so as to plant corn without first cross plowing.

The machine, as we repeat, is warranted to sow from eight to ten acres of small seed in drills or broadcast per day, and plant from fifteen to twenty acres of corn per day, all with one man and a good team. And this machine costs less than the common drill.

There is one of these drills now standing among the crowd of drills, corn-planters, corn-shellers, corn and cob mills, Pitt's thrashers, and numerous other articles of agricultural machines, near the Journal office, North Sixth street, and for sale by Francis & Barrell. So much is said of this drill that we are desirous of seeing it tested by some of our farmers. It is manufactured by the inventor, E. Emmert, Franklin Grove, Lee county, Illinois.

The fair grounds in Macon county are one and a half miles from Decatur. They are well fenced, have an abundance of good water, and other conveniences. Persons out of the county desiring to enter stock and other articles for competition, will please address Jas. Shoaff, Esq., Decatur.

Miss Juliana May, the American Prima Dona, arrived in the Atlantic after an absence of more than six years.

15th September, instant.

The Fair of Sangamon county will commence on the 15th of the present month—one week from next Tuesday—and will continue four days. Sangamon county has been famed for her agricultural fairs. Her farmers, among the best and the richest of the State, have brought to them for exhibition the best of their flocks and herds—the best of their grain, fruits and vegetables;—our mechanics have furnished fine specimens of their respective branches of industry; our millers their best specimens of flour; and we have had, in a very striking manner, illustrations of the handi-work of the ladies in the several departments of domestic cloths, ornamental needle work, plain needle work, made up clothing, quilts in great variety and excellence, food, bread, cake, preserves, condiments, butter and cheese, and various other articles, which has made our annual exhibition a fair index of the wealth, the industry, the business, and excellent taste of the people of Sangamon county.

When spring opened, the weather was adverse to the farmers' interests, and all our people felt a sympathy in the fears, doubts and distrusts which pervaded the country in regard to the coming crops. Gradually the season progressed for the better—seed time came, late, it is true—and the early crops have matured and are harvested, and, with the single exception of wheat, they were better than ever witnessed in this part of the great West. Spring wheat has yielded as high as forty fold; oats as much; and barley, in many cases, more than fifty fold. The meadows have been fine, and we are assured that food for man and beast will be abundant for the coming year. Our farmers have great cause to thank the Giver of every good and perfect gift, for the favor He has extended them in giving success to their labors.

County fairs are an institution which can scarcely be too highly appreciated by our farmers. There, within a limited circle, are exhibited the choicest results of their agricultural labors, skill and taste, for the preceding year. There come together, after the toils of the season, our industrious sons and daughters, to meet together and exchange congratulations—to witness the improvements in stock—in implements—in grains—in vegetables—in the mechanical arts—in all the various articles which make up the great annual display. Peculiarly is this exhibition worthy the farmers' encouragement and patronage by his presence. There we can witness evidences of *progress*,

that great principle, whether in agriculture, in manufactures, in all those arts which make up the comforts of human life, that should be the aim of all true men and woman, If we remain without effort to advance, we retrograde, and we do not fulfil the behests of Providence or the spirit of the age.

For these, among many other reasons, we are anxious that the farmer and mechanics of Sangamon county, and including the ladies, should be present at our fair, and should bring of their best, to make the fair worthy of themselves and of the county. It is manly duty in us to make a fair worthy of ourselves and of Sangamon. It is a noble object to bring the young farmers together, to encourage them in their labors, to disseminate taste in the rearing of the best stock and grains and fruits, and the presence of the ladies adds to the pleasures and usefulness of the fair—indeed, without their presence and encouragement, it would lose half its value.

We learn that a large number of the premium list for the coming county fair have been disseminated through the county. If persons desire more copies they can obtain them by calling on the Secretary of the Society, S. Francis, or any of its officers.

There are some departments of the fair to which the ladies of our city, as well as the country, make contributions, absolutely essential to their success. We desire to call their special attention to these departments, at this time—so that they can make the arrangements necessary to fill them. The ladies will excuse us for adding to this long article, a list of the premiums in those departments to which we especially refer.

CLASS H—NO. 23.

C. W. MATHENY, Superintendent.

MILL FABR CS.

Best lot of cloths, satinets, blankets, &c., from one manufactory, Diploma and \$5 00

HOUSEHOLD FABRICS.

Best 10 yards jeans	2 00
do do linsey	2 00
do pair woolen blankets	2 00
do pair woolen socks	1 00
do woolen stockings	1 09
do do do by girl under 12 years	1 00
do 10 yards wool carpet	3 00
do 10 do rag do	2 00
do 10 do flannel	2 00

CLASS H—NO. 24.

NEEDLE WORK.

Best evidence of skill in needle work	\$10 00
do do ko silk embroidery	3 00
do do do thread do	3 00
do do do by girl under 12 years	2 00
do plain fine skirt	2 00
do do do by girl under 12 years	2 00
do quilt, silk patch work	5 00

do do cotton do	5 00
do worsted spread or quilt	3 00
do satin vest made by a lady	3 00
do child's dress	3 00
do evidence of skill in silk embroidery on velvet	3 00
do do worsted embroidery	3 00

CLASS I—NO. 27.

P. BRECKINRIDGE, Superintendent.

HAM, BREAD, WINE AND CIDER.

Best two loaves wheat bread	\$2 00
do do do corn bread	2 00
do ham cooked	2 00
2d best do	2 00
Best sponge cake	2 00
do pound cake	2 00
do jelly cake	2 00
do cookies, 2 lbs	1 00
do crullers, 2 lbs	1 00
do keg of cider	3 00
2d best keg of cider	2 00

CLASS I—NO. 28.

PRESERVES, PICKLES, HONEY, &C.

Best preserves of any kind	\$1 00
do apple preserves	1 00
do peach do	1 00
do quince do	1 00
do strawberry do	1 00
do jelly of any kind	1 00
do pickle of any kind	1 00
do cucumber pickle	1 00
do mango do	1 00
do gherkin do	1 00
do 10 lbs of honey	1 00

CLASS J—NO. 29.

H. C. WATSON, Superintendent.

PLANTS, FLOWERS AND FLORAL DESIGNS.

Best show of pot plants, professional	\$3 00
do do do amateur	2 00
do vase of cut flowers	2 00
2d best do do	1 00
Best two hand-boquets	2 00
2d best do do	1 00
Best floral design	2 00
2d best do do	1 00
Best show of dahlias	1 00
Best show of German asters	1 00

Discretionary premiums can be given for other articles of merit.

CLASS K—NO. 33.

WM. O. JONES, Superintendent.

MISCELLANEOUS DEPARTMENT.

All articles for competition not included in the premium list, must be entered in this department.

We take the occasion to suggest to those of our farmers who have orchards, to bring to the fair for exhibition, their best fruits. A dozen specimens of each will be altogether sufficient, and to have each variety labelled with their names. We want our friends should know the names of the varieties of our best fruits. We have some expectations that there will be present a large amount of fruit, which is intended to be exhibited by the State Horticultural Society at the State Fair, and we have been told that specimens of fruit will be brought from Rochester, New York, and exhibited. We should like our farmers to see these specimens. They may be great in the number of varieties, but hitherto they have not equalled in size, in beauty, or excellence, the same varieties

grown in Illinois. Another item may be of more interest to our readers; efforts are being made to procure, for exhibition at our fair, a steam plow, which is nearly completed, and which promises to be a valuable agricultural implement. We may add also, that the "\$5,050 horse," recently imported by the Illinois Stock Association, and sold to a company of our county citizens, it is expected will be exhibited at the fair.

Hon. M. L. DUNLAP, a distinguished fruit grower and farmer of Illinois, will deliver the Annual address.

We cannot help but repeat the sentiment here, that exhibitions of the character under consideration, are calculated to elevate our perceptions of the noble employment of agriculture, and all the industrial pursuits connected. Men engaged in these employments, who have families, cannot do a more valuable service to them than in bringing them to the fair. They will see things there, and hear matters discussed there, that will be subjects of useful thought thereafter, and make them better farmers, better citizens, and better sons and daughters.

ILLINOIS STOCK IMPORTING ASSOCIATION.

The Great Sale of Imported Blooded Stock.

The Illinois Stock Importing Association has already proved itself a grand institution for Illinois, and has done a work which will ultimately add incalculably to the active wealth of the State.

The Association, organized for the selection, purchase and importation of foreign stock, as our readers will remember, was formed last winter. The first meeting for the object was held in accordance with a call published in the *State Journal*, in the Hall of the House of Representatives, on the evening of the 9th of January. A constitution was presented and adopted; and subscriptions having been made, amounting to more than enough to allow the Company to organize, JAMES N. BROWN was elected President, JOHN WILLIAMS, Treasurer, and GEORGE W. CHATTERTON, Secretary. The Association was designed to cover the whole State, and a hearty co-operation was invited from all friends of the enterprise.

As was anticipated, the total amount of stock \$25,000, was readily subscribed and at a meeting of the association held on the 2nd of February, Messrs H. C. JOHNS, JAMES W. BROWN and HENRY JACOBY were appointed agents to

visit Europe for the purpose of purchasing stock for the association. Three fourths of the capital, less expenses, was directed to be invested in the purchase of cattle, not more than one third of which were to be males—and one fifth to be invested in horses, sheep and hogs.

The committee sailed for England on the 19th of March, completed their purchases during the months of April and May, and reached home early in June. Owing, however, to adverse winds and calms, the stock was sixty days on the passage and did not reach this country until the 21st of July. Several of the cattle and one horse died on the passage and all the rest were received in bad condition.

The beauty and superiority of the stock, however, attracted the attention of cattle growers immediately upon its arrival here and up to the day of the sale, the Fair Grounds of the county where they were kept was the scene of one constant levee, visited by persons from every part of the State, who took an interest in discussing fine stock.

The sale took place on the 27th ult., on the County Fair Grounds.

There was a very large attendance of stock growers and others interested in fine cattle, from all parts of the State. During the forenoon the number was variously estimated at from two to three thousand and at no time was it less than fifteen hundred. Mr. J. C. Maxcy of this city acted as auctioneer. We append below a list of the cattle sold, the names and residence of purchasers and the price paid:

COWS.

ANIMAL.	PURCHASER.	COUNTY.	PRICE.
Bella, 5 years old,	J. Ogle,	St. Clair,	\$750
Caroline, 4 "	J. N. Hill,	Cass,	500
Stella, 4 "	Mr. Bondman,	St. Clair,	925
Lady Harriet, 3 y'rs,	James Jacoby,	Sangamon,	1,300
Cassandra, 3 "	H. Owlsley,	"	675
Western Lady, 2 "	J. N. Brown,	"	1,325
Empress Eugenie, 2 "	J. Ogle,	St. Clair,	675
Pomegranite, 2 years,	T. Simpkins,	Pike,	975
Lilly, 2 "	G. Barnett,	Will,	550
Constance, 3 "	G. Barnett,	"	700
Empress, 2 "	J. Jacoby,	Sangamon,	1,725
Rachael 2d, 2 "	J. N. Brown,	"	3,025
Minx, 1 "	J. G. Loose,	"	800
Adelaide, 1 "	R. Morrison,	Morgan,	825
Emerald, 1 "	J. C. Bone,	Sangamon,	2,125
Perfection, 1 "	E. Hitt,	Scott,	900
Coquette, 1 "	G. Barnett,	Will,	550
Fama, 1 "	Spears & Co.,	Menard,	1,050
Coronation, "	J. A. Prickett,	Madison,	50e
Violet, 1 "	Mr. Judy,	Menard,	700

HORSES.

Young Barnton,	J. C. Crowder,	Sangamon,	5,050
Baylock,	R. S. Wilkins,	Bond,	1,600

BULLS.

Defender, 3 y'rs old,	J. H. Thomas,	Champaign,	2,500
King Alfred, 2 y'rs,	J. Jacoby,	Sangamon,	1,300
Admiral, 2 "	S. Dunlap,	Morgan,	2,500
Master Lounds, 2 "	J. H. Spears,	Menard,	725
Argus, 2 "	B. Saunders,	Jersey,	2,058
Doubleton, 1 "	W. Iles,	Sangamon,	1,075
Goldfinder, 1 "	J. W. Judy,	Menard,	725

SHEEP.

FULL-BRED COTSWOLD RAMS.

"Gen. Lane," one year old, H. Jacoby, Sangamon.....	\$300
"Emperor," one year old, C. W. Price, do	160
"Hewer," Sherling buck, M. M. Yocum, do	85

SHERLING EWES—LONG-WOOLED.

1—H. Jacoby, of Sangamon	60
2—C. W. Price, do	50
3—C. W. Price, do	125
4—H. Jacoby, do	70
5—C. W. Price, do	35
6—M. S. Ballinger, of Greene.....	30
7—H. Jacoby, of Sangamon	60
8—C. W. Price, do	30
9—C. W. Price, do	50

SOUTHDOWN RAMS.

"Cambridge Duke," yearling, H. Jacoby, Sangamon,	205
"Prince," yearling, James N. Brown, do	195
"Sir William," yearling, Miles Holiday, Morgan.....	110
"Buckland," ram of spring of 1857, J. R. Meggison, Morgan	40

SOUTHDOWN EWES.

1—Yearling, G. W. Becraft, Morgan.....	75
2—do H. Jacoby, Sangamon.....	80
3—do G. W. Becraft, Morgan.....	115
4—do D. A. Brown, Sangamon.....	80
5—do H. Jacoby, do	55
6—do James Strawn, Morgan.....	50
7—do J. N. Brown, Sangamon.....	45
8—do D. A. Brown, do	60

HOGS.

BERKSHIRE BOARS.

"Edward," one year old, W. D. Sanger, Sangamon.....	200
"Siddington," 6 months old, J. C. Crowder, do	40
"Tipton," 6 months old, W. D. Sanger, do	35
"Gipsev Boy, 18th," 7 months old, Jesse Cloyd, Champaign	200
"Gipsev Boy, 19th," 7 months old, E. B. Hitt, Scott.....	150

IRISH, CUMBERLAND AND YORKSHIRE BOARS.

"Boyle," 11 months old, F. Stephenson, Morgan.....	180
"Naper," 9 months old, (crippled on ship) James Hill, Cass	55
"John," 8 months old, S. N. King, Sangamon	105
"Pert," 8 months old, E. N. Taintor, do	125

BERKSHIRE SOWS.

1—Eleven months, J. C. Crowder, Sangamon.....	220
2—Ten months old, Jos. Stockdale, do	250
3—One year old, Conrad Bondman, St. Clair.....	380
4—Eleven months old, John H. Thomas, Champaign.....	195

IRISH, CUMBERLAND AND YORKSHIRE SOWS.

1—Eleven months old, Jos. Stockdale, Sangamon.....	300
2—do do E. B. Hitt, Scott.....	200
3—One year old, T. G. Taylor, Logan.....	205
4—do L. P. Sanger, Sangamon.....	215
5—do James Hill, Cass.....	40
6—Eight months old, E. B. Hitt, Scott.....	110

The aggregate amounts of the sales of the association is \$43,300.

The day was delightful and the sale passed off pleasantly and satisfactorily to all concerned. At noon a fine collation, prepared by Mr. Myers, was served up to the company. We have not space to give the prices of the cattle to the Importing Association, but the figures at which they sold, generally exceeded the cost. In a few instances they fell below, but the competition was pretty strong and to make up it will be seen that some of the stock went off at almost fabulous prices. The stallion, "Young Barton" for instance sold for upwards of three thousand dollars more than he cost. Some of the heifers and bulls were likewise run up by the competitors, to corresponding high figures. The Association, we doubt not, has fully realized all its outlay and expenses.

Sangamon, Morgan and Menard counties have secured quite a number of the best animals though the stock is pretty well distributed.

COMMERCIAL.

St. Louis Market--September 3.

Flour—Country drooping; sales 84 bbls superfine at \$4 75; 50 do at \$5; 120 bbls fancy at same; 500 do branded extra at \$5 30; 100 bags at \$2 75; 50 bbls extra at \$6; 100 do at \$6 12½, and 24 do at \$6 25.

Wheat—Supplies mostly of low grades, which are dull and unchanged. The better qualities are active at full prices. Sales to-day 229 bags inferior and musty at 60c; 102 do damp spring at 75c; 196 do inferior fall at 80c; 269 do fair spring at 91@92½c; 139 do good at 96; 80 do prime do at \$1.03; 359 do damp and mixed fall at 90@95c; 2100 do fair and good fair red from \$1@105; 77 do good red at \$1 10; 595 do damp and fair white at \$1 15; 1,165 do prime and choice red on private terms; 240 do do at \$1 18@1 20; prime and choice red may be quoted from \$1 15@1 25, and white at \$1 25@1 35.

Corn—Sales to-day .22 bags mixed at 63c; 455 do mixed and yellow at 65c and 170 do white at 68@70c, in new gunnies.

Oats—80 bags poor sold at 35c; 2,000 bags good, in lots, at 36c part delivered; 534 bags prime, in lots, at 37@37½c, and 200 bags choice white, in two lots, at 38@39c in new gunnies.

Rye—Market inactive; sales 171 bags at 65@66c including bags.

Barley—Dull and no sale. Bacon—12 cks city shoulders sold at 12c, and small lots clear sides, of which very few are in the market, sold at 16½@17c.

Salt—Firm; sale 400 sks G A at \$1 17½.

Whisky—Cash price for large lots 22½c.

Hay—60 bales fair at \$1 10; 20 bales prime at \$1 20.

Seed—Flaxseed declined to \$1 30 for prime; sales small lot Timothy at \$4 10, and 15 sacks herds at \$1 50 per bushel.

Beans—1,000 bu old white on private terms.

Gunnies—5,000 second hand sold at 10c.

Hides—Steady at 2½@20¼c.

Groceries—Very quiet. We quote sugar at 10 to 11½c for fair to prime. Coffee 11¼c to 12½c. Molasses very dull at 55c to 60c per gallon.

Chicago Market--Sept. 2.

There is a declining tendency in wheat, but prices for the most part are unsettled; sales of spring have been made during the day at prices between 95c and \$1 per bu. Red and white winter is probably worth 1 05 for red, and 1 20 for white.

Corn is unsettled, and it is difficult to give reliable quotations; some sales took place at 70c, which is perhaps about the ruling rate.

Warehousemen are buying up all the oats they can find, at 28 cents, but there are few in market, and farmers generally prefer to keep them at home till they can get a proper price for them; and in this they are perfectly right. Oats are fairly worth 37c per bu and should not be sold for less.

Large quantities of potatoes are coming in and they sell at from 35 to 40 cents per bushel.

St. Louis Cattle Market--August 39.

At BALDWIN'S YARD, BROADWAY.—Cattle—A moderate stock of good offering, with a heavy supply of inferior and common in the market. Fair to choice sell rather slow to butchers at 6½ and 7½c. Lower grades sell at 2¼@3c gross.

Hogs—Rather limited supply in market. Fair to choice sell to butchers at 8@8½c net. Demand fair for shipping at 6½@7¼c.

Sheep—Moderate; stock offering and selling \$1 50@3 per head, according to quality.

Cows and Calves—A fair demand at \$25@45 per head.

Chicago Cattle Market--Aug. 24

Sales of 300 good beef cattle at from 3½@3¾ to \$4 per cwt; 242 ordinary cattle at from 3 to 3¼. Packers have not commenced buying. Sales of 715 hogs at from 6@6¼ to 6¾, and scarce at that. Sales of 1671 sheep at from 2@2½ to 3½ per cwt. Lambs at from 1@1½ to \$2 per head. Sales of a few cows and calves, at from \$25@30 to \$45 per head.

New Orleans Cattle Market--Aug. 23.

Beef Cattle—The market is well supplied with western and Texas heaves, and prices easy for purchasers at 10c per lb net for western, and \$16@35 per head for Texas cattle. Receipts 249 head.

Hogs—Prices at 9½@10c per lb net. A heavy stock.

Sheep—The market in favor of purchasers at \$2 50@4 per head. A stock of near 800 head remain on sale, with receipts of 270 head.

Milch Cows—Prices at \$30@65 per head.

Veal Cattle—A good inquiry. Prices at \$6 50@11 per head. Source.

THE ILLINOIS FARMER.

SIMEON FRANCIS, EDITOR.

BAILHACHE & BAKER, PUBLISHERS.

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NOVEMBER, 1857.

No. 11.

Evergreen Trees on the Prairies.

BY J. P. JAMES.

The belief is very common, almost universal, that evergreens cannot be made to live and thrive on the prairies. People, who have some taste for rural adornment, when asked why they do not plant evergreens, will often reply, "its of no use; I have tried them till I am entirely discouraged; they will never grow on the prairies." We will give an illustration of these abortive attempts to grow evergreens. Late in October last, the writer, while passing along the street, in the town of Amboy, Illinois, noticed, among other wares exposed for sale upon the sidewalk, a large lot of evergreen trees. They were spread out so as to catch the eye of every passer in the street. The roots were entirely unprotected, exposed to the action of sun and air. People were very busy inspecting and purchasing them, at "ten cents apiece." On expressing to the vender some doubt as to the propriety of treating the trees in that manner, he informed me that those trees were taken out of the ground, in Michigan, only last week, and could not possibly be injured yet! Surely evergreens will never grow on the prairies with such usage. People who will buy them because they come at ten cents deserve to be humbugged.

But evergreens will grow, they do grow to perfection on these broad savannas; and they may be transplanted, from the nursery, with even more safety and certainty of success than most deciduous trees. The reason of this is, that when several times transplanted, or root pruned, they will be found to have a large mass of fibrous roots; so that, on taking up the trees, much more root may be obtained with the evergreen than with deciduous trees. But the roots are very tender, and if the fibrous roots are destroyed the tree will die; which is not always the case with deciduous trees.

A few plain directions, strictly followed, will insure complete success with hardy evergreens. In the first place, select such trees from a nursery as have been several times transplanted; they should be branched to the ground, and very stocky; observe that they made a good growth the last year. Such trees will uniformly have good roots. The trees must be taken from the ground very carefully. The roots being very tender, will not bear the rough handling of careless hands. If they are to be carried but a few miles, in a wagon, it will be sufficient to carefully envelop the roots in wet straw. Never allow the roots to become dry while out of the

ground; that is the great point. Remember that, while, if properly treated, they are sure to live as any tree can be, they are the first to suffer from neglect. When practicable, they should always be planted out the day they are taken up. The ground for planting should have been thoroughly cultivated the year before. It must now be deeply worked, and completely pulverized. The earth, in the bottom of the hole that is to receive the roots, must be fine and mellow, the roots placed in a natural position, and the mould filled in closely among them with the hand. If the soil is in good condition to work, no water need be applied; but, if the ground is either very dry or very wet, as soon as the roots are covered pour on a pail of water, to settle the earth around the roots. Fill up the hole, and press the surface firmly with the feet. The tree should be planted just as deep as it stood in the ground before. If, after planting, the weather should be dry, the ground must be often stirred with the hoe. If evergreens are planted on the lawn, or in sod ground, great care will be requisite to insure success. If planted on the natural prairie sod, a large excavation should be made, and filled with fine surface soil, with a mixture of leaf mould or rotten chip manure; and, after the tree is planted, the ground around should be thoroughly mulched. The best season to plant is as soon as the soil is well warmed, and in good condition to work, in the spring. I know from my own personal experience that, with evergreens managed in this manner, there is no such thing as failure, as I have planted, on my own ground, several hundred, without ever losing one.

First Illinois State Agricultural Society.

In the summer of 1852, the editor of this paper and Col. Wm. B. Warren, of Jacksonville, being together in Jacksonville, a suggestion was made in favor of establishing a State Agricultural Society. It was agreed that a resolution should be introduced calling a State Convention for the purpose, at the first meeting of the Sangamon County Agricultural Society. This was done by the editor, received the unanimous sanction of that Society, and a Convention was called to meet on the third day of the session of the Legislature in 1853.

That proposed Convention was held, and the State Society was organized.

At that time we supposed these were the first effectual movements in this State in behalf of a State Agricultural Society. But this was not so. A State Agricultural Society was formed in Illinois in 1819. How long it existed we have no means of stating. Recently there was put into our hands a copy of the *Illinois Intelligencer*, which was published at Kaskaskia, by Blackwell & Berry, and dated, "Wednesday, Nov. 17, 1819." In this paper we find the proceedings of a meeting of farmers and mechanics in Kaskaskia (then the seat of government,) in which the expediency of organizing a State Agricultural Society was discussed, and the proposition carried into effect. We doubt not that the perusal of the documents connected with this subject, at this later day in the history of our State, will be of interest to our readers. We therefore copy them. With the exception of a single individual named in these documents, all have paid the great debt of nature. That exception is the Hon. Edward Coles, once Governor of this State, and long private Secretary to Thomas Jefferson. He now resides in Philadelphia.

The "objects" proposed to be accomplished by the first State Agricultural Society of Illinois, can hardly be improved on by any modern Society. The early fathers of our State made a movement in the right direction. Why the Society failed of success, we are not informed. We would be glad to learn its further history, and Rev. Dr. PECK, at that period a citizen of Illinois, and familiar with the events of the day, could, most likely furnish the desired information,—which would be gratifying to ourselves and our readers.

"At a meeting of a number of gentlemen (farmers) from different parts of the State of Illinois, held at Kaskaskia, on the 10th of November, 1819, pursuant to public invitation, for the purpose of considering the expediency of forming a State Agricultural Society, Gov. Bond was called to the Chair, and Henry S. Dodge appointed Secretary.

On motion of Edward Coles, seconded

by Dr. John H. Lambert, it was unanimously

Resolved, That it is expedient to form an Agricultural Society for the State of Illinois, and that this meeting do hereby agree to constitute themselves such Society.

Resolved, That a committee of five be appointed to prepare a body of rules and regulations for the government of such Society, and that the Chairman appoint such committee.

The Chair accordingly named Messrs. Edward Coles, Morris Birkbeck, Nathaniel Pope, John M'Ferron, and Henry S. Dodge.

Resolved, That the meeting adjourn until 3 o'clock this afternoon.

HENRY S. DODGE, Sec'y.

3 O'CLOCK P. M.

At an adjourned meeting of the Agricultural Society of the State of Illinois

Mr. Birkbeck, on the part of the committee to whom it was referred to prepare a body of rules and regulations for the government of the society, reported:

That the committee had performed the duty assigned to them as well as the shortness of the time would allow, and offered to the consideration of the society the following rules and regulations, which, after some discussion, were unanimously adopted.

Rules and Regulations of the Agricultural Society of the State of Illinois.

The undersigned, farmers of the State of Illinois, duly appreciating the importance, both in a general and individual point of view, of an improved system of agriculture, and of one adapted to the peculiar nature of this State; persuaded that agricultural associations have proved eminently beneficial to other States and countries, and that they would be particularly so to this; and desirous to procure for themselves and their neighbors the advantages of such institutions, have determined to associate together and to constitute an Agricultural Society, having for its attention and inquiry, among others, the following objects, and for its government the rules and regulations hereinafter specified.

FIRST.—OBJECTS, &c.

To collect and associate the farmers together—thus making them personally acquainted with each other, and with the systems of husbandry pursued by each—and exciting in all a spirit of inquiry and emulation.

To hold meetings for the instruction of its members; and to receive essays and communications from individuals and from other societies.

To open a correspondence with agricultural societies as well in Europe as America, for the mutual interchange of knowledge.

To collect all the information the individual members of the society possess, as well as that derived from a correspondence with other societies, and to have such parts of it published as may be deemed useful.

To collect and distribute the choicest farming and garden seeds, fruit trees and vines, valuable timber trees, and hedge thorns.

To encourage and facilitate the improvement or introduction of premiums or otherwise of the best breeds of domestic animals, as soon as the society obtains the necessary funds.

To introduce the best system for breeding, rearing, feeding, and general management of all kinds of live stock—and for the management of the dairy.

To give descriptions or procure models of the best and most approved agricultural implements; and assist the farmer to get them at the lowest price at which they can be obtained.

To point out the simplest and best modes of ploughing and bringing into cultivation the prairie lands, as well as the most economical inclosures, and the most comfortable cheap houses, where both timber and stone are difficult to be procured.

To inquire into the simplest and cheapest modes of performing the various operations of agriculture and gardening.

To discover and introduce into cultivation valuable indigenous plants, and to select and make experiments on the growth of such exotics as from use have become necessary to our comforts, and which our soil and climate might so far favor as to allow their being cultivated to advantage.

To encourage and promote the increase of domestic manufactures; on the success of which the prosperity of this section of the union so essentially depends.

To inquire into the propriety of substituting to a great degree, steam, wind or animal power to propel mills and other machinery in place of water;—the damming up of which, in a country so level as this, being extremely noxious to the health of the inhabitants, and highly injurious to its character and prosperity.

To call the attention of the inhabitants to the substituting, as fuel in the place of wood, stone coal, which seems to have been bountifully provided for our use, especially in those districts most destitute of timber.

To procure a library, by purchase, dona-

tion or otherwise, of such books and periodical publications as may tend to illustrate the science and practice of agriculture and gardening, or which may in any way conduce to advance the objects of the society—to investigate the statistics of the country, particularly as relates to its ancient inhabitants and antiquities—also to procure and treasure up in a museum specimens of every thing curious or valuable or in any wise connected with the natural history of the State—and particularly to assist in the discovering and analysing its mineral productions.

And finally, such other subjects in husbandry and the arts connected with it, as the society may think fit to propose for its consideration.

HENRY S. DODGE.

At a meeting of the Agricultural Society of the State of Illinois, held at the Court House in Kaskaskia, on Thursday 10 o'clock, a. m. November 11th, 1819, pursuant to adjournment.

Present—S. Bond, Chairman, H. S. Dodge, Secretary, and a number of members.

On motion,

Resolved, That the persons now present be invited to come forward and subscribe the rules and regulations.

Upon which, the following gentlemen subscribed the same, and paid the first annual contributions:

S. Bond, M. Birkbeck, Edward Coles, Nathal. Pope, Charles Trimmer, Thomas F. Herbert, Henry S. Dodge, Robert Latham, E. C. Berry, Jno. H. Lambert, Curtis Conn, Warren Brown, R. Blackwell, Edmund Roberts, Thomas Mather and Robert Morrison.

The society then proceeded to elect their officers, when upon a ballot being taken, it appeared that the following gentlemen were duly elected:

Morris Birkbeck, President.

Edward Coles, 1st Vice-President.

Nathaniel Pope, 2d do.

Henry S. Dodge, Secretary.

Elijah C. Berry, Treasurer.

John H. Lambert,)

Edward Coles, }

Nathaniel Pope, } Committee of

Curtis Conn and } Correspondence.

Henry S. Dodge.)

On motion of Governor Bond,

Resolved, That a committee of three be appointed to revise the rules and regulations of the society, and to report at the next an-

nual meeting such alterations and additions as they may deem necessary.

On balloting for such committee there were elected Messrs. Coles, Pope and Dodge.

Resolved, That there be placed in the hands of the President and Secretary, the sum of thirty dollars, for the purpose of procuring such periodical and other publications, connected with the objects of this society, as they may see fit—and twenty dollars for the purpose of procuring seeds or plants, to be distributed when received, in such manner as they may think most conducive to the interest of the society—the members of the society always to have a preference in such distribution.

Resolved, That the President be, and he is hereby authorized to draw upon the Treasurer for the sums specified in the above resolution.

The following gentlemen were proposed to the consideration of the society as honorary members:

By Mr. Coles—Thomas Jefferson, James Madison, John Taylor, William Pilghman, Richard Peters, Samuel L. Mitchell and Elkanah Watson.

By Mr. Lambert—Jacob Bigelow.

By the President—General La Fayette, Charles De Lastrye and Sir John Sebright.

By Mr. Pope—Isaac Shelby and William Henry Harrison.

On motion of Doctor Lambert,

Resolved, That the rules and regulations, with the proceedings of the society, be printed in the Illinois Intelligencer.

Resolved, That the society adjourn to meet at this place on the first Monday in May next. HENRY S. DODGE, Sec.

Arabian Horses.

In Mr. William C. Prime's interesting works, recently published by the Messrs. Harpers, "Boat Life in Egypt," and "Tent Life in the Holy Land," frequent mention is made of the Arab horses, renowned all over the world for their beauty, docility, fleetness, power, endurance, and value to their masters, who live and roam upon the great deserts of the East. Mr. Prime says the Arabs prefer the mare to the horse, on account of her superior power of endurance. They trace their genealogy by their mother and not, as we do, by the sire. The favorite tradition is that they are descended from

the five mares of the Prophet Mohammed, and that these came originally from one common stock, to wit the Kohailah. The finest breeds of horse are to be found among the Anazee and Shumar tribes, east and southeast of the Damascus, extending quite to the Euphrates.

The value of an Arab mare is, literally, not to be estimated in gold, since no amount of money will effect the purchase of one of the pure blood. The fact arises from causes that are evident to one who knows the Bedouins. In the first place, money is of no use to an Arab. He needs very little for his ordinary purposes, and more would be an incumbrance—to be buried, given away, or lost. His mare is his life; with her he is free to travel on the desert, to fight or fly, to rob his legitimate enemies, or protect his friends. If he should exchange his mare for gold, he would be a fair subject for plunder, without the means of defense, or escape, and having no home, would be at a loss to bury his treasure where it would be of practical use to him.

The color of the Arab horse varies, but is most frequently white, or light chestnut. They are not large, rarely above fourteen hands high, and while at rest, none but an experienced horseman would observe their points. But when in full motion they are glorious animals. "A high bred mare should hide her rider between her head and tail," saith the Koran, for the Koran is not silent on the subject of horses, and many of these animals nearly perform this duty.

Mr. Prime says, it is only by accident that an Arab horse of pure blood, is obtained, so that out of hundreds of horses imported into England and America as Arabian, it is not probable that until within the last year, one horse of pure blood was ever brought into either country. He mentions that he met a gentleman in various parts of Syria, who was from New Orleans, whose object in visiting the East, was to obtain these animals. [This gentleman was probably A. K. Richards, Esq., of Scott county, Kentucky, who has imported several Arabian horses.] He had, by a

fortunate occurrence, obtained one mare, a noble animal, and when last heard from, was about to go down among the Annazee to look for others. The inferior horses, not of high blood, are always for sale, and bring prices, in the desert, varying from \$150 to \$750. There is but little Arab blood in any horses out of the Arabian country.

The attachment of the Bedouin to his mare, Mr. Prime observes, is that affection which has been so frequently the subject of poetry and prose. On the contrary, there is no sort of affection existing on the side of the man, and the beast receives only just so much care and attention as will insure her against illness and death. Seldom covered and never housed, it is often a subject of the utmost astonishment that the Arab horses do not perish from exposure. But for their incredible powers of endurance they would undoubtedly do so. After a long day's journey, or a sharp ride of hours over precipitous paths, without food or water, on the way or at the halt, the horse is left standing in the air; the saddle is not removed, being a substitute for clothing, as well as a preservative against sharp stones if she rolls, and while the rider lies under the shelter of his black tent, or on the ground, wrapped in his boornose, the steed shivers in the desert starlight; but she is no less ready for the road in the morning.

Illinois State Agricultural Society.

OFFICE OF THE CORRESPONDING SEC'Y. }
Springfield, Oct. 13, 1857. }

The State Agricultural Society offer the following premiums:

ESSAYS AND TREATISES.

- Best treatise on rearing and managing cattle on the prairies of Illinois, diploma and \$10 00.
Second best do, medal.
- Best treatise on rearing horses and mules in Illinois, diploma and 10 00.
Second best do, medal.
- Best treatise on the various breeds of sheep and their adaptation to the prairies, diploma and 10 00.
Second best do, medal.
- Best treatise on rearing swine, diploma and 10 00.
Second best do, medal.
- Best treatise on the management of poultry, diploma and 10 00.
Second best do, medal.
- Best treatise on the culture of forest and ornamental trees on the prairies, diploma and 10 00.
Second best do, medal.
- Best treatise on the culture of fruit trees in Illinois, diploma and 10 00.
Second best do, medal.
- Best treatise on the culture of the vine in Illinois, diploma and 10 00.
Second best do, medal.
- Best treatise on the transplanting and culture of evergreens in Illinois, diploma and 10 00.
Second best do, medal.

- Best treatise on the cultivation of flowers, diploma and 10 00.
Second best do, medal.
- Best treatise on the cultivation and preparation of osier willows for basket making, diploma and 10 00.
Second best do, medal.
- Best treatise on the embellishments of a country home, diploma and 10 00.
Second best do, medal.
- Best treatise on the cultivation of Chinese sugar cane, expression of its juice, and its manufacture into molasses and sugar, diploma and 10 00.
Second best do, medal.

The essays and treatise must not exceed in quantity ten pages each of the published transactions of the Society.

The executive committee will also receive for examination and consideration, other essays and treatise on subjects interesting to the members of the Society.

All entries under this head, with the manuscripts, must be in the hands of the corresponding secretary previous to the first of January, 1858.

FIELD CROPS.

- Best 50 lbs. sugar made from Chinese sugar cane, gold medal.
Second best do, \$15 00.
Third best do, 10 00.
- Best 5 gallons molasses from Chinese sugar cane, gold medal.
Second best do, 15 00.
Third best do, 10 00.

The specimens of sugar and molasses for which premiums are thus offered, must be sent to the corresponding secretary previous to the 1st of January, 1858. The specimens must be accompanied by description of mode of cultivation and manufacture.

FIELD CROPS.--(Continued.)

The entries have closed for other field crops, viz: fall wheat, spring wheat, Indian corn, rye, oats, buckwheat, field peas, white beans, potatoes, sweet potatoes, onions, fall barley, spring barley, and other articles—a full list of which will be found on page 8 of the premium list of 1857.

Many entries have been made under this head. In order to perfect them, the following rules are imperative:

The applicant must be a member of the Society, if he is not now. This can be done by forwarding one dollar to the corresponding secretary. Statements must also be forwarded by applicant as follows:

1st. The land shall be measured by some competent person, who shall make affidavit of the accuracy of the measurement and quality of ground.

2d. The applicant shall make affidavit to the quantity of grain and other products raised on the ground; the kind and condition of soil; the quantity and kind of seed used; time and mode of planting, and mode of cultivation.

3d. The grain and seed must be weighed after being in merchantable condition, and calculation made according to the legal weight per bushel. Potatoes, onions, &c., measured; the weight of hemp or flax when prepared for market.

All these statements must be in possession of the corresponding secretary by the 1st of January, 1858.

The executive committee will make the awards under this head.

FARMS, &c.

The committee appointed for that purpose, are now engaged in making examinations of farms, nurseries, &c., entered for premiums. Their awards will be made public at the January meeting of the executive committee.

PREMIUMS FOR 1858

Talcott, Emmerson & Co., of Rockford, in addition to their munificent donation of a mower and reaper for the best forty acres of spring wheat, the crop of 1857, have generously offered the society another mower and reaper, (which has been accepted,) for the best forty acres or more of winter wheat, the crop of 1858—statements, &c., to be furnished the society as in 1857.

B. Kuhns, Dayton, Ohio, has also proffered to the society, (which has been accepted,) one of his drills, to sow a width of seven feet, and to be worth \$150, for the best forty acres of drilled wheat, the growth of 1858.

TRANSACTIONS OF 1856 AND 1857.

These will be ready for delivery in a few days. County Societies and persons entitled to copies through this office, will please give directions how the books are to be forwarded to them. If copies are sent by mail, the applicant must furnish means to pre-pay the postage,—thirty-three cents for each volume.

PREMIUM LIST.

A limited number of the list of premiums awarded at the fair of 1857, can be had on application at this office.

PREMIUMS.

There are yet remaining in my hands medals awarded at the fair of 1856. The rightful owners of these medals, and others to whom are due premiums, medals and plate, can obtain them on application to the undersigned. Arrangements have been made to secure the execution of a Diploma which shall be worthy of the Society and of those to whom diplomas are awarded, and which will be forwarded by mail or otherwise as soon as completed.

GENERAL COMMITTEE OF STATE AGRICULTURAL SOCIETY.

The members of the general committee of the State Agricultural Society, as well as the Secretaries of the County Societies, are requested to furnish the undersigned with the proceedings of the respective County Agricultural Societies for the present year. A condensed report of the history of such societies, stating what has been done, what is intended to be done, and future prospects, would be regarded as of great value. We desire to obtain the material for giving to the County Agricultural Societies the prominence they deserve in the transactions of 1857-'58.

FAIR OF 1858.

The Executive Committee will receive proposals at their next January meeting for the location of the State Fair for 1858.

MEETING OF THE EXECUTIVE COMMITTEE.

The Executive Committee of the Society will meet at the Corresponding Secretary's office in

Springfield, on Wednesday, January 6th, 1858.

S. FRANCIS,
Cor. Sec. Ill. State Ag. Soc.

Editors in this State are most respectfully requested to publish the above.

ILLINOIS STATE FAIR OF 1857.

REPORT:
NATURAL HISTORY, GEOLOGY, &c.

S. FRANCIS, *Corresponding Secretary,*
Illinois State Agricultural Society:

According to appointment I attended the State Fair at Peoria, which occupied the 21st and 25th of September, 1857.

The duties of my superintendency were not burthensome, the number of entries in that department being small. This, however, is nothing extraordinary. The scientific interest felt in the country has seldom been called forth on occasions of this kind. I may here remark that the fear of confiscation has kept the best specimens in Geology and Mineralogy from being presented, most men of science attaching a far higher value to their specimens than to even the highest awards of a State Fair.

The number of entries, however, was quite respectable, and many of them of great value. An admirable collection was presented "for exhibition" by Mr. Freeman, of LaSalle county. Had this been regularly entered for competition, it would have taken several of the best premiums. As it was, however, it gave intimation of the mineral resources of our State and did great credit to the zeal and scientific enterprise of the gentleman who had, with so much labor and care, collected and arranged it.

Of native woods, there were two collections presented, one of which contained ninety-two varieties. In this class, however, I think there has been less interest, hitherto, than its importance demands. The Botany of the State seems not yet to have awakened any general interest; though I was pleased to find a few zealous devotees of this branch of science, from whose labors we have much to expect.

The lime which was entered was of a superior quality; though it was matter of regret that none came from any other point than Alton. The impression seems to have gotten abroad that the stone of this vicinity, (Alton,) is superior to that of any other part of the State, or of the Mississippi Valley. Of the correctness of this impression I have much doubt, as the same rock, in respect of geological position, may

be found in many other parts; and the examinations have not yet been sufficiently accurate to justify such a conclusion. It is sincerely hoped that before the next meeting of your society, there will be a general effort, in all parts of the State, to present specimens of lime.

People should not be deterred by the high reputation of the Alton lime, which, although it excel in whiteness, may not be a whit superior, for building purposes, to the darker qualities which are known to have been produced in several sections of the State.

The coal of Illinois must necessarily have been a subject of the deepest interest, and although there were few districts represented, there was enough to stimulate the pride of every citizen of Illinois.

The coal of our State holds a place only second in importance to its agricultural wealth. The Illinois coal field is bounded by an out-line, starting, say at the mouth of the Wabash, and thence following the Ohio and Mississippi rivers to the mouth of Rock river, near Rock Island; thence eastward nearly by Joliet,—through the northern part of Vermillion county, and thence south, to the beginning. Within this line, all may be said to be a coal-field. Of course, within this field, there are many places where there is no coal, but these are only "the exceptions to the rule," and no one has a right to say that there is not coal at any point within this outline, until he is certain of having touched the carboniferous rock and failed to find coal. In some places, it is, doubtless, very deep; though in no place is it too deep to be worked when necessity or convenience shall have stimulated enterprise. No one has yet realized the half of the applications of steam, as a motive power; and the time is not far distant when coal will be the only fuel employed in the generation of steam. Every new bed of coal is, then, to be hailed with profound satisfaction, and cherished, as a real boon to the country. The specimens exhibited at Peoria were all of a quality eminently capable of usefulness; though that from La-Salle would seem to justify the opinion that in that region is a sort of central point in the great coal-field.

But our surprise was greatest on examining the specimens of salt from the Equality salt works of Gallatin county, near Shawneetown. Of the quality of this salt, and its capacities for preserving meats, we had no means of satisfying ourselves other than by its general appearance, and the testi-

mony of persons who have used it. The impression we received was that it was vastly superior to the salt of the Kanawha Salines; quite equal to the Saline salt of New York, and but little inferior to the Turks Island. If this impression be nearly correct, then the salt of Gallatin county is destined to exert an immense influence on the interests of our western country.

The annual consumption of salt, in the packing business is already immense, and must increase every year, as the agricultural resources of the State are developed; and if the annual expenditures for this article can be retained, it must tell materially on the finances of Illinois. Col. A. McCallan informed that one single well, of eleven hundred feet deep, has been, for some months, yielding one thousand bushels of salt per day, all of which has been readily sold at thirty-five cents per bushel. But he assured me that should the price of salt fall to one half of that price, they could, nevertheless, continue the business with success and profit. This seems to preclude the possibility of failure to the enterprise. We feel assured that it will now go on, and prove a new source of wealth to the State.

Many articles of minor importance were entered, some of which possessed much value, but which I have not time nor space to notice. Most of them will be found by reference to the very judicious reports of the committees.

In conclusion, I beg leave to tender to you my congratulations on the results of your recent exhibition. Exhibitions of this nature are certainly calculated to stimulate enterprise, awaken a generous and healthy emulation, and call forth the resources of our State. No one can have attended your late exhibition without being astonished at the new evidence of "hid treasure" which must be brought to light in due time, nor have returned home without a loftier pride in his "Prairie State."

Yours truly,

S. Y. McMASTERS,
Supt. of Department of Natural
History, Geology, &c.

A WISE FOWL.—In a California paper we find a patriotic production, dedicated to the "American Eagle." It is in "varse," of which the following is a veritable stanza:

"Keep your eye ever fixed on the American Eagle,
Whom we, as the proud bird of our destiny hail;
For that wise fowl thou canst not inveigle,
By putting a handful of old musty salt on its venerable tail."

THE GRAZIER.

Charcoal for Sheep.

One of the best medicines for human beings, is finely pulverized fresh charcoal, kept corked in a close vial or jar; one half of a tea-spoonful mixed with five times its bulk of water, forming an agreeable and excellent remedy for almost any kind of deranged stomach, and in larger doses constituting a very mild and perfectly safe laxative. There is no doubt that the same remedy would often prove of great service to domestic animals. Although we have never seen it tried, we confidently predict that half a pint to a pint of powdered charcoal, mixed with two to four quarts of water, would prove an admirable remedy for hoven in cattle. We observe that a correspondent of a late paper has used charcoal mixed with salt for his sheep, with the best results; he had found them to suffer much on west pastures, until he made use of this remedy, after which they immediately presented a more healthful appearance.

Cure for the "Stretches."

Messrs. Tucker & Son:

Since we have had the care of a flock of Merino sheep, we have, during the winter season, lost some of the best specimens of the flock by this disease; and after using most of the medicines recommended have thought the disease incurable. This winter we were induced to make trial of unground mustard seed in connection with castor oil. We gave a tablespoonful of the seed, with a little more than that quantity of oil well mixed together, and in an hour or two the animals were chewing their cud, and were soon well. I informed a skillful sheep breeder in this neighborhood, who had at the time two desperate cases on hand. The mustard seed and oil was given with complete success. The disease should be attended to in its first stages; and in order to be able to do this, the person who feeds the flock should remain a while after feeding, to ascertain if any are off their feed, and showing signs of sickness. We communicate this matter to the "Cultivator," thinking it may be opportunely for another winter, if not this.

CHARLES COLBY.

Hogs.—As was stated in the *Courier* yesterday, the market for hogs for packing is flat, with no buyers at any price with, in fact, no price offered. Those who contracted some time ago, will lose heavily, as contracts for over 25,000 hogs were made here at 6½ to 6¾ cents.—*Louisville Courier, 14th.*

AGRICULTURAL.

WHEAT AND CHESS—The following report in relation to the examination of the proofs offered by Mr. Davison, has been made by the committee; and it will be seen that the committee have decided to make a trial which it is hoped will result in a satisfactory decision on this long agitated question.

ROCHESTER, Aug. 24th, 1857.

B. P. JOHNSON, Esq.:

The committee appointed to make an examination of the proofs of the transmutation of wheat into chess, have failed to find any absolute or reliable facts to sustain that presumption; and, although the exhibitor, Samuel Davison, Esq., of Greece, Monroe county, is a man in whom all confidence can be placed, and the proofs resting upon his representation of the manner by which it was produced, and an expectation of finding the attachment of the original wheat kernel to the chess stem, which was an entire failure, as the farinaceous portion of the berry was entirely decomposed, leaving only the chaff and bran wholly unattached. The roots of the chess is no case was attached to the wheat stems or roots.

The committee, consisting of Prof. Dewey, of Rochester, John J. Thomas, of Union springs, Cayuga county, and L. B. Langworthy, of Greece, Monroe county, have resolved to institute the most stringent tests of this much mooted subject; each individual to have an experiment in charge, and to follow the directions of Mr. Davison after preparing the earth in the following manner:

A water tight box, 12 to 18 inches square 6 inches deep, is to be filled with any good loamy wheat soil which has been boiled with water one hour, to destroy all vegetable vitality, when a given number of wheat grains are to be planted after some mathematical diagram, known only to the person trying the experiment, to guard against any possible outside interference by introducing the seeds of chess. After which they are to follow, implicitly, the directions of the proposer and report to the State Society.

C. DEWEY,
J. J. THOMAS,
L. B. LANGWORTHY.

STEAM PLOWS—It is interesting at this season of Agricultural Fairs to notice what they are doing abroad in the way of agricultural progress; and we have, therefore, engraved a picture of the trial of Boydell's steam plow, which has lately taken place in Lincolnshire, England.

It consists of a locomotive with wheels not fashioned for a groove, but adapted for level or uneven ground, and capable of being steered with the same facility as a boat. Mr. Boydell's men drove it down the road near Louth as easily as one might drive a cart, and made a sharp turn into the field on which their experiments took place.

To this "steam-horse," as it seems to be usually called, three double-breasted wheel plows were yoked, and worked

satisfaction of the spectators. A large cultivator was then tried with equal success. Some lighter plows which were hitched to the steam-horse proved unable to resist the strain, and were broken to pieces.

On a subsequent occasion a still more careful trial was made. Three double plows were yoked, and plowed an acre in 73 minutes, including stoppages and turnings, in strong clay land. This is at the rate of eight acres per day of ten hours. The cost in labor and coals was equal to £1 10s., say \$7 50, less than a dollar an acre. Had six single plows been used, they would have required the labor of eighteen horses besides men; costing in England over £2 10s., say \$12 50; and they would not have plowed over four and half acres in the same space of time. The prime cost of the machine is said to be about equal to that of eighteen horses. In this country it would be less than one half that cost.

The same "steam horse" was tried with a cultivator and old crusher and harrows attached, and worked well. Next a subsoil plow was yoked, and answered admirably, working to a depth of twelve inches by a like width. A draining plow was tried at the depth of two feet with equal success, though, from imperfections in the plow, the earth was allowed to fall into the trench. Altogether the experiments went to prove that the steam horse was capable of doing anything that flesh and blood horses can do, and with a power of at least twenty-five of the latter. * * * * *

Steam plows have been much talked of in this country, but have never yet been so successful as to rank among our agricultural implements. Both English and French seem to be in advance of us in this respect. Yet it is quite obvious that our vast prairie lands are the very place for the "steam horse." Such locomotives as Mr. Boydell's, which was successful on the uneven lands near Louth, would infallibly answer in Illinois; and with us, who pay very high for labor, and very little, comparatively, for machinery, they would be a blessing inestimable.

We should be glad to hear that some of our enterprising agricultural machinists or farmers had given the steam plow a fair trial on the level lands of the West. There is a fortune there waiting a claimant. — [Harper's Weekly.

From the Journal of the New York Ag. Society.

WHEAT AND CHESS.—In March last, Benj. Hodge, Esq., of Buffalo, "offered a premium of \$100, to the person who shall demonstrate that wheat turns to chess; the premium to be awarded under the supervision of the New York State Agricultural Society, under such rules and regulations as a committee appointed by the society shall prescribe."

We received a letter, 20th July, from Sam'l Davison, a respectable farmer of Greece, Monroe county, saying, "that on the 10th of March last he commenced an experiment on wheat to produce chess therefrom, and the experiment has succeeded; and requesting to have a committee appointed to examine the wheat growing, to test

the truth that wheat turns to chess." He also requested that the committee for next year be appointed, to try the experiment under his direction, &c.; and he claims the premium offered, &c.

As here was a direct offer and an acceptance, it was thought advisable to have a committee selected, and an examination and thorough trial had. J. J. Thomas, of Cayuga, Prof. Dewey and L. B. Langworthy, Esq., of Rochester, were selected as the committee. The committee met at the office of the Rural New Yorker, in Rochester, on the 5th of August, and Mr. Davison was present with the wheat and chess which he had grown. The committee, after obtaining all the information from Mr. Davison, as to the manner of preparing the ground and managing the same after the wheat was sown, proceeded to separate and examine the stalks presented; but after a careful examination under the microscope, they were unable to find any chess growing from the wheat; but as the grain and husks were so much decayed nothing satisfactory could be determined. A report will be presented, of the whole examination, by the committee. The committee, as requested by Hodge, drew up regulations for a trial hereafter, which was satisfactory to Mr. Davison, and persons will be selected to make the trial under the direction, as to management, of Mr. Davison, and the result will be given another season.

We are glad that a careful and well arranged trial is to be had; and we shall hope that a trial conducted with all the care required by the regulations of the committee, will, in a single year, prove satisfactory.

We were present with the committee at their examinations, and though, on the question of wheat turning to chess, we had never heard but one opinion; that the thing has never occurred; yet in the very proper remark of one of the committee, a trial is not to test opinions, but to elucidate facts; and when these shall be fairly ascertained, we will abide by the results.

Hungarian Millet.

The Hon. Charles L. Flint, of Massachusetts, in his admirable treatise on the grasses, thus speaks of it:

"HUNGARIAN MILLET, MOHA DE HONGRIE (*panicum germanicum*) has been cultivated to some extent in this State, from seed received through the Patent Office. It is an annual forage plant introduced into France in 1815, where its cultivation has become considerably extended. It germinates readily, withstands the drouth remarkably, remaining green even when other vegetation is parched up, and if its development is arrested by dry weather, the least rain will restore it to vigor. It has numerous succulent leaves which furnish an abundance of green fodder, very much relished by all kinds of stock.

It flourishes in somewhat light and dry soils, though it attains its greatest luxuriance in soils of medium consistency and well manured. It may be sown broadcast and cultivated precisely like other varieties of millet. This millet is thought to contain a somewhat higher percentage

of nutriment than the common millet, though I am not aware that it has been analyzed. A practical farmer of Worcester county says of it: "I have raised the "Moha de Hongrie," on a small scale only. In my garden it has grown thick and fine. As it is a leafy plant and remains green until its seeds mature, I think it may prove valuable for fodder, both green and dry."

RAISE MORE FOOD—The New York Post gives some "advice to the tillers of the soil," from which we take the following sensible and timely remarks:

"The revolt in India is the harbinger of famine. One hundred and eighty millions of human creatures will need large supplies of food from the products of other regions. The army of India, the transport fleet for that army and its supplies, the necessities growing out of the disturbed state of that great English dependency, will call for much of our surplus beef, pork and flour. The two last named articles are the product of every year, but beef requires years of nourishment before it is ready for use. The wicked, wanton waste of breeding power, which is the basetting sin of American farmers, ought to be checked. Every farmer ought to be required to give an account of himself who kills a female calf. We ought to preserve every "cow-calf" for five years to come. By this method we might soon have a supply of beef, not only for ourselves, but for any emergency abroad."

TO WHITEN LINEN TURNED YELLOW.—Cut up a pound of fine white soap into a gallon of milk, and hang it over a fire in a washkettle. When the soap has entirely melted, put in the linen and boil it half an hour. Then take it out, have ready a lather of soap and warm water, wash the linen in it and then rinse it through two cold waters, with a very little blue at the last.

WASHING.—Mrs. L. W. says—"I send the following for your housekeepers' department; I have tried it for the last four or five years. Whoever will soak clothes from twelve to thirty-six hours before washing them, will find they can do without patent washing fluids, &c., and save nearly all the wear of clothes by rubbing—any more than to rinse the loosened dirt.—[Mass. Plowman.

The Scientific American gives the following cure for felons on the finger—

"The past year we have known the spinal marrow of an ox or cow applied to three different persons with the most satisfactory results, in relieving pain and securing cures of their felons. The spinal marrow should be applied once every four hours for two days."

HORTICULTURAL.

In selecting trees for an orchard, a great many varieties are not required. There is a deal of good sense in the following article from the Ohio Valley Farmer. The apples recommended are fine, but a few additions might be made here. Rawles' Jenette is an excellent winter apple, though the two last seasons have proved that the tree is tender—many in this section of the country having been killed and others injured beyond hope of recovery:

OUR APPLE ORCHARD.—About ten years ago, I planted out a small apple orchard containing about thirty-five trees. At that time I had little or no personal experience in regard to the kinds of trees it was most profitable to plant. Realizing, however, the importance of making as good a selection as possible, I took pains to get the advice of persons eminent as cultivators of fruit. The consequence is that my orchard has proved more successful than the generality of orchards. Realizing, however, the importance of making as good a selection as possible, I took pains to get the advice of persons eminent as cultivators of fruit. The consequence is that my orchard has proved more successful than the generality of orchards. It is, indeed, the admiration of many as they pass along the road. And yet, of the thirty-five trees of which my orchard is composed, there are but fifteen trees that are entirely satisfactory to me. The remaining twenty have all, more or less, disappointed me. And had they been such other varieties, as my present knowledge of fruit trees would cause me now to select, I would willingly give a hundred dollars. I believe the annual additional profit to me would be nearly or quite half that sum.

How important then is knowledge? By lacking the proper knowledge ten years ago to make a judicious selection of fruit trees to plant an acre of ground, I am now losing, from the effects of that ignorance, the sum of fifty dollars a year! And if my orchard had been twenty acres, in place of one, my annual loss would have been a thousand dollars a year. With such facts before us, who can resist an ardent thirst for knowledge—for such practical knowledge as our every-day pursuits imperatively require.

The apple trees in my orchard which are entirely satisfactory to me, and which I have no desire to displace for others, are as follows:

- 6 Wine Sap,
- 5 Smith's Cider,
- 2 Benoni,
- 1 Summer Rose,
- 1 Early Strawberry.

The places occupied by the twenty that are not satisfactory to me, I wish had been filled with the following:

- 4 Wine Sap,
- 5 Smith's Cider,
- 3 Benoni,
- 5 Maiden's Blush,
- 3 Porter.

My entire orchard of thirty-five trees would, in this latter case, have contained only seven varieties. But they would all have been good kinds, admirably adapted to the locality of the neighborhood of Cincinnati, and all good bearers.

From my own experience, I feel satisfied that an orchard, properly taken care of, and composed of the varieties above named, would yield an annual profit of \$100 an acre, after attaining to an age of ten years from the time of planting.

And yet there are those who pretend that fruit culture is not profitable!

Although I give the above as an approved list, still if an orchardist sought for profit only I do not believe he could do better than have all Smith's Cider. This apple is in its prime during the three winter months, and always brings the highest price. And it is the most astonishing bearer that I ever saw. It has also the additional advantage of being a fine healthy grower. The Wine Sap is a better apple, but it will sell no higher in market. And, although a fair bearer; it is not loaded down with such overwhelming crops. Besides, it is a slow grower, and does not exhibit that vigorous health and rampant growth, which is apparent in the Smith's Cider tree.

The Benoni is the very queen of mid-summer fruits. It is a healthy, vigorous grower, limbs with an upright tendency, and an excellent bearer. No orchard should be without the Benoni. If an entire orchard was composed of Smith's Cider and the Benoni, the owner would have little cause to complain.—[Editor Ohio Valley Farmer.

NEW REMEDY FOR CURCULIO.—At a late exhibition of the Cincinnati Horticultural Society, some very fine plums were exhibited by Mr. Walker, of Kentucky. And all wondered how he had succeeded so well in keeping off the the depredations of the Curculio.

The plan adopted by Mr. Walker was as follows:

As soon the fruit begun to be worked upon by the Curculio, he took a tin pan,—into which soap suds had been placed, to the depth of an inch or so,—and after affixing this pan in a level position in the tree he set a small glass globe lamp in the middle of the pan. Early every evening this lamp was lighted and permitted to burn all night.

The consequence was that every morning a large number of the Curculio insects were found dead. In darting towards the light, they would strike the glass globe, which was two inches or so in diameter, and be precipitated into the liquid from which they were unable to extricate themselves again. It is well known that the Curculio does its mischief mostly in the night. We have heard of no remedy that strikes us so favorably as this. And if it shall really prove as effectual as Mr. Walker represents it, we may soon hope to have, not only an abundance of plums, but peaches also that are smooth and fair. Even our thin skinned apples are greatly injured from the attacks of this ugly insect.

There has been nothing that has so much

baffled fruit growers as the ruinous attacks of the Curculio. Indeed, with many, the culture of plums has been wholly abandoned: But the experiments made by Mr. Walker teach us in a striking manner to not give up.

Constant industry and unremitting perseverance will accomplish wonders. Let us not sit supinely down discouraged at the first obstacle that presents itself, but if we meet with difficulties, let us proudly determine to conquer them.—[Ohio Valley Farmer.

THE "ALLEN RASPBERRY."—The American Agriculturist says:

"We have seen in our late summer travels, a Raspberry, so superior in some of its qualities that we have strong confidence in its cultivation as a domestic garden fruit—the "Allen" Raspberry, for ten years past cultivated by L. F. Allen Esq., in his farm gardens near Buffalo, where we saw them in great luxuriance and perfection. They are of the Red Antwerp family in appearance, both in wood and fruit, but are not the true Antwerp, being hardy as a currant bush without winter protection, and throwing up a stout, vigorous cane of six feet high and upwards in a good soil. The fruit is roundish, of full Antwerp size, prolific in bearing, bright red in color, and of delicious flavor. Where they originated, Mr. Allen, could not tell us. He obtained them in his own neighborhood, from a choice garden, being broken up we believe, and took all the plants left in it. Neither are they in cultivation in his vicinity, excepting a few lately taken from his own plants. Finding them so valuable he last year authorized his gardener to offer his surplus canes for sale, which he did to near ten thousand in number, and so much was a hardy, good flavored Raspberry demanded, that all plants which could be spared were taken in parcels from ten to a hundred each, and many of them sent into distant States."

SAVING CABBAGE.—The best way to preserve Cabbages green all winter, so that their good qualities shall in no manner deteriorate, is as follows:—As late in the fall as the weather will allow, dig out your cabbages that you have set apart for winter use,—dig trenches, say eighteen or twenty inches apart, and from twelve to twenty feet in length as may be most convenient, and in accordance with the quantity to be preserved,—transplant your cabbages firmly in these trenches, as they will stand together.—When your bed is finished, raise a platform some eighteen or twenty inches high, over them, which can be made of any refuse posts, rails, or boards about a place; across this place a few bean poles or lath, and upon the whole throw a quantity of bean haulm, cornstalks, straw, or any material of this kind, as a protection against wet and frost.—and you can eat green cabbage up to April, finer than if plucked from the garden in October.—[Germantown Telegraph.

"Here comes Mr. Winter, inspector of taxes, I'd advise you to give him whatever he axes, I'd advise you to give him, without any flummery, For, though his name's Winter, his actions are summary."

Raspberry and Blackberry.

At a meeting of Horticulturists in New York, the following facts were given by the different cultivators present.

It is a serious truth that we have not at this time, in this section of the West, a good raspberry which will withstand the vicissitudes of our climate and produce constantly good fruit. Many of the new varieties are on trial, but we cannot yet speak with confidence of their merits.

"Charles Downing said that the variety known as the Hudson River Antwerp was the only sort cultivated largely for the New York market. The product was from \$300 to \$800 per acre. Sold at wholesale at 10 cents a basket, and three baskets made a quart.

H. E. Hooker, at 10 cents a quart, found the yield here to be about \$140 per acre. Had taken correct account of one bed containing 16 rods—one-tenth of an acre, and containing 136 hills four feet apart each way. The product was 200 quarts, which at 12½ cents per quart, would be \$25. Charging the cost of picking and marketing, manure and cultivation, and cost of plants, use of land, &c., at fair prices, there was left a clear profit of fourteen dollars and eight cents on this small piece of land.

C. L. Hoag, of Lockport, sold over one hundred quarts this season at 16 cents.—Brinckle's Orange is not only the best fruit, but bears altogether the best crop. He did not think it firm enough to bear carriage a great distance. The plant is hardy, though he found that when covered in winter a better crop is produced, and finer. The Hudson River Antwerp killed back unless covered.

Nathaniel Draper, of Rochester, had grown the Red and Yellow Antwerp on the same soil for twenty-five years. Used no manure during the time, but kept the weeds down and the canes tied to stakes. Never lost a crop, but plants taken from his beds and planted in highly manured soils have proved barren.—Others had observed that high manuring had resulted in strong growth and unproductiveness. P. Barry thought that raspberries might be raised for six cents a quart at good profit.

The following remarks on the management of the Blackberry, were made by C. P. Bissell, who has many thousand plants under cultivation:—The young plants should have good roots. The first season the branches spread on the ground the second and third years throw up strong shoots. Should be planted in rows some eight feet apart, and about the same distance in the rows. For training, the best way is to set posts and run two wires from post to post, to which the bearing canes should be tied. In the spring cut the cane back to about five feet, and also shorten the laterals to five or six buds, or or they become so heavy with the weight of fruit as to break from the cane. The blackberry fills a vacancy between raspberries and peaches. Had picked over 400 berries from one plant. After bearing is over, the canes may be untied from the wires and allowed to fall by their

own weight. When fully ripe, the fruit was good, but persons often picked it before ripe.

P. Barry, thought the High Bush or Dorchester Blackberry, better and more valuable than the New Rochelle. Charles Downing thought the former the best flavored, but it was not so large nor productive as the New Rochelle. The Newman was sweeter than either, but not very productive.

It was resolved unanimously, to adopt the name New Rochelle for the variety known by this appellation, instead of Lawton."

Difficulties in the Way of Fruit Culture.

["One hundred millions of fruit trees should be planted the coming fall. The ground should be got ready at once. Now is the time to under-drain the ground for your future orchard. Have a compost heap, composed of muck, forest leaves, straw, leached ashes, etc., ready, with which to mulch the trees when planted. Do all this, then give your orders to a reliable nurseryman for a lot of the best trees, of the best varieties of fruit. Depend upon it, your farm will sell for 50 per cent. more than the cost of the trees, within five years. Farmers, plant fruit trees!

We have often called the attention of our readers to the vast importance of raising a greater quantity and better quality of fruit; and we shall doubtless have occasion to give them "line upon line and precept upon precept." On this subject the public mind must be educated. We believe that the health of our people, the prosperity of our nation and the perpetuity of our institutions, are more intimately connected with the cultivation of fruit than with any other one subject that can be named. Why? Because the people must have cheap food and good health, or want, disease, vice and crime, misery and degeneracy, are inevitable.]

"It is true there are some difficulties in the way, as with every enterprise under the sun.—But they are to be studied, understood and overcome."

The above is copied from "Life Illustrated," by Fowler & Wells, New York. What has become of most of the orchards planted out in this State? Many of them have been nearly destroyed by the excessively cold winters, and others have been greatly injured. Thousands upon thousands of the trees brought from the east perish on our prairies the first year, even if their vitality is not gone before they are planted out.

We should not give up the cultivation of orchards; but we should learn experience from the past. We have now some knowledge of the varieties of apple trees which best stand our changing climate of winter, and we should profit by that knowledge. But few apple trees of varieties originating in the East succeed well

The Ohio Cultivator very properly says on this subject:

"Our people have heretofore been almost entirely dependent upon Eastern books and catalogues for their information about the varieties of fruits, and upon Eastern nurserymen for their fruit trees, so that our orchards are composed of the varieties of fruits that are found most adapted to the Eastern and Northern States; and it is found that, as a general rule, the most common and popular winter apples of those States are the surest to fail here, both from rotting and from winter killing.

In spite of these facts, which are beginning to be well known to some of our people, the evils are perpetuated and extended by the annual purchase and planting throughout the West of millions of trees of these very kinds that are destined to certain failure. The greater part of the business of the numerous large nurseries of Western and Central New York, is in supplying trees at wholesale to the Western States; and in proof of the unfitness of these trees for the Western country, it can be shown that of the dozen or twenty varieties of winter apples that are found best adapted for the soil and climate of Central and Southern Ohio and the greater portion of Indiana, Kentucky, Illinois, etc., not one of them is commonly found among the assortments furnished at wholesale by the New York Nurseries! Take, for instance, the following most reliable and approved kinds for this region:

Wine Sap, Rawles' Janette, Rome Beauty, Red Vandervere, or Newtown Spitzenberg, Smith's Superb, (formerly Smith's Cider,) Ortleigh or White Bellflower, Pryor's Red, Fallenwalder, Paradise Winter Sweet, Willow Twig, Winter Piennock, Gilpin or Little Romanite."

Barley---Economical use as Food for Horses.

The value of barley, in one form or other, as an article of use, has acquired in some countries a factitious importance, from its easy convertibility into malt and spirituous liquors; but, viewing it simply as an article of diet for man, it must be assigned a lower position than wheat, oats or Indian corn.

In an economical point of view, the grain or barley, when boiled, has long been employed in Europe as a mash for horses after a hard day's work, or when unwell, acting as a gentle aperient, as well as a sudorific, opening the system and softening the skin.—In Egypt, as also in all parts of the East, it has been used in an uncooked state from time immemorial, as the common food of horses, where the use of rye and oats is unknown.

Barley, when fed to horses in a half-malted state, is said to be perfectly harmless, however highly heated they may be, irrespective of the quantity they may eat. The only preparation it requires for their purpose, is to soak it in water for twelve or twenty-four hours, after which it may be fed to the animal in the usual way.—[Patent Office Report, 1855.

THE GARDENER.

THE GOOD GARDENER, will remove all the weeds from his garden in the fall, throw the rubbish which is to rot in heaps, and dig up a good portion of his garden. If trenched it will advance the crops next spring. This is done by throwing the ground into ridges. In the spring the trenches will be found dry, and the ridges levelled, it will be in the best order for planting and sowing.

ASPARAGUS AND PIE PLANT.—The beds of Asparagus and Pie Plant should be covered with manure this fall;—so that in spring the lighter portions of it can be forked into the beds. This will enrich the ground, preserve the roots from injury, and greatly increase the crops the coming year.

SPINACH.—Spinach, or spinage, may be sown during the early part of this month for fall, winter, and early spring use; the sowing may be continued at intervals up to at least the middle of the month. The quality of the spinach depends much upon the richness of the soil; the object should be to induce a rapid growth. Spread on and dig under a good coating of old barn-yard manure; the older the better. Sow the seed in drills about six inches apart; for the last sowing, intended to be kept over for early spring use, the drills may be only four inches apart. When the seed is well up, give the plants a hoeing, as well to destroy the weed as to encourage a rapid growth. If the seed has been sown thickly, the plants will probably need thinning out. On the approach of cold weather, cover the beds intended to be kept over winter with hay or straw. This covering is not indispensable, but its advantages are sufficiently great to warrant the trouble. The plants are not so liable to be thrown out by frost; the tops are less injured by extreme changes in the spring. As to kinds, the broad-leaved Savoy is probably the best.

The varieties of the Chinese chrysanthemum are many, and the flowers are exceedingly beautiful. These flowers come at the commencement of winter, when the gardens are desolate, and give a most cheerful aspect to the dwelling. They are of the easiest culture, and when the plants have done blossoming, they can be set away in the cellar, or buried in the ground, and will give no further trouble until spring.

THE DAIRY.

Cheese Making in Vermont.

An inquiry was made in a late number of the Farmer about cheese-making. Although I do not feel worthy of writing for the public to read, I will give my method of cheese-making, which I learned of an old dairy woman, who said she learned of a girl whose parents sent her to the Shakers, with whom she served time for that express purpose.

The milk should be as warm as it conveniently can be had from the cows; if the rennet is good, the milk will curdle hard enough to cut in thirty minutes; it should then be carefully cut with a curd-knife made for the purpose. After the whey is dipped off, which is done by putting a strainer over the tub, the curd should again be broken with careful handling, as too much squeezing works away the richest part of the curd, which will be readily seen by the whey being white. The whey first dipped off is put into a kettle or boiler for the purpose of scalding; it should be scalding hot, but not boil; while the whey is heating, the curd is dipped off into a strainer placed over a sink or basket made for the purpose, then is tied up and a weight placed upon it for a few moments, after which it is crossed up two or three times, each time the weight being applied; the curd is then sliced about three-fourths of an inch thick, and placed as loose as may be into a tub. So it may scald evenly, care should be taken to stir it with a paddle for the purpose as soon as the whey is poured upon it. When the curd feels a little tough, or will squeak between the teeth, it is sufficiently scalded; it is then dipped into the strainer which is over the basket, after which it is spread on tables or boards to be cooled as cool as it can be; then it is hung up in a strainer to drain about one hour; then it is cut by a curd-cutter and salted, three ounces to five pounds of curd.

As to presses, they differ so much in power it is difficult to say anything of them. The cheese, however, should be pressed hard, and the whole power should not be put on at first; it should be pressed two days, and be turned three or four times from a tunnel strainer first to a cotton one. When the cheese comes from the press it should be bandaged by a bandage cut crosswise of the cloth, with a string drawn into each edge of it wide enough to bring the bandage about three-fourths of an inch over the top of the cheese before the side bandage is put on; cut a piece the size of the top and bottom of the cheese, wring it out in the grease, and put it smoothly on, after which the side bandage, with the ends sewed together, is drawn over, and strings drawn, which makes the cheese perfectly safe from the fly. The bandages are made of the cheapest of cotton cloth. The best and cheapest grease is made of the cream or scum of whey, by the whey being set twenty-four or thirty-six hours, churned and simmered slowly to an oil. If double curded cheese is required, the curd should be prepared for the hoop, then hung in the cellar, which is added to the next day's after that is prepared.

THE APIARY.

There is luxury, money, and opportunity for displaying fine taste, in the raising of Bees for their Honey. H. N. Schooler, of Putnam county, at the last State Fair, had on exhibition a bee house, some six feet high, about the same length and some four feet deep, occupied with boxes, one end of which was inclosed by glass, filled with honey. If we should be told that there was a ton of honey in this bee house, we should not be surprised. The honey was made in the house as it stood; and exposed as every box was to view, it was an interesting, and we may say a magnificent sight. Mr. Schooler was present, and made all the explanations asked for of the management of the bees, and the peculiar advantages of his plan of raising them, and securing such immense masses of honey.

Mr. Schooler's bee house was one of the most interesting exhibitions of the fair. We never saw any thing of the kind to equal it.

Bees in the Fall.

In most places, bees will add nothing to their stores after the 10th of September. In some localities, they gain very little even in August; but in a few favored sections, they will increase their stores until October. This of course depends on what flowers there are to supply them. Clover usually fails the first of August, buckwheat the first of September, but golden rod, when in sufficient abundance, prolongs the honey season into October. As soon as the flowers cease to yield honey, the bees will be on the look out for a supply from other sources. All weak stocks and swarms, not able to keep sufficient guard, are quite sure to be found and plundered. Every hive should be examined now, and not wait till next week, when it may be too late. Do not suppose because it was good in June, that it will of course be so now. All the defenceless ones should be put out of harm's way at once, before honest bees are tempted into bad habits by appropriating forbidden sweets. Seasonable attention to this matter will often save much complaint between neighbors, about "first rate hives being robbed." It is not sufficiently understood that good hives are not plundered on the start; they are left till weaker ones are disposed of. If there are no weak ones, and no refuse honey injudiciously exposed to entice bees, there will be no robbing!

A family too weak to maintain a defense now, cannot be successfully wintered with all possible assistance, and the sooner they are out of the way the better. Two or three weak ones may be united, when the stands are within a few feet of each other, and if judiciously fed, may possibly make something. A queenless stock containing stores sufficient to winter a family, should receive the bees and queen of some one or two weak or diseased stocks. A swarm that

works without a queen, and has even stored ample provisions for winter, should be broken up, as, in such cases, they always make too much drone comb for profit. In all localities where diseased or foul brood prevails, every old stock should be thoroughly examined, and if diseased, it should be condemned without hesitation. If the bees are much reduced, remove them, and by no means allow healthy stocks to appropriate the honey, and thus induce disease.

As long as the weather continues warm, any combs taken from the bees, whether filled with honey or not, will need watching to keep the moth worms out—should any appear, subject them to the fumes of burning sulphur.—[M. QUINBY, in Am. Agriculturist.

VALUABLE RECIPES.

BLACKING FOR HARNESS.—Melt four ounces of mutton suit with twelve ounces of beeswax; add twelve ounces of sugar candy, four ounces of soft soap dissolved in water, and two ounces of indigo finely powdered. When melted and well mixed, add half a pint of turpentine. Lay it on the harness with a sponge, and polish off with a brush.

Here is another recipe: Take three sticks of the best black sealing-wax, dissolved in half a pint of spirits of wine; to be kept in a glass bottle, and well shaken previous to use. Applied with a soft sponge.

Another recipe for black varnish is the following—Best sealing-wax, half an ounce; rectified spirits of wine, two ounces; powder the sealing-wax, and put it in with the spirits of wine, into a four ounce phial; digest them in a sand heat or near the fire, till dissolved. Lay it on warm with a fine hair brush. Spirits of turpentine may be used instead of wine.

The wife of an American agriculturist has been experimenting in soaps, and finds that the addition of three quarters of a pound of borax to a pound of soap melted without boiling, makes a saving of one half in the cost of soap, and of three-fourths the labor of washing, improving the whiteness of the fabrics; besides the usual caustic effect is thus removed and the hands are left with a peculiar soft and silky feeling, leaving nothing more to be desired by the most ambitious washerwoman.—[Exchange.

When molasses is used in cooking, it is a very great improvement to boil and skim it before you use it. It takes out the raw taste, and makes it almost as good as sugar. When the molasses is much used for cooking, it is well to prepare one or two gallons in this way at a time.

MISCELLANEOUS.

Praise Your Wife.

Praise your wife, man, for pity's sake give her a little encouragement; it won't hurt her. She has made your home comfortable, your hearth bright and shining, your food agreeable—for pity's sake tell her you thank her, if nothing more. She don't expect it; it will make her eyes open wider than they have for these ten years, but it will do her good, for all that, and you too.

There are many women to-day thirsting for the words of praise, the language of encouragement. Through summer's heat, through winter's toil, they have drudged uncomplainingly, and so accustomed have their fathers, brothers, and husbands become to their monotonous labors, that they look for and upon them as they do the daily rising of the sun and its daily going down. Homely, every day life, may be made beautiful by an appreciation of its very holiness. You know that if the floor is clean, manual labor has been performed to make it so.— You know if you take from your drawer a clean shirt whenever you want it, that somebody's fingers have ached in the toil of making it so fresh and agreeable, so smooth and lustrous. Everything that pleases the eye and the sense has been produced by constant work, much thought, great care, and untiring efforts, bodily and mentally.

It is not that many men do not appreciate these things and a glow of gratitude for the numberless attentions bestowed upon them in sickness and in health, but they are so selfish in that feeling: They don't come out with a hearty—"Why how pleasant you make things look, wife!" or "I am obliged to you, dear, for taking so much pains!"

They thank the tailor, for giving them "good fits;" they thank the man in a full omnibus who gives them a seat; they thank the young lady who moves along in the concert room—in short they thank everything out of doors, because it is the custom and come home, tip their chairs back and their heels up, pull out the newspaper, grumble if wife asks them to take the baby, scold if the fire has got down; or, if everything is just right, shut their mouths with a smack of satisfaction, but never say, "I thank you."

I tell you what, men, young and old, if you did but show an ordinary civility toward those common articles of housekeeping, your wives; if you gave them the hun-

dred and sixteenth part of the compliments you almost choked them with before you were married, if you would stop the badinage about whom you were going to have when number one is dead, (such things wives may laugh at, but they sink deep sometimes,) if you would cease to speak of their faults, however bantering, before others fewer women would seek for others sources of happiness than your apparently cold, sottish affection. Praise your wife, then, and you may rest assured that her deficiencies are fully counterbalanced by your own.

The Color of Rural Buildings.

The question of color is a most interesting one in any design for a country house, and seems at present but little understood in America, by far the greater number of houses being simply painted white, with bright green blinds. By this means each residence is distinctly protruded from the surrounding scenery, and instead of grouping and harmonizing with it, asserts a right to carry on a separate business on its own account; and this lack of sympathy between the building and its surrounding is very disagreeable to an artistic eye. Even a harsh vulgar outline may often pass without particular notice, in view of rural scenery, if the mass is quiet and harmonious in color; while a very tolerable composition may injure materially the views near it, if it is painted white, the human eye being so constituted that it will be constantly held in bondage by this striking blot of crude light, and compelled to give it unwilling attention.

In country houses, the design has to be adapted to the location, and not the location to the design; for it is undesirable, and generally impracticable, to make the natural landscape subservient to the architectural composition. Woods, fields, mountains and rivers will be more important than the houses that are built among them; and every attempt to force individual buildings into prominent notice, is an evidence either of a vulgar desire for notoriety at any sacrifice, or of an ill-educated eye and taste.—The colors of rural buildings should be carefully varied. They should be often cheerful and light, sometimes neutral, seldom dark and never black or white, and there is, fortunately no end to the combinations of tints that may be used in painting a house. The constant recurrence of about the same requirements will, of course, lead to much similarity in plan, particularly in small buildings, but the monotony that this would

occasion may be agreeable relieved by variety in color, both in the interior and exterior. Different patterns of paper will make two rooms of the same proportions no longer look alike; and the same result will be observed on the exterior, by adopting different tints for the walls and the woodwork. Another important point to be considered is, that it is entirely insufficient to use only one or two shades of color for each house. Every rural building requires four tints to make it a pleasant object in the way of color; and this variety costs but little more than monotonous repetition while it adds much to the completeness of the effect. The main wall should be of some agreeable shade of color; the roof trimmings verandas, and other woodwork, being either of a different color, or of a different shade of the same color, so that a contrast, but not a hard one, may be established. The third color, not widely different from the other wood-work, should be applied to the solid part of the Venetian blinds, and the movable slats should be painted of the fourth tint. This last should be by far the darkest used on the premises, for the effect of a glass window or opening in a wall is always dark when seen from a distance; and if this natural fact is not remembered, and the shutters are painted the same color as the rest of the house, a blank, uninteresting effect will be produced, for when the blinds are closed, which is generally the case the house, except to a person very near it will appear to be without any windows at all. This error is often fallen into, and requires to be carefully guarded against.

BUDDING ROSES.—In roses, as in many other things, climate has a great influence in modifying our operations. For instance, budding can seldom be performed successfully with us till July, and in many seasons may be continued till October. The condition of the stock is a better rule to go by than any given period of time. Budding ought not to be done when the sap is too watery, which may be known by the bark very thin and delicate, on being raised with the budding knife. It should be quite hard and firm, at the same time separating readily and easily from the wood. The condition of the scions is also of importance. Buds taken from shoots in active growth, are not so good as those selected from branches that have partially exhausted themselves. To this end, stopping a strong growing shoot a few days before we intend to use it for budding, checks the circulation

upward, and throws more organizable matter into the buds. With us, also it is not of importance to take out the wood after cutting out our bud; the best operators take as little as possible with the bark. A great cause of failure, is in not taking out the bud with a straight, clean cut. The edge of the bark, after the bud is cut out must not be split and cracked up, as if a jack-plane or shingle-shaver had been employed, or failure will be certain. Use a thin-bladed knife, and keep its back well away from you, or downwards, while using it.—[Horticulturist.]

Northern Sugar Cane.

Dr. E. Chandler, of Chester Co. Penn., has given his experience on the subject of converting the juice of the cane into syrup. He says from 190 hills of the cane he made ten gallons of syrup of the color and consistence of good honey.

"You can boil it in an iron pot, though a brass, or large copper kettle, or even a common cook stove, wash-boiler would be preferred to an iron pot. I allude to boiling less than a barrel or two at a time. Slake a small piece of fresh lime, have it appear like milk, or thin whitewash; place your kettle of juice over the fire, and when it becomes milk-warm add a tablespoonful or wineglassful of thin whitewash to every six gallons of juice; stir and mix it well through the juice; then mix the white of two eggs with a bowlful of juice out of the kettle; pour it into the kettle again and mix it thoroughly. Now bring it almost to a boil as soon as possible, and as quick as you see it beginning to boil take it off the fire and let it remain off fifteen or twenty minutes; at the end of this time, but not before, skim off all the scum, and if you wish to make an extra article strain it through flannel or muslin. Now it is ready to boil down, or to be set aside that you may prepare more in the same way to be boiled with it down to syrup. After it is boiled down one half the boiler being near the fire, much care is required to prevent it from boiling too rapid, which would blacken your syrup and give it more the dark appearance of molasses than a light colored syrup.

Wooden rollers were used for the expression of the juice.

☞ A coquette is a rosebush, from which each young beau plucks a leaf, and the thorns are left for the husband.

EDITORIAL NOTICES.

Illinois Farmer---Vol. III.

We are now near the verge of another year. Our publishers are making arrangements to largely increase the size of the Farmer, to print it on a smaller and better type, and otherwise to greatly improve its appearance. The increased patronage of the work, and its future prospects, we are pleased to say, justify these improvements.

The publication of the Illinois Farmer was commenced some two years since, at the earnest solicitation of friends, who seemed to be impressed with the propriety of there being published at the Capital of the State, an agricultural paper, devoted to Western, and especially Illinois Agriculture, in such a form and at such a price, that it could go into the hands of the masses of our farmers. It is useless at this day to decry agricultural periodicals. No good farmer can afford to be without one. These periodicals contain information which is of great importance to him in his daily labors. Progress is marked on every industrial pursuit in life—and on none more than that of the farmer.

It is a gratifying truth that in the families of our farmers there is a spirit of inquiry which is not satisfied with the old routine of the manual labor of making farm crops. There is a disposition to employ mind as well as bodily labor in the management of the farm. Hence there is seen a keenness of perception in the study of whatever concerns the farm in the families of farmers at the present day, unusual and which promises the most satisfactory results. A large portion of the young men of the country seem to have a right appreciation of the profession of the farmer;—that the farm is not necessarily a place for the stagnation of mind;—that it furnishes a large and interesting field for mental exercise;—that it gives health to the body,—and presents an employment that carries with it manly independence of character and a fair reward for their industry.

It is usual for politicians to talk flatteringly of farmers and of their profession, and this mainly to draw them into their toils. Politicians have little use for farmers but to obtain their votes. We would have our farmers well informed on all subjects, and especially would we desire them to be so well informed as not to be deceived into the support of men or measures by the flippant sophistry and statements, as likely

to be false as true, of men whose present living and future hopes are dependent on the favors of party. Such men are often found, one day, full of fire and zeal on one side of a great political question, and the next on the other, equally zealous and active—looking forward to the recompense of reward.

While, therefore, we desire that our farmers shall fully understand the great political questions of the day, so that under all circumstances they will be able and ready to act as worthy citizens,—we think that there are other subjects that deeply concern them—that while politicians are looking to their personal welfare, farmers should have regard for their own. This is clearly their interest and duty.

Hence it is that farmers should sustain their own papers. Look abroad in our State. What is the great interest of Illinois? What interest absorbs the greatest portion of her capital and labor? What interest does the community every where—the farmer, the merchant, the mechanic, the laborer—now rely upon to carry the State through the present financial distress? What is it but the farming interest—the untold wealth that now rests in her stacks of wheat, her fields of corn, her other grains; her hogs, her cattle, her horses, and the other products of her farms?

And how meagerly is the great interest of Illinois represented by her public press! There are some 150 political newspapers—there are three agricultural papers! Are not these agricultural papers what you desire them to be? Give them your patronage—and they will fully keep up with the improvements of the times. It was never known—at least we have never known the fact—that a press did not carry upon its face an evidence of the amount of patronage it received.

In our own case, therefore, we ask our friends not only to continue their subscriptions, but to increase the number of our subscribers in their neighborhood. You can do this, without much sacrifice on your part, and with great benefit to us. We desire to publish a paper that shall be entirely worthy your patronage. We wish above all things, to publish a really useful paper to our farmers.

We do not anticipate a long continuance of the present financial distress. It may continue until another crop. We regard it as the true interest of our farmers to sell off their present crops at the most they can get for them, where they are in debt, and pay their debts. We may then be poorer than we expected to be the com-

ing spring; but we will then be ready for our coming crops. What would our wheat be worth next spring, if there should then be a good prospect for a crop of winter wheat? The western States are full of produce. If we so arrange as to sell two crops at once, we may break down those we owe, and we may distress ourselves with court fees and sheriff's calls—but we shall gain nothing.

The price of the Farmer will remain as before. Seventy-five cents will pay for it when taken in clubs. We shall in a few days publish a prospectus for the third volume.

The Times.

Within a few weeks, our country has been subject to a great financial reverse. This has affected all classes of society more or less. Farmers have felt it especially in the low price of crops and the small demand for them. There is but little call from foreign countries for American provisions, and the throwing out of employ large bodies of workmen in manufactories, will lessen the requirements at home. Still our produce will sell at low prices, and it is a necessity that farmers, who are in debt, should sell their crops and pay their debts. The evil is not likely to be lessened by holding on to their crops. The yield of wheat, take the whole country through, is more than the usual average. Other crops are much larger than ever before. We are now but a few months from spring and with the demand then, equal to the present, with a great crop of wheat, and corn in prospect, what will your wheat and corn be worth?

We regard it as the true policy for farmers to dispose of their crops, as usual. If it proves to be an unprofitable season, by your crop not paying its cost, there is no better way than to put up with it. Your merchants have unprofitable seasons—so do your pork packers, your mechanics, and all other branches of industry;—but in all these cases, the true policy is to do the best that can be done, and go ahead with your calling.

Your merchants, who have sold you goods, rely on receiving pay for the same in

a few weeks. They fix the time of your credits by the arrangements they make to pay for goods. You cannot withhold your money from them without seriously affecting, if not breaking up their business.—Economize, manage your matters, and pay your debts, and it will be altogether best for you.

Latterly there has been, under what is sometimes called "famine prices" for produce, a great disposition to enlarge farms. Lands have been purchased on credit to do this, and the farmer has been made the slave of his ambition. Many lands thus purchased we fear cannot be paid for under the present aspect of the times. We believe our farmers would find it most profitable—we mean those farmers who "hold or drive," if they would cultivate smaller farms. The farming would be done better—crops would be heavier—and the appearance of the farm would be more satisfactory to the owner. He would not always be upon a strife to get money to pay for labor. His family would be more comfortable; and, smaller farms, by enabling you to have school houses convenient, and better roads and bridges, would greatly benefit yourselves and the community generally.

Our advice to our friends is—to get their crops to market when markets are open—to pay your debts, to live economically, and work on! Times will change. The few weeks that we have been compelled to stop trading with England for articles which are better made here, has compelled England to send over specie to pay balances against her. The specie sent over there for iron and cloths months ago, is coming back,—for our merchants are too poor to keep up the importations. If by law we could so arrange our trade with foreign countries as to make it a healthy one, sending off our products in exchange for those we receive, we should in our judgment, experience no such convulsions as we are now passing through. But these matters are left to politicians, matters which should never be considered as bearing upon politics. The history of the country shows that in early

times, our great men acted upon these subjects without regard to ephemeral politics.

Northern Sugar Cane.

The Chinese sugar cane will hereafter be one of the staple productions of our State. Scattered over every part of it, there were raised the season just closing, patches of this cane. In most instances a trial has been made of its value as a saccharine plant, and with success. We have seen and conversed with many who have tried it, without finding a single exception to this conclusion.

A fine article of the syrup of this cane has been and is selling here at this time, at \$1 25 per gallon. This was manufactured by Col. M. Pierson, farmer, near this city. We shall undoubtedly have the article for sale in all our towns the coming winter.

It is very gratifying that persons who commenced the manufacture of the juice into syrup, with no practical knowledge of the proper process, have attained results entirely satisfactory. In conversation, they unanimously say that they went on improving their syrup, from the commencement of the trial, and that in the last boiler was the best.

Within a few days we have had heavy frosts and indeed for two nights something of a "freeze." We are not certain what effect the freeze will have on the cane. One of our farmers told us he had made the best syrups since the "freeze." Another that he thought the freezing lessened the saccharine matter in the cane. By the time the next number of the Farmer is issued, we hope to have statistics of production this season—the manner of expressing the juice from the stalks, the proper mills, the best arrangements for boiling and for the purification of the syrup, the best mode of cultivating the plant, the proper soils, the amount of syrup from the acre, and many other items of importance. We have many farmers in our State whose knowledge on these subjects, obtained by observation and experience, should not be withheld from the people.

Last spring and before, we urged a thorough trial of the Chinese cane plant. We had seen and tested syrup made from this cane, and did not believe that we could possibly be mistaken in its value. We did not anticipate a failure where a fair trial could be made of it. Our expectations are realized. Illinois at least will produce syrups for her own use, and for exportation, in a short period of time. The cane will hereafter be a staple production of Illinois.

And we believe, not for the production of syrup only. Sugar has been made of the syrup, the present season, in many parts of the West. We hear of it in Ohio, in Delaware county; in Indiana; in LaSalle and Winnebago counties in this State, that sugar has been made from the syrup, and what has been done, can be done and more extensively. It requires nice judgment and practical skill to make sugar from this syrup; but these will be obtained, and we now give it as our belief that next season large amounts of sugar will be made from this cane. In Louisiana, at their sugar-making establishments, they have a man expressly as a sugar maker, who, by long experience, skill and judgment, is enabled to granulate the syrups.

The cultivation of the Chinese sugar cane will greatly benefit Illinois. We have about one and a half millions of people. Their consumption of sugar and syrups will amount to an average each of three dollars a year. That will amount to \$4,500,000. Let this amount of money, or half of it, be kept in this State and circulate among us, instead of being sent off, and our people will feel the benefits of it.

The Chinese plant is now naturalized here, and we are in favor of throwing away its usual names of Sorghum, Chinese Millet, Imphee, &c., and of giving it an English name, one that all can understand. The South has its Southern Sugar Cane, and the North has its Northern Sugar Cane. Let us call them by these names, and no man need be mistaken in regard to the plant.

Prepare for Winter.

Be sure and gather your seed corn. Provide protection, as much as possible, for your stock in winter. See to the buildings, that they are put in order for cold weather—cellars banked up, window glass put in, stoves ready, fuel on hand. See that your farming tools are under cover, and your garden tools put in place. Your potatoes should now be dug and placed beyond the reach of frost. Your cabbages should be gathered, trenches made, the roots put in the ground, a shed made over them, loaded with straw, bean vines or other articles, to keep them from freezing. Beets should be taken up, put into the cellar, and covered with sand. Apples should be put into cellars. All these articles do best in an atmosphere a few degrees above freezing point. If you expect eggs, you must have warm places for your fowls to lay in and to roost, and they should be provided with meat to eat and lime and ashes to wallow in. The great weeds should be removed from your garden, and if you trench it two feet deep, it will be all the better for working in the spring.

Protect the tender plants and shrubs in the garden. Tender roses may be bent down and covered over with earth, or the earth may be hilled up ten inches high on the wood. Asparagus and Rhubarb do best by being covered up with manure in the fall. You can plant beds of both, if you choose, now. A piece of the root of the rhubarb with a single bud, will make a good plant. Celery should now be taken up, and carefully protected in trenches and well covered. Be cautious about fires on the prairies; many a farmer has lost his crops, his fences and sometimes buildings by prairie fires. Apple and other trees can be planted out. The evenings are now long, and when the labors of the day are over, you should have an agricultural paper, to see what improvements are being made in your profession, that you may keep up with the improvements of the day. What you read, understand if possible. Those who read most are not often the most intelligent.

They are likely to know ALMOST a great deal. And last of the items we shall here mention, is your district school. The school house should be in order, you should secure a good teacher, and then see to it, with your neighbors, that every thing is provided to enable your teacher to do justice to himself and his scholars.

Northern Sugar Cane.

The editor of the Ohio Farmer says in his paper:

"At every fair I have attended this season I found the Sorghum on exhibition, varying from eight to eighteen feet in height; at every fair I found the Sorgho syrup, no two specimens of which were alike. At Delaware, I found the best syrup, and also that which I had heretofore deemed an impossibility, viz—a splendid article of sugar from the Sorghum! In appearance and taste it closely resembled the best maple sugar. It was a great gratification to know that sugar could be manufactured from this plant, whose reputation for being a humbug was getting very fair. In Ohio are, in round numbers, twenty-five millions of acres of land; now suppose that every two hundredth acre is sown in Sorghum, and the average product to be three hundred gallons of syrup to the acre, the result will be that instead of importing millions of gallons of syrup, we shall have thirty-seven and a half millions for consumption and export! Let us next year devote sufficient land to the Sorgho for the production of sugar for domestic consumption."

The Editor of the Ohio Cultivator, visited the Delaware county fair. He also notices the same sugar, thus—

"But what was most satisfactory of all, we found at Delaware a jar of the bona fide grained sugar, beautifully crystalized, light and delicious, made by the ordinary process in a single kettle. We consider the question settled, and what farmers want further, is experience as to the best modes and implements of manufacture. These will come right along now."

Judge Caton, at his farm in LaSalle county, has succeeded in making sugar from the Chinese sugar cane. He expressed the juice in the usual manner—put several gallons into an iron boiler, out of doors, adding two spoonful of lime, first mixed with juice. In thirty-five minutes after fire was applied

the juice was brought to the boiling point, when the fire was withdrawn, and it was allowed to cool twenty minutes—the scum was removed, and the juice strained through a cotton cloth,—and when the juice was so cool that a finger could be held in it, the whites of three eggs were added, and it was returned to the boiler, and again brought to the boiling point,—the fire was then withdrawn till morning. The scum, which formed half an inch thick and covered two-thirds of the liquor, was removed. The liquor was then drained off, and much impurity which had settled in the kettle, taken away and the kettle made clean. The liquor was again returned and boiled down to two gallons; it was then removed to the stove and boiled down to six quarts. Four quarts were then taken out, and the remainder boiled down till bubbles rose, as they do in mush. It was then taken off and cooled; but believing that it was not sufficiently boiled to granulate, it was boiled again and until it would adhere to the skimmer in broad flakes. A portion of this was placed in a vessel, a little good sugar added and in a few hours it had so granulated that it was turned out into a cloth to drip and dry. And thus veritable Sorghum sugar was obtained. The Judge afterwards learned from a southern sugar-maker that the last boiling injured the syrup for sugar making.

Mr. E. Andrews, of Chicago, seems to have made sugar without much difficulty. He boiled and purified his syrup as usual, set it away, and it granulated into sugar.

PICKLING CABBAGE.—Slice the heads very finely. A head of red cabbage mixed with half a dozen white ones give the whole a pretty color. Sprinkle on and mix in a little salt. Scald together, say one gallon of good vinegar two or three tablespoonfuls of sugar, one tablespoonful cloves, one of ground cinnamon, and a teaspoonful or less of ground black pepper. The cloves, cinnamon and pepper should be put into a bag while scalding. When cold pour the pickle over the cabbage, and also drop in the bag of spices. Keep the whole well covered, putting a plate over the cabbage to hold it down in the pickle.

Last spring and before, we urged a thorough trial of the Chinese cane plant. We had seen and tested syrup made from this cane, and did not believe that we could possibly be mistaken in its value. We did not anticipate a failure where a fair trial could be made of it. Our expectations are realized. Illinois at least will produce syrups for her own use, and for exportation, in a short period of time. The cane will hereafter be a staple production of Illinois.

And we believe, not for the production of syrup only. Sugar has been made of the syrup, the present season, in many parts of the West. We hear of it in Ohio, in Delaware county; in Indiana; in LaSalle and Winnebago counties in this State, that sugar has been made from the syrup, and what has been done, can be done and more extensively. It requires nice judgment and practical skill to make sugar from this syrup; but these will be obtained, and we now give it as our belief that next season large amounts of sugar will be made from this cane. In Louisiana, at their sugar-making establishments, they have a man expressly as a sugar maker, who, by long experience, skill and judgment, is enabled to granulate the syrups.

The cultivation of the Chinese sugar cane will greatly benefit Illinois. We have about one and a half millions of people. Their consumption of sugar and syrups will amount to an average each of three dollars a year. That will amount to \$4,500,000. Let this amount of money, or half of it, be kept in this State and circulate among us, instead of being sent off, and our people will feel the benefits of it.

The Chinese plant is now naturalized here, and we are in favor of throwing away its usual names of Sorghum, Chinese Millet, Imphee, &c., and of giving it an English name, one that all can understand. The South has its Southern Sugar Cane, and the North has its Northern Sugar Cane. Let us call them by these names, and no man need be mistaken in regard to the plant.

Prepare for Winter.

Be sure and gather your seed corn. Provide protection, as much as possible, for your stock in winter. See to the buildings, that they are put in order for cold weather—cellars banked up, window glass put in, stoves ready, fuel on hand. See that your farming tools are under cover, and your garden tools put in place. Your potatoes should now be dug and placed beyond the reach of frost. Your cabbages should be gathered, trenches made, the roots put in the ground, a shed made over them, loaded with straw, bean vines or other articles, to keep them from freezing. Beets should be taken up, put into the cellar, and covered with sand. Apples should be put into cellars. All these articles do best in an atmosphere a few degrees above freezing point. If you expect eggs, you must have warm places for your fowls to lay in and to roost, and they should be provided with meat to eat and lime and ashes to wallow in. The great weeds should be removed from your garden, and if you trench it two feet deep, it will be all the better for working in the spring.

Protect the tender plants and shrubs in the garden. Tender roses may be bent down and covered over with earth, or the earth may be hilled up ten inches high on the wood. Asparagus and Rhubarb do best by being covered up with manure in the fall. You can plant beds of both, if you choose, now. A piece of the root of the rhubarb with a single bud, will make a good plant. Celery should now be taken up, and carefully protected in trenches and well covered. Be cautious about fires on the prairies; many a farmer has lost his crops, his fences and sometimes buildings by prairie fires. Apple and other trees can be planted out. The evenings are now long, and when the labors of the day are over, you should have an agricultural paper, to see what improvements are being made in your profession, that you may keep up with the improvements of the day. What you read, understand if possible. Those who read most are not often the most intelligent.

They are likely to know ALMOST a great deal. And last of the items we shall here mention, is your district school. The school house should be in order, you should secure a good teacher, and then see to it, with your neighbors, that every thing is provided to enable your teacher to do justice to himself and his scholars.

Northern Sugar Cane.

The editor of the Ohio Farmer says in his paper:

"At every fair I have attended this season I found the Sorghum on exhibition, varying from eight to eighteen feet in height; at every fair I found the Sorgho syrup, no two specimens of which were alike. At Delaware, I found the best syrup, and also that which I had heretofore deemed an impossibility, viz—a splendid article of sugar from the Sorghum! In appearance and taste it closely resembled the best maple sugar. It was a great gratification to know that sugar could be manufactured from this plant, whose reputation for being a humbug was getting very fair. In Ohio are, in round numbers, twenty-five millions of acres of land; now suppose that every two hundredth acre is sown in Sorghum, and the average product to be three hundred gallons of syrup to the acre, the result will be that instead of importing millions of gallons of syrup, we shall have thirty-seven and a half millions for consumption and export! Let us next year devote sufficient land to the Sorgho for the production of sugar for domestic consumption."

The Editor of the Ohio Cultivator, visited the Delaware county fair. He also notices the same sugar, thus—

"But what was most satisfactory of all, we found at Delaware a jar of the bona fide grained sugar, beautifully crystalized, light and delicious, made by the ordinary process in a single kettle. We consider the question settled, and what farmers want further, is experience as to the best modes and implements of manufacture. These will come right along now."

Judge Caton, at his farm in LaSalle county, has succeeded in making sugar from the Chinese sugar cane. He expressed the juice in the usual manner—put several gallons into an iron boiler, out of doors, adding two spoonfuls of lime, first mixed with juice. In thirty-five minutes after fire was applied

the juice was brought to the boiling point, when the fire was withdrawn, and it was allowed to cool twenty minutes—the scum was removed, and the juice strained through a cotton cloth,—and when the juice was so cool that a finger could be held in it, the whites of three eggs were added, and it was returned to the boiler, and again brought to the boiling point,—the fire was then withdrawn till morning. The scum, which formed half an inch thick and covered two-thirds of the liquor, was removed. The liquor was then drained off, and much impurity which had settled in the kettle, taken away and the kettle made clean. The liquor was again returned and boiled down to two gallons; it was then removed to the stove and boiled down to six quarts. Four quarts were then taken out, and the remainder boiled down till bubbles rose, as they do in mush. It was then taken off and cooled; but believing that it was not sufficiently boiled to granulate, it was boiled again and until it would adhere to the skimmer in broad flakes. A portion of this was placed in a vessel, a little good sugar added and in a few hours it had so granulated that it was turned out into a cloth to drip and dry. And thus veritable Sorghum sugar was obtained. The Judge afterwards learned from a southern sugar-maker that the last boiling injured the syrup for sugar making.

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Soft Maples for Shade Trees.

We fully indorse the following communication. Soft Maples can be raised easily from seed; the trees grow rapidly; make much wood and form beautiful heads. They would be just the tree for the prairie, where a grove a dozen years old, would brake the heavy winds and storms, or furnish fire wood. We have lately seen lines of these trees on roads, proving all that we have here said, and which commanded the admiration of those who had a taste for the beautiful.

For the Illinois Farmer.

MESSRS. EDITORS:—Permit me to call the attention of all our fellow citizens who may read your valuable paper, and that are about setting out shade trees this fall, or the ensuing spring, to the claims of the soft or swamp maple.

This graceful, hardy and beautiful tree is of very rapid growth, attaining to the height of from thirty to forty feet in ten years, at that time it will throw a dense shade over a large area of ground and it will send up no suckers from its roots, (which is a leading objection to the locust.) It will not be broken by heavy sleet, as the bark is perfectly smooth and does not collect the ice to any extent.

It is not annoyed by any insect, to destroy its beauty or affect its vitality.

When planted merely for fire wood it will yield more and of a better quality, in a given time than any of our forest trees.

Some fine specimens of these trees may be seen in the western part of this county on the farms of Mr. Myers and R. H. Constant, Esq.

A Sojourner in Sangamon.

Protection for Cattle.

In the prairie sections of our State, where timber cannot be had, and where farmers are too poor at once to build good barns, farmers make very warm shelters by covering frames with straw, which latter article they have plenty of. It is cruel to subject cattle to the hard fare of laying under a fence for protection from our freezing prairie winds. Every feeling man should have a sympathy for the poor dumb brute, who cannot, in human voice, express its wants. Stock do not require as much food when warmly kept in winter as when they

have to bear its pitiless blasts. Poorly kept stock on the prairies may live till spring, through all trials; but their value will be much less than if well wintered. We have fancied that a poor steer, who has lived in the open prairie in winter, if he could reason, would rather go to the shambles in the fall, than to pass another winter exposed again to the same sufferings.

Many of our readers have made experiments with the Northern Sugar Cane the present season. We would be glad to learn of their success, and their projects with regard to the plant for the future. All the light that can be thrown upon the subject of cultivating the cane, the expression of its juice, and its manufacture into molasses and sugar, should be given to the public;—so that another year our manufacturers may rely upon experience, as they generally have had to rely upon theory, the present year.

We do not believe that it will require more skill and science to convert the juice of the Northern Cane into molasses and sugar, than it does the juice of the Southern Cane. In both cases it requires the utmost care and practical knowledge.

We may be mistaken, but we believe the coming year Illinois will make the molasses, (and some portion of the sugar,) her people will consume.

The State Agricultural Society has offered good premiums for the sugar and molasses of the Northern Sugar Cane. We hope there will be many specimens on exhibition. Entries can be made of these articles with the Corresponding Secretary up to 1st January, 1858. [See official notice in this number of the Farmer]

Digging Potatoes.

The potatoe harvest is greatly facilitated by the use of the plough; and one of the best methods is to commence by back-furrowing between the rows with a double team running the furrows a little lower than the potatoes in the hill and near enough to roll out a few of them the remainder of the work is to be performed with the hoe. Try it, brother farmers you will find it much ahead of the old back breaking way that has so much deterred people from raising that quantity they otherwise would.

What is Imphee.

It is the African Sugar Cane. Sorgho is the Chinese Sugar Cane, which is now so much talked of and experimented on. The Imphee quite nearly resembles it in botanical properties and in the agricultural and commercial value which it may possess. If any great difference except in the appearance of the seed exists between them, in these respects, it remains yet to be noticed. But the history of Imphee is, according to Mr. Leonard Wray, quite different from that of the Sorgho. Sorgho, or the Chinese Sugar Cane, was first introduced into Europe, in 1851, by the Count de Montigny, consul of France, at that time, at Shanghai in China. It was planted by M. Robert, of Toulon. From this planting only one sprout appeared. It grew and ripened, and the seeds were distributed. A gardener of Hyeres succeeded in ripening eight hundred seeds, which were bought by Vilmorin & Co., of Paris, for eight hundred francs. The plant then made it way rapidly. It was cultivated extensively and from this source mainly it was supplied to the United States.

The Imphee, on the other hand, was, according to Mr. Wray, introduced into Europe in the following way:—While at Port Natal, in Africa, in 1851, he found the Imphee, or "sweet seed," grown by the natives. He collected the seeds of all the varieties he could hear of, fifteen in all, planted them, and made sugar from each of them. He then left Port Natal, went to Europe planted it in England, France and Belgium, and established its culture in the West Indies, Mauritius, the Brazils and some other countries. It is now being introduced into the United States. Some varieties of the Imphee ripen in ninety days, from the seed.

Mr. Wray thinks that Imphee, or the African Sugar Cane, will furnish the Northern States with means of making sugar for themselves.—Several varieties of it will ripen perfectly in from 75 to 100 days. He thinks that it can be crystalized by a method which he has used, and for which he has applied for a patent in the United States, as well as in Great Britain, and some countries on the Continent. The method consists of several distinct operations. 1. Treating the juice with "cream of lime," without heat. 2. Filtering the juice through charcoal to remove all feculence. This gives a clear, bright liquor, without any heat. 3. Heat the liquor to 120 or 180 deg. Fahrenheit; put in nut galls, and bring the liquor to the boiling point. Keep it so a few moments, then cool and filter again. 4. Evaporate the liquor in open pans, skimming the scum as it rises, till the syrup is ready to grain. 5. Then remove to vessels proper for this purpose. If it should not granulate readily, throw into the concentrated syrup a few ounces of well grained sugar. This will cause it to grain rapidly. By the use of this method, Mr. W. affirms that excellent white sugar can *always* be made from the African Sugar Cane.

If he is right in this matter, our farmers will do well to look into the subject. The experience

of the last eighteen months will give additional interest to every effort to secure cheap domestic sugar. Our advice to all is, that they read extensively, observe carefully, experiment cautiously, and having proven "all things, hold fast to that which is good."—*Ohio Farmer.*

Shape of a Goode Horse.

[From an ancient Record.]

A goode horse shoulde have a black, smothe, drie, large, round and hollow hove and if it be soft and tender; and brode about the heles, it is the greater sign of lightness.

The reason is, for that the horse, from the day of hys foling, tredeth light upon the grounde, for he is afray'd to trust to his hoves, being as yet verye tender, and therefore he strayneth hys fore legges and back the more. The crownes above hys hoves shoulde be small and heavy.

Hys pastors short, and that neyther too lowe nor yeat too high; so shall he be strong beneath, and not apt to founder.

Hys joyntes great, with longe feawterlocks behynde, whiche is a sign of force.

Hys legges straight and brode; hys knees great, leane, and playne; hys thyes full of sinews, the bones whereof should be short, equal, just, and well-proportioned, and the brawnes thereof, when he standeth with hys legges together, ought to be muche more distaunt one from another above, towards the breast, than beneath.

Hys shoulders longe, large, and full of fleashe; hys breast large and rounde; hys necke rather longe than shorte, greate towards the breaste, bending in the midst, and slender towards the heade; hys ears small or rather sharpe; hys forehead leane and large; hys eyes black and greate; the hollowness of hys browes well filled and shooting outwarde, hys jaws slender and leane; hys nostells so open and puffed uppe as you may see the redde within, apt to receive air, his mouth greate; and finally hys whole heade together would be like a shepe's heade. Hys wythers should not only be sharpe-pointed, but also righte and straight, so as a man may plainlye see from them the departure of his shoulders; hys back should be shorte, and that neither risinge nor fallinge, but even and playne, hys sides should be long and large, with a small space between the hyndermost ribbe and the huckle bone; hys belly orderlye hid under hys ribbes; hys flanks not gaunte, but full; hys tayle should be full of haírs and long, downe to the grounde; finally all hys members should be correspondent to the greatness of hys bodye, fashioned much like a stag, somewhat lower before than behind.

Concrete Cellar Bottoms.

The facility and cheapness with which the bottoms of cellars may be made clean, sweet, and impervious to water, is not generally known to house owners, nor the ease and certainty with which water may be excluded from cellars when it is difficult to drain.

In soft and pervious soils, this process is best performed by paving with small stone laid in sand, but common compact soils, the natural surface, well leveled, will answer all purposes. Make a thin mortar with water lime and coarse sand, of the consistency called grout, or so thick that it can be poured from a pail on the ground. Commence with a portion of about eight or ten feet at one end and throw on sufficient to cover it an inch or more thick and with a scraper or rake head, spread it evenly and smooth; then throw on as much clean, coarse gravel as it will absorb, and so continue until it is finished. In twelve hours or as soon as it has set, sweep the overplus gravel evenly on the surface, and pump it down with a short plank and pounder, until it is smooth and compact, and in a few days of good weather it will become like a solid rock. It assists in durability and firmness, to give it several good dashes of water after it gets dry.

To render the sides impervious to water where drainage is difficult or costly, requires that the wall should be laid with mortar originally; and at the time of constructing the bottom, good well portioned water-lime mortar should be plastered on, a little higher than the source of water, and well and firmly slicked down when about half dry, and followed by another coat of the same when if a proper time intervenes before there is any outward pressure of water, it becomes as tight as a barrel or tub; it is always sweet, clean, and cool, and no vermin can enter nor find lodgement.

The sand used in the grout and mortar should be coarse, clean and sharp and the gravel from the size of walnuts down to coarse sand.

HOW TO KEEP PRESERVES.—Apply the white of an egg, with a small brush, to a thickness of tissue paper; the paper must be sufficiently large to come an inch or two over the jar, and will require no tying.

—We understand that Selby, Jones & Co. of Peoria have donated to the State Agricultural Society, one of their valuable seed drills, which will be offered for the best ten acres and over of drilled wheat, the growth of 1858.

COMMERCIAL.

St. Louis Market--Oct. 31.

Flour—Sales of 200 bbls superfine and extra, terms private; 42 do superfine \$4; 60 do \$4 12½; 100 do fancy \$4 30; 50 do extra \$5; 160 sks S. F. \$2 05; 40 do extra \$2 75 per sk.
Wheat—Sale of 129 aks spring 65c; 932 do spring and club 65@75c, 800 do 62@75c; 425 do 68@73c, 119 spring 72½c; 35 white \$1 10, without sacks.

Corn—Sale of 150 sacks mixed at 55c; 450 do choice white 70c, in new gunnies.
Oats—Sales of 200 sacks of black 34c, cash; 2,000 do white and mixed, in lots, 35@36c; 1,200 do in lots, 37c, sacks included

Bailey—400 sacks spring 62½c, sacks returned.
Rye—Sale of 67 sacks at 70c, including sacks.
Bran—Sale of 60 sacks at 75c per hundred.
Hay—Sale of 22 bales at \$1 12½ per 100.
Beans—Sale of 12 bbls white \$1 05 per bushel.
Fruit—Dried apples at \$1 40; do peaches 1 75 in small 1-ts.
Potatoes—Sale of 325 bags, in lots, 50c; 120 do 52c; 84 do 55c; 71 do 60c, 232 do private.
Onions—Sale of 66 bags at 95c per bushel.
Whisky—Sale of 68 bbls at 19c, currency; 52 do private; 28 do at market price
Provisions—Without movement.
Hogs—Nothing reported.
Groceries—Perfectly quiet.

Chicago Market--Oct. 31.

Flour—Sales 200 bbls West Arcadia at 4 00; 350 bbls Granite at 4 20; 200 bbls Arcadia at 4 12½; 100 bbls Fulton City (choice extra,) at 4 25; Hydraulic (winter wheat,) and 86 bbls Central (fancy,) at 3 75. Buckwheat flour sells at 1 50 per 100 lbs. Rye flour sells at 3 75@4 00 per bbl.

Wheat—The market for spring opened at 69c in store, and numerous other parcels sold at that rate. Three full cargoes sold at 71c on board for immediate delivery and one for Monday and one for Wednesday at the same figure. Two canal boat loads sold at 70c afloat, subsequently one cargo sold at 71½c on board, two or three round lots and one full cargo at 72c on board—the market closing firm at that figure. One cargo extra sold early at 72c on board and one later in the day at 74c on board.

Corn—Dull at 46c in store.
Oats—Moderately active at 25c in store.
Rye—Steady at 50c.
Barley—Prime is dull at 50c@60c; common 40c.

St. Louis Cattle Market--Oct. 31.

Baldwin's Yards, Broadway.—Cattle are plenty, with a moderate demand for city use and packing; butchers are buying at prices ranging from 2 to 3c gross. Packers are paying 5c net for heavy cattle, in currency. Specie is out of the market at present.

Hogs—Supply ample for the demand, and are selling at 4@5½c net. Shipping demand light. Packers are not contracting for future delivery.

Sheep—A moderate stock on the market, and selling at 1 50@3 per head, according to quality.

Cows and Calves—Suitable for shipping sell at 25 00@45 00 per head.

New York Cattle Market--Oct. 28.

The current prices for the week at all the markets are as follows:

BEEF CATTLE.	
Premium quality, per cwt.....	\$10 50@11 00
Ordinary do do	9 50@10 00
Common do do	8 50@ 9 00
Inferior do do	8 00@ 8 50
COWS AND CALVES.	
First quality, each	\$60@70
Ordinary do	50@55
Common do	40@45
Inferior do	25@35
VEAL CALVES.	
Prime quality, per lb.....	7@7½c
Ordinary, per lb.....	5@6½c
SHEEP AND LAMBS.	
Prime quality.....	\$4 50@6 75
Ordinary.....	3 00@4 00
SWINE.	
First quality, per lb.....	5½@6c
Other do do	4½@5c

The following shows from what States the supply of Beef Cattle at Allerton's came:

From New York.....	925
Ohio.....	421
Illinois.....	350
Kentucky.....	360
Indiana.....	300
New Jersey.....	32
Connecticut.....	22

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Embellishments of a Country Home.

By Tyler McWhorter, Mercer County, Illinois.

Let others praise the architectural piles, the marbled columns, and the glitter of art and the costly embellishments of the crowded city—where hoarded wealth, that has been abstracted from the hands of honest toil, displays itself in the decorations of fashion—but from the pent up views of walled streets, let me hasten to where the pure breezes of heaven freely play over the green landscape, where the leafy boughs spread their cooling shade over my head, while far away, on the broad old prairie, the glowing beams of light are softened to the eye—

"Where the tints of the earth and the hues of the sky
In color though varied in beauty may vie"—

From the ceaseless din, the tainted air, and the crowded street of the city, let me steal away to some sunny bank, where the light zephyrs bear along the sweet fragrance of opening flowers, where the warble of birds, the murmur of the dancing streamlet and the balmy freshness of nature can soothe and tranquilize every fevered disturbance of the mind. Let him, to whom the varied beauties of the smiling earth impart no delight, go the mart of trade and fashion; but give me the free air that waves the green meadows and rustles the fields of growing corn—let me enjoy the rich bounties of the orchard and the garden—give me the social tranquility and all the rural endearments that cluster around—

A COUNTRY HOME.

And this is the subject to which it is proposed to call the attention of the reader. We live to enjoy happiness; and the happiness of living necessarily depends very much upon what degree of convenience, comfort and enjoyment the place where we live will afford.

The human mind is dependent upon something external to itself for its entire nourishment, culture and expansion. External nature impresses its images, and everything with which we are surrounded and associated has its modifying influence. Then let him who would cultivate a love of home, contentment, and the finer sensibilities, in his own mind—and more especially in the minds of his children—study to make a place PLEASING AND DELIGHTFUL TO THE SENSES.

As fine strains of music greet the ear and tranquilize the mind, so, also, pleasing objects meet the sight and impart a more happy and abiding influence. Then, how important that the scenery and objects that are almost contin-

ually before our sight should be such as most delight our senses.

With the individual that has been reared in a pleasant home—in a place surrounded by interesting scenery—in the reminiscences of that childhood, the fondest associations of memory will ever cling around "THE OLD HOMESTEAD;" and, with true emotions, he may sing—

"How dear to my heart are the scenes of my childhood."

The object of this essay is not to recommend an extravagant outlay for costly dwellings, or homestead embellishments. Nothing should be recommended that will not accord with economy and republican simplicity. Having been for twenty years a resident of the western States, we well know the many things that press upon the care and attention of the western farmer; and will endeavor to offer some practical suggestions, with due regard to the cost of labor and expense of doing things. And let it be distinctly understood, that the following hints are designed for those who have, with their own hands, sustained the dignity of labor, and added to the growing greatness of our State. It is not expected that people can do everything at once; but in arranging things about a homestead it is very important to start aright.

In a short essay published in the reports of 1855, we labored to show that all correct taste in landscape gardening must spring from a love of nature; and that the most pleasing forms and aspects are always obtained by imitating the scenery of nature. And the same position, as a foundation principle, will be adhered to in these remarks.

In fitting up a place, the first matter that presents itself for consideration is—

THE LOCATION.

One of the first objects to be considered in the location of a place is LANDSCAPE EFFECT. And here arise two entirely distinct considerations:

1. The appearance of the grounds when viewed from the house.
2. The aspect of the place when viewed from the main road, or some other position.

On this point a decided difference exists between the feelings or fancies of the English and the Americans. The Englishman prefers a situation quite off from the main road; and the entire scenery of the place is arranged with reference to the pleasing effect when viewed from the mansion. Or, if adjacent to the highway, masses of trees are planted so as rather to hide the place from view—sufficient at least to give the whole an air of seclusion. The Englishman

can hardly feel that to be his own, which is equally enjoyed by every passer by. But the American generally has decidedly a different fancy. And, it may be remarked, that if there is anything in the work of the immortal author on Landscape Gardening, that will never wholly meet the American feeling, it may be presumed to be his proclivity to favor the English fancy for seclusion.

The American must be situated "on the road;" hence THE HIGHWAY stands connected with our subject, as a matter of consideration. And here the common practice justly comes up for condemnation of forcing all our roads on a straight line, over hill and dale—whatever may be the obstacles—whatever the expense—whatever the inconvenience to the traveling public, the road must be cut through. This uniform adherence to straight lines and square turns in laying out roads, regardless of make of ground, is an outrage on good taste, economy and common sense. Observe when a road is allowed to take graceful windings, to suit the make of ground—how beautiful, how natural are these easy meanderings! And how light and free the willing steed moves the carriage around the foot of the circling hill! And above all, what interesting situations these natural turns of the highway afford for country residences? This one thing constitutes an interesting feature in the location of a place. We can associate an idea of beauty with a graceful curve; but what beauty is there in a stiff, straight line? But with the moving enterprise of the Anglo-American there appears to be associated a remarkable geometrical genius. He must and will square up and straighten things—if it were possible it may be supposed he would even straighten the arch of the rainbow! As he extends his industry over the wide domain he is ambitious to give his own labors a distinguishing feature; and the greater changes he can make, on the natural face of creation, the more things present, to his ideas, an aspect of civilization.

In traveling over our State, in its primitive condition, abundance of beautiful situations for country residences present themselves to our view. But, alas, as the country settles the most interesting situations are overlooked, or the vandal hand of frontier civilization soon despoils them of all natural beauty. As an example, a few years ago one of the loveliest natural situations might be seen along the Mississippi bluff, in Rock Island county. The road meandered along the foot of the bluff, at a sufficient line of elevation to command a view of the fertile bottom lands; while, on the other side, the bluff ascended in picturesque irregularity, and was clothed in sylvan beauty, with a scattering growth of young timber, extending in broken groups to the road. A gentle swell presented a natural situation for a dwelling. A few years passed; the place was located; a farm extended over the bottom; the road was distorted from its natural place; a house, that is an outrage on good taste, was erected on the very spot; the industrious occupant had cleared away the young timber; a portion of the poles were ingeniously constructed into a corn crib, that occupied a

conspicuous position; and a goodly wood pile, in front of the house, revealed the fate of the remainder. Probably, as the enterprising man becomes able, he will "fix up things," embellish his door yard with a picket fence, and perhaps go to a nursery to get ornamental shrubbery.

But, returning to our subject, in choosing a situation in conformity with the American disposition to live near the road, and to have the place present a dignity of appearance when viewed from the road, the house should occupy a piece of rising ground, ascending from the highway; and the place can be made more interesting if some portion of the adjacent grounds is somewhat undulating.

The house should never be so near the highway as to give the place a narrow, mean appearance. If, however, the ascent from the road to the house is rather steep, the house may be within four rods of the road; but, on ground moderately ascending, or nearly level, more breadth is needed in front—not less than seven or eight rods—and a building always looks larger, and the whole aspect of the place more grand and imposing, from a distance of about sixteen rods: The amount of ground thrown in front of the house, however, should depend somewhat on what arrangements are made to keep the place in order.

It may be regarded as very fortunate if a natural growth of young timber is on the grounds, so that a luxuriance of shade may be enjoyed at once. The value of a living stream of water, if situated to afford water for stock, should never be overlooked; and, if it has dry pleasant banks, nothing can give a greater charm to the rural scenery of the place. In connection with the location of the dwelling, we are to consider the convenient and—

PROPER POSITION OF THE APPENDAGES.

The next appearance of the homestead almost wholly depends upon getting these things all in their proper place. Let it be held in view that all such essentials as barns, stables, hog yards, stacks, sheds, corn cribs, pig pens, hen coops and fenced up gardens are objects of utility, but not of fancy. One would suppose that many of our farmers especially pride themselves in making as great a display as possible of their worldly abundance. To say the least, it is a violation of good taste to place any such objects so as to interrupt any view either way of the road, or across the road in front of the house. Such things should occupy a back position. Generally, the most convenient place for the barn, and objects naturally connected with it, is somewhat back of the house, with a lane passing from the barn yard to the road. If the barn is back of the house, it should generally be at a sufficient distance to admit the vegetable garden between the house and barn, and also space near the house to get round with a team.

To give a pleasing expression to a place, it is necessary to avoid getting too much hemmed up on the front side of the house, and secure, as far as possible, an extended view of clean surface; not a dead, lifeless surface, but a surface of living green, spread forth beneath a refreshing

variety of shade. And the most important consideration associated with the embellishment of a country home is a proper—

ARRANGEMENT OF SHADE TREES.

No definite rules can be given on this subject; but general principles are inferred from what we most admire in the scenery of nature. The eye is always delighted with a stretch of smooth, green turf, beneath the shade of trees; and it is rendered more charming if the surface lays up to our view, in ascending swells of ground, openings or vistas, for the alternate play of sunshine and shade enliven the scene.

It may always be observed that a fine dwelling, or a pleasing scope of landscape, presents a more striking feature when the view is broken beyond it by masses of timber; consequently, to give the most interesting expression, we would generally desire, as far as practicable; to break the view in the back ground by planting trees of a large growth back of the house, extending the same off at the wings, which should finally fall off in broken lines towards the road. Then the remainder of the ground should be planted according to the extent and features of the place. If there is a broad, open surrounding prospect, a few scattering trees towards the extremity, and two or three neatly formed evergreens near the house, may be all that is needed. If there is more extent and variety of surface, and more diversity and interruption in the surrounding views, it may be desired to give a more sylvan feature to the place; then trees should be planted in not very dense masses, but in scattering groups, thrown into irregular lines, so as to leave occasional openings or vistas through to the road. It is through these openings, also, that the passing traveler catches a view of the place; hence it is better to have them from an oblique direction than exactly in front, as a building always presents a richer appearance from a corner view; and, also, from such positions the eye catches more extent of landscape. The heaviest trees and thickest groups should generally be at the extremity of the grounds, next to the road. Thick masses may be planted on steep banks. In rather sequestered places, perhaps at the foot of steep banks, low spreading trees may be planted, mingled with wild grape vines, Bitter Sweet or other vines, so that, while the surface may be kept clean, a thick canopy will spread overhead. Rustic seats, placed beneath Climbing Vines, may add greatly to the rural scenery of a place. A low broad topped tree, in a detached position, thickly overspread with wild grape vines, dropping around in pendant tufts, with rustic seats beneath, looks inviting in the hot summer day and is something, too, with which frame work arbors bear no comparison. The Bitter Sweet; [*Celastrus Scandens*—ED.] with its glossy foliage in summer, and bright orange colored berries in winter, looks beautiful spreading over the top of a small tree. Evergreens add greatly to the rich appearance of a place, and present a feature of life and grandeur even in the desolation of winter. They are most appropriate to elevated and diversified situations. They may be planted on the sides of steep banks; or they

may be mingled with other trees, at the wings of the house, where it is desired to break the view. If a steep bluff ascends back of the house, a few cedars, scattered over the rugged ascent, make a magnificent appearance. Also, two or three are always appropriate near the front of the house, trimmed in symmetrical form.

Let it be understood that these directions are for country homes, where it is supposed there is room to give a full expression. The means of doing it all are within the reach of any one that is able to own a home. In the—

CHOICE OF TREES,

As the first word of counsel, we would say, look to the native forest. The White Oak would be the first choice if it was not of such slow growth, and difficult to transplant. It is adapted to thick masses, or single positions, and is appropriate in almost any situation.

The Burr Oak, also, makes a good shade tree, and it presents a striking contrast among other trees in the winter.

The White Maple is appropriate in almost any place; and if a luxuriant shade is desired, in the shortest space of time, and with the least possible expense, this might enter most largely into the composition. The cheapest way is, to raise them from the seed. The seed ripens about the 20th of May, and should be gathered and planted immediately. They will grow two or three feet high the first year, and the second may be transplanted. They grow very rapidly; and, being inclined to ascend, if it is desired to give them a spreading top, they may be headed back when three or four years old.

The Box Elder may, also, be raised from the seed; is of quick growth; easily transplanted; leaves out remarkably early in the spring; a spreading top; makes a dense shade, and has no superior where trees of moderate size are desired.

The Sugar Maple should never be omitted. It is easily transplanted, and, like the White Oak, is appropriate in almost any situation; a more beautiful tree than the White Maple, but of slower growth.

The Elm is easily transplanted, and should never be overlooked. The graceful form of its broad top should assign it a place rather by itself; and it better becomes a level spot of ground.

The Coffee Nut (*Gymnocladus*) presents a striking contrast among other trees; is easily transplanted, but of slow growth.

The Buck Eye may be transplanted; it leaves out very early, and is of quick growth. Its proper place is on level ground, and not too near the house, as its odor is not pleasant.

The Chestnut makes a large, splendid shade tree, and when young, is not difficult to transplant.

The Tulip Tree bears transplanting; beautiful foliage; rapid, upright growth; like the Chestnut and Elm, it needs room.

The Linn, Blue Ash and Honey Locust are also worthy of notice; and when smaller trees, of low form, are desired, the Siberian Crab, White Thorn, Persimmon, Judas Tree, Mountain Ash and Wild Crab Apple may be noticed.

This treatise being intended mostly for the benefit of those who love to do something them-

selves; it is thought proper to add some suggestions in regard to the—

PRACTICAL WAY OF DOING THE WORK.

Having the house built, or its location decided, if there is not on the place a natural growth of timber, the ground is all plowed and smoothly harrowed. Then the entire design is surveyed and staked out. In arranging the position of trees and groups, avoid everything like geometrical forms; a novice may be assisted by cutting a quantity of bushes and sticking them up where trees are contemplated, and viewing them from different points of observation.

Trees that have been raised in the nursery are better; but, if taken from the forest, young thrifty ones are preferred, and should be taken up with as much root as possible.

Having the trees planted, the ground should be cultivated for two or three seasons. Flowers and garden productions of all kinds may be raised in the open spaces; the ground being plowed by a careful hand, with one horse and a little corn plow.

The Yankee nation having gained some notoriety in the use of the pocket knife, it may be well to add, as a word of admonition, that trees should not be "trimmed up" too much. Allow them to grow in their own natural beauty. After the trees are growing well the ground should be smoothly prepared, in the fall, and thickly seeded with spear grass (*poa pratensis*) early in the spring. It is generally best not to give the walks a finished construction until after the ground is seeded. The grounds should be entered from a side direction, and the road or walk should not be exactly straight; though we should not depart from common sense to make it crooked. Everything should appear natural. If there is a turn in a walk, some reason should appear for it, such as curving around groups of trees, or swells of ground. Neither should walks be made where there is no need for them—that begin no where and end no where. They may lead to the barn, orchard, garden, to a spring of water, or to some sequestered shade with rustic seats, or to a rustic arbor. In deciding the turns of a walk short pieces of cornstalks may be laid along on the ground in a continuous line, and adjusted by the eye. If only a grass walk is desired, little light furrows may be cut along each side with a sharp spade.

The great trouble with graveled walks is the difficulty of keeping them clean. Fine knot grass and white clover will work over them, which gives them a slovenly appearance. It is believed this difficulty would be removed if the walk was constructed with a bed of coal ashes underlying the ground. Roads and walks made on ascending ground, on our soil, need gravel to prevent them from washing. An amount of gravel can be appropriated to flowers and small shrubbery, according to a person's taste—or, according to the amount of time people are willing to devote to the care of such things.

In laying out the design of a place the cost of keeping it in order should always be considered. A small place kept in good order is more to be admired than a great breadth of

tall grass. A place of any extent should be arranged to have the principal part of the grounds grazed off by sheep. To effect this let the house, with a small portion of adjacent ground for flowers and shrubbery, be protected by a wire fence, which, at a short distance, will be invisible; or, a wire fence may start at the road, at the entrance gate, and continue along the walk, or carriage road, towards the house, and finally join some other fence, so as to throw the house, with a small piece of adjacent ground, together with the fruit yard and vegetable garden, into the same field with the orchard, from which all animals are excluded, leaving the broad scope in front of the house to be pastured. By this arrangement only a small amount of fancy ground will be need to be kept mowed.

In my former essay such fences were recommended as least obstruct the view; and it was suggested that if they were painted, it should be with a color corresponding, nearly, with the bark of the surrounding trees. Some appear to regard this as a mere arbitrary idea; but suppose a charming scope of landscape to be stretched before you, with no intervening obstruction to the view—then suppose, all at once, a glaring white picket fence is thrown up before you! There it stands, in self-display, as much as to say, "look at me—look at nothing beyond me." A picket fence is very appropriate for a poultry yard. A very appropriate fence may be constructed along the highway, with a board a foot wide at the bottom, and a strong net work wire fence, three feet wide, above. Such wire fences are manufactured in the east, and are not expensive.

In the composition of all the things that together constitute the homestead,

THE DWELLING

is the object, to which everything else holds a secondary relation. It should be seen—should present an attractive feature; and when it stands back in a luxuriance of verdant scenery, it has a more cheerful expression painted some rather light color. But there is no reason why every house should be the "whitest of the white."—White looks very well; but he who thinks this is the only appropriate color, should draw a lesson from the variety of nature. White is a pretty color for flowers, and a pretty color for dwellings, but it does not follow that we would more admire the flowers if they were all white, neither are dwellings more objects of our admiration for being all white. If all creation were white we could no longer admire the color. A dwelling presents a lively expression and a richer appearance with the trimmings only painted white, and the body or ground work some other light shade. A very little India red mixed with white lead, makes a lively color; then a very little lamp black added deepens the shade. A little chrome yellow added to white gives a light straw color. Then an addition of a very little India red gives a soft, pale orange shade, &c. In mixing paints the colors must be well ground in oil before mixing.

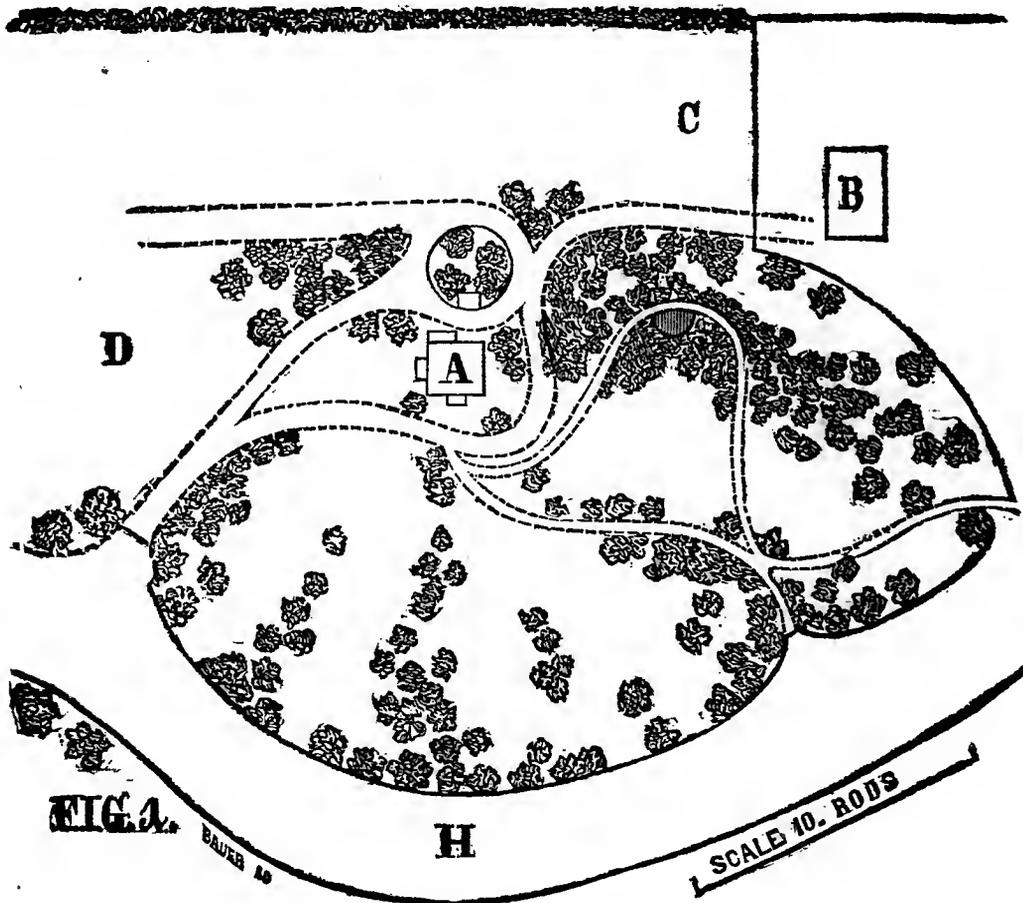
The house should present a becoming appearance, and afford comfort and convenience to its inmates; but this does not imply that it should

be a costly edifice. It is feared there is an increasing extravagance, among the upper classes, in building over-costly dwellings. The wealthy set the example, and men of more limited means ruin themselves in trying to follow.

If there is any subject on which a book is needed, it is on the construction of cheap and commodious dwellings. A house may be built in a square form, two stories high, hipped roof, modallion cornice, good projection and plain brackets, with a cheap ballustrade portico in front, all in plain style. Such a house presents a good appearance, and secures a large amount of room at a moderate expense. If a picturesque diversity in the situation seems to demand a rural gothic cottage, such buildings can be built appropriate to a country place without so much little, carved, expensive, flimsy trimmings. Our present subject does not re-

late to the internal arrangement of the dwelling, but to the external feature of the homestead. Among the many evils that demand reform in our country is the habit of American females of excluding themselves, almost wholly, from the open air. Our homesteads should have more outside attractions. If the pale faced consumptive-looking inmates of the drawingroom and parlor would invigorate their lungs with the fresh air of morning, and spend the same amount of time in the flower garden that they spend in useless needlework, it would impart life and buoyancy to their spirits and the bloom of health to their cheeks. Better for a house to be without a "parlor" than without its open air attractions.

That some of the foregoing suggestions may be better understood, it is thought proper to present the following—



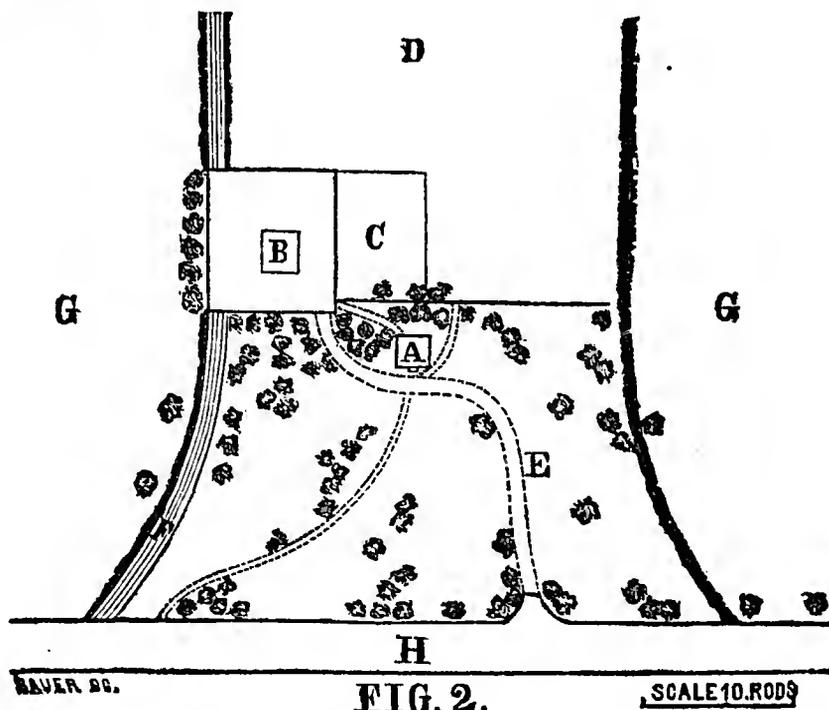
DESIGN FOR A HOMESTEAD.

The house, A, (fig. 1,) stands on rising ground, over 10 rods from the road. The highway, H, curves around the situation, so as to keep on level ground. The barn is seen at B, northeast of the house, on lower ground, with a point of the barn yard extending to the highway. A wire fence starts at the entrance gate and continues along the south side of the carriage track, E, and finally unites with the barn yard; and thus the whole extent, in front and east of the house, extending to the barn yard, is pastured by sheep, including nearly two acres, but will appear to be much larger. The garden is located at C; the orchard at D, protected, on the north, by a hedge. A walk leads to the road

eastward. Another walk winds off east of the house, through a dense shade, down to a natural arbor, at the foot of a declivity. The same path comes up the ascent and leads towards the road. Another path strikes off to where the sheep are turned from the lawn into the barn yard.

A full view is preserved westward to the orchard and road; also, several other lines of view are had to the road, through vistas of the lawn, and the dwelling is seen from the road, for some distance, from both the east and the west. Situations similar to the foregoing can be arranged almost any where on the rolling prairies.

We will conclude this essay with a—



DESIGN FOR A LEVEL SITUATION.

This design, (fig. 2,) is on half the scale of the former, and is explained with the same letters. Also, G indicates the farm land—F the wagon track along the hedge. The house is 16 rods from the road. The piece of ground appropriated to the lawn extends 40 rods on the road and 20 rods back, and contains 4 acres, but being wide on the road, and covered with scattering trees, it looks much larger than it really is. Here we have a tame, level situation, with the road pass-

ing directly by. It will not admit such interesting diversity, yet even here we can have a breadth of beauty and an air of grandeur. We do not have such a variety of shade, but we have the broad, extended views. Every place needs a small pasture, and we have it here with all the charms of a park. If we are a few rods further from the road than exactly suits our Yankee notion, we are just that much nearer the centre of our farm—that much nearer all our work.

The Northern Sugar Cane.

We have before alluded to the fact that but little was known of the proper manner of converting the juice of this cane into syrup until the present fall. Many scientific modes were suggested, which on trial altogether failed in producing satisfactory results. We know of several cases in which the use of lime made the syrup entirely worthless, and when no more was added to the juice than was necessary to neutralize the acid, tested by the litmus paper. It was, indeed, in most cases an unknown field, in which every thing was to be learned by experiment. Would it be strange, then, if some of the trials failed to be successful? We do not, however, know of such failure.

Our present purpose is collate from the different statements published in the newspapers now before us on the subject of manufacturing syrup from the juice of the cane, whatever may seem to be important or as furnishing hints by which the best system

for doing the work may be accomplished.

Mr. Ambrose Henderson, of Jacksonville, in this State, has been very successful in making a capital article of molasses from the juice of the cane. In a few minutes conversation with him we learn something of his mode of operations. After experimenting with lime and failing to make a good article, he discarded the use of lime and succeeded to his satisfaction. He found neither lime, eggs or milk, necessary to purify the juice. He gradually brought the juice to the boiling point, then took it from the fire, the impurities rose, they were taken off, the juice then returned to the fire and the boiling completed. Unripe canes he found to make the lightest colored syrup, but not the best. Ripe canes which were frozen twice, once solid, made good syrup but less in quantity than the same before they were frozen.

Mr. S. S. Ruby, of Macon county, has made some very fair molasses. The juice

was expressed by a mill with wooden rollers. He estimates that his cane produced at the rate of 200 gallons of molasses to the acre. He thinks that the raising of the cane and the manufacturing of the juice must be a profitable business.

Mr. Jas. D. Johnson, of Limaville, Ohio, made of 208 gallons of juice, 30 1-2 of very handsome thick molasses. He says that the manufacturing should be done in a pan which is exposed to the fire only at the bottom. If this is done, the syrup will be of a color resembling the purest honey. He says that with his experience he is convinced that this cane will become as common in the North as Indian corn.

Wm. Bonar, of Mt. Vernon, Ohio, raised what would be equal to about five-eighths of an acre. He evaporated the juice in shallow pans and made 112 gallons—the juice yielding about 12 per cent. of syrup.

John Day, Lawrence, Kansas, writes—A great quantity of Chinese Cane has been grown in Kansas this year. I obtained 12 quarts of juice from 100 canes, and in every case I got one sixth syrup. I have two long pans, made of Russia iron, and use lime.

A gentleman in North View, Baltimore county, Md., writes to the Country Gentleman, that from 13 gallons of juice he made nearly two gallons of syrup, equal in flavor and quality to any similar article he ever saw. He believes the plant to be one of greatest acquisitions of our country, that has been introduced for many years.

The Louisville Courier of the 27th Oct. says—That the Chinese sugar cane is a perfect success in that State, and that Dr. Broadnux, of Oldham county, who has eighteen acres, was manufacturing two barrels of superior syrup per day.

Mr. J. H. Smith writes to the Commissioner of the Patent Office—"I have succeeded in producing the most beautifully flavored syrup I have ever tasted. I think it will take the place of the Boston golden syrup. I have also succeeded in taking from the syrup the entire cane taste, and boiling it down till it becomes quite thick,

then setting it aside in some open vessel a few days, it turns and grains gradually into sugar. The manner of my boiling is to put a small sprinkling of unslacked lime—say one gill into a hundred gallons of juice—will at least make 100 gallons of good syrup."

Drs. Bowman & Cobbedicks, of Rock Island county, have grown the present season, forty-five acres of the Chinese sugar cane. Considering the season, they made a very fair crop. They have put up an efficient mill for grinding the cane—the rollers being of cast iron. The motive power is a steam engine. They make about 100 gallons of molasses per day, for which they find a quick market, in which they readily obtain \$1 per gallon.

Benj. Jenkins, of Kaneville, made a good syrup by putting a small table spoonful of soda into a kettle of 12 gallons of juice when blood warm. He thus got a first rate article, clear as honey, and without the least bitter taste.

Geo. W. Bushe, of Jerseyville, has been successful in raising the cane and making syrup. He says that an acre of cane can be raised at the same expense as an acre of corn, and that it will make 10 barrels of molasses. The boiling process is the same as for making maple sugar, but copper or brass kettles are better than iron—(making the syrup of a lighter color.)

Dr. C. B. Ostrander, of Livingston county, writes to the Prairie Farmer: "Last spring I obtained three dollars' worth of seed, and planted in rows four feet apart, one kernel or seed every twelve to twenty inches, on one acre of dry loam soil, a part of which I highly manured from my stable. I planted the seed May 19th, and in about a week it came up. On the manured ground it grew fast; the other very slow. The first named ripened its seed well; the other scarcely got into good dough. I purchased a sugar (crushing) mill of two iron rollers, 5 1-2 inches in diameter, and 14 inches long; had new gear wheels cast, both a size, to give equal motion to the rollers; then commenced grinding and boiling, and soon found

that six gallons of juice would make one gallon of superior syrup. I then built a mill with wooden rollers, 18 inches in diameter, and went at it in good earnest, and found that it now took eight gallons of juice for one of syrup. Upon investigating the case, I found there were two juices distinct from each other in the cane, viz: a crystalizable and an uncrystalizable saccharine juice. The iron rollers expressed both; the wooden rollers only one. The juice run from the iron rollers granulated easily, while the juice from the wooden rollers could scarcely be said to grain.

I made from one acre of cane 200 gallons of syrup, for which our merchants pay me, by the barrel, 90 cents per gallon. The result may be summed up as follows:

Rent of land.....	\$3 50
Cost of seed.....	3 00
Plowing of ground and planting.....	2 50
One day's plowing cane.....	2 00
Paid for labor in working.....	18 00
Paid for wood for boiling.....	2 00
One iron mill.....	28 00
One wooden mill.....	20 00
Two kettles, 40 and 60 gallons.....	17 50
Total cost.....	\$96 50
200 gallons syrup at 90 cts per gal.....	\$180 00—83 50

Leaving a nett profit over every expense of \$83 50, from one acre of Chinese sugar cane. The cane was twice frozen solid before it was cut.

Col. Belcher, of St. Louis, writes to a gentleman in this State: "I have made some experiments in the syrup of the Chinese Sugar cane, but have not succeeded in granulating it; and I very much fear it will prove a failure so far as sugar making is concerned, and if it will not granulate, the syrup does not contain a due proportion of cane sugar."

Mr. J. B. Newcomb, of Elgin, in this State, writes to the Prairie Farmer, that he expressed the juice of the cane before the seed had matured, converted it into syrup, and set it away, and in a day or two after found half of it had granulated. He examined the crystals with a microscope of one hundred diameters, and found them very well defined and almost transparent.—No sugar was put into help the granulation.

S. B. Shaw, of East Cleveland, writes to the Ohio Farmer: "From a little patch,

containing about 240 square feet, I made 2 1-2 gallons of very superior quality—in appearance like honey and of very excellent flavor. Though only three-fourths of the juice was extracted from the cane, the yield of syrup was equal to over 225 gallons per acre, and I am fully satisfied that this amount can be easily excelled by proper culture and proper grinding of the cane."

The editor of the Ohio Farmer has been sceptical in regard to the Chinese Sugar cane furnishing the north with molasses and sugar. We are gratified to notice the following paragraph in that paper of the 14th instant:

We have received several samples of syrup made from the Sorgho. One from A. Turner, of Sharon, was a good sample of molasses, and the same may be said of that from A. Williams, of Jouth Kirtland; both of these we think, were made from cane that was rather or that had been somewhat hurt by the frost. We have little doubt that the profitable culture of this cane has become a fact, and that the Middle States and some of the Northern, have a climate in which it can be grown to advantage. Much has yet to be learned regarding the most favorable soils, aspects and conditions in which this culture can be prosecuted; and science as well as practical experience must point out the proper methods by which the manufacture of both sugar and cane be brought to the proper degree of perfection. We anticipate that at no distant day, Sorghum sugar and molasses will be articles of common consumption and sale. Many of our friends who have tested this plants, are sanguine of this, and think that this product will yet become one of the staples of our State.

We here take occasion to say that the seed of the cane will not poison stock. We know that it has been fed to stock not only without injury but with decided benefit. It is possible that stock may gorge themselves with it, and that it may thus kill them. But so they may do with corn, wheat and other articles. Fed out as it should be, the seed can be made useful for stock; and ground and converted into flour, it can be made to rival buckwheat flour for "hot-cakes."

We regard the experiments in growing the Chinese sugar cane in the season just closed, the expression of its juice, and it

manufacture into syrup as an entire success. The syrup when well made, is equal to the golden syrup. Most of that we have seen, has been imperfectly made. Experience is necessary in this article of manufacture, to attain superior excellence. We have given the experience of many in this article. It will be of service to those who intend to prosecute the cultivation of the cane. The cultivation of the cane and the manufacture of its juice, was an unknown field of experiment. It is a marvel that the cultivators of the cane have done as well as the results show—a marvel to others and themselves. All who have thus tested the plant, speak with pleasure and delight of their success.

The following will be the results of the experiments the past season with the Chinese sugar cane:—Its cultivation will be greatly extended the coming year in Illinois; the growth of the cane will be better; better apparatus will be provided for expressing its juice, and converting it into syrup; the syrup will be far superior in quality, as a general fact, than that made the present year. It will be a profitable business;—paying better than corn or wheat. The syrup will be consumed in our State, and thus keep in it and in circulation a large amount of money now sent away for the foreign article. We shall dispense with that villainous compound, brought to us from a distance, of "green flies, dead rats, occasional non-descript lumps, which some have supposed might be bits of little niggers, and which goes under the names of "Sugar House," "Reboil," and "New Orleans Molasses."

We have an abiding conviction that the syrup of the Chinese sugar cane will yet be converted into the best sugar.

☞ The "begasse," or stalks of the Chinese Sugar Cane, after the compression of the juice, have been converted in Massachusetts, into good wrapping paper.

☞ A large importation of Llamas from Peru, is expected in New York. They are of the variety from which the alpaca wool is obtained.

THE GRAZIER.

History of Fine Wool Sheep.

The following, which we extract from the speech delivered by Hon. J. Collamer, "on the Tariff and Wool interest," in the U. S. Senate, February 26th, will be found highly interesting to all classes of readers, and especially to sheep breeders. It is in reply to the suggestion of Mr. Hunter, of Virginia, that we did not raise fine wool in this country.—[Vt. Watchman and State Jour.

There are no fine wools in the world, raised anywhere on this earth, which are not all from the same family of sheep. By fine wool, I mean such wool as is sometimes called spinning wool, which is spun and wove into broadcloths and kerseymeres, especially those which are required to take a finish; that is, after they are woven and fulled, there is a face raised upon them, by either carding or teaseling, and then they are sheared and pressed and calendered, for the purpose of making a finish on them. That can be done only with fulling wool. Now, where do the fulling wools come from? I say they are all from the same family of sheep.

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that six gallons of juice would make one gallon of superior syrup. I then built a mill with wooden rollers, 18 inches in diameter, and went at it in good earnest, and found that it now took eight gallons of juice for one of syrup. Upon investigating the case, I found there were two juices distinct from each other in the cane, viz: a crystalizable and an uncrystalizable saccharine juice. The iron rollers expressed both; the wooden rollers only one. The juice run from the iron rollers granulated easily, while the juice from the wooden rollers could scarcely be said to grain.

I made from one acre of cane 200 gallons of syrup, for which our merchants pay me, by the barrel, 90 cents per gallon. The result may be summed up as follows:

Rent of land.....	\$3 50
Cost of seed.....	3 00
Plowing of ground and planting.....	2 50
One day's plowing cane.....	2 00
Paid for labor in working.....	18 00
Paid for wood for boiling.....	2 00
One iron mill.....	28 00
One wooden mill.....	20 00
Two kettles, 40 and 60 gallons.....	17 50
Total cost.....	\$96 50
200 gallons syrup at 90 cts per gal.....	\$180 00—\$83 50

Leaving a nett profit over every expense of \$83 50, from one acre of Chinese sugar cane. The cane was twice frozen solid before it was cut.

Col. Belcher, of St. Louis, writes to a gentleman in this State: "I have made some experiments in the syrup of the Chinese Sugar cane, but have not succeeded in granulating it; and I very much fear it will prove a failure so far as sugar making is concerned, and if it will not granulate, the syrup does not contain a due proportion of cane sugar."

Mr. J. B. Newcomb, of Elgin, in this State, writes to the Prairie Farmer, that he expressed the juice of the cane before the seed had matured, converted it into syrup, and set it away, and in a day or two after found half of it had granulated. He examined the crystals with a microscope of one hundred diameters, and found them very well defined and almost transparent.—No sugar was put into help the granulation.

S. B. Shaw, of East Cleaveland, writes to the Ohio Farmer: "From a little patch,

containing about 240 square feet, I made 2 1-2 gallons of very superior quality—in appearance like honey and of very excellent flavor. Though only three-fourths of the juice was extracted from the cane, the yield of syrup was equal to over 225 gallons per acre, and I am fully satisfied that this amount can be easily excelled by proper culture and proper grinding of the cane."

The editor of the Ohio Farmer has been sceptical in regard to the Chinese Sugar cane furnishing the north with molasses and sugar. We are gratified to notice the following paragraph in that paper of the 14th instant:

We have received several samples of syrup made from the Sorgho. One from A. Turner, of Sharon, was a good sample of molasses, and the same may be said of that from A. Williams, of Jouth Kirtland; both of these we think, were made from cane that was rather or that had been somewhat hurt by the frost. We have little doubt that the profitable culture of this cane has become a fact, and that the Middle States and some of the Northern, have a climate in which it can be grown to advantage. Much has yet to be learned regarding the most favorable soils, aspects and conditions in which this culture can be prosecuted; and science as well as practical experience must point out the proper methods by which the manufacture of both sugar and cane be brought to the proper degree of perfection. We anticipate that at no distant day, Sorghum sugar and molasses will be articles of common consumption and sale. Many of our friends who have tested this plants, are sanguine of this, and think that this product will yet become one of the staples of our State.

We here take occasion to say that the seed of the cane will not poison stock. We know that it has been fed to stock not only without injury but with decided benefit. It is possible that stock may gorge themselves with it, and that it may thus kill them. But so they may do with corn, wheat and other articles. Fed out as it should be, the seed can be made useful for stock; and ground and converted into flour, it can be made to rival buckwheat flour for "hot-cakes."

We regard the experiments in growing the Chinese sugar cane in the season just closed, the expression of its juice, and it

manufacture into syrup as an entire success. The syrup when well made, is equal to the golden syrup. Most of that we have seen, has been imperfectly made. Experience is necessary in this article of manufacture, to attain superior excellence. We have given the experience of many in this article. It will be of service to those who intend to prosecute the cultivation of the cane. The cultivation of the cane and the manufacture of its juice, was an unknown field of experiment. It is a marvel that the cultivators of the cane have done as well as the results show—a marvel to others and themselves. All who have thus tested the plant, speak with pleasure and delight of their success.

The following will be the results of the experiments the past season with the Chinese sugar cane:—Its cultivation will be greatly extended the coming year in Illinois, the growth of the cane will be better; better apparatus will be provided for expressing its juice, and converting it into syrup; the syrup will be far superior in quality, as a general fact, than that made the present year. It will be a profitable business;—paying better than corn or wheat. The syrup will be consumed in our State, and thus keep in it and in circulation a large amount of money now sent away for the foreign article. We shall dispense with that villainous compound, brought to us from a distance, of "green flies, dead rats, occasional non-descript lumps, which some have supposed might be bits of little niggers, and which goes under the names of "Sugar House," "Reboil," and "New Orleans Molasses."

We have an abiding conviction that the syrup of the Chinese sugar cane will yet be converted into the best sugar.

☞ The "begasse," or stalks of the Chinese Sugar Cane, after the compression of the juice, have been converted in Massachusetts, into good wrapping paper.

☞ A large importation of Llamas from Peru, is expected in New York. They are of the variety from which the alpaca wool is obtained.

THE GRAZIER.

History of Fine Wool Sheep.

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sheep were placed at Windsor, under the care of Sir Joseph Banks, and the utmost exertions were made to induce the use of that kind of fine sheep among the farmers of England. To this day, England does not raise a pound of wool out of which you can make a yard of broadcloth that any gentleman in this house wears. For a long time all her fine wool has come from abroad. After Spain went into the business of digging gold in South America, all her wool was exported to England, there manufactured, and sent back to Spain to be sold, and they dug gold to pay for it. The result has been that, while they have run down, England has run up.

I wish to show why that flock of sheep did not succeed in England, and to show the difference between their condition and ours, to see why fine wools succeed here and cannot there. At the same time that that present was made to George the Third, a similar present was made to Louis the Sixteenth. The flock given to the King of France was put on the Rambouillet farm, which was then the royal farm, and is still, Bonaparte having always kept it. That flock of sheep, bred in, as I shall hereafter mention, in the French merino of the present day.

At the same time, the same present was made to the Elector of Saxony. The flock which was sent to the Elector of Saxony was attended to, and selected all the time for the finest wool, without regard to size. The French selected with regard to size. The Germans selected for fineness of wool merely. The flock given to the Elector of Saxony is the basis, the origin, the parentage of all the Saxony wool of the world, now to be found all over Bavaria, Silesia, Hungary, Russia and this country—as I shall directly show.

About the latter part of last century there was introduced into England that branch of farming called the turnip culture, which is the basis of prosperity to the English agriculturist at the present day. Everything in England which sustained human life, everything that the people could eat was very dear, as we all know, until a recent period, since they have taken off their sliding scale of duties on wheat, and allowed foreign provisions to be introduced for the benefit of manufactures. The turnip culture was this; they sowed a large field, especially on the downs of England, with turnips—generally the Swedish turnips—and then in the fall of the year they would put upon the turnip fields a flock of their native long wool sheep—the best improved

breeds of which are the South Downs and the Leicestershires. Those sheep ate the turnips on the ground. There was no gathering them—no cutting them up. When they exhausted one field they went to another, and so on through the winter. The climate being mild, they wintered in the fields on the turnips, and were in a fine condition for mutton in the spring. A mutton sheep in England, at that day and now, averages from eighty to one hundred pounds dressed off. The French merinoes, with all the improvements they could give them by breeding in, do not average more than forty pounds dressed off. The mutton of the English sheep would command in the British market, and has all the time for thirty years back, from ten to twelve cents a pound. It is a very superior mutton.

That is not all. When a piece of land in England had been tilled in the manner I mentioned, and the sheep herded upon it, it would produce twenty-two bushels of wheat to the acre, and that wheat averages from two dollars to two dollars and fifty cents a bushel in England at all times. Bearing these facts in mind, you will see how fruitless was the attempt to introduce into England these little merinoes, as they have improved them, yield but six, and ours from three to three and a half or four pounds. The farmers were told by the nobility, "The King has made me a present of some fine wool sheep, and we want you to attend to them, so as not to be dependent on foreign countries for our supply of fine wool." The farmer saw at once that the wool from these sheep would not bring him more than two shillings sterling a pound for three pounds, while the long wool sheep would shear eight or ten pounds of wool, and then the inquiry was, how much will that little sheep bring for mutton? Not a cent. You can never make valuable mutton of it. In Vermont, where we have so many fine wool sheep, our people use little or no mutton, though we have a little lamb occasionally. I never saw any mutton there that compared at all with the Virginia mutton which I see here. Indeed, I am reminded of an anecdote of an old neighbor of mine who was rather fond of mutton. He used to talk about these little merino sheep, and said, "When you got a quarter of it dressed off, you could see the light between the ribs. In good old times, when we had the large sheep, a man might go out and steal a sheep, and bring home something for his family to eat, but now, if you bring home, these little merino sheep, you might as well have a tin lantern to eat." [Laughter.]

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would have been sufficient. And he then sagely remarks, that the eye has not regained its clearness entirely. But, he says, the sight is not wholly lost! which is indeed wonderful. The last "hook" was removed two years ago; and, he says, there has been no re-appearance. In closing his article the writer says, "these are facts—the opinions of writers on the subject to the contrary, notwithstanding." It is clear to us that he has been pretty well hooked himself.

This substance in the eye of the horse, called the haw, or hook, is known to anatomists as the "nictitans membrane," and is an appendage to the "retractor oculi," or retractor muscle of the eye, and on which its action depends. It is cartilaginous, situated behind the inferior canthus, between the eye-ball and the side of the orbit. In a healthy condition, the cuticular margin of this substance is commonly black—which part is only visible externally. In disease of the eye this membrane, or cartilage, becomes swollen; or its projection may be caused by the action of the retractor muscle drawing the eye inward to escape the irritation caused by the light. And thus the nictitans membrane is forced over the eye, acting, as it were, as a third eye-lid, for wiping away dust or other foreign bodies. Horse-owners, mistaking effect for cause, argue that this membrane, which is more readily seen when the eye is diseased, must be the cause of all the trouble; and then they immediately secure the animal to a "hole in the side of the barn," and, armed with needle and thread and a small keen blade, extirpate, by piece-meal, the supposed offending substance, sometimes by three different operations. And thus the supposed remedy becomes itself a disease which they cannot control.

In "Mason's Farrier Improved," a writer says, the "hooks" is a substance growing upon the inner edge of the washac, or caruncle of the eye; that it causes great pain to the eye, tightness of the skin, stiffness of the hind legs—and finally, a general spasmodic affection of the whole system. All this is to be cured in the following manner, viz.: by securing the animal and removing the hook—being careful to impress upon the reader that the piece cut must not be larger than one-fourth the size of a fourpence half-penny. Another piece meal operation. Subsequent treatment—The eye should be washed with salt and water, the legs, up to the belly, to be bathed in equal parts of vinegar, spirit and oil, or fresh butter. The food should be bran and oats, with a spoon-

ful of sulphur and saltpetre. And a cure is promised in four or five days. He further says:—"Great care should be taken not to cut too large a piece from the caruncle, as it disfigures the eye and sometimes produces blindness."

In an old number of the "American Farmer" we find the following in a communication from W. V. Murray. It was published in 1830, and shows the absurdity of the above treatment. "Before I was acquainted with this subject, I had two fine horses sacrificed to this mistaken and ruinous operation. Ignorant quacks do not know the horse has a membrane, peculiar to the animal, which is at pleasure drawn over the eye. The enlargement of this by fever produces the appearance, which, in jockey slang, is called the 'hooks.' Reduce the fever by depletion, such as bleeding and purging, and the hooks will disappear.—That is, the membrane will be restored to its natural size and office; which is, to clear the eye from dust, etc. I need not say the cutting out of this membrane is unnecessary, as I have proved the uselessness of the operation by restering a horse without it."

Thus we see, that Mr. Murray has, years ago, declared what we now sustain. And if some of our practitioners had more acquaintance with the writings of those who have gone before them, and did not suppose that everything which they had not themselves seen was something entirely new, they would be much wiser than they are, and would save the journals from the communication of wonders and miracles. Much benefit may be derived from notices of any new and peculiar feature of disease. Its successful treatment by any one (qualified) of the profession, will save years of experiment and of failure. The veterinary journals are open to all, for a small fee; and no man who desires to advance his own interests, or would acquire the confidence of the public, should fail to be a constant reader. —[American Veterinary Journal.

PRICE OF HOGS.—We heard upon the street, yesterday, of several transactions in hogs, on foot, at \$3 gross. Compared with prices a few months ago, this seems quite a falling off. Yet as the almost total dependence of our farmers this fall is upon their hogs, to raise money to meet their January dues, we hope none will be cheated into making sales at a higher rate, *on time*—with the almost certain prospect of losing the whole—rather than take the market price *in cash*.—*Morgan Journal*.

AGRICULTURAL.

An Agricultural Ode.

BY WM. C. BRYANT.

Far back in ages
The plough with wreaths was crowned,
The hands of kings and sages
Entwined the chaplets round,
Till men of spoil
Disdained the toil
By which the world was nourished,
And blood and pillage were the soil
In which their laurels flourished.
Now the world her fault dispairs—
The gilt that stains her story,
And weeps her crimes amid the cares
That forms her earliest glory.

The throne shall crumble,
The diadem shall wane,
The tribes of earth shall humble
The pride of those who reign;
And war shall lay
His pomp away;
The fame that heroes cherish,
The glory earned in deadly fray
Shall fade, decay and perish.
Honor waits o'er all the earth,
Through endless generations—
The art that calls the harvest forth,
And feeds the expectant nations.

Hungarian Millet.

BY D. B. DIXON, OF MUSCATINE, IOWA.

The Moha de Hongrie, (*Panicum germanicum*.) imported by the Patent Office in 1854, and described in the Agricultural Report of that year, was first grown in this region in Mantes township, Monroe county, and is here commonly known under the name of "Hungarian Grass." It is luxuriant in its growth, and produces hay of the finest quality. Horses and cattle eat it with avidity. Farmers in every part of the country should give it their attention, as it will make more and better feed than any other kind of grass now known in the United States. Our western farmers, in particular, should learn its value; for its destiny is to change the agricultural products of this portion of the Union, and substitute cows, horses, mules, and sheep in place of hogs. We have raised hogs, heretofore, from necessity, simply because our only reliable crop was corn, and other domestic animals required hay, or its equivalent, which we could not produce with cheapness and certainty.

A good crop of the Hungarian grass is about 3 tons of hay and 30 bushels of seed to an acre, while it will often go beyond, and seldom fall below this. Such crops were grown last season, notwithstanding the drought.

The seed may be sown in this region, from the 1st of May to the 15th of June, at the rate of a bushel to 3 acres. It should be put into the ground in the same manner as oats, harrowing before and after sowing. The time for cutting is when the seed is nearly ripe, and the whole plant of a fine yellow color. If cut too early, the seed will not be perfect, and if too late, it will shell out in curing; the stalks will also be too woody. It may be cured in the same manner as other hay. As fodder, after threshing, it is fully equal to Timothy; and when fed out with

the seed in, as it generally should be, it is better than good sheaf-oats.

I am sowing, this season, 100 acres of this grass, from which I expect to raise at least 3,000 bushels of seed.

Natural Enemies of Insects.

One of the most useful is the toad. He feeds wholly on insects. Perhaps some reader may demur to this, and cite the authority of a so-called "Professor" and some of his "Institute" associates, that "toads eat strawberries," and not satisfied with a fair average of the crop, "they always pick out the best." But our strawberry cultivators need not feel any special alarm at the presence of the toad in their grounds, as it was only the superior berries that were produced by the application of "tanic acid," that this animal has ever been accused of eating.

The toad feeds mostly at evening twilight, at which time he hunts for his prey. He is not dainty, but swallows bugs, grubs, and flies as they come in his way, or as he chances to find them. There are many insects which seldom go abroad by daylight—such as various moths, the May bug (*Melolontha*.) and other beetles, and several species of insects, the larvæ of which are called "cut worms," &c. All these are devoured by the toad. Later in the season he feeds on crickets and grasshoppers. As before remarked, he is entirely harmless in reference to vegetation, and on the whole, is the most useful of all animals as an insect destroyer. His manner of catching insects is such that even the most delicate plant is not injured by the act.—His long tongue is thrust with unerring aim on the victim, who vanishes so sudden that unless the observer pays close attention he can hardly describe the operation.

The toad is particularly useful in gardens, where poultry cannot be introduced on account of the injury they would in various ways produce, although they might destroy many insects.—The toad neither scratches the ground nor feeds on the crop, and his small size and trifling weight permit him to go everywhere in search of his food. We are aware that many people have an antipathy to this innocent little animal. To "conquer" such "prejudices would not only be a virtue on the score of humanity, but would be found to pay in a pecuniary sense, which relieves the case of those conflicting points so embarrassing to some minds."

The frog is an eater of insects to a considerable extent, but as most of the species stay near water, they take comparatively few of the insects most prejudicial to agriculture. But some kinds of frogs by no means confine their carnivorous propensities to insects; they swallow young ducks which go on the water, or chickens which happen to come near it. Probably they would not eat insects enough to make it an object to harbor them; and to feed them with ducks and chickens would be altogether too expensive, even if we should adopt the custom of the Gallie epicures, and turn the carcass of the frog to the best account.

The repulsive animal, the skunk (*Mephitis*

would have been sufficient. And he then sagely remarks, that the eye has not regained its clearness entirely. But, he says, the sight is not wholly lost! which is indeed wonderful. The last "hook" was removed two years ago; and, he says, there has been no re-appearance. In closing his article the writer says, "these are facts—the opinions of writers on the subject to the contrary, notwithstanding." It is clear to us that he has been pretty well hooked himself.

This substance in the eye of the horse, called the haw, or hook, is known to anatomists as the "nictitans membrane," and is an appendage to the "retractor oculi," or retractor muscle of the eye, and on which its action depends. It is cartilaginous, situated behind the inferior canthus, between the eye-ball and the side of the orbit. In a healthy condition, the cuticular margin of this substance is commonly black—which part is only visible externally. In disease of the eye this membrane, or cartilage, becomes swollen; or its projection may be caused by the action of the retractor muscle drawing the eye inward to escape the irritation caused by the light. And thus the nictitans membrane is forced over the eye, acting, as it were, as a third eyelid, for wiping away dust or other foreign bodies. Horse-owners, mistaking effect for cause, argue that this membrane, which is more readily seen when the eye is diseased, must be the cause of all the trouble; and then they immediately secure the animal to a "hole in the side of the barn," and, armed with needle and thread and a small keen blade, extirpate, by piece-meal, the supposed offending substance, sometimes by three different operations. And thus the supposed remedy becomes itself a disease which they cannot control.

In "Mason's Farrier Improved," a writer says, the "hooks" is a substance growing upon the inner edge of the washer or caruncle of the eye; that it causes great pain to the eye, tightness of the skin, stiffness of the hind legs—and finally, a general spasmodic affection of the whole system. All this is to be cured in the following manner, viz.: by securing the animal and removing the hook—being careful to impress upon the reader that the piece cut must not be larger than one-fourth the size of a fourpence half-penny. Another piece meal operation. Subsequent treatment—The eye should be washed with salt and water, the legs, up to the belly, to be bathed in equal parts of vinegar, spirit and oil, or fresh butter. The food should be bran and oats, with a spoon-

ful of sulphur and saltpetre. And a cure is promised in four or five days. He further says:—"Great care should be taken not to cut too large a piece from the caruncle, as it disfigures the eye and sometimes produces blindness."

In an old number of the "American Farmer" we find the following in a communication from W. V. Murray. It was published in 1830, and shows the absurdity of the above treatment. "Before I was acquainted with this subject, I had two fine horses sacrificed to this mistaken and ruinous operation. Ignorant quacks do not know the horse has a membrane peculiar to the animal, which is at pleasure drawn over the eye. The enlargement of this by fever produces the appearance, which, in jockey slang, is called the 'hooks.' Reduce the fever by depletion, such as bleeding and purging, and the hooks will disappear.—That is, the membrane will be restored to its natural size and office; which is, to clear the eye from dust, etc. I need not say the cutting out of this membrane is unnecessary, as I have proved the uselessness of the operation by restoring a horse without it."

Thus we see, that Mr. Murray has, years ago, declared what we now sustain. And if some of our practitioners had more acquaintance with the writings of those who have gone before them, and did not suppose that everything which they had not themselves seen was something entirely new, they would be much wiser than they are, and would save the journals from the communication of wonders and miracles. Much benefit may be derived from notices of any new and peculiar feature of disease. Its successful treatment by any one (qualified) of the profession, will save years of experiment and of failure. The veterinary journals are open to all, for a small fee; and no man who desires to advance his own interests, or would acquire the confidence of the public, should fail to be a constant reader. —[American Veterinary Journal.]

Price of Hogs.—We heard upon the street, yesterday, of several transactions in hogs, on foot, at 83 gross. Compared with prices a few months ago, this seems quite a falling off. Yet as the almost total dependence of our farmers this fall is upon their hogs, to raise money to meet their January dues, we hope none will be cheated into making sales at a higher rate, *on time*—with the almost certain prospect of losing the whole—rather than take the market price *in cash*.—*Morgan Journal*.

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The Paramount Importance of Agriculture.

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daily bread with the same appetite which reigns at his family board, and that if by a superior power they could be gathered together at the same time for the same meal, they would fill both sides of five tables reaching all round the globe where it is broadest, seated side by side allowing eighteen inches to each individual, and that these tables are to be renewed twice or thrice every day. Then let him consider that in addition to the food for the human race that of all the humble partners of man's toil—the lower animals—is to be provided in like manner.—These all wait upon agriculture as the agent of that Providence which giveth them their meat in due season, and they probably consume in the aggregate an equal amount of produce; and finally let him add in imagination, to this untold amount of daily food for man and beast, the various articles which are furnished directly or indirectly from the soil for building materials, furniture, clothing and fuel.

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The N. Y. Observer says the following good things of progressive agriculture:

"Under its influence spring up tasty and convenient dwellings, adorned with shrubs and flowers and beautiful within with the smiles of happy wives, tidy children in the lap of thoughtful age—broad hearths, and acts as well as words of welcome. Progressive agriculture builds barns and puts gutters on them, builds stables for cattle, and raises roots to feed them. It grafts wild apple trees by the meadow with pippins or greenings—it set out new orchards, and takes care of the old ones.

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The Planting of Orchards in Illinois.

BY M. L. DUNLAP, OF WEST URBANNA, ILL.

OCTOBER 22, 1857.

The question of orchard planting is at this time assuming an importance second to few other rural occupations. The high price of fruit, and its now fully conceded prophylactic quality, has given the subject new importance, and the questions, what varieties shall we plant? what kind of soil and aspect shall we select? are more often asked than satisfactorily answered.

Up to the winter of '55-6, most varieties proved hardy, though very many old and well known popular sorts at the "East" had made but poor return, while others heretofore little known, had given high promise of great value. Orchardists were slow to account for this change, and at last reluctantly attributed it to the true cause, — difference of soil and climate. Further investigations have shown that few if any of the apple family generally cultivated at the East, maintain their peculiar character in our prairie soil; some of them prove tender and after a few years of sickly existence die out; others prove indifferent bearers, while on the other hand, many prove much more valuable, producing a richer fruit and more abundant crops than in their native home. The time of ripening and size of the fruit here exhibit a marked change. Our more ardent sun and dryer atmosphere in most instances increase the size and hasten maturity. In most cases autumn apples are ripe in late summer, and early winter becomes late autumn. The Rhode Island Greening and Baldwin are familiar examples of this change. Rawle's Janet, Limber Twig and other western varieties almost unknown at the East, fill up the list of our long-keeping sorts. It will thus be seen that in selecting an orchard no attention

should be paid to the mere fact of value of the variety at the East, but to carefully ascertain what is adapted to this locality.

Such was the condition of our fruits until the winter before noted, and which will be long remembered throughout the valley of the Upper Mississippi for its wide spread destruction of fruit trees, north of latitude 39 deg., where full one half of our orchard trees were destroyed, whilst similar varieties in the nursery suffered in nearly the same ratio. Plums, peaches, pears, cherries, and other small fruits, shrubs and plants, suffered more severely. Such a wide-spread calamity to our orchards and gardens came with a crushing weight, tending to despondency, and seriously checking the progress of fruit culture.

Whether another such winter will again occur, is a question upon which various opinions exist, some contending that it was anomalous, and not likely to again occur. Be this as it may, we would do well to be on our guard, and plant such varieties as stood that searching test. In addition to the general view of the subject of adaptation, we have subdivisions that require our attention, from the fact that this State presents three distinct belts of soil having their peculiar air currents, producing a change of climate quite marked and distinct in each division. So fully is this change admitted, that at the late meeting of the Northwestern Fruit Growers Association at Alton, the committee on fruits adapted to general cultivation, divided their report so as to present three separate lists, each adapted to different latitudes. Several varieties of the apple were found worthy a place on all three of the lists, while others have only a local value. Under this state of things it is the height of folly for one to order trees from distant nurseries to supply our wants, which are peculiar and not well understood by these distant establishments.

While our western nurserymen have been experimenting on the adaptation of varieties suited to the West, the "tree peddler," that bane of civilized society and leech upon the progress of fruit culture, has been busy filling our orchards with all sort of worthless trash. The rejected and refuse varieties of the eastern nurseries are by him renamed and sent broadcast over our beautiful State, to engender deep disappointment, and to crush the hopes of the too confiding farmer. Armed with fancy-high-colored drawings of fruit, which have no reality beyond the fancy of the artist; tomatoes preserved in alcohol to represent some new

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Whether another such winter will again occur, is a question upon which various opinions exist, some contending that it was anomalous, and not likely to again occur. Be this as it may, we would do well to be on our guard, and plant such varieties as stood that searching test. In addition to the general view of the subject of adaptation, we have subdivisions that require our attention, from the fact that this State presents three distinct belts of soil having their peculiar air currents, producing a change of climate quite marked and distinct in each division. So fully is this change admitted, that at the late meeting of the Northwestern Fruit Growers Association at Alton, the committee on fruits adapted to general cultivation, divided their report so as to present three separate lists, each adapted to different latitudes. Several varieties of the apple were found worthy a place on all three of the lists, while others have only a local value. Under this state of things it is the height of folly for one to order trees from distant nurseries to supply our wants, which are peculiar and not well understood by these distant establishments.

While our western nurserymen have been experimenting on the adaptation of varieties suited to the West, the "tree peddler," that bane of civilized society and leech upon the progress of fruit culture, has been busy filling our orchards with all sort of worthless trash. The rejected and refuse varieties of the eastern nurseries are by him renamed and sent broadcast over our beautiful State, to engender deep disappointment, and to crush the hopes of the too confiding farmer. Armed with fancy high-colored drawings of fruit, which have no reality beyond the fancy of the artist; tomatoes preserved in alcohol to represent some new

grape, morello cherries to represent some new wonder in the currant family, and other currants and small fruits shown in vials which are made to magnify the normal size of the fruit fifty per cent. Every farmhouse and every village garden have been visited by these worthies, and the superlative merits of their trees and plants vividly set forth.

Sometimes they represent themselves as the agents of some well-known nursery in New York. At other times they are the owners or partners of nurseries in this State. One thing is certain, they can furnish you with any variety of fruit you may please to name, though, at the time of taking the order they are not the owner of a single tree, shrub or plant.

Should you wish to follow them further, after the order season is over, you may find them visiting the East, purchasing cheap trees by the thousand, which are labeled with such names as suit the wishes, whims, or caprice of their western customers, and when the first frosts arrest further growth, these trees are duly packed and sent forward in charge of a third party to their destination, who, armed with the written contract, delivers the goods. In many cases these are of less size than represented, but this is of no avail; they fill the letter if not the spirit of the contract, and the purchaser has the satisfaction of believing, that if not as large, or well-grown as he expected, they will soon grow to it. Of course, he has full confidence in the integrity of the little wooden label which sets forth the name, for how is he otherwise to know whether it is a seedling or Putnam Russet, a Newtown Pippin, or a Swaar; to him the trees have the same general appearance; those little characteristics form of tree, color and size of twig, size and feature of bud, have formed no part of his study. He sets his trees, cultivates them with care, but with his best efforts only a few of them show a thrifty growth. Year after year their numbers grow less. After a long delay some of them show fruit. He watches its development with an anxious eye, and wonders why its rich pencilings are so long delayed. It proves but an indifferent fruit, perhaps a seedling. The wonderful grape would not produce the plum tomato and now discloses its foxy origin. The currants have long since disclaimed their relationship to the cherry, and proved themselves of the common kind.

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This taste for annexation, who seems to be inherent in the anglo-saxon race, does not add to comfort or prosperity. We recollect an anecdote of one of the first settlers of Illinois which is in point. When married, he told his wife that they would be fugal and hard working until they had enough to make them "*Comfortable*," and with this understanding they commenced a farm upon eighty acres, fenced it, brought it all into cultivation and got up snug and convenient buildings. This was accomplished in a few years and the old lady concluded she was then "*comfortable*." The husband thought not, and he delved on and she found it necessary to delve on with him until he added piece of land after piece, and he died without being "*comfortable*," for the want of an eighty acre tract which would bring his farm up beautifully square with the road! He died without being at all "*comfortable*," and his last days were in entire slavery to raise means to pay for wild lands.

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TERMS OF THE FARMER FOR 1858.—Single copy \$1; five copies \$3 75; ten copies \$7 50 and one to agent; over fifteen copies, 62½ cents each, and one copy free to agent. Money may be forwarded by mail at our risk.

The Rhode-Island Agricultural Society offer premiums for ornamental trees planted on highways.

Orchards.

We know a farmer, who has planted out several orchards with success, and practices on this wise: He obtains his trees in the fall; buries them in the ground; and sets them out in the spring. Long experience satisfies him that this is the best for the trees, and that this practice secures a good growth the first season.

It is a good thing to look at the young trees planted out often, and see if they are attacked by borers. If they are, cut out the borers—or get them out some way—and close up the wound with wax.

There is danger that your young apple trees will be girdled by mice and rabbits this winter. Clear away all the trash about them, and take domestic, tear it into strips, broad enough to protect the tree—saturate the strips with tar, and wind them about the tree above the roots. The cloth can be made to answer for several years, if taken off in the spring.

Should you desire to raise seedling apple, peach, quince or pear trees, plant out the seed in the fall.

Pears.

This fruit has been cultivated in the United States, since the first settlement of the country. The Horticultural periodicals generally contain notices and illustrations of the new as well as old varieties, and there are long lists in the Fruit Books and Nursery Catalogues. In fact, the number of varieties of pears in many of the Nursery Catalogues, exceeds those of apples. We have been surprised in visiting the eastern cities, "in pear time," that few pears were seen in the markets; and those found there were sold at very high prices. At a late Pomological meeting in Western New York, a gentleman stated that he had 500 dwarf pear trees—that his white Doyenne's did not do well this year, but from the others he had sold the fruit at the rate of twelve dollars per bushel, or ten cents each! Dr. Grant, of Newburg, stated that he had sold 400 pears, the produce of a six year old tree, for 12½ cents each—\$50—and obtained \$12 per bushel for seckel pears." Now it does seem to us extraordinary, if pear trees produce thus in New York, and considering the fact that millions of the trees have been planted out within the last ten years of the best varieties—that pears are not plenty in the markets. There is something unaccountable in this fact, taking all the published statements of nursery men and cultivators to be true.

Chinese Sugar Cane.

There is a great desire in this section of the State that there shall be a meeting here of the growers of the sugar cane, for the purpose of obtaining and imparting information relative to its culture and the manufacture of its juice into sugar and molasses. It is manifest that the plant is to be a staple of our State, and, whatever information will tend to make its cultivation profitable, should, if possible, be obtained. Much good syrup was made in the season just closed, but every manufacturer had his own system, and there is now no perfect rule generally known to insure the best success. Hence a meeting of those persons who have made successful experiments, can be eminently useful to themselves, and to those who design to engage in the business. We append a call for the proposed meeting, and hope the editors of this State will not only publish it in their paper but call attention to it editorially.

SPRINGFIELD, Nov. 20, 1857.

SUGAR PLANTERS OF ILLINOIS:—I am requested to give notice that there will be a meeting of the Northern Sugar Cane Planters of this State, at the office of the Corresponding Secretary of the State Agricultural Society, in this city, at 9 o'clock on Thursday, the 7th day of January, 1858. It is believed that such a meeting can be rendered of great service to those farmers of our State who design to grow the Northern or Chinese sugar cane.

S. FRANCIS, Cor. Sec.

Ill. State Ag. Society.

Fruit Requiring Names.

We anticipate a meeting of the State Horticultural Society in this city on the 4th of January next. In our vicinity, growing out principally of the change of ownership in farms, there are a great many apples the names of which are lost, and the owners are very desirous of obtaining their true names. There are also raised in this county a good deal of seedling fruit, much of which is "very good," worthy of propagation and to which names should be given. We expect at the January meeting several gentlemen competent to decide upon the names of old fruits, and upon the value of the new. We therefore suggest that such fruit should be sent to the Corresponding Secretary of the State Agricultural Society, who will pass it over to the Horticultural Society, for their examination. It will be properly taken care of, and the decisions of the Society noted.

When corn costs 50c per bushel, pork costs 5c per pound.

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Orchards.

We know a farmer, who has planted out several orchards with success, and practices on this wise: He obtains his trees in the fall; buries them in the ground; and sets them out in the spring. Long experience satisfies him that this is the best for the trees, and that this practice secures a good growth the first season.

It is a good thing to look at the young trees planted out often, and see if they are attacked by borers. If they are, cut out the borers—or get them out some way—and close up the wound with wax.

There is danger that your young apple trees will be girdled by mice and rabbits this winter. Clear away all the trash about them, and take domestic, tear it into strips, broad enough to protect the tree—saturate the strips with tar, and wind them about the tree above the roots. The cloth can be made to answer for several years, if taken off in the spring.

Should you desire to raise seedling apple, peach, quince or pear trees, plant out the seed in the fall.

Pears.

This fruit has been cultivated in the United States, since the first settlement of the country. The Horticultural periodicals generally contain notices and illustrations of the new as well as old varieties, and there are long lists in the Fruit Books and Nursery Catalogues. In fact, the number of varieties of pears in many of the Nursery Catalogues, exceeds those of apples. We have been surprised in visiting the eastern cities, "in pear time," that few pears were seen in the markets; and those found there were sold at very high prices. At a late Pomological meeting in Western New York, a gentleman stated that he had 500 dwarf pear trees—that his white Doyenne's did not do well this year, but from the others he had sold the fruit at the rate of twelve dollars per bushel, or ten cents each! Dr. Grant, of Newburg, stated that he had sold 400 pears, the produce of a six year old tree, for 12½ cents each—\$50—and obtained \$12 per bushel for seckel pears." Now it does seem to us extraordinary, if pear trees produce thus in New York, and considering the fact that millions of the trees have been planted out within the last ten years of the best varieties—that pears are not plenty in the markets. There is something unaccountable in this fact, taking all the published statements of nursery men and cultivators to be true.

Chinese Sugar Cane.

There is a great desire in this section of the State that there shall be a meeting here of the growers of the sugar cane, for the purpose of obtaining and imparting information relative to its culture and the manufacture of its juice into sugar and molasses. It is manifest that the plant is to be a staple of our State, and, whatever information will tend to make its cultivation profitable, should, if possible, be obtained. Much good syrup was made in the season just closed, but every manufacturer had his own system, and there is now no perfect rule generally known to insure the best success. Hence a meeting of those persons who have made successful experiments, can be eminently useful to themselves, and to those who design to engage in the business. We append a call for the proposed meeting, and hope the editors of this State will not only publish it in their paper but call attention to it editorially.

SPRINGFIELD, Nov. 20, 1857.

SUGAR PLANTERS OF ILLINOIS:—I am requested to give notice that there will be a meeting of the Northern Sugar Cane Planters of this State, at the office of the Corresponding Secretary of the State Agricultural Society, in this city, at 9 o'clock on Thursday, the 7th day of January, 1858. It is believed that such a meeting can be rendered of great service to those farmers of our State who design to grow the Northern or Chinese sugar cane.

S. FRANCIS, Cor. Sec.

Ill. State Ag. Society.

Fruit Requiring Names.

We anticipate a meeting of the State Horticultural Society in this city on the 4th of January next. In our vicinity, growing out principally of the change of ownership in farms, there are a great many apples the names of which are lost, and the owners are very desirous of obtaining their true names. There are also raised in this county a good deal of seedling fruit, much of which is "very good," worthy of propagation and to which names should be given. We expect at the January meeting several gentlemen competent to decide upon the names of old fruits, and upon the value of the new. We therefore suggest that such fruit should be sent to the Corresponding Secretary of the State Agricultural Society, who will pass it over to the Horticultural Society, for their examination. It will be properly taken care of, and the decisions of the Society noted.

When corn costs 50c per bushel, pork costs 5c per pound.

The Hog Market.

We understand that Mr. James L. Lamb of this city, began cutting pork for packing on the 23d Nov. He has about 1,200 head now in his pens, and is offering \$3 gross for good hogs. There were a good many drovers in the city last week, and there seems to be a disposition among many of them to sell provided they can realize \$4 net. We are glad to learn that sales will be made in this region almost exclusively for cash. We subjoin information from other points as far as heard from. The *St. Louis News* of Nov. 18th says:

Pork packers are ready to buy hogs, but sellers are slow in coming in. Small lots are being slaughtered on the Illinois, and a few lots of mess pork and lard have been sent in. The pork commands \$12 50, and prime lard is held at about 11c.

At Cincinnati, yesterday, hogs were selling at \$5 75 to fill contracts, and mess pork at \$14 50. The regular market has not yet opened. Farmers, says the *Commercial*, are careless about settling early, and packers are about as indifferent about buying. The *Gazette* says there promises to be an abundant supply of facilities for moving the produce, and what is equally as desirable—a satisfactory market for wheat, flour, corn, pork, &c.

At New Harmony, a thousand hogs were slaughtered last week, costing five dollars on early contract. At Indianapolis, \$4 is the highest offer.

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and very likely killing will be commenced to-day. There are, however, only about 1,500 hogs in pens, thus far, but if the weather continues favorable, they will commence coming in fast. Buyers are generally offering \$3 50 on time, gross. There are, however some who have contracts to fill, and they would probably give \$5 cash. The purchasers of late have been principally persons in the country. Prices are unsettled at present, and they may advance or decline. Our packers have supplied themselves for doing a large business, and those who desire to pack on their own account, will find this as cheap a point as any other, while as a market our facilities are equally good.

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The receipts are on the increase, but they are comprised mostly of contract hogs. The offerings are therefore light, and thus operated in favor of parties having droves for sale. A lot of 550 head sold late on Saturday evening at \$5 75 per 100 lbs net, and there were buyers to-day at the same figure. The general feeling is better than last week, and good hogs may be quoted steady at \$5 50@ \$5 75.

There is nothing doing in Alton. The *Chicago Democrat* of the 19th says:

The market for live hogs is moderately active, but prices are without quotable change. Many of our dealers have Eastern orders for mess pork, and are busy supplying them, but are barely operating on their own account. Receipts are falling off and are hardly equal to the demand, only 120 head arrived yesterday, and but a few car loads to-day, and those found a quick market at the following rates: 250 head choice at \$4 20; 150 head averaging 300 lbs at \$4 12½; 23 car loads, averaging 277 lbs at \$4 10.

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realized for the products, yet there is a net loss on the 300 hogs of \$536 55.

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300 hogs, 61,349 lbs., 6 1/2c.....	\$3,987 68
34 lard, bbls, 100.....	34 00
Rendering 7,477 lbs lard, 39.....	24 67
Commission on sales, 2 1/2.....	90 00
	\$4,136 35
PRODUCT.	
34 bbls lard, 7,477 lbs, 10 1/2.....	\$785 08
598 hams from block, 8,394 lbs, 7 1/4.....	608 56
2 hams damaged, 26 lbs. 2.....	52
600 sides from block, 24,252 lbs, 6 1/4.....	1515 75
600 shoulders do, 11,074 lbs, 4 3/4.....	525 86
Offal.....	95 03
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	3,599 80

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Things in General.

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Of extravagance, it has reached our farmers, less in their households than in their mania for buying lands, extending their farms, already too large in this State for profitable cultivation. Buy lands with spare money and not without. Let there be expense involved to live well; to live respectably; to encourage taste, so sadly abused on these prairies; to improve in mind and deportment, the possession of which gifts would never upset the financial world. As a nation our energies are more directed into money making than any other on earth, the Jewish family excepted, but no people spend more freely—we are foolishly lavish in our enjoyments—and as there are no entailments or laws of primogeniture to confine property in families, there is little fear of an aristocracy of wealth that can hurt any but its immediate possessor.

Again the tariff, the free trade features of it, is supposed by many to betray the country into an overpurchase of foreign goods, requiring a drain of gold to fill up the payment which our produce is insufficient to supply and thereby producing a crisis. That the world is advancing in the doctrine of free trade, is obvious enough, and if it endures through the ages a financial simplicity may be obtained, but while the European and other commercial portions of it at this day embrace protection, excluding many of our products, we must as an offset, correspondingly check the influx of theirs. Again, in new countries, protection is supposed to aid the hidden and more difficult interests, of which iron may be the representative.

We are reminded of another branch of our subject, and that is the credit system as being the cause of much financial disturbance. We think short credits the better plan; they place the payment day too near to tempt us into excess; they are a rod of warning held over the rich, and poor, the high and low; but better even than this is the responsibility, the deep concern, of paying at *some time*, of certainly paying; of feeling remorse and stain if debts are not paid

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with the least possible delay, after the time of payment comes. Though we have the farmers flag at our mast head, and know that many of them require no schooling in this matter at our own imperfect hands, still we are disposed to emphasize the class, more especially as they are the base upon which the business superstructure of the country mainly rests, and if they dishonor themselves, prove delinquent, the shop keepers fail or are in peril, and the eastern wholesale dealer goes down beyond all peradventure, dragging with him across the water those from whom we have descended, and belong to the family of man, though so far divided from ourselves.

The East Indian war is a marked feature in the aspect of the times. Were the Hindoos an unmixed race, we should say let them govern themselves, let the English go down. But Hindoos and Mahometans in the central and southern districts, mingled with the ferocity of the Afghan and Tartar tribes of the north, portions of the earth from whence Europe in early times was overrun, can only be kept in abeyance by some of the great powers. India has been governed in the main pretty well since the time of Clive and Hastings; the garrisons throughout have not swayed a very arbitrary rule, but the East India Company who still hold the revenues, tax their Indian subjects too heavily for an Asiatic people, and hold monopolies over their produce, opium, indigo &c., that has caused great dissatisfaction. This, coupled with the influences of Christianity, which, in barbarous countries generally shows anything but Christian aspects, so far as trade and common intercourse goes, with a people singularly superstitious, religious, fanatical, ready to burn up or be crushed for the rules of their faith, could only end sooner or later, in an outbreak. But humanity requires that England should succeed; anarchy would ensue under native rule; and who would desire the already bloated Russian Empire, stretching one wing on our own continent, semi-barbarous in all its distant confines, to place its feet upon the fair peninsula of Hindoostan?

In China, England is in another predicament, and our sympathies even there, are not with the Chinese. Much might be said in their favor if they were not such a treacherous, implacable race. Their Mongol, and worse, their Malay blood sticks right out of them. Their pretensions, not to desire foreign trade is all sham, what would they do without it? If a famine happens in any of the provinces, a very common event, an American or English ship can bring them a cargo of rice in a tithe of the time that one of their own could do it, and at less expense. Their desires, their tastes, their wants, their necessities, have been modified by a foreign trade, and it is useless for them to pretend that their welfare as a nation is not promoted by it. This then being granted, putting the opium traffic—the only known evil entailed upon them by trade—in the one scale, and the palpable benefits that result from trade as a whole; the abuse of foreigners; the inhumanity toward them at all times when unprotected; the inflated vanity and nonsense in their addresses to foreign governments, and worse than this in alluding to the people, in

the other scale, and we shall see that it will be quite up to the best ethics of our day for the English, Americans and French unitedly to give them a sound drubbing. All this may be wrong in a man of peace to advocate, but a demonstration of force seems to be the only thing that can bring so supremely a bigoted people to estimate aright the power and character of those whom they affect to despise as barbarous.

The Farmer's Occupation--Food for Thought.

The occupation of the farmer furnishes food for thought, subjects for study, which are ever new and inexhaustible. All the elements wait to do his bidding. All the occult forces of nature challenge his investigation, and promise him a rich reward for every secret he will bring forth from her hidden store-house. He can use head-work as well as hand-work. No form of labor invites so freely or pays so promptly the head-work of the laborer, as agriculture. Nature has her secrets. She does not reveal them unasked; but to keen intelligence she constantly offers something new and valuable—chemistry, botany, geology, ornithology, all stand ready to help the farmer do his work. And just in proportion as he uses their aid, does he elevate his occupation from servile drudgery to a soul elevating and expanding employment. He has to do with plants. How much is his interest in these plants awakened, if he knows something of the ingredients of which they are formed! of the influences of soil and the atmosphere in their production. He has to do with the soil—geology will tell him how that soil was formed, and in what respect one soil differs from another. So far as the science of agriculture is concerned, it is still in its infancy. The farmers are intelligent, well informed as a class; but they have not yet given their study, and their best thought to the occupation in which they are daily engaged. When they have read, it has been upon topics widely remote from the objects of their daily pursuit. The farm itself, the soil, the rocks, the flowers that grow there, the springing crops, the insects that devour, the birds that protect or injure, all are interesting subjects of study; and all have immediate application to his daily labor. It is a lack of acquaintance with these things which makes labor upon the farm dull and monotonous, and sends our young men, by crowds, every year, to the store or to the factory. It is an acquaintance with these things which will awaken a generous enthusiasm in his calling. It will enlist his mind and heart. It will not be drudgery—but a labor of love. It will call out all his best powers, and he will become not merely a toiling artisan, working for daily bread, but a living man, pursuing a noble calling with noble aims.—*Sermon of John Moore.*

WINTER PROTECTION FOR PLANTS.—About as good way as any, is to lay the plants down on the earth, and cover them over with a piece of turf. This is a capital plan for pinks, antirrhinums and tender roses.

THE POULTRY YARD.

LAYING HENS.—Just about this season of the year, when eggs are an indispensable ingredient in the good things to be got up for thanksgiving and Christmas, laying hens are a valuable and profitable portion of a farmer's stock. The propensity for laying, seems to belong to distinct families of the same breed. We know of a farmer whose chickens are a cross of Shanghai, Brama and the common dunghill. The pullets lay when four months old, and they keep on laying with little intermission, through the whole year. No especial pains are taken to feed them. Other persons having precisely the same cross, get but very few eggs. Why is this? We occasionally find a scrub cow an excellent milker, while some cows of the same stock are worth nothing for the dairy.

To Prepare Poultry for Market.

PREPARING.—Make them fat. A grain-fed plump, fat fowl will sell for double the price per pound of a lean one. A liberal feeding, for a few weeks before killing will nearly double the weight and double the price, making a quadruple return for the finishing off food.

KILLING.—Keep them from bruising themselves. Secure the wings the instant they are caught, and tie them behind the back. Tie the legs together, hang them upon a pole, and then cut off the head with a sharp knife, leaving as long a neck as possible. Let them hang until they bleed clean. Keep them from food for two or three hours before killing. Any grain left in the crop sours and materially injures the flesh if kept long before cooking.

DRESSING.—Pick them dry, taking particular care not to tear or bruise the flesh. If scalded at all let it be done quickly and in water not quite boiling hot. Be careful not to rub off the outer thin skin from the legs. If not to be packed in boxes, after picking dry or scalding, wash them in clean warm soap-suds, and 'plump' them, that is hold them in boiling water about five seconds. If to be packed for carrying a long distance do not wet them at all, except to wash the neck. Strip back the skin on the neck bone, draw the loose skin over, tie it tightly, cut off the bloody portion a little way beyond the string and wash off any blood, wiping dry. This will keep them clean and bloodless, and increase their saleableness.

CURRENTS AND GOOSEBERRIES.—These can now be trimmed. Cuttings for new plants can be planted out now, or when the ground is in order, or kept for spring planting. In the latter case, they should be covered with sand or earth, to prevent them from drying up.

When pork sells for 5c per pound, it brings 45c per bushel in corn.

Famous English Oaks.

The King Oak, Windsor Forest, is more than 1,000 years old, quite hollow. Professor Burnett, who once lunched inside this tree, said it was capable of accommodating ten or twelve persons comfortably at a dinner sitting.

The Beggar's Oak, in Bagshot Park, is 20 feet in girth five feet from the ground; the branches extend from the tree 48 feet in every direction.

The Wallace Oak, at Ellerslie, near where Wallace was born, is 21 feet in circumference. It is 67 feet high, and its branches extend 45 feet east, 36 west, 30 south, and 25 north. Wallace and 300 of his men are said to have hid themselves from the English, among the branches of this tree, which was then in full leaf.—*Downing's Landscape Gard.*

Handsome Ornamental Hedge.

In passing through a nursery recently, we observed a long row of purple Althea, in full flower. The plants were about 4 feet in height, one foot apart, and thickly branched from the ground. They formed a close, compact hedge, of handsome form, and the flowers gave it a very gay appearance. The Althea is much more compact than the Privet; will bear the shears well, and is easier kept in form, not being apt to throw out long, straggling branches. It will not, of course, do for keeping out animals, and neither will the Privet; but for a small ornamental hedge, we know few plants that will compete with it, and cutting in the spring, will increase the show of blossoms. We may, however, remark that it is not well adapted to very dry soil, as it will lose its leaves in such a situation, in a dry time; but it will grow finely in good, rich loam, and all the better if somewhat moist.—*Ohio Farmer.*

Colossal Walnut Tree.

On the road from Martel to Gramant (Lot) is to be seen a colossal walnut tree, at least 300 years old. The height of this tree is about 55 feet; its branches extend to a distance of 125 feet; the trunk, 14 feet in diameter, is only 20 feet high, but it sends out seven immense branches.

It bears on an average each year 15 bags of walnuts. Older trees grow near, but they are of very moderate dimensions.—*Galignani's Mess.*

Tallow may be hardened by mixing one pound of alum in the lump, with every twenty or thirty pounds of tallow, when "trying" or rendering it. This is said to secure an exemption from soft greasy candles.

Mr. Frederick Hecker, of St. Clair county, in this State, has produced one hundred and fifty gallons of wine from his vineyard, this season. The quality is said to be superior to the Cincinnati wine.

with the least possible delay, after the time of payment comes. Though we have the farmers flag at our mast head, and know that many of them require no schooling in this matter at our own imperfect hands, still we are disposed to emphasize the class, more especially as they are the base upon which the business superstructure of the country mainly rests, and if they dishonor themselves, prove delinquent, the shop keepers fail or are in peril, and the eastern wholesale dealer goes down beyond all peradventure, dragging with him across the water those from whom we have descended, and belong to the family of man, though so far divided from ourselves.

The East Indian war is a marked feature in the aspect of the times. Were the Hindoos an unmixed race, we should say let them govern themselves, let the English go down. But Hindoos and Mahometans in the central and southern districts, mingled with the ferocity of the Afghan and Tartar tribes of the north, portions of the earth from whence Europe in early times was overrun, can only be kept in abeyance by some of the great powers. India has been governed in the main pretty well since the time of Clive and Hastings; the garrisons throughout have not swayed a very arbitrary rule, but the East India Company who still hold the revenues, tax their Indian subjects too heavily for an Asiatic people, and hold monopolies over their produce, opium, indigo &c., that has caused great dissatisfaction. This, coupled with the influences of Christianity, which, in barbarous countries generally shows anything but Christian aspects, so far as trade and common intercourse goes, with a people singularly superstitious, religious, fanatical, ready to burn up or be crushed for the rules of their faith, could only end sooner or later, in an outbreak. But humanity requires that England should succeed; anarchy would ensue under native rule; and who would desire the already bloated Russian Empire, stretching one wing on our own continent, semi-barbarous in all its distant confines, to place its feet upon the fair peninsula of Hindoostan?

In China, England is in another predicament, and our sympathies even there, are not with the Chinese. Much might be said in their favor if they were not such a treacherous, implacable race. Their Mongol, and worse, their Malay blood sticks right out of them. Their pretensions, not to desire foreign trade is all sham, what would they do without it? If a famine happens in any of the provinces, a very common event, an American or English ship can bring them a cargo of rice in a tithe of the time that one of their own could do it, and at less expense. Their desires, their tastes, their wants, their necessities, have been modified by a foreign trade, and it is useless for them to pretend that their welfare as a nation is not promoted by it. This then being granted, putting the opium traffic—the only known evil entailed upon them by trade—in the one scale, and the palpable benefits that result from trade as a whole; the abuse of foreigners; the inhumanity toward them at all times when unprotected; the inflated vanity and nonsense in their addresses to foreign governments, and worse than this in alluding to the people, in

the other scale, and we shall see that it will be quite up to the best ethics of our day for the English, Americans and French unitedly to give them a sound drubbing. All this may be wrong in a man of peace to advocate, but a demonstration of force seems to be the only thing that can bring so supremely a bigoted people to estimate aright the power and character of those whom they affect to despise as barbarous.

The Farmer's Occupation--Food for Thought.

The occupation of the farmer furnishes food for thought, subjects for study, which are ever new and inexhaustible. All the elements wait to do his bidding. All the occult forces of nature challenge his investigation, and promise him a rich reward for every secret he will bring forth from her hidden store-house. He can use head-work as well as hand-work. No form of labor invites so freely or pays so promptly the head-work of the laborer, as agriculture. Nature has her secrets. She does not reveal them unasked; but to keen intelligence she constantly offers something new and valuable—chemistry, botany, geology, ornithology, all stand ready to help the farmer do his work. And just in proportion as he uses their aid, does he elevate his occupation from servile drudgery to a soul elevating and expanding employment. He has to do with plants. How much is his interest in these plants awakened, if he knows something of the ingredients of which they are formed! of the influences of soil and the atmosphere in their production. He has to do with the soil—geology will tell him how that soil was formed, and in what respect one soil differs from another. So far as the science of agriculture is concerned, it is still in its infancy. The farmers are intelligent, well informed as a class; but they have not yet given their study, and their best thought to the occupation in which they are daily engaged. When they have read, it has been upon topics widely remote from the objects of their daily pursuit. The farm itself, the soil, the rocks, the flowers that grow there, the springing crops, the insects that devour, the birds that protect or injure, all are interesting subjects of study; and all have immediate application to his daily labor. It is a lack of acquaintance with these things which makes labor upon the farm dull and monotonous, and sends our young men, by crowds, every year, to the store or to the factory. It is an acquaintance with these things which will awaken a generous enthusiasm in his calling. It will enlist his mind and heart. It will not be drudgery—but a labor of love. It will call out all his best powers, and he will become not merely a toiling artisan, working for daily bread, but a living man, pursuing a noble calling with noble aims.—*Sermon of John Moore.*

WINTER PROTECTION FOR PLANTS.—About as good way as any, is to lay the plants down on the earth, and cover them over with a piece of turf. This is a capital plan for pinks, antirrhinums and tender roses.

THE POULTRY YARD.

LAYING HENS.—Just about this season of the year, when eggs are an indispensable ingredient in the good things to be got up for thanksgiving and Christmas, laying hens are a valuable and profitable portion of a farmer's stock. The propensity for laying, seems to belong to distinct families of the same breed. We know of a farmer whose chickens are a cross of Shanghai, Brama and the common dunghill. The pullets lay when four months old, and they keep on laying with little intermission, through the whole year. No especial pains are taken to feed them. Other persons having precisely the same cross, get but very few eggs. Why is this? We occasionally find a scrub cow an excellent milker, while some cows of the same stock are worth nothing for the dairy.

To Prepare Poultry for Market.

PREPARING.—Make them fat. A grain-fed plump, fat fowl will sell for double the price per pound of a lean one. A liberal feeding, for a few weeks before killing will nearly double the weight and double the price, making a quadruple return for the finishing off food.

KILLING.—Keep them from bruising themselves. Secure the wings the instant they are caught, and tie them behind the back. Tie the legs together, hang them upon a pole, and then cut off the head with a sharp knife, leaving as long a neck as possible. Let them hang until they bleed clean. Keep them from food for two or three hours before killing. Any grain left in the crop sours and materially injures the flesh if kept long before cooking.

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When pork sells for 5c per pound, it brings 4 5c per bushel in corn.

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Mr. Frederick Hecker, of St. Clair county, in this State, has produced one hundred and fifty gallons of wine from his vineyard, this season. The quality is said to be superior to the Cincinnati wine.

COMMERCIAL.

Springfield Market.

OFFICE OF THE ILLINOIS FARMER, }
November 23, 1857.

FLOUR—Extra white, \$5 50; common \$5 00.
WHEAT—New fall 75c; good red 65@70c; Canada club spring, 50@60c.
RYE—50c per bushel.
CORN—Sales of new 20@25c; white shelled for bread 30c.
OATS—Sales at 20@22 cts. bu.
BARLEY—50@60c.
HIDES—Dry hint 6@7 \$ lb.
BRAN—6 cts. \$ bu.
SHORTS—fine, 75c \$ cwt.
CHICKENS—Dressed 12½@15; \$1 25@1 50 \$ doz.
TURKEYS—6@8c \$ lb.
ONIONS—1 25 \$ bu.
POTATOES—35@50c \$ bu.; sweet do \$1 50.
APPLES—Dry \$1 40@1 50; green 50c@75.
BUTTER—18@25 cts. \$ lb.
CHEESE—11@15 cts. \$ lb.
EGGS—12@15 cts. \$ doz.
HAY—\$6@10 \$ ton.
CORN MEAL—60c. \$ bu.
HAMS—Smoked 10@11½c \$ lb.
MOLASSES—75@80c \$ gal; sugar house 80.
GOLDEN SYRUP—75c@1 00
SUGAR—Brown, 10@12c \$ lb.
TALLOW—8@9c \$ lb.
BACON SHOULDERS—14c.
SIDE MEAT—10@12c \$ lb.
LARD—8@10c declining.
BEANS—75@1 25 per bush.
COFFEE—Rio, 14@16½c \$ lb; Java 18@20c.
RICE—8@10c
CLOVER SEED—\$8@10 per bu; Timothy, 1 50@1 75.
CANDLES—Tallow 15@16; Star 30@35c per lb; sperm 60c.
PEACHES—Dry, \$2 50.
SALT—G. A. \$2 25 \$ bag; barrel \$3.
WHITE FISH—\$6½ \$ half bbl.
COD FISH—\$ lb 6½c.
MACKEREL—No. 1, \$ bbl \$18.
BROOMS—\$ dozen \$1 50@2.
BUCKETS—\$ dozen \$2 50.
VINEGAR—\$ bbl 12½@15c.
WHITE LEAD—\$ keg \$2 25@2 50.
LINSEED OIL—\$ bbl \$1 00.
LARD OIL—\$1.15 \$ bbl.
WHISKY—Common \$ gal 25c; rye 50c.
ROPE—Manilla 15@20c \$ coil.
NAILS—\$4.75@5.75 \$ keg.
SOAP—Palm \$6.50@7 \$ box.
CARB. SODA—7½c \$ keg.

Chicago Market--Nov. 21.

The weather was more favorable to-day, and business of all kinds more active. Fourteen vessels cleared to-day with cargoes for the lower lakes, and some of those which had put back have again started. The wheat market is more animated and prices at the close are better than yesterday. The flour market is without change; buyers and holders are still unable to agree on prices of leading brands. Corn is dull and without any export demand. The market for hogs, mess pork, and lard, is more active and prices of hogs are improving. Receipts of hogs yesterday were 4,500 head, most of which were purchased in the country by our own dealers. The St. Louis and Alton road alone brought in 45 cars of live stock—341 head of cattle and 2,200 hogs. We learn that a large number of the hogs shipped alive froze to death before arriving here, owing to a detention on the road. Receipts of flour and grain by all yesterday were 2,538 bbls flour; 49,317 bu wheat; 3,434 bu corn; 4,289 bu oats and 675 bu barley. Shipments were 159,089 bu wheat. Shipments to-day are heavy, a number of vessels going out, which have been chartered and partly loaded for some days and have been awaiting more favorable weather; they amount to 1,020 bbls flour; 258,797 bu wheat; 2,000 bu corn; 3,000 bu oats; and 350 bbls beef and pork.

Live Stock—Cattle, 2 00@3 00 \$ cwt, gross; sheep, 2 50 @3 00. Sales of hogs include 100 head, averaging 320 lbs at 4 80 gross; and 300 head for next week averaging 250 lbs at 4 15 gross.

Mess pork—70 bbls sold at 16 00.
Mess Beef—9 00@12 00 \$ bbl
Cut Meats—Hams and shoulders 7@9c \$ lb; hams in pickle 9c; beef hams \$ bbl 18 00.
Dressed hogs—Active at 5 00@5 25 \$ cwt.
Lard—Brisk at 10c \$ lb.

St. Louis Market, Nov. 21.

The week closes on a market indicating no very important change. The staples, tobacco, hemp and lead, remain quiet,

and without demand or sale. There was a sale of 1000 bbls city superfine to-day, delivered next week, at 4 50 \$ bbl. Sales of small lots also of country brands at prices not materially varying from the current figures of the week, ranging for superfine to choice extra at 4 25 to 5 75 \$ bbl. About 20,000 bushels of wheat were among the receipts to day Buyers, as usual on Saturday, held off, and the market closed inactive, though unchanged and holders firm in their views. Corn continues dull, with small sales. None of the new crop offering. Oats dull. Nothing doing in barley or rye. Market for whisky closed firm with small sales at 17c \$ gallon. A sale of mess pork reported to day, and the price supposed to be 13 00. Nothing else in provisions. Groceries quiet.

Flour—Market unchanged. 100 bbls low grade extra at 4 75, 500 bbls choice extra 5 75.

Wheat—Sales comprise 2650 bags fair and good spring from 75 to 80c; 236 prime do at 82@85c; 73 bags inferior and common fall at 85@90c; 114 bags fair and good at 1 00@1 05; 2400 bags prime red at 1 08@1 10; 205 do at 1 11, and 196 bags prime white at 1 12½.

Corn—Dull. 339 bags new yellow and white sold at 35c and 86 bags old at 45c, including bags.

Oats—Market heavy. Sales 280 bags common at 35½c.

Chicago Cattle Market--Nov. 16.

Beeves generally sold by live weight, some sales were by the head.

Sheep sold by live weight and by the head.

Swine sold by live weight or estimated net weight.

Cows and calves generally sold by the head, prices varying much and depending greatly upon their milking qualities.

Markets are a trifle better for good fat cattle than last week's quotations

Sales of 1,015 Cows from \$2@2 50 to 3 00 \$ cwt. Sales of few extra from \$3 25 to 3 50, quick.

Sales of 6,042 Hogs from \$3 87½@4 to 4 25.

Sales of 498 Sheep from \$2 25@2 50 to 3 00 \$ cwt.

Total amount of stock received for the week ending Monday was 7,644 hogs, 1,255 cattle and 673 sheep.

Cattle shipped, 200; hogs, 1,602.

St. Louis Live Stock Market.

Baldwin's Yards, Broadway—November 21, 1857.

Cattle—Arrivals for the last week have been rather light and the stock now in the yards limited. Fair to choice sell to butchers at 2½ and 3c, gross, with a fair demand; inferior and common sell at very low rates. Shippers are doing nothing at present, and packers are doing but little.

Hogs—A number of small lots have arrived within the last few days, and have sold readily to butchers at 4½@5½c, net. Packers have done but little, as sellers hold at a higher figure than they feel willing to give, 4½c, net, being the high est price offered for immediate delivery.

Sheep—A fair stock offering, with a limited demand, at prices varying from one dollar fifty and three dollars per head, according to quality.

Cows and Calves—A light demand at twenty-five dollars and forty-five dollars per head for fair to choice.

New Orleans Cattle Market--Nov. 10.

Beef Cattle—The market showed but little variation to-day. We quote good and fine Western at 8c; ordinary do at 5½@6c \$ lb net. Texas and Attakapas cattle \$13@28 \$ head.

Hogs—We quote at 8½@9½c \$ lb net.

Sheep—Prices at \$2 25@4 \$ head, in lots; choice at \$5 \$ head.

Milch Cows—A fair stock at \$40@75 \$ head.

Veal Cattle—Good demand. Prices \$6 50@11 \$ head.

Land Warrants.

We quote this week at the following rates:

	BUYING.	SELLING.
40 acres	\$0 90	\$1 00
80 acres	70	75
120 acres	65	70
160 acres	75	80

Warrants sold at this office are guaranteed in every respect. —Thompson's Reporter,

RAGS WANTED.

THE HIGHEST MARKET PRICE IN CASH, paid for clean

COTTON AND LINEN RAGS,

at the Journal Printing Office. Save your rags friends; we will take all you have. oc23-dwtf

COMMERCIAL.

Springfield Market.

OFFICE OF THE ILLINOIS FARMER, }
November 28, 1857. }

FLOUR—Extra white, \$5 50; common \$5 00.
WHEAT—New fall 75c; good red 65@70c; Canada club spring, 50@60c.
RYE—50c per bushel.
CORN—Sales of new 20@25c; white shelled for bread 30c.
OATS—Sales at 20@22 cts. bu.
BARLEY—50@60c.
HIDES—Dry flint 6@7 $\frac{1}{2}$ lb.
BRAN—6 cts. $\frac{1}{2}$ bu.
SHORTS—fine, 75c cwt.
CHICKENS—Dressed 12 $\frac{1}{2}$ @15; \$1 25@1 50 $\frac{1}{2}$ doz.
TURKEYS—6@8c $\frac{1}{2}$ lb.
ONIONS—1 25 $\frac{1}{2}$ bu.
POTATOES—35@50c $\frac{1}{2}$ bu.; sweet do \$1 50.
APPLES—Dry \$1 40@\$1 50; green 50c@75.
BUTTER—18@25 cts. $\frac{1}{2}$ lb.
CHEESE—11@15 cts. $\frac{1}{2}$ lb.
EGGS—12@15 cts. $\frac{1}{2}$ doz.
HAY—\$6@10 $\frac{1}{2}$ ton.
CORN MEAL—60c. $\frac{1}{2}$ bu.
HAMS—Smoked 10@11 $\frac{1}{2}$ c $\frac{1}{2}$ lb.
MOLASSES—75@80c $\frac{1}{2}$ gal; sugar house 80.
GOLDEN SYRUP—75c@\$1 00
SUGAR—Brown, 10@12c $\frac{1}{2}$ lb.
TALLOW—8@9c $\frac{1}{2}$ lb.
BACON SHOULDERS—14c.
SIDE MEAT—10@12c $\frac{1}{2}$ lb.
LARD—8@10c declining.
BEANS—75@81 25 per bush.
COFFEE—Rio, 14@16 $\frac{1}{2}$ c $\frac{1}{2}$ lb; Java 18@20c.
RICE—8@10c
CLOVER SEED—\$8@10 per bu; Timothy, 1 50@1 75.
CANDLES—Tallow 15@16; Star 30@35c per lb; sperm 60c.
PEACHES—Dry, \$2 50.
SALT—G. A. \$2 25 $\frac{1}{2}$ bag; barrel \$3.
WHITE FISH—\$6 $\frac{1}{2}$ $\frac{1}{2}$ half bbl.
COD FISH— $\frac{1}{2}$ lb 6 $\frac{1}{2}$ c.
MACKEREL—No. 1, $\frac{1}{2}$ bbl \$18.
BROOMS— $\frac{1}{2}$ dozen \$1 50@\$2.
BUCKETS— $\frac{1}{2}$ dozen \$2 50.
VINEGAR— $\frac{1}{2}$ bbl 12 $\frac{1}{2}$ @15c.
WHITE LEAD— $\frac{1}{2}$ keg \$2 25@2 50.
LINSEED OIL— $\frac{1}{2}$ bbl \$1 09.
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WHISKY—Common $\frac{1}{2}$ gal 25c; rye 50c.
ROPE—Manilla 15@20c $\frac{1}{2}$ coil.
NAILS—\$4.75@5.75 $\frac{1}{2}$ keg.
SOAP—Palm \$6.50@7 $\frac{1}{2}$ box.
CARB.SODA—7 $\frac{1}{2}$ c $\frac{1}{2}$ keg.

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Sales of 495 Sheep from \$2 25@2 50 to 3 00 $\frac{1}{2}$ cwt.

Total amount of stock received for the week ending Monday was 7,644 hogs, 1,255 cattle and 673 sheep.

Cattle shipped, 200; hogs, 1,602.

St. Louis Live Stock Market.

Baldwin's Yards, Broadway—November 21, 1857.

Cattle—Arrivals for the last week have been rather light and the stock now in the yards limited. Fair to choice sell to butchers at 2 $\frac{1}{2}$ and 3c, gross, with a fair demand; inferior and common sell at very low rates. Shippers are doing nothing at present, and packers are doing but little.

Hogs—A number of small lots have arrived within the last few days, and have sold readily to butchers at 4 $\frac{1}{2}$ @5 $\frac{1}{2}$ c, net. Packers have done but little, as sellers hold at a higher figure than they feel willing to give, 4 $\frac{1}{2}$ c, net, being the highest price offered for immediate delivery.

Sheep—A fair stock offering, with a limited demand, at prices varying from one dollar fifty and three dollars per head, according to quality.

Cows and Calves—A light demand at twenty-five dollars and forty-five dollars per head for fair to choice.

New Orleans Cattle Market--Nov. 10.

Beef Cattle—The market showed but little variation to-day. We quote good and fine Western at 5c; ordinary do at 3 $\frac{1}{2}$ @6c $\frac{1}{2}$ lb net. Texas and Attakapas cattle \$13@28 $\frac{1}{2}$ head.

Hogs—We quote at 8 $\frac{1}{2}$ @9 $\frac{1}{2}$ c $\frac{1}{2}$ lb net.

Sheep—Prices at \$2 25@4 $\frac{1}{2}$ head, in lots; choice at \$5 $\frac{1}{2}$ head.

Milk Cows—A fair stock at \$40@75 $\frac{1}{2}$ head.

Veal Cattle—Good demand. Prices \$6 50@11 $\frac{1}{2}$ head.

Land Warrants.

We quote this week at the following rates:

	BUYING.	SELLING.
40 acres	\$0 90	\$1 00
80 acres	70	75
120 acres	65	70
160 acres	75	80

Warrants sold at this office are guaranteed in every respect. —Thompson's Reporter,

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