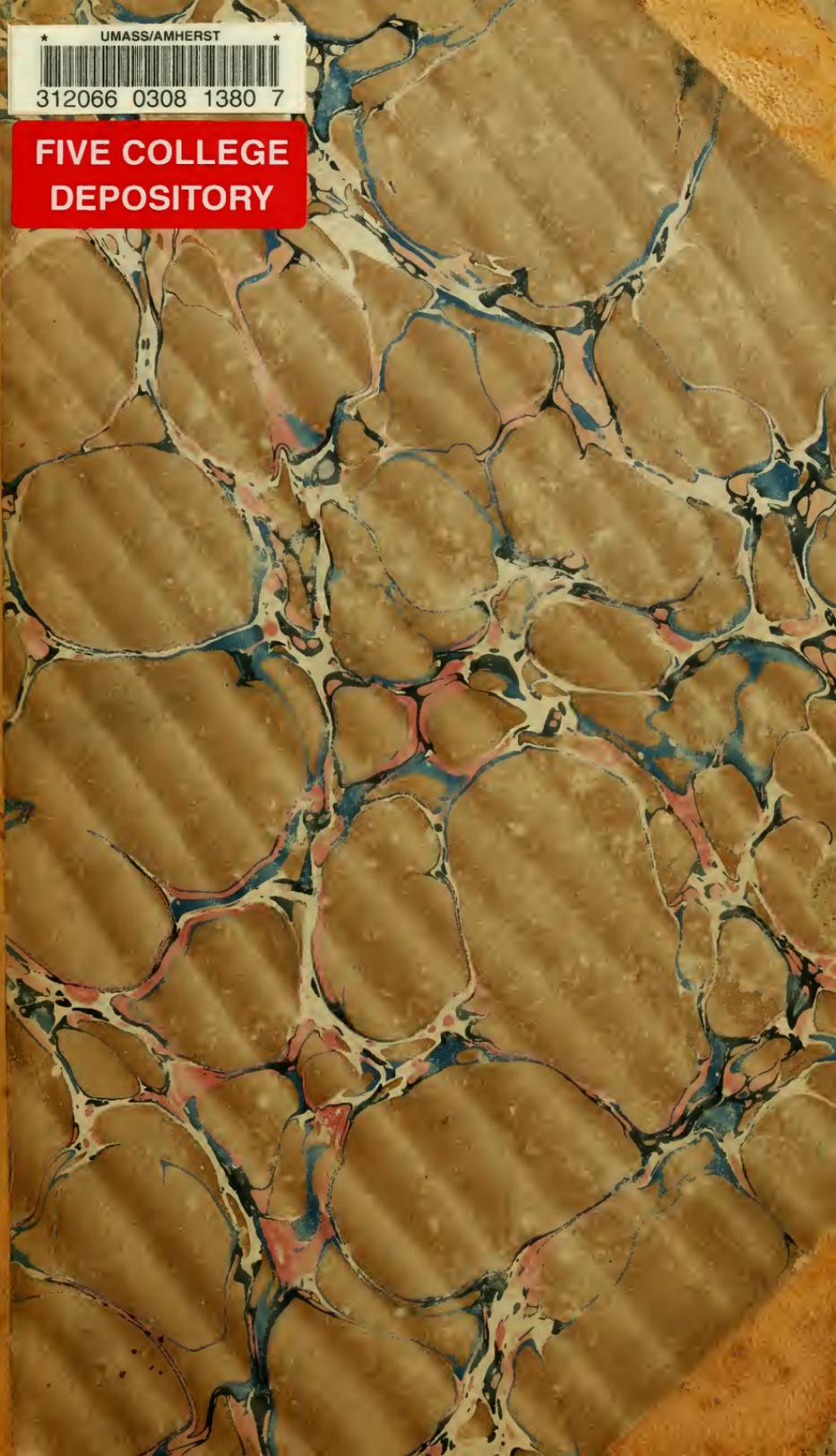


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THE

GENESEE FARMER:

A MONTHLY JOURNAL DEVOTED TO

AGRICULTURE & HORTICULTURE,

DOMESTIC AND RURAL ECONOMY.

ILLUSTRATED WITH ENGRAVINGS OF

FARM BUILDINGS, DOMESTIC ANIMALS,

IMPROVED IMPLEMENTS, FRUITS, &c.

EDITED BY DANIEL LEE, M. D.

P. BARRY, CONDUCTOR OF HORTICULTURAL DEPARTMENT.

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**VOLUME VIII—1847.**  
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ROCHESTER, N. Y.

**D. D. T. MOORE, PUBLISHER AND PROPRIETOR,
TALMAN BLOCK, BUFFALO-STREET.**

1847.

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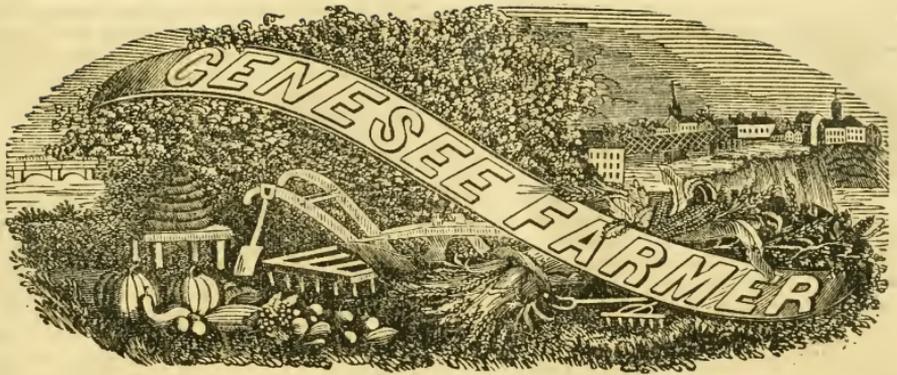
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The New and the Old Year.

We rejoice at another opportunity to wish thee, respected reader, "a happy New-Year." How swiftly the years roll round! That of 1846, like the thousand is and millions which have preceded it, is now past never to return. Its whole account is made up; it is a sealed volume, which none but the Deity can open.

What is *Time*? Our largest idea of it gives but a point on that vast and incomprehensible circle designated by the name Eternity. Short as is the time in which our Earth travels two hundred and seventy millions of miles in its annual course around the Sun, still it is long enough to enlarge our conceptions of the greatness of the Universe, and of the duration of its existence. The last twelve-month has been signaled by the discovery of another planet 220 times larger than ours, which belongs to our solar system, and pursues a track so distant from its centre, that its year is 217 times longer than that of Earth. This new world was first revealed to man, not by any of his physical senses, like that of the eye, aided by a telescope, but by *Cultivated Reason*, working the profound problems of mathematical science. The Intellect that demonstrated the existence, orbit, and weight of the planet called *Leverrier*, was thirty-seven hundred and fifty millions of miles from the invisible object of its calculations! These calculations were so accurate, in regard to the attractive force and position of this unknown world, that the astronomer GALL actually discov-

ered it within 24 hours after he received the solved problem from LEVERRIER.

Who cannot see a spark of the Divinity illuminating the human mind as it sits in its narrow closet, and carefully weighs in a balance, a globe 220 times as heavy as this earth, and nearly four billions of miles distant from the operator? What a triumph of Intellect over Matter! LEVERRIER is a young man, only 31 years of age. Comprehending all that is positively known by the discoveries of others in their youth, young men now enjoy great advantages, for pushing their researches into the unexplored, and boundless fields of God's works that every where surround them. Every new development in the mysteries of nature serves as a basis, on which to erect the machinery for making far greater discoveries. Hence, the young men of 1847 enjoy opportunities for distinction in the various departments of natural science, superior to those possessed by any of their predecessors. Tell us, young man, shall these great advantages be neglected? Can you reverse the Scripture maxim, and say: "to whom *much* is given, *little* will be required?" Although the years that are past can never be recalled; yet the Future is all your own. This is kindly given us that we may correct all the errors and evils that blemish our character and institutions in the sight of Heaven.

Mere negative existence, a life of idleness and of emptiness, will not excuse moral and intellectual beings that were created to labor alike for their own good, and the highest happiness of their race. Time has been created, and indefinitely extended to us, that we may improve every thing connected with our moral, rational, and physical natures. Each New-Year's day should be sacredly devoted to a close public examination of all discoveries and improvements, whether real or fancied, made in the course of the preceding year. The Progress of Man in Knowledge, in Virtue, and Philanthropy, is capable of being reduced to a *science*. Divine Revelation discloses the true basis on which this science must be erected. Man must evince the sincerity of his love to his Maker and final Judge, by showing in his daily conduct that he truly "loves his neighbor as himself." Pretension will not answer. All isolated selfishness, by which one person, or family, seek to elevate, and aggrandize themselves, at the public expense, must be relinquished in obedience to that love of others which God commands, and which, while it promotes the equal happiness of the community at large, will impart the highest and most enduring pleasure to the Christian Philanthropist, who cheerfully performs his whole duty. If society as a whole, is to prosper, all its members must labor for the good of the whole, rather than for the benefit of the few, at the cost of the many. The whole cannot possibly prosper, so long as superior attainments are directed not to the public

service, with an honest purpose to serve one's neighbors as much as one's self, but to help one's self at the expense of his neighbors. This system of private antagonistical effort, necessarily places the weak, and the less informed, at the mercy of the strong, and the more intelligent. It is a kind of half-humanised cannibalism, which, instead of devouring veritable human flesh, only consumes the bread and meat of the millions, without which, no flesh can be formed. A plan must be devised by which every family shall produce as much as it consumes; and create a fair equivalent for all its property. The interest of the many must be carefully studied and maintained by all public servants. The common good of all requires the opening of a public market for the sale of honest, productive labor, where it can command full employment, and not three-fourths, nor nine-tenths, but the whole of the proceeds of such labor. Why should a poor family pay a bounty to a rich one for the privilege of working, and creating all the necessaries and comforts of life, that the rich family may set a bad example and impair its moral well being, by indulging thro' life, in habits of idleness and dissipation? This question has got to be answered before fifty more New Years come round. The general diffusion of knowledge among the laboring masses will soon secure to each member of the community the equal right to labor without suffering the wrong of having to give to capital a premium for the privilege of living in civilized society. Humanity now gets less than its own; while Capital, controlled by that "love of money" which God has declared to be "the root of all evil," contrives to acquire what does not belong to it. Neither money, nor the love of it, has ever performed its whole duty in the community. By a species of blind idolatry, the thing, property is most insanely elevated far above Man, its Creator. This subversion of a law of Heaven, can not be much longer endured by the toiling millions who work hard, fare hard, and die poor, that a favored few may produce nothing and yet "be clothed in purple and fine linen, and fare sumptuously every day."

The command of God that we shall "love our neighbors as ourselves," must be literally obeyed in practice, as well as preached to men that permit their works to contradict their professions of faith in the principles of the Bible. A dead faith and a living one are very different things. It is a living, active, working faith in Providence which is destined to rule the world. The opposition to the rule of Truth and Justice, will continue to be intense, and may be protracted for years to come; but it will certainly succumb at last. Scientific Agriculture will do more to convince the world that no one man needs more than his well directed industry can produce, than all other pursuits put together. Badly cultivated, large landed estates, will one day cease to be objects of human cupidity. They will come to be regarded as an incumbrance on the hands of the possessor, imposing responsibilities from which intelligent men will gladly escape. Science will demonstrate to the satisfaction of the controlling majority, that the world is large enough to give all a fair chance to work, earn, and enjoy a liberal supply of all the comforts and advantages that moral and accountable beings can reasonably desire. It does not imply the abridgement of any man's happiness or rights to secure to every other human being an equal chance to labor for himself, and have all that his honest toil shall call into existence. This is the direction in which the public mind is now tending. It is the elevation of the laboring masses to a state of independence, without depressing any above them, that engages the earnest study of the wisest and best men of the age in which we live. The year 1846 is not more signalized by the discovery of a new world, than by the acknowledgement of the British government of its moral

obligation to give *employment*, not *bread*, to its destitute subjects in Ireland and Scotland. This distinction is an important step in the progress of human emancipation. The old system of giving bread without employment, created no fewer than four millions of public paupers in the United Kingdom—one eighth of its whole population!

The importance of Universal Education is beginning to be felt and generally acknowledged. Agricultural, and other schools are springing into existence in all parts of the two islands. In short, the most powerful nation on the globe seems to have adopted our republican motto—that the Labor of the Hands, and the Culture of the Intellect must go together. Similar sentiments are extending silently, but universally, over Continental Europe. We rejoice at the Future that awaits the thousands of millions of our race, who, having ceased to do evil, and learned to do well, shall reap at last, their great reward. In this work of moral, intellectual and social improvement, the Tillers of the Earth are destined to act a conspicuous and most honorable part. Most certainly if no effort be made, no important good can be attained.

Young Men's Agricultural Association and School.

WE have given in this paper the outline of a plan for an Agricultural Association and School, which embraces the results of some experience, and much thought, and is earnestly commended to the favorable consideration of every reader.

An Agricultural School, to be perfect in all its details, requires the expenditure of more money than any one or two men of ordinary means can afford to give for that purpose. It was the full appreciation of this fact that induced the writer to urge the Legislature, by petition, or in person, for years, to do a little something to aid in making scientific farmers, as well as so much for the benefit of doctors and lawyers. These efforts were unavailing. The *hope* of an Institution, that should present to the ingenuous sons of farmers a fair chance for honorable distinction by the study of the Natural Sciences, and their successful application to agriculture, and thus elevate their profession to that high and commanding position which it ought to occupy in every community, seemed to rest on the slender basis of a doubtful private enterprise. The experiment has been tried, and is likely to fail—not from any lack of good paying pupils, but from the sheer want of comfortable buildings for their accommodation. These we have never had; and it is idle to suppose that men of literary and scientific attainments will throw away their time on a school where only 15 or 16 students can be furnished with rooms and other necessaries. By an amicable arrangement with Gen. HARMON, the Principal of the Institution has it in his own hands; but it will not long be kept up without some provision for the accommodation of more students. No expense has been spared by the writer of this, in procuring an excellent apparatus for making chemical analyses; and with a fair chance, instead of having 15 young men at work in his laboratory, his applications for ad-

mission warrant him in saying that he could have one hundred. We have pupils 16 years old, to whom you may give a soil that contains only *one part of gypsum in fifteen thousand*, mixed by yourself, and unknown to the pupils, and they will get it out and weigh it for you.

The farmers in the vicinity of Edinburgh, (Scotland,) give Prof. JOHNSTON five hundred pounds a year (some \$2,500,) to keep up a laboratory for the benefit of their sons, the analysis of soils, fertilizers, &c. Permit us to state a few facts by the way of contrast. While we have written nights, when farmers were asleep, for political papers, that our days might be devoted to the advancement of American Agriculture, we have actually expended two dollars for every one that we have ever received from the agricultural community, in the purchase of chemicals, apparatus, geological maps, specimens, &c.

These facts would not be mentioned only as the *last effort* to procure the use of a little land, and comfortable buildings, not for ourself, but for those that wish to investigate the laws of Nature, which must ever control the results of rural industry, that they may do so, without being compelled to go to Edinburgh, or Giessen. It is to the YOUNG MEN of Western New York that this appeal is made. We will furnish 200 subscription books to as many towns, in the hope that some young man will undertake to raise \$100 in each town, making an aggregate of \$20,000, with which to purchase a farm and found an Institution to be owned and controlled by the stockholders, that shall be a lasting monument to their honor, and their patriotism.

We believe that valuable improvements can yet be made in the acquisition of a sound, moral, intellectual, and physical education. To command able teachers, and bring the cost of instruction within the means of all, a large number of students must be collected within the four walls of a single room, and witness at once the most perfect demonstrations of Science. Harvard University, (the best in America,) has 600 pupils, and a force of 36 professors and tutors.—The economy of having large classes far exceeds all popular belief. A demonstration in any science, a lecture on any branch of literature, can be understood as well by 500, as by 5 auditors. In a large institution, you can divide the labor of teaching among many professors, and thus enable each one greatly to excel in his favorite branch of learning or science. We need a large Agricultural Hall in Western New York, on a good farm, where students can be boarded, or board themselves, at the smallest expense. So far from desiring any particular personal gain in this matter, we stand ready to give \$500 toward the establishment of a public institution of the character we have indicated. We disclaim all mercenary considerations while laboring for the good of the *Cause*. If the young men of 100 towns

will take \$100 of the stock of the Association in each town, we are confident that the Legislature will give them as much more, or \$10,000, to endow their institution. Union College has had over \$400,000 from the State; Hamilton \$120,000; and the Medical Colleges have all had large sums.

Young Men of Western New York! a new and glorious field is presented for the exercise of your known talents, and for the easy development of those ever enduring mental powers, which a good Providence has kindly given you. Become active, working members of this RURAL ASSOCIATION, and the good you will do to mankind shall carry your names down to posterity, on the brightest page of your country's history. You should rejoice that something has been left for you to do, worthy of being held in lasting remembrance. The tillage of the Earth is the chosen pursuit appointed to man by his Maker. It is for the young men who are soon to inherit, and cultivate the earth, to elevate this Heaven appointed occupation as far above all others, in the learning and science of its members, as it is in its greatness and importance in the economy of civilized Society. To protect their own interests, and advance the well being of the whole community, farmers should sit in their legislative halls, in conventions to amend their constitution, on the bench to adjudicate, and maintain the dearest rights of their peers, at least the equals in mental culture of the most favored in the land. Is this now the case? We pause for a reply.

Agricultural Address, by S. B. Woolworth, A. M.

We have received from the Author a copy of his address delivered before the Onondaga Agricultural Society at its last Annual Fair, which is an able and well written production. Mr. W. is Principal of the Cortland Academy, and makes Agricultural Science a branch of study in his Institution. His efforts in this matter, we are happy to know, have been most favorably received by the enlightened farmers of Cortland county. Nothing stimulates the exertions of men of science to labor for the public good so much, as to have the favorable regards of the community in which they live. Mr. WOOLWORTH is very fortunate in this respect, having full classes, and the present of silver-plate as evidence of the just appreciation of his services in the cause of Agricultural Improvement. We hope to live to see the time when every Academy in the State will make Agricultural Chemistry both practically and theoretically a branch of its regular instruction.

WHEAT.—Upwards of 350 varieties of this grain are known to exist. Yet it is a factitious production, and indebted for its present excellency wholly to the power and skill of cultivation.

The Analysis of Soils.

A distinguished Chemist told the writer, that for ordinary earthy substances, the detection of a thousandth part required skilful analysis. Minder portions of some constituents are more easily detected than of others. But suppose a ten-thousandth part the *utmost limit* for agricultural practice, a few instances will show the inadequacy of analysis in cases which may occur.—*J. J. Thomas' Prize Essay.*

THE cases referred to are the quantity of gypsum, muriate of ammonia, and phosphoric acid in soils, which, while too small for detection, may nevertheless, exist in the earth and confer great advantages on growing crops. This is true in the main, and we copy the above extract to show the fact that "distinguished chemists" regard the detection of an element equal to the 1000th part of a soil, as requiring "skilful analysis."—Many eminent chemists could be named that have expressed similar opinions. Now, we claim to have made great improvements on the ordinary process of conducting these chemical manipulations, by which farmer's sons only 16 years old, at their *first trial*, extract, and correctly weigh a mineral equal to the fifteen thousandth part of a soil. Instead of a "ten-thousandth part" being "the utmost limit" in our laboratory, we are prepared to demonstrate a result ten times more minute than that. As we work for the public good, and pay out five dollars for chemicals where we get one back, we will state a single process.

In analyzing the soils of the southern tier of counties in this State in the ordinary way, by taking only 100 grains, we can find scarcely a trace of lime; and yet all plants that grow there, contain notable portions of this mineral in their ashes. As all practical farmers, as well as men of science, concede the great value of lime in all soils, and especially for growing wheat and other cereal plants, we have regarded it as worth some trouble, and expense to find out a way to determine the quantity of lime in a soil, although it shall make only one part in one hundred thousand. This is our process: Burn off the organic matter in ten pounds of the earth, by repeated doses in a large crucible, or clean iron basin. Two pounds of this may be treated at a time in a large glass basin so thin that it will stand the heat of a spirit lamp without breaking; or it may be placed in a sand bath, and the soil boiled in diluted muriatic acid. As we do not care to get out all, or any of the alumina and iron, it is not necessary to have more than an ounce of acid to two pounds of soil, and distilled water enough to cover the mass an inch or two deep. The solution is poured off into a tall precipitating jar after it has boiled on the soil 30 minutes. The soil is washed with pure water, to remove all the acid solution; which is also put to settle, in the precipitating jar. The clean liquid is poured off into a clean evaporating dish, and the sediment in the jar is well washed on a filter. The liquids being all added together, are

evaporated down to half a pint, and aqua ammonia added in slight excess to neutralize the muriatic acid. A precipitate will fall, which is mostly iron and alumina. These must be separated by filtering. The lime, if there be any, will still be dissolved in the liquid, which passes through the filter. To this must be added a strong solution of the *oxalate of ammonia*, so long as any precipitate falls. This precipitate is white, and the oxalate of lime. It must be collected on a filter, dried, burnt and weighed. If the soil has one part of lime in 153,600 of earth, our lime will weigh one tenth of a grain. To make the result however more satisfactory, boil the ten pounds of soil in successive portions of two pounds each in weak acid to dissolve out the lime, settle, and filter till the solution is limpid, evaporate down to a gill, get rid of the iron and alumina by ammonia, and then separate the lime as above described. It will be a most extraordinary soil if ten pounds, or 76,800 grains do not give at least a half grain of this important mineral. If the soil contain only 1 part in 768,000 it can be separated and weighed.

There is nothing to prevent our leaching one or two hundred pounds of any soil either with cold or hot water; or with diluted vinegar, sulphuric, nitric, muriatic, or other acid, to dissolve out the *phosphate of lime*, or any other valuable constituent of our crops. Have not practical men long leached the *earth* of plants, and evaporated the solution to obtain their *potash and soda*? And who will say that we may not perform a similar operation to show how much potash and soda there is in the soil that yields the *ashes* of forest trees? The science of chemical analysis is now in its infancy; and, for one, we protest against the injustice of popular writers, like HENRY COLMAN and others, who are most liberally paid for their compositions, in seeking every possible opportunity to disparage the value of this science. Must the farmers of the United States be taught to regard with contempt and treat with ridicule all efforts to foster the study of Agricultural Chemistry in this country, because it is *better* for them to be dependent on Great Britain, France and Germany for their information on this important subject? Such is the position in which the agriculturists of the U. States now stand. They look up to Johnston, Liebig and Boussingault as the beginning and *end* of all progress in the application of Chemistry to rural affairs. We honor these names as much as they deserve, which is not a little.—But of all idolatry, that of man-worship is the most pernicious to the advancement of true knowledge.

The great volume of Nature is alike open to all; and why should not all read, and understand the original text? We are confident that we shall be able to determine how much of the substance of the soil is ordinarily consumed in

forming 100 lbs. of wheat, oats, clover, turnips and potatoes. In true manure, there is no guess-work. We weigh the soil before planting the seeds, weigh the crops, and then weigh the whole earth in which the plants grew, and note the loss in consequence of producing any plant. Then, by knowing precisely what the artificial, or natural soil contains, and what the plant required, and has taken from the earth, we shall come to know something more about the organization of our crop, and the things that nature uses in forming the same. Understanding precisely the character and condition of the materials we have to deal with, and what we really need to form a good crop, we shall make every hour's work tell to the best advantage, and thus secure a double reward for our knowledge and industry. With these come honor, plenty, virtue and happiness.

Form of a Constitution for an Ag. Association.

To IMPROVE ourselves, and promote the diffusion of useful knowledge among men, in regard to the science and practice of Agriculture, that this profession may be more honored and better rewarded than it now is, We, the undersigned, do hereby organize ourselves into a Society under the name of the Young Men's Agricultural Association; and adopt for its government the following

CONSTITUTION.

ARTICLE 1.—It shall be the leading object of this Association to secure to its members, on the best practical terms, an opportunity to acquire a thorough knowledge of Agricultural Chemistry and Geology; and of such other sciences, and branches of learning as will be most useful, and honorable to the possessors.

ART. 2.—To carry into effect the objects named in the first article of this Constitution, the property and stock of this Association shall be divided into two thousand shares of ten dollars each, to be subscribed for and held by its members. So soon as one thousand shares are taken, a meeting of the stock-holders shall be convened in the city of Rochester, agreeably to previous public notice to be given in the Genessee Farmer, at least three weeks before the time of holding the meeting, to choose Trustees, and make all necessary arrangements to collect the funds of the Association, purchase a suitable farm, and erect thereon plain, substantial buildings for an extensive AGRICULTURAL SCHOOL.

ART. 3.—This School shall be organized substantially after the following plan: A comfortable room for study and sleeping shall be furnished to each two students attending the institution, for which they shall pay a small rent; they finding their own beds and furniture. Each student shall have at a low rent the use of a half acre of good tillable land to cultivate, and the entire proceeds of the same, to aid in paying his board and other expenses at the school.—The culture of all land and fruits to be under the general superintendence of the President of the Association. A common table shall be provided by the students, and as far as may be, from the products, and proceeds of the farm.—An accurate account shall be kept of the first cost of board, and that shall be the price charged for the same. The object shall be to combine economy and comfort in regard to living, at the Institution.

An extensive chemical laboratory shall be provided for making the most useful researches into the nature and composition of soils, and of all vegetable and animal products grown on the farm. An ample museum shall be provided to illustrate the organic structure of man, of all domestic animals, and cultivated plants, as well as to aid in the study of natural history in general. A cabinet of minerals

shall also be provided. At least five professorships shall be established, embracing not only a liberal range of the natural sciences, but ancient and modern languages, and the mathematics. A primary department shall be kept to prepare pupils for entering the higher classes. A full course of study of the sciences shall extend through a period and embrace the lectures of four years, when those that pass a thorough examination by the Faculty shall receive a parchment diploma of the honorable degree of Masters of Agriculture; the initials of which shall be M. A., or A. M., "Agricola Magister." There shall be two public examinations a year. The students shall be subject to moral, as well as intellectual and physical training.

ART. 4.—Every member of the Association shall be entitled to an annual volume of its transactions, and to have soils, minerals, or other substances analyzed on paying the first cost of the materials consumed in making the same.

ART. 5.—In case there shall be more applicants for admission into the school than can be accommodated, they shall draw lots for the privilege by an equitable arrangement, increasing the number of chances of success, according to the number of shares held by the applicant. The design, however, shall be, by an increase of stock on the part of the members, and by Legislative and other aid from patriotic citizens, to accommodate with comfortable board and rooms all that may desire to avail themselves of the peculiar advantages of the YOUNG MEN'S AG. L. SCHOOL.

ART. 6.—The stock of the Association shall be held as personal property, and transferable on its books, giving to each share one vote by proxy or in person, in the election of all officers. Trustees shall be elected annually on the first Tuesday in January, unless otherwise provided by the Association.

ART. 7.—A majority of all the members of the Association shall have power to alter or amend this Constitution.—But no person shall become a member, or be entitled to a vote, unless he holds, or represents one share of stock.—The names of all the members of the Association shall be annually published in the Genessee Farmer. No subscription shall be payable till after \$10,000 are subscribed, and a Board of Trustees chosen, who shall appoint a Treasurer, and exact adequate security for all moneys received.

Farming in Winter.

AN exchange gives the following timely and sensible remarks upon this subject. We find the article credited to the *Maine Cultivator*—but we presume its proper ancestor is brother HOLMES of the *Maine Farmer*:

What shall a farmer, as a farmer, do in the winter? He has much to do in the winter peculiar to his profession—in his house, in his barn, in the woods, and at market. There is no need of his being idle. He has a great deal to do for the promotion of his interest. In the first place, if the rigors of the season drive him in-doors let him think himself a lucky man; for it is to the family that his most important duties are due. Has he a wife and children? Let him make the first his companion, friend, and equal; and let him devote his thoughts and labors for the instruction and improvement of his children. See that they are well and tidily clad. See that they go to school, and are furnished with suitable books. See that their winter evenings are employed in useful reading and study, with innocent amusements intermixed, rather than in visiting the haunts of dissipation and ruin. Let the winter be devoted to the duties of the bedside, and the calls of social intercourse.

Having every thing in order in the house, both as it respects the physical, moral, and intellectual wants of his family, let his next attention be devoted to the domestic animals of the barn and fold. See that they are well fed.—Keep the stalls clean. Blanket the horses; and if you do the same to the cows, so much the better. Make sure of as warm a place for them as possible. Give them straw beds to sleep upon. Comfortable animals will thrive best, and give back the best returns.

In the day time, when your children are at the school, cut and haul home wood enough to keep a year's stock of seasoned fuel beforehand. This is economy. In short, every farmer has enough to do in winter; and that, well done, is often the most important and profitable labor of the whole year. Keep stirring, and-do good.

Laboratory Conversations.

Principal—Here is a pound of soil which a friend has sent me to see whether it contains any gypsum or not. If it has one part of the sulphate of lime in fifteen thousand, Cooper, of you have learned enough of the practical part of Agricultural Chemistry to get out the gypsum and weigh it, have you not?

Cooper—Sir, it is taxing one's skill pretty severely to separate any mineral in a soil where 100 grains contain less than the one hundredth part of a grain of the substance to be separated; still by your improved process for conducting these manipulations, I doubt not my ability to extract plaster from soil if the proportion is so small as 1 to 15,000.

Principal—Well Cooper, tell these new comers* how you will proceed, and then take the soil, and work out the result by an actual demonstration.

Cooper—I shall take the pound of soil and burn it in a large Hessian crucible to get rid of the organic matter. Then I shall boil it for half an hour in three pints of distilled, or rain water, as it comes from the clouds. A grain of gypsum will dissolve in about an ounce of water, so that all there may be in the soil will be dissolved out.

Principal—Very well, so far; but you must not forget that the same water which dissolves the sulphate of lime will dissolve also the chloride of calcium, and all salts of potash, soda, magnesia, and iron. How are you to separate the salt called gypsum from all the others?

Cooper—Gypsum is but sparingly soluble in water, requiring 461 parts to dissolve one; and is absolutely insoluble in proof spirit, or diluted alcohol. The other salts are soluble alike in weak alcohol and water. Hence, by settling, and filtering the water quite clear in which the soil was boiled, it can be evaporated down to a wine glass full, or a half gill, and then add as much good alcohol as there is of water. Whatever sulphate of lime or gypsum there may be, will be precipitated, and can be collected on a filter, dried and weighed.

Principal—Suppose your gypsum weighs half a grain, what per centage of this fertilizer will the soil contain? †

Cooper—In one pound there are 7,680 grains avoirdupois; or 15,360 halfgrains. One part in 15,360 is a fraction less than the 153d part of one per cent.

Principal—How small weights do you sometimes use in making chemical analyses?

Cooper—The balance is so nicely adjusted that we use weights down to the 100th part of a grain.

* COOPER ANNIN is a lad, 15 years old, who has been with the Editor 7 months, and studied Geology, Anatomy and Physiology, and other branches, besides Analytical Chemistry.

† The specimens furnished, did contain a half grain of gypsum, in 8,000 grains of soil, or one part in 16,000.

Principal—In making an analysis of potatoes, what interesting fact did you discover?

Cooper—That rohan potatoes contain 6 per cent more water than mercers, although both grew near together in one field, and were treated alike. The rohans had 81 per cent and the mercers 75 of water. ‡

Principal—In 100 lbs. of rohans how much ash is there?

Cooper—Ninety-five one hundredths of a pound. In mercers there is a fraction over 1 lb.

Principal—How much potash is there in this ash?

Cooper—A little over 50 per cent.

Principal—From some experiments I have made, how much of the substance of a soil is consumed in organizing 100 pounds of potatoes?

Cooper—From three to seven pounds.

Principal—Upon what data is this important inference founded?

Cooper—Upon the facts of weighing the soil well dried, and the sets of potatoes, before planting; and also the same soil after the crop has grown, and comparing its loss in weight with the gain in the crop. It must be borne in mind that three fourths of the weight of ripe potatoes is nothing but water.

Principal—In organizing carbon and the elements of water into starch, what chemical substance seems to be necessary in potatoes?

Cooper—Potash. Potatoes planted in an artificial soil that lacks potash, form very little starch.

Principal—Here is a quart of spring water, I suspect it contains lime. How will you determine the fact, and its quantity?

Cooper—Evaporate it down to one gill in a clean glass vessel, and add a solution of oxalate of ammonia so long as any precipitate falls.— This is a white powder, the oxalate of lime. It may be collected on a filter, burnt in a platinum capsule with the addition of a few drops of carbonate of ammonia, when the oxalic acid will be decomposed, and the carbonate of lime formed, which can be weighed to give the amount.

Principal—When oxalic acid is decomposed by heat, what new compounds are formed?

Cooper—Carbonic acid and carbonic oxide.— An atom of oxalic acid contains two atoms of carbon combined with three atoms of oxygen.— One atom of carbon combines with two of oxygen to form an atom of carbonic acid; while one of carbon unites with one of oxygen to make one atom of carbonic oxide.

Principal—I suspect the spring water I gave you contains a small quantity of common salt in solution. Tell me how you will test it for that salt, or chloride of sodium?

Cooper—By a solution of nitrate of silver.— This is a very delicate test; the chlorine in the

‡ My pupils are just beginning to learn to separate starch, albumen, oil, glutine, fibrine, caseine, sugar, &c., in organic bodies.

spring water leaves the sodium and unites with the silver forming an *insoluble* white powder, which may be collected and weighed, and from it the quantity of salt in the water calculated.—The color of this precipitate changes to a dark blue or purple on standing in the light.

Principal—Suppose ten thousand grains of soil contain half a grain of magnesia and one fifth of a grain of potash, show your associates how to extract and weigh these valuable fertilizers.

Cooper—It will take some time to go through with all the manipulations, but if the boys will take notice I will exhibit the whole process.

Cooking food for Animals.

MR. EDITOR:—Will you have the kindness to give, in the *Farmer*, the most approved, or best method, of cooking roots for animals?

Yours, &c., INQUIRER.

Fowlersville, Nov. 1846.

REMARKS.—The above should have been attended to before; but the copy got mislaid. It is not easy to say what is "the most approved method for cooking roots for animals." If only small quantities are to be cooked, they can be boiled in a cauldron or potash kettle in an arch, with a board cover to prevent the great loss of heat by evaporation, at a trifling expense.—Where large quantities are to be cooked, a steaming apparatus can be put up and used with a considerable saving in fuel and labor. Contrivances of this kind are quite numerous.—Having had but little personal experience, we respectfully invite some one familiar with the whole subject, to give the readers of the *Farmer* the benefit of his practical knowledge in cooking roots for domestic animals. We have seen stoves filled up with a large kettle that looked as though they would answer a good purpose for cooking bulky articles.

Prolific Corn.

DR. LEE:—I herewith wish to exhibit a sample of corn, raised by me in the town of Chili, showing, first, five perfect ears on one stalk; second, four ears on a stalk, and third, three ears on its stalk. It so happened that my plowing and planting was done late, on sandy loam, the planting as late as the first of 6 mo., (June) If this sample is worthy of being mentioned in the *Farmer*, please do it after examining the samples. I have also selected some of the best for seed, which some perhaps would wish to purchase.

Respectfully, &c.

Chili, 12th mo., 1846.

DAVID BELL.

REMARKS:—The specimens of corn can be seen at the publication office of this paper.—The ears are not large, but sound, eight-rowed, yellow corn.

Bees. --- APIS MELIFICA.

These insects have been admired from the remotest period in human record for their industry, skill and economy.

There are three orders of bees in each hive:—the queen bee, (a), drone, (b), and working bee, (c). There is but one queen bee, which is distinguished by having a body larger than the others.—She is the only bee that brings forth all the young in the hive. The workers are females whose ovaries are not developed. The drones are males and number from 300 to 1000 in a hive. The number of the laborers varies from 5,000 to 20,000. They, only are armed with a sting, and toil with system and regularity.



The bees that go abroad seek for three distinct kinds of matter, viz: honey, farina or bee meat, and a substance called propolis. The honey is the nectar of flowers, and from the same source bees obtain their wax. Farina is stored up in cells for young bees—is of a whitish color, and very different from honey. Propolis is a resinous exudation from the trunks of trees, and is used to close up the crevices in the hive, and to close the cells in which the eggs of the insect are deposited by the queen. She lays first the workers at the rate of 50 a day, then the drones, and lastly the ova for queens. It is the old queen that leaves her home, and leads the emigrant swarm. The natural history of this insect is a curious, and most interesting study. Great improvements have been made in bee-hives within the last twenty years. The number of patents may be counted by hundreds, of various utility. It is for the owners of these to point out the advantages of each hive.*

Bee-pastures ought to be provided in all cases where natural ones do not exist. No other class of animals pay better for their keeping and good attention.

About August, the bees of the preceding year die, the drones are expelled, and the hive is completely under the control of the new generation. Dr. Darwin states that a swarm of bees may be kept through the winter without consuming any food by freezing them, and keeping them in an ice-house till May. It is also stated by other writers, that bees cease to lay up honey after the first year, when carried from a temperate climate where there is snow and frost, to the torrid zone.

* For some information relative to Dr. O. REYNOLDS' Hive, see advertisement on another page of this paper.

The bad economy of burning green Fire-wood.

WE have been burning, for the last month, green black and white oak wood, cut from small trees. Our students find on analysis that 100 lbs. of this wood contain 35½ lbs. of water, and less than one pound of ash. We demonstrated in an article published in the last Farmer, that 1000 degrees of heat are taken up, in converting water into steam which occupies a space 1696 times larger than that filled by the water. Although the quantity of latent heat contained in a cord of green wood is not increased by seasoning, and hence the latter can evolve no more sensible heat than the former; still, in burning green wood, or wet wood, it is almost impossible to avoid the loss of one-fourth of the heat generated, in combination with water, in *steam* and *vapor*. Most of the heat rendered latent in these gaseous bodies passes up chimney, where they are condensed, and give out their heat to warm all our doors.

We are anxious to give the most unscientific reader a clear idea of this subject, for it is really one of great practical importance. Look at it, then, in this light: You have divided your 100 lbs. of green oak, beech, or maple wood, into 65 lbs. of dry combustible matter, and 35 lbs. of cold water. Every pound of this water you evaporate in green wood, and *throw the heat away* by the consumption of a part of your 65 lbs. of fuel, and then take the heat evolved by the balance of your fuel to warm your room. How many ounces of perfectly dry wood are required to transform a pound of water into steam, we can not at this moment say; nor can we determine what portion of the heat taken up by steam in the combustion of green wood is again evolved by condensing in the room where the fire is made. We believe, however, that the usual loss is about equal to one-third of all the heat contained in 65 lbs. of kiln-dried wood; and that the gain in seasoning wood under cover is at least 25 per cent.

Winter is a good time to cut, and get up a year's stock of firewood. Farmers at this season have less other work to perform, and wood is easier loaded and drawn when there is good sleighing, than in summer. But remember one thing: Don't attempt to warm all creation, by working hard to chop and haul fire-wood, and at the same time leave your dwelling so open that the cold wind will rush in on all sides. By all means make your house comfortable. Bank it up, and have all its walls tight, and good non-conductors of heat. While taking good care of those in-doors that can *talk*, and tell their wants, never forget the *dumb* brutes in your barn-yard and stables. "The merciful man is merciful to his beast."

"INDUSTRY, economy and perseverance" is a good motto for young men.

Laconics.

BY THE EDITOR.

EVERY person should study the science of Productive Industry, that he may know how to employ his mental and physical powers to the best advantage, and give to the community more than he consumes. If production did not exceed consumption, there could be no increase of the human family on the earth.

Every human being should study the science of Keeping Property, for ignorance on this subject is the source of incalculable evil. Somebody ought to write a good book on this important science, and fully illustrate its principles and economy.

Beware how you run into debt, and assume the payment of annual interest on money, or other dead matter, which can not add one particle to its own weight, nor one cent to its own value. Interest is a contrivance of the Devil, by which he enables one man to retrace from another all that he gives, and something more. Disguise the truth as best you can, still it is a *fact* that, that *something* which Humanity gives more than it receives, is a consuming ulcer on its body and its soul.

If you believe that you are not a brute—that you should cherish some hope of Heaven, some fear of a just God—then read your Bible, and believe it when it tells you that, "it is easier for a camel to pass through the eye of a needle, than for a rich man to enter the kingdom of heaven."

The devil invented Usury—the getting from Humanity something for nothing—to entrap immortal, accountable beings in the snares and perils of "laying up treasures on earth, where moth doth corrupt, and thieves break through and steal;" and in the crimes incident to that "love of money," which is "the root of all evil."

Christians are fast becoming idolaters. They build unto themselves idols of brick and mortar, or other dirt, and compel their pastors like themselves, to fall down and worship them. We have waited 30 years to see people *begin* to lay up treasures in heaven.

There is no liberty of the Press in America; because the most honest men in the community are but a little less dishonest than the greatest rogues.

Man's rank injustice to his fellow man forbids our writing and publishing truths of vital moment to Society, which ought to be proclaimed on every house top. We shall indie for volume VII of the Farmer as many as we dare, and not destroy the circulation of the paper. Our Laconics will cost us some subscribers, which the friends of Justice, and of Honest Industry should take some pains to make good to the publisher.

Never give Labor ninety cents and take a dollar back, till you see *dimmes* growing spontaneously out of the earth.

A man that is able to work, and unwilling to produce in some form, a full, and fair equivalent fair what he consumes, from the cradle to the grave, should be driven out of civilized society, and made to dwell in the wilderness with wild beasts.

If all producers will only keep their own, or exact a perfect equivalent for the sweat of their faces in the toil of others, all non-producers will be compelled to *earn* all that they acquire, and all that they consume. But Humanity comes into the world naked, hungry, and houseless. It can not keep what it has not. It is at the mercy of Capital; and Capital has hitherto been in the service of the Evil One.—Hence, the wrongs and sufferings of poor Humanity.

Humanity gives being to all the capital in the world; but her offspring, falling into the hands of heartless strangers, is made to act the part of an infamous parricide. More suffer, however, from their own vices and follies than from the wrongs of others.

The elevation of fallen man in morals, in knowledge, and in physical comfort is the work of time. Agrarianism, and all ideas of a division of property, are at best mere quack remedies, calculated to do infinite harm rather than good.

The good people of Monroe county pay some \$20,000 a year for the support of the poor. The annual consumption of one half of that sum would carry into effect the benevolent intentions of the law better than is now done.

All men are so deeply engrossed in attending to their own personal affairs, that few, or none, have time *duly* to study matters of public interest. These must continue to suffer so long as selfishness, and the little honors and emoluments of office reign supreme in the human breast.

Letter from Seneca County.

DR. LEE:—I have heard two of your subscribers speak in high commendation of your criticism on Dr. RODGERS' agricultural school book. It is a blessed thing that something can stir up farmers to a state of mental activity. Had Dr. RODGERS published a better book, it might have fallen still-born from the press; but the moment the farmers are told that a part of his compilation is made from "authors who wrote before analytical chemistry was born," they become alive to the proffered indignity. Hence Dr. R. carries off the palm for having done more to jostle our farmers into a living sense of the dignity of their calling, than a hundred Liebig's or Johnstons could have done.

Out of the thousands of adult farmers who deal in our village, I believe I got, last year, 44 subscribers to the Genesee Farmer. If I was asked to give the reason why so few farmers read, I should reply that mental industry seems to be rare among them, in proportion as physical industry predominates. The cause is obvious: their early physical training is perfect, while their early mental instruction has too often been barbarous in the extreme. A district school teacher is hired to teach farmers sons, not for his ability to instruct, but for the low wages he consents to receive. Before the boy can half spell, he commences reading. He is immediately taught enough of arithmetic to add a column of figures, divide, and subtract, when his school education is finished. I am proud to say that there are hundreds of farmers sons who, impelled by the *afflatus* within them, subsequently overcome the deficiencies of their wretched school learning, by patient study. Such men are the subscribers to agricultural papers—they are the few who feel, with the poet, that

"Ignorance is sin"—not bliss.

I notice that our friend BATEHAM, of the Ohio Cultivator, plows his little 10 acre farm 16 inches deep. Such practice ought to immortalize an editor of an agricultural paper. He is right in calling his a large farm; with such a subsoil as is common in Western N. Y. and Ohio, a farm should not be estimated by its surface only.—With a like subsoil New England would hardly have been as manufacturing as she now is. I well remember with what reluctance the New-Englanders were compelled, by embargo, non-intercourse, and war, to abandon the Ocean and go to manufacturing. As often as I travel over our alluvial Seneca, I am struck with the idea of the amount of labor which has been expended in clearing and fencing the land, then so little advantage taken by the farmer of so great an outlay—fences rotting around fields scarcely tilled.—I instinctively ask the farmer the cause of this waste of capital. His reply is, generally, "My sons and daughters have gone west, and I can't

afford to hire help." Such is life among farmers living on the finest soil ever warmed by the sun's rays. The young of both sexes foolishly give up such a birth-right, for a bare-foot existence in the western wilderness—amid privation, and toil, and sickness—where pork is the greatest luxury, and a log-house raising the most exciting recreation. It has been said that it is much easier for man to retrograde to barbarism, than to progress in civilization. Do we need further proofs of the fact? S. W.

Waterloo, December, 1846.



Buckwheat,

Is the grain of the *Polygonum fagopyrum*, and is said to be a native of Persia. It is usually sown on poor land, although, like other cultivated plants, it does best on a good soil with good culture. Its blossoms yield considerable food for bees, although the honey thus obtained is inferior to that made from clover. Buckwheat meal or flour is much used in some sections of the United States for making griddle cakes. The seeds of this plant contain 50 per cent. of starch, and 1½ per cent. of earthy matter. It is often sown and the crop plowed in, to fertilize poor land. From one to two bushels of seed are put on an acre.

Figure a represents the *Polygonum fagopyrum*—b the *Polygonum tartaricum*.

YANKEE ENTERPRIZE.—The Traveller says a New Hampshire man was in Boston the other day with a few stockings for sale—only five hundred dozen pairs—being about half of his fall supply. It seems this gentleman is concerned in a cotton yarn factory, in a small town in the interior of New Hampshire. The yarn is sent out to all the farmer's families far and near, and wrought into stockings, and the farmers wives and children are paid for their labor in part or entirely with goods from the store, and the stockings are then brought by the hundred dozen to our city for sale. This is but one specimen out of a thousand of the versatility of Yankee traders.

The Farmer.---His Position, Responsibilities, and Duties.

NUMBER FIVE.

THE District School System is one of the distinguishing features of the New World. Its adaptation and fitness for the country, and the almost imperative necessity in view of our political institutions and their perpetuity, renders every thing connected with it of decided interest and importance. It is said that the Ancient Egyptians inscribed on their Libraries "Remedies for the diseases of the Soul;" and so might we write over the door posts of our School Houses, remedies for, and preventives of, diseases in the body politic, and promoters of the morality, good order, and safety of society. As New Yorkers, we may justly feel proud of our educational advantages—and, as patriots and philanthropists, we are bound to cherish and labor to improve and elevate them.

Education is one of those indefinite terms which admit of almost any latitude. In its real and true signification, it is a progressive and never-ending work. The whole life-time of man is but a movement onward, and it is perhaps safest to believe the elevated and beautiful idea that throughout all eternity, man will continue to increase in knowledge and advance in wisdom.—But it is not in this broad view that I now propose to regard the term Education. I will define it for present purposes, as a disciplinary process, fitting the mind for the business of life; not only the accumulation of knowledge and intelligence, but the acquisition of habits of order, industry and economy, in proportion for the active duties and responsibilities of life. This work belongs to the school-room; there the boy is to be prepared for man-hood. In process of time nature will develop the full capacity of the physical system, but the mind is not made of the same material, and cannot alone come to its full strength and capacity. Its food and nourishment is made of different matter than that which feeds and invigorates the body; it must have the aid of other minds—must have facts and figures, arbitrary rules, and distinct principles, and obtain them not by instinct, but by hard study, severe thinking, and the rigid application of the mental faculties.

The school book, the school house, and the school master, are these important requisites in training the mind and in bringing out its power and energy. Mind, like the body, is the work of the great Architect, it is the gift of God, and may and does exist in all its glory and majesty, in the poor man as in the rich; it knows no distinction, only in its means of development, and in its educational polish. Then how glorious to educate all the people—how high and solemn the duty to give to all the advantages of mental culture.

The district school belongs, emphatically to the masses; they are the people's schools; they know no caste, nor recognize no distinction, but broadly unfold their beautiful panoply and cover all alike, and say without respect to person, or condition, "come and partake of my benefits." God has given thee Mind; ours is the duty to unfold the power, and prepare for systematic and useful action, this richest and mightiest of God's gifts.

It is the highest glory and proudest boast of the Empire State, that she has thus provided a system for the education of her children. Rightly does she judge, and wisely act, when she thus provides for the safety of herself and the elevation of her people. And have the Farmers no interest in this matter? Yes, they have, most of all; for they are more numerous than all other classes. The district school is truly, almost exclusively their own; it is to most of them their only school, and it behooves them to look well to these seminaries, so peculiarly their own. Their children, nine out of ten, if not ninety-nine out of every hundred, will be educated in them, for they have no where else to go. Then let the district school be elevated, improved, and made what it should and may be. And as one improvement, almost indispensably necessary to the farmers, there should be, and must be, a department devoted to Agriculture. I can discover no reason why it should not form a regular branch of Common School Education—nor why every College and Academy in the State, should not have their professorship department, devoted to Agriculture, as a distinct branch of study and education. Is there any thing in the subject which precludes this? Is there any difficulty in reducing to a regular science, and of so arranging and classifying its different branches, as to permit it being made a part of the educational process of the young? I think not; but on the contrary, Agriculture is a science, possessing, in all its ramifications, distinctive features—is governed by fixed facts and unerring principles—which the young farmer should learn, by study and close application of his mental faculties. They should be engraven on his mind, when it is young and plastic, and capable of receiving and retaining impressions, and this subject may, I imagine, be introduced into every district school in the State, without any detriment to the branches now taught in those schools, and without interfering with the regular course of common school education.

Much reflection has satisfied my own mind of the great importance of the subject. I regard it as an essential step towards the elevation of the farming interests—a necessary ingredient in lifting up to their real position the farmers of this country. The State has been beneficent in her school funds; but the farmer has not as yet had his full share of the benefits accruing from them. He has been content to look on listlessly, and let

other classes reap the harvest which his own industry had provided. Let him now arise from his lethargy, and begin to cast about, and see if there be no place where his sons can go and learn to become farmers, as well as Doctors, Lawyers, and Divines. It seems to me that the farmers have a right to use a portion of the money which belongs to them, to advance their own calling; not, indeed, to tear down or prejudice others, but to elevate their own business to the dignity of a science, to be taught and learned in the schools of the state.

First of all we want Agricultural School Books, and agricultural teachers, or persons qualified to teach Agriculture. The very initiatory step, then, is to find men to prepare books adapted to the instruction of children, and then to find competent teachers who can use them. I would then reverse the usual rule—begin at the top and work down. Begin by establishing and endowing an Agricultural School, or schools, by the Legislature of the State; and with that, or them, as a nucleus, I would begin the work of making agriculture a regular science—a branch of education for the older scholars in every school district, just as much as arithmetic is now. The thing is in the highest degree practicable. It may and should be begun at the present session of the Legislature. That body should be called upon and forced to appropriate a portion of the Literature or other fund, for this purpose; and then ere five years shall pass away, the great work will have been accomplished. To me it appears plain and clear, and I ask the Farmers of the State to come up to the work and insist on their rights—demand for their children Agricultural Schools, aided by a fair portion of the literature fund—insist that DANIEL LEE and his School, or those of a similar character, be sustained by the funds of the State, as well as Geneva College. Stand up for your rights, and you will obtain them, but never until you do.

In my next I shall enter more into detail.

D. A. OGDEN.

Penn Yan, Dec., 1846.

Castration of Animals.

MR. EDITOR:—I have read one or two articles in your paper on the castration of animals. I have tried almost all ways, but never became satisfied, until recently by cold water. My course now is to take pure cold water, and, for convenience, put it in a pitcher or coffee pot, and, after the operation is performed, pour in enough to cleanse the wound, and the work is done. The wound heals readily, and it causes the animal no pain. I have tried the above for two years past, and have had no trouble.

If you think the above recipe is worth publishing in the Farmer, insert it; if not there will be no harm done.

WM. B. WALDRON.

East Leon, Cal. Co., 1846.

Preserving Hams.

MR. EDITOR.—Many are the ways which people adopt to preserve hams for future use. I have a recipe for curing hams, which I have used with good success for many years, and think it as good as any other I ever saw. The recipe is as follows, viz:—For 100 lbs of meat I use 8 gallons of water, 16 lbs. of salt, 4 lb. of salt pepper, and $\frac{1}{2}$ gallon molasses, and so on in proportion to the quantity of meat you may have to prepare. These ingredients are put into a kettle, and hung over the fire until it becomes scalding hot; then taken off and set away to cool.—When I pack my hams down I use a little salt, for fear the brine would not be salt enough to keep them in hot weather. The hams should remain in brine about 12 weeks; then taken out, washed clean, and hung up in the smoke house. The smoke house should not be perfectly tight; it should be freely ventilated. Some prefer brick houses for smoking hams, and some wood. I, for one, prefer wood, for this reason: in wood smoke houses the hams do not sweat, which by so doing injures their flavor. Hams should be smoked about three weeks, and those intended for summer use, I encase in small cotton sacks, which afterwards are thoroughly whitewashed and hung in some cool place.

This way of preserving hams will keep them good through the summer. If others should have a better mode, by which hams can be kept sweet and good, I wish they would make it known through the pages of the Genesee Farmer, and oblige your friend and brother farmer.

Dec. 4, 1846.

W. S. T.

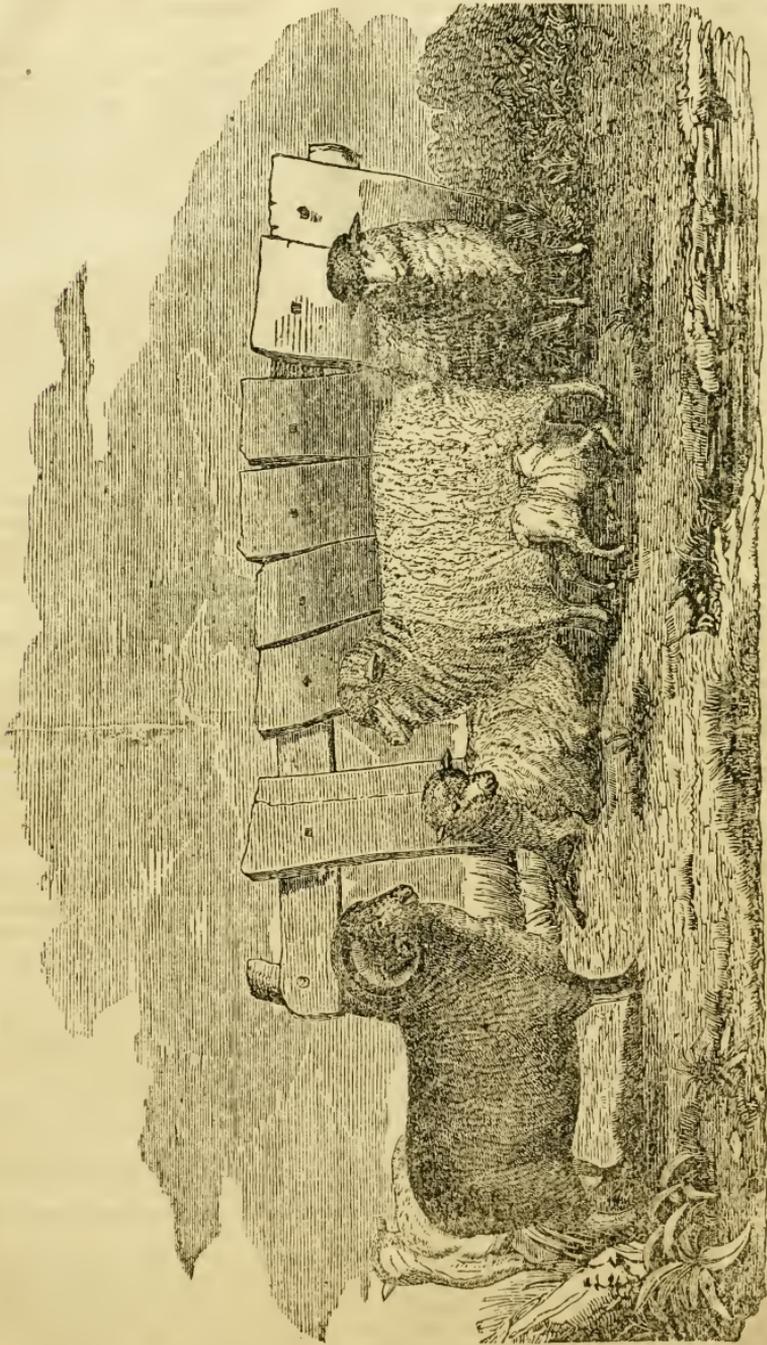
BUTTER.—The Elmira Republican contains the following boastful account of butter making in Chemung county. Everybody in every town in the State is challenged to produce a case of equal success:

MR. JOHN HOLBERT, of the town of Chemung in this county, manufactured on his own farm in the year 1845, 7147 pounds of butter, which brought him in market, at 21 cts. per pound, the comfortable sum of \$1499.49. In addition to this a tenant on the same farm made in the same year 2520 pounds, which was sold in market at 19 cts. per pound, making in all \$1978.20 for butter in one year.

During the present year, 1846, he has made 7227 pounds and sold the same at 29 cts., amounting to \$1445.40. His tenant on the same farm has also made 1911 pounds which sold in market at 18 cts., amounting in all to \$1789.38.

HUGE OX.—The Buffalo Courier, of a recent date, says:

Yesterday there passed through our city the largest and most perfect Ox ever produced in Western New York. He was raised by Mr. HIRAM COOLEY, of Attica, and sold to JOHN CLARK, of Toronto, for two hundred and fifty dollars. He was a grade from Remseur's celebrated stock, and about one-fourth Durham—six years old, and measured nine feet and nine inches round the girth. His weight was not ascertained, as he arrived here just in time to take the cars for the Falls, but it is estimated to be in the neighborhood of 3000 lbs. If the John Bulls of Toronto ever tasted more sumptuous roast beef at home, than this ox will make, we are much mistaken.



SPANISH MERINO SHEEP.

Spanish Merino Sheep.

On the preceding page we give a Plate representing several Spanish Merino Sheep, from the flock of Mr. R. J. JONES, of Cornwall, Vt. As this breed of sheep is fast coming into favor in Western New York, and other sections where the Farmer circulates, we presume that our numerous readers will be gratified with the accurate and life-like portraits here given. During the past season quite a number of sheep have been purchased of Mr. JONES, and brought into this section. Gen. HARMON, of Wheatland, has several fine bucks and lambs of the same stock.

The following extract of a letter from Mr. JONES contains definite information relative to his flock of Merinos:

"My flock of Merino Sheep, about 125 in number, originated from the importations of Messrs. JARVIS, HUMPHREY, and LIVINGSTON. For size and symmetry, and quantity and quality of fleeces—the four cardinal points of a sheep—I have seen no sheep superior to them. My yearlings averaged 6 lbs. and 1 oz., per head, of washed wool; the entire flock 5½ pounds. The wool is worth now (September) 35 cts. per lb.

The Buck represented in the accompanying engraving is three years old. He was shorn the 1st of June, 1846; weight of fleece 11 lbs. 4 oz.—the growth of 11 months and 10 days. The Ewes received the first premium at the Addison Co. (Vt.) Fair, in October, 1845—and a Diploma at the Fair of the American Institute, the same month and year. They were purchased of S. W. JEWETT, and are, in every respect, very superior animals.

In selecting my flock of Merinos (during the past four years,) I have seen nearly every flock of note in seven States, and have never purchased without having an entire selection—sometimes paying \$25 per head for ewes.—If I have not good sheep, it is for want of judgment in selecting.

This breed of sheep are fast taking the precedence of all others—combining the greatest number of good qualities, and being well adapted to this climate. It is very important that farmers should learn to judge correctly of sheep, if they are desirous to make improvements. Here is the difficulty: Not being judges of sheep, people buy miserable animals—and then, being disappointed, condemn the whole race. I once found a man who would not buy a Merino Buck, because he had previously purchased a miserable Berkshire hog!

I send enclosed a few samples of wool—three of them from my stock bucks. They are not remarkably fine, but of good quality for sheep that will shear 10 or 11 lbs. of washed wool."

The samples of wool alluded to by Mr. J. are of superior quality. They can be seen at the office of this paper. For history of the Spanish Merinos, &c., see "Morrell's American Shepherd," page 60.

M.

ROCHESTER FLOUR.—The flour sent East from Rochester the past season amounted to 540,238 bbls. The receipts of wheat by the two canals amounted to 1,504,546 bushels.—There are in Rochester 18 flouring mills, with 82 run of stone. Next year two mills with 18 run of stone are to be added.

FLOURING IN ST. LOUIS.—There are 14 steam flouring mills in St. Louis, which turn out 2000 bbls. flour daily—consuming 10,000 bushels of wheat every 24 hours, at a cost of \$6,000.

To Correspondents.

DURING the past month Communications have been received from S. Williams, D. A. Ogden, Lewis F. Allen, H. P. Norton, J. W. Bissell, Alpheus Baldwin, W. J. Phelps, E. S. Bartholomew, W. S. T., Student, David Bell, A. G. Melvin, James L. Ingalsbe, Hosea Straight, Monroe Co. Ag. Society, N. Y. State Ag. Society.

Several excellent articles from correspondents are necessarily deferred. We are much obliged for the favors of our friends, and will give each a hearing—or answer their inquiries—as soon as convenient.

Books, &c., have been received as follows:

"Experimental Researches on the Food of Animals, and the Fattening of Cattle; with remarks on the Food of Man. Based upon the experiments undertaken by order of the British Government. By Robert Dundas Thomson, M. D., Lecturer on Practical Chemistry, University of Glasgow." For sale by S. HAMILTON, Bookseller, Rochester.

"Six Lectures on the Uses of the Lungs; and causes, prevention and cure of Consumption, Asthma, and Diseases of the Heart; and on the mode of preserving male and female health to an hundred years. By Samuel Sheldon Fitch, A. M., M. D." Hall Colby, Agent for Western New York. For sale at the Bookstores in Rochester.

"Prince's Manual of Roses. By William Robert Prince." [See notice of this work in our Horticultural Department.]

"The Apianian's Guide—being a Practical Treatise on the Culture and Management of Bees. By William R. Kelsey."

"Charter and By-Laws of the American Agricultural Association. Adopted October, 1846."

"Transactions of the American Agricultural Association. Part I."

"The Rural Register and Almanac for 1847. Philadelphia—Lea & Blanchard." For sale by S. Hamilton, State-street Book-store, Rochester.

"The Ready Reckoner; for Ship Builders, Boat Builders, and Lumber Merchants. By J. M. Scribner, A. M."—Published and for sale by FISHER & Co., Exchange-street Bookstore, Rochester.

"An Address delivered before the Onondaga Co. Ag. Society, at their Annual Fair, Oct. 2, 1846. By Samuel B. Woolworth, A. M., Principal of the Cortland Academy." [See notice on page 11 of this paper.]

"Dealings with the firm of Dombey & Son, Wholesale and Retail and for Exportation; by Charles Dickens (Boz.) With illustrations by H. K. Browne. No. 1. To be completed in 20 Nos. at 8 cents each." Published by Lea & Blanchard, Philadelphia.

"Norman's Southern Agricultural Almanac for 1847; edited by Thomas Affleck, Esq." Published by M. B. Norman, New-Orleans.

Such of the above mentioned works as are not elsewhere noticed in this number, will receive proper attention hereafter. They were received too late for examination previous to the publication of this month's paper.

M.

Our New Volume.

THE reader will perceive that we have made some improvement in the appearance of the Farmer. The paper upon which it is printed is superior to that heretofore used, and we intend that its mechanical execution shall be second to no other publication in Western New York. The Farmer will hereafter be printed upon a *Steam Power Press*, and in the best style of the art. In future, the paper will be issued and mailed with more promptness and attention. In a word, as the patronage of the Farmer is fast increasing, we shall avail ourselves of every facility within our reach to furnish its subscribers a handsome and correct journal, in proper season, and thus endeavor to give entire satisfaction to all its friends and patrons.

M.

Monroe County Agricultural Society.

At the Annual Meeting of the Monroe County Agricultural Society, held at the Rochester Seed Store, Dec. 8th, the following named gentlemen were elected officers for 1847, viz :

President—SAMUEL MILLER, of Penfield.
Vice Presidents—GEORGE C. LATA, of Genesee, ROMANTA HART, of Brighton, JOHN ROWE, of Riga.
Treasurer—JAMES P. FOGG, of Rochester.
Recording Secretary—JAMES H. WATTS, of Rochester.
Corresponding Secretary—JOSHUA W. BISSELL, Rochester.

TOWN COMMITTEES.

Gates—Wm. Buell, M. Garrett, Wm. Otis.
Wheatland—Wm. Garbutt, J. Blackmer, Flisha Harmon.
Chick—Wm. Fixley, Jacob Strawn, J. K. Valentine.
Riga—Alfred Fitch, Dennis Church, Charles Tenney.
Osgo—Jesse Harmon, Marcus Adams, Oliver Harroun.
Sackett—Robert Staples, Asa Rowe, F. P. Root.
Clarksden—Adin Manley, F. McBean, Lemuel Clark.
Parma—C. A. Knox, R. Atchinson, J. M. Webster.
Greene—L. B. Langworthy, R. H. Brown, J. S. Stone.
Brighton—S. P. Gould, N. Hayward, C. F. Crossman.
Henrietta—Elihu Kirby, Wells Springer, S. Leggett.
Rush—H. B. Hart, N. C. Dayton, Thomas Wright.
Mendon—N. N. Treat, T. Wilcox, John Sargeant.
Pittsford—L. P. Whitebeck, L. Bushnell, M. Hopkins.
Penfield—Sylvester Tracy, L. Ross, H. Fellows.
Perrinton—Gideon Ramsdell, John Ayrault, Z. Burr.
Webster—J. W. Kennedy, O. Reynolds, B. Woodhull.
Irondequoit—H. N. Langworthy, C. K. Hobbie, J. McGonigal.

Rochester—Wm. Pitkin, Ep. Moore, P. Barry, A. Sawyer, James M. Whitney, James P. Fogg, Leouel Thompson, John Rapalie, D. D. T. Moore.

The Treasurer made the following report.

1846—December 4.—Amount of cash on hand, November 8, 1845,	\$63 31
Amount received from members,	196 00
“ “ “ the State,	194 00
	\$453 31
December 4—Paid receipts, Number 157 to 212, inclusive,	\$172 00
Paid for Books for Premiums, and expenses of the Society,	176 88
Paid for Dr. Lee's Lectures,	20 00
Cash on hand,	89 43
	\$453 31

JAMES P. FOGG, Treasurer.

On motion of J. W. BISSELL,

Resolved, That the thanks of the Society be tendered to Mr. J. P. Fogg, for the efficient manner in which he has discharged the duties of Treasurer the past year.

On motion of James P. Fogg, it was voted that the thanks of the Society be tendered to those members who had contributed to the funds of the Society the amounts of their several premiums at the last Fair, viz: to Wm. Garbutt, of Wheatland, \$7; Wm. Buell, Gates, \$7; Romanta Hart, Brighton, \$4; James Hart, Irondequoit, \$3; Joseph Fairley, Irondequoit, \$2; John Ayrault, Perrinton, \$16; Geo. C. Latta, Greene, \$2; Allen Frost, Brighton, \$1; R. Harmon, Jr., Wheatland, \$5; Pardon D. Wright, Rochester, \$4; H. Hooker, Brighton, \$2; C. F. Crossman, Brighton, \$3; N. Hayward, Brighton, \$2.

FIELD CROPS.—The Society cannot but regret that in the county that produces one tenth part of all the wheat grown in the State of New York, there should be no applicant for any of the premiums offered on Field Crops, when it is within the knowledge of many members of the Society, that several crops were made in this county, by members of this Society, particularly of wheat and corn, probably second to none in the State, but from neglect of measuring and certifying, they were excluded from entering for premiums. It is to be hoped that the farmers in this county will not in future be deterred from entering their Field Crops, on account of the trouble to which the necessary regulations of the State Society, to prevent imposition, may subject them.

REPORTS OF THE COMMITTEES ON FARMS.—The Committee for the East side of Genesee River, award as follows

To Rufus Beckwith, of Henrietta, the first premium of \$4 and Cohan's Reports. To Zera Burr, of Perrinton, the second premium, \$3 and 1 Vol. of Transactions. To John McGonegal, of Irondequoit, the third premium, \$2 and Washington's Letters. To George L. Beckwith, of Henrietta, the fourth premium, \$1 and 2 Vols. Genesee Farmer.

The following communication was read from Wm. GARBUTT, Esq., of Wheatland, Chairman of the Committee on Farms for the west side of Genesee River.

THE COMMITTEE ON FARMS, for the West Side of the River, would respectfully

REPORT,

That they commenced their pleasing task on the last of June, and in three days took a hasty view of the various towns, but the unusual forwardness of the season rendered the farmers all so busy that they had not leisure to attend on the committee, so that they concluded to postpone further operations until the last of September. Put unavoidable circumstances prevented their meeting, yet from what they saw, they would respectfully state that the general aspect of the County was delightful. Crops in general, (with the exception of corn, which in many instances was much injured by the worms,) bid fair to yield a bountiful return to the husbandman for his toil. And we cannot refrain from congratulating our Farmers on their happy lot, blessed with a healthful climate, and a productive soil, convenient to market, and accessible to all the rational enjoyments of social life; and when blessed with health, *if not independent and happy, the fault is their own.*

The extensive fields of wheat were splendid, and in most sections a spirit of improvement was evinced; and the many well cultivated farms which we visited convinced us that the farmers of Monroe were not last in agricultural improvements.

But when we look at the statistics of the County, and see that the average wheat crop is only 104 bushels per acre, corn 30, barley 19, oats 32, rye 10, potatoes 110, and other roots only 180 bushels per acre, and then examine the reports of the Committees on Field Crops, we cannot avoid being forcibly impressed with the great difference in amount per acre, on the average crop, and the select pieces. And it speaks in language not to be contradicted, that farmers are deficient in their general culture, and that it is susceptible of great improvement.

To point out the numerous means within the reach of the farmer to enrich the soil, and enhance the value of their labor, or to state all the defects in the general cultivation, would much exceed the bounds of this report. Yet they will state what appears to them to be the most prominent ones, and let the farmers test them for themselves.

We would earnestly recommend to every farmer to keep an agricultural journal, and enter down all the principal operations on the farm and keep an exact account of debt and credit, so that they can know each year the exact amount of their profit and loss.

And we feel confident that we cannot too strongly solicit their earnest attention to *agricultural reading, and annual exhibits*—knowing that they are powerful promoters to active industry, and the most efficient means of acquiring agricultural knowledge.

Plaster and barn-yard manure are within the means of every farmer, but not sufficiently valued as fertilizers of the soil.

With but few exceptions, there is too much ground cultivated for the labor to perform it. *If one fourth*, (and in many instances one third,) less ground was cultivated by the same amount of labor that is now done on the whole, there would be equally as much produce raised, and more profit realized.

Plowing is generally done in too much of a hurry, too shallow, and too wide a furrow slice, for a thorough cultivation; and the value of the harrow is not sufficiently realized. The more frequently that the surface of cultivated ground can be pulverized the better, and especially in dry weather. And the use of the roller in pulverizing is too much neglected.

Pastures are generally cut too close. A bare pasture improves not the soil, nor fattens the animals, nor makes the owner rich.

On the most difficult part of their duty, viz: that of awarding the premiums, they would respectfully state that, from the limited means they had of judging, it was impossible for them to select three from amongst the many well cultivated farms which they examined, that they could say had the decided preference over the others, without the fear of doing great injustice to many.

New York State Agricultural Society.

At the regular Monthly Meeting of the Executive Committee of the N. Y. State Agricultural Society, held at their rooms in Albany, on the 10th day of December, 1846, the following business was transacted :

Present—Messrs. Sherwood, Vail, Prentice, Tucker and M'Intyre.

The minutes of the last meeting being read, were approved. The following resolutions were passed:

On motion of Mr. VAIL, of Rensselaer,
Resolved, That the Committee on loaning the surplus funds of the Society, appointed at the last meeting, (having reported in part,) be continued with same power.

On motion of Mr. TUCKER, of Albany,
Resolved, That the thanks of the Society be presented to LEWIS F. ALLEN, Esq., for a copy of his "American Herd Book," presented to the Society.

The Committee then took up the Farming Committees on awards at the Annual Meeting in January next, and made the following appointments:

On Farms—Dr. J. P. Beckman, of Columbia County; Anthony Van Bergen, Green; Wm. Fuller, Onondaga.

Experiments and Essays—A. B. Allen, New York; Prof. Emmons, Albany; Sandford Howard, Albany.

Designs for Farm Dwellings—Geo. Geddes, Onondaga; Jno. McDonald M'Intyre, Albany; Ebenezer Mack, Tompkins.

Cheese Dairy—Benj. P. Johnson, Oneida; Thos. Hillhouse, Albany; Ira Hopkins, Cayuga.

Butter Dairy—Zadoc Pratt, Greene; Robert Dennison, Orange; E. W. Baseman, Cayuga.

Selection of Fruits—L. F. Allen, Erie; V. A. Storms, New York; D. A. Thompson, Tompkins; J. C. Platt, Clinton; Prof. J. Jackson, Sciencetada.

Wheat, Barley, Rye and Oats—Daniel Lee, Rochester; Squire M. Brown, Onondaga; John Wilkinson, Dutchess.

Indian Corn, Corn Fodder and Peas—Asa Fish, Washington; Benj. Enos, Madison; C. S. Button, Wayne.

Root Crops—Caleb N. Bement, Albany; Jno. C. Mathier, Rensselaer; S. B. Burchard, Madison.

Hops, Flax, and Broom Corn—Sam'l Cheever, Saratoga; John Rankin, Canandaigua; Justus Harwood, Albany-Tobacco, Cabbage, Clover and Timothy—E. Marks, Onondaga; G. V. Sacket, Cayuga; John Walsh, Albany.

On motion of the President,
Resolved, That Messrs. Prentice, Tucker and M'Intyre be a Committee to make all arrangements for the Annual Meeting of the Society in January.

The Annual Meeting of the Society will be held in the city of Albany, on *Wednesday and Thursday*, the 20th and 21st days of January next, commencing at 10 o'clock, A. M. Farmers and the public generally are invited to attend.

An extra meeting of the Executive Committee will be held at the Rooms of the Society, on Tuesday, the 19th day of January, at 10 o'clock A. M.

The Committee then adjourned.

Wayne Agricultural Society.

At the Annual Meeting of the Wayne County Agricultural Society, held at Thayer's Hotel, in the village of Clyde, on the 9th inst., the following persons were chosen officers of said Society for the ensuing year :

President—REUBEN H. FOSTER, of Lyons.
Vice Presidents—Joseph Watson, Galen; Joel Hall, Marion; James H. Ferris, Butler; Wm. P. Nottingham, Palmyra; Henry Shaver, jr., Arcadia; Jedediah Wilder, Huron; W. D. Cook, Sodus.

E. N. Thomas, Rose, *Recording Secretary*.
J. J. Thomas, Macedon, *Corresponding Secretary*.
H. G. Dickinson, Lyons, *Treasurer*.

Executive Committee—Samuel E. Hudson, Palmyra; Truman Hemingway, do.; Wm. R. Smith, Macedon; Aaron Griswold, Galen; A. G. Percy, Lyons; Elizur Flint, Rose.

The Society adjourned to meet at Landon's Hotel, in Lyons, on the second Wednesday in March next, at 10 o'clock A. M.—*Clyde Eagle*.

To Destroy Lice on Cattle.

MR. EDITOR :—Having seen in the Genesee Farmer, Cultivator, and other publications, many remedies (such as sand, wood ashes, water from boiled potatoes, soft soap, pork pickle, &c.) to destroy lice on cattle, I beg leave, as a subscriber to your valuable paper, to offer one of my own invention—and one which, from my personal observation, has proved more effectual than either or the whole of the above named remedies combined together.

It is simply this: Make a wash with hot water and common clay, about as thick as common porridge, select a warm day, and wash the animals all over,—taking care to rub it into the hair well with a woollen rag or cloth.

HOSEA STRAIGHT.

Williamson, N. Y., Dec. 1846.

Guide in Buying a Horse.

A correspondent of the Prairie Farmer, contrary to old maxims, undertakes to judge the character of a horse by outward appearances, and offers the following suggestions, as the result of his close observation and long experience :

If the color be light sorrel or chestnut, his feet, legs and face white, these are marks of kindness.

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 any thing.

As respects such horses, the more kindly you treat them, the better you will be treated in return. Nor will a horse of that description stand the whip if well fed.

If you want a safe horse, avoid one that is dish-faced; he may be so far gentle as not to scare, but he will have too much go-ahead in him to be safe for every body.

If you want a fool, but a horse of great bottom, get a deep bay, with not a white hair about him: if his face is a little dished, so much the worse. Let no man ride such a horse who is not an adept in riding—they are always tricky and unsafe.

If you want a horse that will never give out, never buy a large overgrown one. A black horse cannot stand heat, nor a white one cold.

If you want a gentle horse, get one with more or less white about him—the more the better. A spotted one is preferable. Many suppose that the parti-colored horses belonging to circuses, shows, &c., are selected for their oddity. But the selection thus made is on account of their great docility and gentleness.

BEER MAKING IN ENGLAND.—During the first six months of the present year duty was paid on 22,682,823 bushels of grain (mostly barley) for malting in England. The amount on which duty was paid last year during the same period was 20,163,823 bushels, showing an increase of some 12 per cent. It seems almost incredible that over forty million bushels of grain should be annually malted in England, mainly for making beer; while the official returns before us show that no less than 23,682,715 gallons of spirits are annually manufactured in the United Kingdom. The revenue derived from the latter during the last fiscal year was £5,749,794; or some \$25,000,000.

Western New York Agricultural School.

THIS Institution will be closed in Wheatland, during the month of January instant, and opened in a better location, and under more favorable auspices, near Mount Hope, in the vicinity of Rochester. In the study of Botany, Horticulture, Arboriculture, &c., pupils will have the benefit of Messrs. ELLWANGER & BARRY'S extensive collection of Foreign and Indigenous Plants, Fruit and Ornamental Trees, Gardens, &c.—We shall have, what the School most needs, larger and better buildings, a plenty of land for experiments, and the assistance of gentlemen of skill and large experience.

To purchase chemicals for the Laboratory, and aid a little in diminishing the tax on the Principal for the high rent for the premises, the friends of Agricultural Science should contribute \$300 to the Institution for the coming year. If we cannot place the School on a permanent basis in that time, we shall abandon the enterprise.—Hitherto, we have neither asked for, nor received a dollar from the public in any form. Had we started, as they have in Dutchess and Orange counties, by charging \$200 a year, instead of one half that sum, no public aid would be required. But our object has not been to make money, by founding an Institution for the exclusive benefit of "the upper Ten Thousand." It has been mainly, to place the great practical advantages of a good Laboratory for making analyses within the reach of young men of moderate means. To do this we must have some assistance. The friends of the Institution in the city of Rochester will give \$150. Will not the wealthy Farmers of Monroe county give as much more?

We shall keep a number of young men constantly at work analyzing the rocks, waters, soils, and all their products, of this and the adjoining counties. We hope to be able to send out into the community many competent teachers of Agricultural Chemistry and Geology; and ultimately kindle the light of these modern sciences in every School House in Western New York.—Need we be ashamed to ask for a little aid in such a cause? Our sympathies are all with the humble school house, and its inmates. If our friends would give us their sympathies at their school meetings, and contribute a little of the needful, due credit will be given in the Farmer, and the favor thankfully acknowledged. Every town should have at least one chemist capable of making an accurate analyses of soils, marls, and other fertilizers. We can supply the apparatus, as well as the instruction for that purpose. Permit us to speak plainly on this subject. Instead of writing daily for a political journal, to defray the expenses of our agricultural researches, our time could be more usefully employed in addressing associations of Farmers.

Agricultural Chemistry is soon to become a

distinct and most honorable profession in the community. There is no humbug in the laws of Nature; and whoever will diligently study them, will find much to instruct, delight, and improve him. The human mind is ever eager to gain additional knowledge. It will push its investigations to the utmost limit of its ever expanding capacity. It is in the study of the works of the Creator that man's natural desire for more, and brighter light, as his Intellect discovers clearer, and stronger evidences of the wisdom and goodness of its Maker, is to be ever gratified, without the possibility of attaining to the full comprehension of the Infinite. The true way to extinguish the grovelling passions, and sensual appetites that spring up so spontaneously in the compound natures of our children, is to furnish them with more agreeable, and exquisite pleasures, as well as those of a purer and more exalted character.

DR. REYNOLDS' BEE-HIVE.—By reference to our advertising pages, the reader will find some information relative to a bee-hive invented and now offered to the public by Dr. O. REYNOLDS, of this county. We direct attention to Dr. R.'s advertisement for testimony of the value and utility of his hive. We shall cheerfully afford other inventors the same mode of communicating with our numerous readers. M.

APPLES FOR ENGLAND.—Elihu Burritt, whose disinterested philanthropy is so widely known, now in England, is making the most diligent use of his observations in that country, and offering such hints to his countrymen at home, as may be of the greatest utility to them. He "urges the people of Maine, an apple-growing state, to turn their attention to the shipment of apples to Great Britain. Apples, which in Maine, are permitted to rot on the ground, or made into cider, or fed to hogs, are worth \$1 the bushel, in many of the British seaports." He estimates the cost of sending them to England at twenty cents per bushel.

FLORIDA OLIVES.—The editor of the St. Augustine News has been presented with some fine fresh olives—the growth of that place. The soil and climate of that State are said to be well adapted to the cultivation of this fruit, which, besides being a delicious article of the table, is an important staple of commerce.

ACKNOWLEDGMENTS.—Among other good things which have recently been presented us, we gratefully acknowledge the receipt of a jar of very excellent *Apple Sauce*, from Mrs. JESSE HARROUN, of Ogden. It was "done up" according to the fashion (in by-gone years,) of our maternal ancestor, in boiled cider, &c.,—with the addition of a rich quince flavor.

We are likewise indebted to Mrs. H. N. LANGWORTHY, of Irondequoit, for a jar of *Tomato Pickles*—than which, we verily believe, none can be so near the *ne plus ultra* of perfection, in all pickle-dom. Our thanks for your *tasteful* favors, ladies. M.



HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

THE experiment of devoting a few pages of this journal exclusively to matters pertaining to Horticulture, has now been sufficiently tested to satisfy us that it meets with very general approbation. This much we expected. Every farmer who wishes to live comfortably and pleasantly, must cultivate a Garden and an Orchard. Fruits and Flowers enter largely into the stock of material that makes up a complete, respectable, and happy home. Fortunately these matters are daily becoming more and more appreciated.—Inquiry is rife on all branches of the science and art of Gardening. The great bulk of our people are just awakening to a proper sense of its importance, and of their great lack of that knowledge that relates to it, and that is absolutely necessary to guide them in the successful practice of its operation. This information must be sought for and procured somewhere. Few are willing, yet, to buy horticultural books or pay for a high priced horticultural journal. The plan adopted here seems to meet the wants and wishes of such. Horticulture is linked with its kindred science, and both are sent out, arm in arm, every month, as time rolls on, to contribute something towards the improvement of the soil and its products, the culture of the mind, and the encouragement and elevation of men engaged in "the noblest of all pursuits."

All classes of the community, whatever may be their profession, or wherever they may dwell—in city, town, or country—all have an interest, indirectly at least—and nearly all have a direct personal interest—in the culture of the Farm or Garden. Every family must have books and papers to read; and we must be permitted to say that this paper will be a cheap item. The study of the principles of Agriculture and Horticulture is now receiving the attention of the great minds of Europe and America, and henceforward no man will be well educated who is ignorant of them. Think of this.

We must, therefore, solicit the friends who have aided in giving circulation to the Farmer, during the past year, to continue their kind offices, in order to provide the means necessary to the full and satisfactory attainment of the objects it has in view.

"The Three Best Pears."

WE learn from the last number of the "Horticulturist" that the editor has been holding a "Pomological Gossip" among the celebrated Pear growers of Boston and vicinity. For the purpose of obtaining some general results, he has asked them, one after the other, "Which do

you consider the three best pears, early, middle, and late, suppose yourself confined to three trees?" It may be interesting to fruit growers to know how these experienced cultivators answered this question, if it were only to indicate their peculiar tastes. Col. WILDER, who has fruited the past season over 200 varieties of Pears, answers *Bartlett*, *Vicar of Winkfield* and *Beurre d'Arreberg*.

Mr. WALKER, chairman of the Horticultural Society's Committee on fruits, he did not see, but learned that his opinion coincided with Mr. WILDER.

Mr. OTIS JOHNSON, of Lynn, answered *Bartlett*, *Louise Boune de Jersey*, and *Beurre d'Arreberg*.

Mr. R. MANNING, of the Salem Pomological Garden, answered—*Bartlett*, *Beurre Rosc*, and *Winter Nelis*.

Mr. IVES, of Salem, answered—*Bartlett*, *Fondante d'Automne*, and *Winter Nelis*.

Mr. JOHN C. LEE, of Salem, prefers the *Bloodgood*, *Seckel* and *Winter Nelis*.

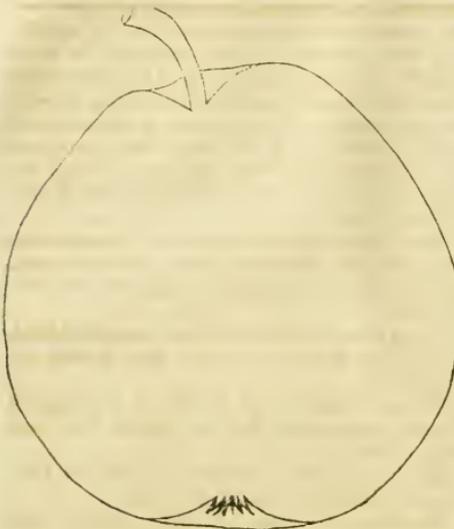
The Editor's own choice is—"For all gardens east and south of us (Newburgh,) *Bartlett*, *Seckel* and *Beurre d'Arreberg*. For all gardens to the North and West, *Bartlett*, *White Doyenne* and *Beurre d'Arreberg*."

Here we have the choice of six of the best Pear growers in and around Boston, with that of Mr. Downing, the editor of the Horticulturist.—It will be seen that they all vary more or less in their choice. *Bartlett* and *Beurre d'Arreberg* being favorites with nearly all.

It seems singular that although the question was concerning *early*, *middle* and *late*, but one states his choice of an early Pear, and that is the *Bloodgood*, the earliest that any of them choose is the *Bartlett*, and that we should suppose, ripening in September, would be ranked with middle. We should have been glad to have learned their preferences among the *Madelaine*, *Bloodgood*, *Dearborn's seedling* and other *early* varieties.—We wish Mr. Downing had kept to the "main question."

By way of concluding the "gossip" on our part, we may state that our present choice of three for Western New York, would be the *Summer Virgalieu*, or what has been recently named *Osband's Summer*, an account of which we published in our last number. *White Doyenne* and *Winter Nelis*. Many in this vicinity, we are sure, would include the *Bartlett*, others could not do without *Seckel* and the *Swan's Orange* or *Onondaga*, would have many advocates. Indeed we should think it almost impossible to do without any one of these, all are so fine here in every respect. It is puzzling to make such a limited choice, as it brings in competition many varieties so nearly equal.

A FIGURE and description of the *Beurre d'Amalis Pear*, intended for this number, will appear in our next.



Gray Doyenne Pear.

THE accompanying outline of this fruit is from one of the specimens acknowledged in our last number, from Brockport. We consider it one of the very finest of autumn pears, ripening at the same time, and continuing longer in use than the Virgalieu or *White Doyenne*. In its form it is quite similar to this variety, as well as in its texture and flavor, the great point of difference being the color.

The *White Doyenne* is of a golden yellow when mature, while the *Gray* is a cinnamon russet, like the *Fulton*. We have been furnished with the following item of intelligence respecting it by our friend Mr. NORTON, of Brockport, which is very satisfactory.

He says Mr. THOS. R. ROBY (not "H. R." as we had it erroneously last month,) "has three trees of the 'Gray Doyenne' pear, which were procured sixteen years since, from the late JESSE BUELL, Esq. When transplanted, the trees were mere whips, five or six feet in length. They have borne now eleven years, producing every year large crops, as heavy as the branches could sustain. For the first few years the fruit was considered worthless or nearly so, from not ripening, until one autumn, happening to be gathered and put away in a chamber, it unexpectedly matured and proved excellent.* The trees grow tall with upright branches, and are now vigorous, healthy and handsome."

Since preparing the above notice we have re-

* This shows how requisite it is to possess a knowledge of the ripening habits of fruits—Pears in particular. Many varieties of the finest quality in this case have been thrown away, because they did not attain their maturity on the tree. The *White Doyenne* also ripens well in the house. Our fruit sellers frequently keep them 3 months.—EDITOR.

ceived the London "*Gardener's Chronicle*" and find in it a notice of this very Pear by (we suppose from the initials) Mr. THOMSON, the head of the fruit department in the London Horticultural Society's Garden, one of the best Pomologists in Europe, said to be. It will be seen he suggests the name of *Red* instead of *Gray*. We copy his notice and omit his outline, as it is similar to our own.

Synonymes.—*Doyenne Gris*, *Doyenne Roux*, *St. Michel Dore*, *Beurre Rouge* (of some), *Rothe Herbstbutterbirne*, *Kothe Deehantsbirne*, *Gray Doyenne*, *Gray Dean's Red Beurre* (of some).

Of the above names, the *Red Doyenne* is proposed as the most appropriate. Although Duhamel designated it the *Doyenne Gris*, yet experience has proved that such name is not the most distinctive for the type of this Pear; the *White Doyenne*, or old *White Beurre*, may be as aptly so called when it assumes a somewhat russeted appearance, grown as a standard. In fact, it has been obtained in various instances with this name. But however much these two *Doyenne Pears* may resemble each other when on the trees, a decided difference ensues. The *White* becomes paler and paler as it approaches the period of being fit for use; the other, on the contrary, acquires a brighter red. The author of the "*Jardin Fruitier*," remarks that the epithet of red is more proper than gray for the Pear in question, because at the period of maturity it is in reality red.

The flesh is white, melting, buttery, and sugary, with a rich cinnamon flavor. In perfection in October and November, succeeding the *White Doyenne*. Shoots vigorous, bright chestnut, with a sprinkling of small pale-brown spots. Leaves middle-sized, oval, slightly serrated; petioles slender. Flowers small, opening rather early; petals oval, inclining to obovate; stamens shorter than the styles.

The tree is a good bearer; and the fruit generally acquires a richer flavor than that of the *White Doyenne*; but like it is best from a standard.—R. T.

The Ice House.

WE extract the following excellent and seasonable suggestions on Ice Houses from the December number of the "*Horticulturist*."

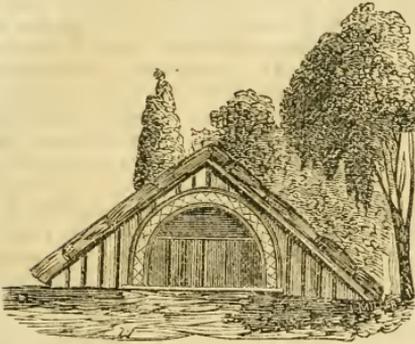
Ice is a cheap luxury in this country, and the *Ice House* very justly begins to be reckoned one of the necessary buildings on every complete farming establishment. Indeed it is indispensable to the proper preservation of the products of the Dairy and the Garden, as well as of meats, pastry, &c. It would be a gain, to many a family, in one year, of what one that would answer every purpose would cost. We recommend the matter, at once, to the attention of our readers.

"To build an ice-house in sandy or gravelly soils, is one of the easiest things in the world. The drainage there is perfect, the dry porous soil is of itself a sufficiently good non-conductor. All that it is necessary to do, is to dig a pit, twelve feet square, and as many deep, line it with logs or joists fixed with boards, cover it with a simple roof on a level with the ground, and fill it with ice. Such ice-houses, built with trifling cost, and entirely answering the purpose of affording ample supply for a large family, are common in various parts of the country.

But it often happens that one's residence is upon a strong loamy or clayey soil, based upon clay or slate, or, at least, rocky in its substratum. Such a soil is retentive of moisture, and even though it be well drained, the common ice-house just described will not preserve ice half through the summer in a locality of that kind. The clayey or rocky soil is always damp—it is always an excellent conductor, and the ice melts in it in spite of all the usual precautions.

Something more than the common ice-house is therefore needed in all such soils. "How shall it be built?" is the question which has frequently been put to us lately.

To enable us to answer this question in the most satisfac-



The common Ice-house below ground.

tory manner, we addressed ourself to Mr. N. J. WYETH, of Cambridge, Mass., whose practical information on this subject is probably fuller and more complete than that of any other person in the country, he, for many years, having had the construction and management of the enormous commercial ice-houses near Boston—the largest and most perfect known.

We desired Mr. WYETH'S hints for building an ice-house for family use, both above ground and below ground.

In the beginning, we should remark that the great ice-houses of our ice companies are usually built above ground; and Mr. WYETH in his letter to us remarks, "we now never build or use an ice-house under ground; it never preserves ice as well as those built above ground, and costs much more. I, however, send you directions for the construction of both kinds, with slight sketches in explanation." The following are Mr. WYETH'S directions for building:

"1st. An Ice-house above ground. An ice-house above ground should be built upon the plan of having a double partition, with the hollow space between filled with some non-conducting substance.

"In the first place, the frame of the sides should be formed of two ranges of upright joists, 6 by 4 inches; the lower ends of the joists should be put into the ground *without any sill*, which is apt to let air pass through. These two ranges of joists should be about two feet and one-half apart at the bottom, and two feet at the top. At the top these joists should be morticed into the cross-beams, which are to support the upper floor. The joists in the two ranges should be placed each opposite another. They should then be lined or faced on one side with rough boarding, which need not be very tight. This boarding should be nailed to those edges of the joists nearest each other, so that one range of joists shall be outside the building, and the other inside the ice-room or vault.

"The space between these boardings or partitions should be filled with wet tan, or sawdust, whichever is cheapest or most easily obtained. The reason for using *wet* material for filling this space is, that during winter it freezes, and until it is again thawed, little or no ice will melt at the sides of the vault.

"The bottom of the ice vault should be filled about a foot deep with small blocks of wood; these are levelled and covered with wood shavings, over which a strong plank floor should be laid to receive the ice.

"Upon the beams above the vault, a pretty tight floor should also be laid, and this floor should be covered several inches deep with dry tan or sawdust. The roof of the ice-house should have considerable pitch, and the space between the upper floor and the roof should be ventilated by a lattice window at each gable end, or something equivalent, to pass out the warm air which will accumulate beneath the roof. A door must be provided in the side of the vault to fill and discharge it; but it should always be closed up higher than the ice, and when not in use should be kept closed altogether.

"2d. An Ice-house below ground. This is only thoroughly made by building up the sides of the pit with a good brick or stone wall, laid in mortar. Inside of this wall set joists, and build a light wooden partition against which to place the ice. A good floor should be laid over the vault as just described, and this should also be covered with dry tan or sawdust. In this floor the door must be cut to give access to the ice.

"As regards the bottom of the vault, the floor, the lattice windows in the gables for ventilation, etc., the same remarks will apply that have just been given for the ice-house above ground, with the addition that in one of the *gables*, in this case, must be the door for filling the house with ice.

"If the ground where ice-houses of either kind are built, is not porous enough to let the melted ice drain away, then there should be a waste pipe to carry it off, which should be slightly bent, so as always to retain enough water in it to prevent the passage of air upwards into the ice-house."

In the article we have quoted from are two fine engravings of ornamental Ice-houses above ground, and illustrations of the mode of building referred to by Mr. WYETH. The descriptions here given are probably sufficiently intelligible to be understood by all without these. The figure given shows simply the roof of a common underground Ice-house, ornamented with trees, &c., making it a pleasing object.

Public Pleasure Grounds, &c.

WE learn from the "Tennessee Farmer and Horticulturist," that the Nashville Horticultural Society, in connection with other citizens, have held a meeting for the purpose of considering "the propriety of purchasing land, for the establishment of a garden for horticultural improvement and ornamental pleasure grounds." It was

Resolved, That a committee of three be appointed for the purpose of obtaining subscribers, in shares of 50 dollars each, for the purpose of purchasing a suitable lot of ground for carrying the views of the Society into execution."

This is certainly a gratifying demonstration of public spirit, and augurs well for the advancement of gardening in the west.

Public grounds, of the character projected here, should be established and sustained, if possible, by every city in the Union. They would be great sources of profitable instruction, as well as of delightful recreation and amusement. People must and will have amusement of some sort or other, and if a public taste of this kind were cultivated, and ample means provided for its gratification, it would be the means of keeping thousands of the youth of the country from vain and idle past-times, that scarcely ever fail to engender vicious and ruinous habits. But few appreciate the influence of places of public amusements and recreations on the moral and intellectual character of the people.

If we had spacious and beautiful public grounds, collections of trees and plants, interesting lectures and reading rooms, public libraries in all our towns and cities, sustained by the vigorous support of those whose interests alone should urge them to support such institutions, we should not be disgusted, as we now are, by seeing our young people flock to circus exhibitions, theatres, two penny concerts, balls, and the thousand catch-penny movements of that sort that literally swarm in this country, there to gape and stare and fritter away their money, and what is more, their *valuable time*, and unfit themselves for high and worthy pursuits. Philanthropists! you cannot take up a better subject.

Reviews.

THE TREES OF AMERICA; Native and Foreign, Pictorially and Botanically delineated, and scientifically and popularly described. By D. J. BROWNE, Author of the "Sylva Americana."

In new, densely wooded countries, trees are divested of that interest and importance that are always attached to them elsewhere. The settler in the forest is generally apt to regard trees as obstacles in the way, and his first labors are hewing them down, with an unsparing and indiscriminating hand. He has no ideas to waste upon the future, when trees would become almost as essential to his comfort as his house is now. The thing is to get rid of them, as soon as possible, and so his axe is plied diligently, till the last tree is felled. By-and-bye, when his fields are cultivated and the whole country cleared off, with only here and there a single tree left, as if by accident, to remind us of the past, he begins to think of the noble Oaks, Pines, Elms, Maples, Beeches, Chestnuts and Lindens, that he hewed down and cannot bring back.—"Oh!" he will exclaim, "What a treasure they would be to me now! Those noble fellows that stood there and braved the storms of centuries." Yes! indeed they would be a treasure, and to the real lover of nature in its noblest forms, almost unpurchasable.

This subject brings to our mind the beauty and grandeur of the broad fields and meadows of the WADSWORTHS, in the Genesee Valley. Almost every field looks like an English Park.—Beautiful groups and single trees* are interspersed so naturally around, that one would fancy the whole estate to have been under the management of a skillful landscape gardener for the last fifty years. Such an instance as this furnishes a beautiful and striking illustration of the influence of taste and foresight on the clearing of wooded land. We wish that every settler would carry such a taste with him to his new home in the forest. He would earn the blessings of his family who would succeed him, and the thanks of his country. Trees are the noblest and finest features of a landscape. Where these are wanting, in a rural picture, it is necessarily barren and desolate.

The Trees of America like her other national features, are vast and diversified, without a parallel. Only think of her possessing over 40 species of the Oak, and as many of the Pine, both noble trees, contributing largely to the commerce and comfort of man in all parts of the world. These two species *alone* would form a national treasure, to say nothing of her splendid Magnolias, Elms, Maples, Walnuts, Sycamores, Beeches, Chestnuts, Lindens, Tulip Trees, with a multitude of others, numbering, we believe, nearly 600 indigenous species.

* Some of the Oaks and Elms on this estate, in the vicinity of Genesee, are the finest on the Continent.

What American is there, or who that has his home here but would be proud of a work on the "Trees of America," worthy of so great a subject? Mr. BROWNE'S work, we are very sorry to say, is not. Our readers will remember that we announced such a work as forth-coming nearly a year ago. We then hoped we should have a splendid national work, that would be an honor to the country. Mr. BROWNE has extracted, and even condensed a great part of the information he gives us in relation to our trees, from "Loudon's Arboretum," an English work, prepared by a man who never had his foot on American soil, but nevertheless the best book in the world, on this subject, and likely to be for a long time to come.

One would hardly credit it until he has seen, that in such a work the whole families of Oaks and Pines, and many others of the most valuable and important trees, are passed over wholly unnoticed, while such as the *Camphor*, *Carob tree*, *Cassava*, *Mahogany*, *Paraqua Lea*, and others, natives of China and the Tropics, of comparatively small practical importance to the people of the United States, are lengthily described.—Remarks relating to *culture* are here and there carelessly copied from European works, without comment or qualification, liable to mislead persons in this country devoid of such information. Whole pages, too, are unnecessarily occupied with descriptions of cultivated varieties of fruit, such as the Cherry, Plum, &c. Other complete works, devoted to this particular department, are accessible to all who wish correct information of this kind.

But notwithstanding it is not what we expected, and far from being what it should be, we are glad to see it. It may contribute something towards directing public attention to this great subject, and thereby lead to the improvement and completion of a work which Mr. BROWNE has commenced. He says:—"Should the public demand an extension of the work, conformable to the plan he has adopted, a supplementary volume will follow, embracing most of the other trees growing in America, with statements of the sources from which the information will have been derived, copious indexes, &c."

The classification is in the *natural system*; the arrangement in this respect is plain and perfect. Small figures of many of the species are given, showing the general appearance of the trees, leaves, flowers, fruit, &c. The whole work is mechanically well executed, and is valuable to every one who desires to cultivate an acquaintance with the Trees of America. It may be said in apology for the defects mentioned in the work, that it involves a gigantic labor, and a labor that but few men in this country could or would undertake. The book can be had of S. HAMILTON, at the State street Book-store, Rochester.

PRINCE'S MANUAL OF ROSES—Comprising the most complete history of the Rose, including all the most admirable varieties that have appeared in Europe and America; together with ample information on their culture and propagation. By WILLIAM ROBERT PRINCE.

Here we have a book of some 50 pages, treating exclusively of the ROSE. It cannot but be interesting. It is well, that among the multitude of useful and even pernicious books that are rolled forth from the press daily, the claims of the floral world are not forgotten. It is joy for the heart of the lover of nature to see the pen of science, of taste, and of genius, employed in scattering light on the culture of earth's beautiful flowers, and in directing the attention of men to a pursuit so well calculated to soothe and renovate the mind, when pressed by the perplexing and harassing duties of life, as well as to soften and refine the hearts and feeling of the world.

The Rose is, to this day, honored with the proud title of the "QUEEN OF FLOWERS."—Never, perhaps, at any time, has so much attention been given to its culture, as at the present. All the lights of science and of art are called to its improvement. Whole broad acres are devoted to its growth and culture. Green houses, conservatories, and parlor windows are filled with Roses. They are grown in every shape, some as dwarfs, not over 6 inches in stature, some as trees with tall stems and spreading bushy heads, some are trained on fantastic frames and pillars of various form; others are grouped, mingling their brilliant colors, rivalling the tints of the rainbow.

The amount of money expended annually for Roses, by amateurs, in England and on the continent of Europe, to say nothing of America, would, to many, be perfectly incredible. *Two, three, five, and even ten dollars*, are ordinary prices for such plants of *new roses*, and thousands are annually sold at these prices.

In this country, in 1844-5, a vast number of the fine Hybrid Perpetual *La Reine* were sold at \$5 each, and so it was with *Chromatella* or *Cloth of Gold*, *Solfatare*, &c. Who, then will say, what's the value of a Rose?

We think we hear some sober money making friends exclaim, "what fools, to pay such prices for a Rose!" A great portion of the world know but little of the feelings of the real enthusiastic lover of flowers—money to them has value only so far as it affords them the means of life and the gratification of their taste. A beautiful flower, to them, is what money is to the miser, but has a contrary effect, on their nature—instead of debasing, it *exalts and purifies* it.

The title of the little volume before us explains fully the character of its contents, and leaves us on that point little to say. It is in the main, a compilation from the excellent work of Mr. RIVERS, an English nurseryman, who has the best Rose plantation, and is said to be one of the most successful Rose growers in the world.

Mr. PRINCE has added to it such facts as he had gathered in his practise, and on the whole it presents a great fund of useful and interesting information, both for the amateur and general reader. It has, we perceive, been pretty severely criticised, on account of its lack of originality. For our own part, we care nothing about this.—Still, we think it bad taste for any one claiming to be an *author*, to quote page after page of another's book, in such a way that the reader who was not fortunate enough to possess both, could not know which was original and which was borrowed. It is all fair and right to quote, but in justice to readers and all, due credit should accompany each quotation.

Mr. PRINCE is well known to the Horticultural world, and entitled to some regard from it, for what he has done himself, as well as from being the representative of a pioneer family in American Horticulture. His grandfather and father were ardent and enterprising men in the pursuit, and in their day, were great public benefactors in their efforts to introduce fruits and flowers.—The late WILLIAM PRINCE was a kind, amiable, high minded man as ever lived, and a sound scientific and practical nurseryman, besides an honor to the science and his country. We love his memory. His son, the author, is one of the most indomitable, energetic, unconquerable men living, with a temperament and mode of getting along peculiarly and emphatically his own.

We find he has dedicated his Manual "to the Memory of his Father," in the most exalted and reverential language.

By way of conveying an idea of his nationality, as well as style and mode of illustration, we copy the following description of a new variety of that beautiful American class, called *Prairie Roses*.

Mrs. Henry Clay is an admirable creamy white flower, extra beautiful, and produced in immense clusters. It is worthy in itself, as well as for its connection with this noble family of native roses, of being dedicated to the eminently worthy lady of that man, who stands apart, marked out in the minds of all candid Americans, and by the world at large, as the exalted combination of natural genius, of concentrated political knowledge, of energy of character, and of generous devotion to his country's prosperity; thus presenting the concentrated amplitude of development, the veriest impersonification of Americanism.

Horticultural Society of the Valley of the Genesee.

At the Annual Meeting of this Society, held on the evening of Dec. 23, 1846, the following gentlemen were elected officers for the ensuing year:

- President—ISAAC HILLS, of Rochester.
 - 1st V. President—J. Gould, Rochester.
 - 2d " " J. S. Wadsworth, Genesee.
 - 3d " " H. U. Soper, Batavia.
 - 4th " " L. B. Langworthy, Greece.
 - 5th " " J. R. Thompson, Rochester.
- Corresponding Secretary—James W. Sibley.
Recording Secretary—J. A. Eastman.
Treasurer—J. W. Bissell.

On motion of Mr. Bissell, the following gentlemen were elected honorary members:

- A. J. Downing, Newburgh; C. M. Hovey, Boston; M. B. Bateham, Columbus, Ohio; H. W. Beecher, Indianapolis, Ia; L. F. Allen, Buffalo; David Thomas, Aurora.

LADIES' DEPARTMENT.

SPONGE CAKE.—One pound of sugar ; half a pound of flour ; eight eggs ; one teaspoonful of essence of lemon or rose water, and half a nutmeg grated. Beat the yolks of the eggs, flour and sugar together ; then add the whites beaten to a high froth, when just ready for the oven.—Butter some tin pans and put in the cake mixture rather more than an inch deep. Bake in a quick oven for twenty minutes ; when cold, cut in squares.

BUCKWHEAT FOR COLORING.—The fresh blossoms and succulent stems of buckwheat have been applied in Europe to the purposes of dyeing wool, &c. The infusion, by the addition of preparations of bismuth and tin, produces a beautiful brown color. From the dried flower bundles, different shades of green are obtained. The Siberian species of wheat, in particular, yields a fine yellow, which, upon boiling the wool still longer in the dye, changes into a golden tint, and at length becomes a beautiful yellow.—*Farmers' Encyclopedia.*

FOR THE LADIES.—*A new way to make Calicoes wash well.*—Infuse three gills of salt in four quarts of boiling water, and put the calicoes in while hot and leave until cold. In this way the colors are rendered permanent, and will not fade by subsequent washing.

A FRIEND TO HUMANITY begs to inform the public, that, in the dangerous case of pins swallowed by accident, swallowing one egg, undressed, and in the course of an hour afterward, another, is an infallible remedy for carrying off the pins, if done immediately, and before the pins have worked themselves into the coats of the stomach.—*U. S. Gazette, Jan., 1780.*

THE WIFE.—That woman deserves not a husband's generous love, who will not greet him with smiles as he returns from the labors of the day ; who will not try to chain him to his home by the enchantment of a cheerful heart. There is not one in a thousand that is so unfeeling as to withstand such an influence, and break away from such a home.

Agricultural Almanac for 1847.

THE AMERICAN CULTIVATOR'S ALMANAC, edited by Dr. L. E. just published and for sale at this office. It is got up in good style—printed on new type and excellent paper, and illustrated with over 30 engravings.

TERMS.—\$15 per 1000 ; 500 for \$8 ; \$2 per 100—or three dozen for \$1. All orders, (post paid.) will receive prompt attention. Address D. D. T. MOORE.

Ellwanger & Barry's new Descriptive Catalogue for 1846 & 7 is just published, and will be sent gratis to all post paid applications.

M. Hope Garden & Nurseries, Rochester, Oct. 1, 1846.

Bound Volumes of the Farmer.

A few copies of Volume VI, bound, for sale at this office. Price 50 cents. Also, bound copies of Volume VII, 1846.

REMOVAL.

The Rochester Agricultural Ware House has been removed from Front-street to No. 23 Buffalo-street, Talman Block, opposite Reynolds' Arcade. See advertisement below.

Rochester Agricultural Ware-House,

HARD-WARE AND SEED STORE.

(No. 23 Buffalo st., opposite Reynolds' Arcade.)

Where can be found most kinds of GARDEN and FIELD SEEDS, Hard-ware, Tin-ware, Wooden-ware, Willow-ware, House Trimmings, Kitchen Furniture, &c.

The late proprietor of this Establishment, (THOS. NOTT,) feels grateful to his many patrons for their very liberal patronage during the past year, and would solicit a continuance of the same—promising to sell them as good articles in his line, and as cheap, as can be purchased at any other establishment west of Boston or New York. He has formed a co-partnership with Mr. E. J. ELLIOTT—and the business of the establishment will hereafter be conducted under the firm of NOTT & ELLIOTT.

We shall keep constantly on hand, a full assortment of *Shaker Garden and Flower Seeds*, the reputation of which needs no comment.

We are continually manufacturing the celebrated Massachusetts Sward C Plow—to which has been awarded the greatest number of Premiums—which we shall sell at the low price of \$7, with an extra point. Also—shall keep on hand an assortment of the various approved Plows and Points, Cultivator Teeth, Root Cutters, Straw Cutters, and Corn Shellers—with a hundred and one other articles, too tedious to mention.

Farmers from a distance, as also those in our immediate vicinity, are respectfully solicited to call at our new establishment, and examine our assortment before purchasing elsewhere.

NOTT & ELLIOTT,

Rochester, Jan. 1, 1847.

No 23 Buffalo-street.

Agricultural Implements.

In order to accommodate the subscribers to the Farmer, from whom frequent inquiries and orders for implements are received, I have made arrangements to supply the following articles :

Pitts' Thrasher and Separator,	price, \$150 00
The above, including Horse-Power,	250 00
Pitts' Corn and Cob Mill,	40 00
Seymour's Sowing Machine,	45 00
Sanford's Straw-Cutter,	15 00
Burrall's Patent Corn-Shellor,	10 00

Also, most kinds of Plows, Cultivators, &c., &c., at the usual prices. As my only object is the accommodation of subscribers to the Farmer who reside at a distance, (without fee or reward,) all orders should be post paid and accompanied with the cash. The implements will be carefully selected, and shipped per order.

D. D. T. MOORE.

Farmer Office, Rochester, September, 1846.

Wanted Immediately!—A practical nurseryman, who understands his business thoroughly, to take the place of foreman in an established nursery in Cleveland, Ohio.

Satisfactory testimonials of honesty and efficiency will be required.

Apply immediately, (if by letter, *post paid*,) stating salary expected and other particulars, to P. BARRY, Dec. 1, 1846. *Genesee Farmer Office, Rochester.*

Seedling Apple Trees wanted.—The subscriber wishes to purchase a few thousand seedling Apple Trees. Apply personally, or by mail, to S. MOULSON, Rochester, Jan. 1, 1847.

Back Volumes of the Genesee Farmer.—The subscriber has on hand the Volumes of the Genesee Farmer for 1841, 1842, 1843, 1844, and 1845—neatly bound, which he will sell very cheap.

JAMES P. FOGG.

Rochester Seed Store, Front-st.

Apple Seeds—Growth of 1846, for sale at the Rochester Seed Store, by JAMES P. FOGG.

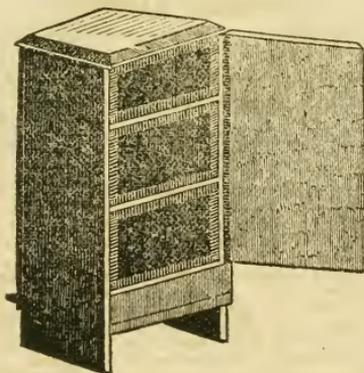
Straw Cutters, of all the most approved kinds, used Western N. Y., for sale cheap, by

RAPALJE & BRIGGS.

No. 10, Front-st.

TO FARMERS AND BEE CULTURISTS.

DR. O. REYNOLDS' Non-swarming and Dividing Bee-Hives, constructed on the following principles.



1st. Multiplying colonies by dividing, thereby preventing swarming. 2d. Removing honey without injury to the Bees. 3d. Removing old comb when necessary. 4th. Preventing the depredations of the moth. 5th. Securing the Bee against the robber. Below is a few of the very flattering testimonials which has been received in its favor :

Extract from the Report of the Committee on Improvements, &c., at the Exhibition of the Monroe Co. Ag. Society, at Rochester, Oct. 8 and 9, 1844.

To Dr. O. Reynolds, of Webster, for a newly invented Non-Swarming and Dividing Bee-Hive, combining all the advantages of former improvements, with some valuable qualifications for ventilation, removing old comb, dividing swarms, and preventing the depredations of the Bee-Moth; the whole under the entire control of the operator, the Committee award a Diploma.

I certify that the above is a true extract from the Report.

M. B. BATEHAM,

Cor. Sec'y Monroe Co. Ag. Society.

Rochester, Oct. 17, 1844.

Rochester, Oct. 21, 1845.

This certifies that the N. Y. State Agricultural Society, at its late Annual Fair, awarded a Diploma to Dr. Reynolds, of Webster, Monroe Co., for the best Bee-Hive exhibited.

DANIEL LEE, Cor. Sec'y.

Extract from the proceedings of the Monroe County Agricultural Society, held at Rochester, October, 1845.

"Dr. Reynolds, of Webster, had a new principled Bee-Hive, with its inmates at work, which, if true in principle, will make a revolution in the manner of treating that very valuable insect. 2 vols. Genesee Farmer.

L. B. LANGWORTHY,
MARCUS ADAMS,
B. F. SMITH."

Statement of John Webster, an extensive Bee Culturist of East Hamburg, Erie Co., N. Y.

I have used Dr. O. Reynolds' Non-Swarming and Dividing Bee-Hives the past season. I consider them a valuable improvement, and one that will make a complete revolution in the manner of treating the Honey Bee. I exhibited one of the Hives at the Agricultural Fair, held at Buffalo, Sept. 23 and 24, and the Committee awarded a premium. They are used extensively in this section, and their principles have been thoroughly tested, and no Apiarian who wishes to render his Bees profitable should be without them.

J. WEBSTER.

East Hamburg, 11th Month, 8th, 1846.

Extract of a letter from a gentleman who purchased the right for Erie Co. in March, last.

Hamburg, Dec. 5, 1846.

Dr. O. Reynolds—Dear Sir: Your improved Bee-Hive is coming into general use here. I have sold, the past sea-

son, over three hundred dollars worth of individual rights in this town, and over six hundred (including this town,) in the south part of this county.

Yours Respectfully,

ROBERT HOAG.

Profit in cultivating Bees in O. Reynolds' Non-Swarming and Dividing Bee-Hives.

Dr. Reynolds—Sir: Agreeable to request, I send you a statement of the profits of my Bees in your Hive the present season. I commenced with ten Hives, (common box.) From the ten colonies I have received eighteen swarms, which were put in your Non-Swarming Hives; six of which I have divided, making an increase of twenty-four colonies.

Now for the profit—

Ten Colonies cost	\$ 40,00
Interest on \$40, for 6 months,	1,40
24 Bee Hives, at \$2 each,	48,00
Expense of living bees,	3,00

\$92,40

16 Colonies on hand,	\$64,00
Sold 18 Colonies for	140,00
Honey, 100 pounds,	12,50

\$216,50

Deduct expenses,

92,40

Nett profit..... \$125,30

MYRON STILWELL.

Hamburg, Erie Co., Sept., 1846.

Dr. Reynolds—Sir: You are at liberty to make whatever disposition you think proper of the following statements.—On the second day of May last, I had an old colony of Bees, which sent out a young swarm, and it was put into one of your Hives. On examining the hive on the 15th day of June, I found they had filled the lower drawers; and I divided them agreeably to your directions. The 20th of July, I divided one of the colonies again, making three colonies, for which I can take \$21. The old hive sent out another swarm which is worth \$5—present value \$26. Deduct expenses of four hives, \$8. Nett Profit, \$18.

ABRAM HOAG.

Hamburg, Erie Co., September, 1846.

All orders or communications, (post paid,) addressed to O. REYNOLDS, Webster, Monroe Co., N. Y., will receive prompt attention.

Webster, Jan. 1, 1847.

ROCHESTER SEED STORE,

By JAMES P. FOGG.

The subscriber having purchased the interest of Mr. B. F. Smith, in the SEED business, will continue the business as heretofore at the Rochester Seed Store on Front street, nearly opposite the market.

The subscriber is well aware of the important relation which the seedman holds to the whole farming community, and that on his honor and veracity the crop and profit of a season in some measure depend. The greatest care has been used in selecting the seeds offered at this establishment for the ensuing year, and they can be relied upon as pure and genuine, carefully selected and raised from the very best varieties, and properly cured. Many kinds were raised in the immediate vicinity of this city, by Mr. C. F. Crosman, and under the inspection of the proprietor; others were raised by experienced seed growers, and all can be recommended as genuine and true to their kinds.

The subscriber begs leave to say to Farmers, and others, who have for the last three years so liberally patronised the *Old Rochester Seed Store*, that the misrepresentations of interested persons that he has sold out, is not true! He will be on hand, as usual, with a complete assortment of every description of *Seeds for the Spring Trade*. Further particulars hereafter.

Rochester, January 1, 1847. JAMES P. FOGG.

Timothy Seed Wanted—500 bushels of clean Timothy seed wanted at the Rochester Seed Store, by
JAMES P. FOGG.

Peas Wanted—Marrowfat and Field Peas, without bugs, wanted at the Rochester Seed Store, by
JAMES P. FOGG.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,-----	90	Pork, bbl,	10,00	11,00	
Corn,-----	38	44	Pork, cwt,-----	3,50	4,00
Barley,-----	33	Beef, cwt,-----	2,50	3,00	
Oats,-----	30	Lard, lb,-----	6	7	
Flour,-----	4,50	Butter, lb,-----	10	14	
Beans,-----	62½	87½	Cheese, new lb.,	5	6
Apples, bushel.	18	25	Eggs, doz,-----	14	
Potatoes,-----	31	Poultry,-----	5	6	
Clover Seed,	3,50	4,00	Tallow,-----	7	8
Timothy,-----	1,00	1,25	Maple Sugar,--	6	7
Hay, ton,-----	6,00	8,00	Sheep Skins,	38	50
Wood, cord,-----	2,50	3,50	Green Hides, lb	4	
Salt, bbl,-----	1,12	Dry "-----	8		
Hams, lb,-----	6	7	Calf Skins,-----	7	

[By Magnetic Telegraph.]

NEW YORK, DEC. 30.—3 P. M.

The market remains quiet for Flour at \$3 50a5 561.—The sales have been quite limited; holders are not generally very firm. In wheat I hear of no sales except 2000 bu. Illinois at \$1 04; Genesee stands at \$1 15a1 16. Old Corn 80a82cts; new 73a78 for fine quality. Sales 15,000 bu Barley nominally 62½. Oats firm at 40a43 cts. Pork is firm at \$10 25a8 37½ tendency upward. Butter in good demand. Sales 100 bbls inferior Lard at 6 cts. Ashes \$4 75 a5 50. Freights are stiff. A ship taken for Ireland at 20d for Corn.

BUFFALO, Dec. 30.

The harbor and canal is free from ice. Wheat was shipped yesterday for the Rock by canal.

There was a sale of 4000 bushels Southport wheat to a Black Rock miller at 75c, seller paying storage. Flour may be quoted at \$3 75; some holders are asking \$4. 100 bu. clover seed was taken at \$8 75.

PUBLISHERS' NOTICES.

The Cash System—1847.

OUR subscribers are informed that we shall adhere, as strictly as possible, for the future, to the cash in advance system. This, we are satisfied, is the best mode for both subscriber and publisher. All, therefore, who receive this number, and have not yet paid for 1847, are requested to forward the amount, or hand it to their Post-Master for that purpose. [] Those not wishing to continue the Farmer, will please return this number, with their name and post office address, written on the margin with a pencil—or in writing on the wrapper. []

To Post Masters, Agents, &c.

WE request all Post-Masters to act as Agents for the Farmer, according to our club terms. Also such other persons as feel an interest in extending the circulation of the Farmer, and thus promoting Improvement in Agriculture, Horticulture, and their kindred sciences. We shall feel truly grateful to any and all persons who will lend their assistance. Any person sending us 16 subscribers, (remitting \$6,) shall receive an extra copy gratis—or a bound volume of the Farmer for 1846.

Acknowledgments.

ALREADY have we received an unexpected number of subscribers for 1847. From several offices where we had no subscribers, or but few, last year, from twenty to forty persons have ordered the Farmer. We tender most grateful thanks to Post-Masters and other friends who are actively engaged in increasing our circulation. With a continuance of such noble aid the GENESEE FARMER can soon boast a patronage unexampled in the history of agricultural publications.

[] We send this number of the Farmer to many persons who are not subscribers. Friends of the cause it advocates will oblige us by examining its contents, and introducing the paper to the notice and patronage of their friends.

[] POST MASTERS are authorized, by law, to send Post Office Drafts for subscriptions. Persons residing at a distance, can order the Farmer in this manner, and thus save postage and discount.

1847.]

VOLUME VIII.

[1847.

GENESEE FARMER,

A MONTHLY AGRICULTURAL AND HORTICULTURAL JOURNAL:

Illustrated with numerous engravings of

Improved Implements, Farm Buildings, Domestic Animals, Fruits, &c. &c.

THE PROPRIETOR of the Farmer gratefully acknowledges an INCREASE of over FOUR THOUSAND subscribers, since the commencement of the current volume. He considers this the most conclusive evidence of the merit and popularity of the work—and respectfully presents it to the friends of Improvement for their examination and patronage. Dr. LEE, its principal Editor, is at the head of the 'Western N. Y. Agricultural School'—and his ability, and the means at his command for obtaining and disseminating information relative to the Science and Practice of Agriculture, are unsurpassed by any agricultural writer in the country.—The Editor of the Horticultural Department, P. BARRY, Esq., (of the 'Mt. Hope Garden and Nurseries,') is one of the most experienced Horticulturists in the State.

Each number of the Farmer contains **Twenty-four large Octavo Pages**, and is illustrated with handsome and appropriate engravings. It is printed on new type and good paper. Since its enlargement from 16 to 24 pages, (in January, 1846,) it is universally pronounced the CHEAPEST and BEST PAPER of its SIZE and KIND in the UNION.

TERMS—**50 cents a year, in advance; FIVE COPIES FOR \$2; EIGHT FOR \$3; THIRTEEN FOR \$5.** Any person sending us 13 subscribers, (remitting \$5,) will receive an extra copy gratis.

Volume 8 will commence in January, 1847,—and all subscriptions should be sent in previous to that time, if convenient, in order that the publisher may determine how large an edition will be necessary.

[] Specimen numbers sent gratis to all post paid applications. All friends of Agricultural and Horticultural Improvement who receive a copy of this Prospectus, are requested to Act as Agents for the Farmer. Subscriptions may be sent (post paid,) at the publisher's risk.

Address D. T. MOORE,

NOVEMBER, 1846.

Publisher, Rochester, N. Y.

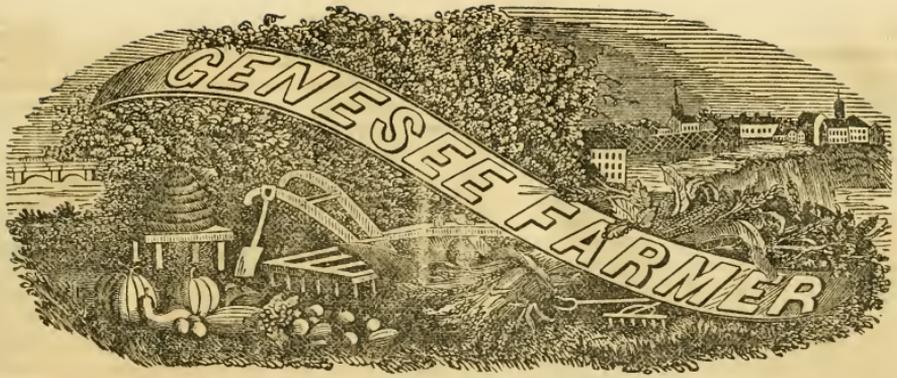
[] Editors will greatly oblige us by copying the above Prospectus; and to those who do so, (sending us a number of the paper containing it,) we will send one or more copies of the Farmer, without an exchange.

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THE GENESEE FARMER:

Issued the first of each month, in Rochester, N. Y., by
D. D. T. MOORE, PROPRIETOR.

DANIEL LEE, EDITOR.

P. BARRY, Conductor of the Horticultural Department.

Fifty Cents a Year:

FIVE copies for \$2—EIGHT copies for \$3. Subscription money, by a regulation of the Post-Master General, may be remitted by Post-Masters free of expense. [] All subscriptions to commence with the first number of the volume.

PUBLICATION OFFICE in Talman's Block, Buffalo street, opposite Reynold's Arcade—where all subscriptions not forwarded by mail should be paid.

POST-MASTERS, and all other friends of Agricultural Journals, are requested to obtain and forward subscriptions for the FARMER. Address D. D. T. MOORE, Rochester, N. Y.

[] The Farmer is subject to newspaper postage only. []

Prospects of the Farmer.—Thanks.

THANKS to its numerous firm and active friends, the GENESEE FARMER is making fine progress on its eighth voyage. The demand for the present volume has been such that we were obliged to publish a second edition of the first number previous to the 15th of January. We have now, however, several thousand of that number on hand—and shall print a very large edition of the present (February) number, in order to furnish the entire volume to all who may desire to become readers and supporters of the Farmer. Its Editors, and numerous Correspondents, (able and practical men,) are capable of making the Farmer worth ten times its subscription price to almost every farmer in the country—and especially to those of Western New York. And, while we desire no *patronage*, we frankly ask the friends of industry, progress, and improvement, to lend such portion of their influence toward extending its circulation as they think its merits may deserve. Without their approval and aid, the Farmer would be restricted in circulation and influence—with them, we trust it will soon be second to none of its cotemporaries in either respect.

Post-Masters, Farmers, Editors, and all others to whom we are indebted for timely and substantial favors, will please accept our grateful thanks—the only acknowledgment we can now make in return for their liberality.—PUB.

[] Persons ordering the Farmer will please state whether they have the January and February numbers.

Digestion and Assimilation.

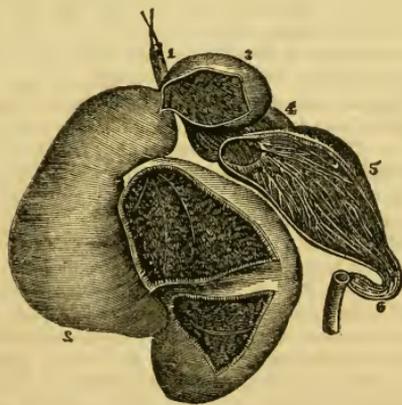
THERE is a natural process carried on in the systems of our domestic animals, by which hay, grain, roots, straw, and other forage, are transformed into pure and healthy blood. This important transformation is the work of Digestion. Assimilation consists in organizing in a living form, in the shape of lean meat, tendons, nerves, and other tissues, the appropriate elements for that purpose, conveyed to all parts of the body by the ceaseless action of the heart and arteries. No other natural phenomena better deserve the *study* of the practical farmer, than those that attend the conversion of grass into living flesh. The subject is an abstruse one, but we shall labor to simplify it, and make our description intelligible to common readers, wholly unversed in the science of physiology.

Digestion may be said to commence by grinding the food taken into the mouth between the teeth. The working faces of these organs are admirably adapted for pulverizing hard substances; while the liquid that flows from the salivary and sublingual glands converts the mass into a moist pulp. Ruminant animals, (those that chew the cud,) swallow their food with very little mastication. The design of nature is, that the herbaceous forage of these animals shall all be returned to the teeth from the first large stomach, to be thoroughly ground at leisure, when the animal is at rest. This admirable arrangement enables ruminant animals to gather and swallow much more food, within a given time, than they could possibly do, provided it had all to be duly masticated before it passed into the stomach.

It is worthy of remark that, it requires many pounds of grass, browse, and other natural food of this genus of animals, to make one pound of their flesh. Hence, nature had to provide a capacious store-house somewhere for holding forage, as well as for digesting it. To meet the whole exigencies of the animal, nature has given it a large and complex stomach, which is

divided into four compartments. The first may be regarded as a simple reservoir, which is called *ventriculus* by anatomists, and paunch by butchers. It lies mostly on the left side, and fills a large space in the belly. From this bag the food passes into the second compartment, called *reticulum*, honey-comb or bonnet, from the cell-like form of its interior structure.—There the food is formed into small round balls, which are thrown back into the *œsophagus* (meat pipe) and raised to the mouth to be chewed while the animal is free from the toil of gathering its nourishment. This second mastication is a proof that the food has undergone very little change in the first and second stomachs. Mark now the contrivance which prevents the well chewed cud from returning into the great reservoir or *ventriculus*, to be passed into the honey-comb, and back again into the mouth.

When the chewed cud has descended the *œsophagus* to its lower extremity, its altered character excites the prompt action of certain nerves and muscles that draw over the orifice into the first stomach, two valvular folds which unite in a way to form a short canal directly through the second, into the third stomach or compartment, and thence into the fourth cavity. It is in the latter that digestion mainly takes place, or that young blood is principally formed. The third compartment is called the *manyplies*; and the fourth the *caille*, or red stomach. From this the small intestines take their origin.



Compound stomach of ruminants, (from Carus and Jones.)

1. Œsophagus.
2. The paunch, or first stomach.
3. The honeycomb, or second stomach.
4. The manyplies, or third stomach.
5. The caille or red, or fourth stomach.
6. The commencement of the small intestines.

Every farmer must have noticed the way in which these intestines are connected with the back bone, or to the back part of the abdomen by a fatty mass called *mesentary*. The whole length of the small intestines is covered with the mouths of a set of vessels named *lacteals*, which drink in, so to speak, the digested food,

or young blood in the alimentary canal, and convey it directly to the heart for general distribution, after it has passed through the lungs and imbibed a due portion of vital air, or oxygen gas.

When we examine critically the composition of the food consumed by our domestic animals, we find it to consist essentially of starch, sugar, oil, gum, woody fiber, albumen, gluten, casein, fibrin, and several earthy salts. All these substances, except the woody fiber, are found dissolved in the *chyle*, or the food as it passes out of the fourth and last stomach of a cow or sheep into the small intestines. The same compound bodies are likewise found in the blood vessels connected with the heart.

To prevent the waste of starch, gluten, and other elements of animal nutrition in the seeds, stems and roots of plants, by their ready solution in water, as they are ever exposed to rains, nature has taken good care to have them nearly or quite insoluble, before they are eaten. Digestion consists in effecting chemical and vital changes in the organized elements taken into the mouth as food, that impart heat to the system, and repair the constant consumption of its muscles, nerves, brain, fat, bones, membranes and other tissues, by which chemical changes, substances that were *insoluble* in food, are rendered *soluble* and *dissolved* in blood. To supply all animals, man as well as brutes, with pure healthy blood is the end and purpose of digestion. There are a few well established truths in regard to the formation of blood which we must assume as granted by the reader for their proof would consume too much of our space and time. These are

First: If the food of an animal lacks *phosphorus*, or any other ingredient of its brain, lacks *bone-earth* or any other element in the framework of its system, lacks *starch, oil and sugar*, or ingredients to *burn* and warm the body; or lacks *nitrogenous* compounds to repair the waste of muscles and of all other organs, the warm blooded, living being must suffer in its health to the full extent of such deficiency.

Secondly: So far as starch, gluten, casein, (vegetable cheese,) or other insoluble article of food, is allowed to pass the digestive organs *undissolved*, it will escape from the system through the alimentary canal, and contribute not a particle to the nourishment of the body.

Permit us to express a conviction founded on considerable research, that the annual loss from the omission to supply animals with food best prepared, and adapted, first to keep up their constant temperature of 98 degrees; secondly, to repair the waste of every organ and tissue; and thirdly, to be dissolved and digested, is equal in value to one fourth of all the food consumed.—When we feed a cow raw potatoes and shorts containing starch, and find one third as much starch in her dung as there was in her food,

what is the inference? Can we escape the conclusion that this insoluble compound so useful to make cream, and evolve heat to warm the animal, has slipped through the digestive organs unchanged? One remedy is, to cook the food, and thus transform an insoluble starch into a soluble gum.

But there is another, and perhaps, all things considered, a better remedy. It has been found by careful experiments and analyses that the ground seeds of plants, like corn, oat and barley meal, wet with cold water or fed dry to cows, steers and other ruminant animals, without hay or straw, passes like the chewed cud directly into the last stomach, and thus loses the whole benefit of the second mastication. Hence follows the important result that this food, so truly valuable in itself, is only half digested. Feed your cattle on whole ears of corn, and your store pigs will find whole kernels of this grain in their dung. Nor will grinding alone answer the best purpose. The meal should be intimately mixed with cut hay, straw or corn-stalks, that it may pass into the ventriculum or first stomach, go back into the mouth, be thoroughly incorporated with the saliva, and masticated as a cud in the second chewing. It is difficult to extract all the nutritive elements from corn meal without cooking. The small sand like particles of the grain are extremely hard, and so abound in oil, as to resist the solvent powers of the gastric juices of herbivorous animals.

The loss by defective digestion in only one item, and perhaps the smallest, that occurs in feeding domestic animals. Let us suppose that a cow or a horse needs the daily addition of ten pounds of new blood drawn from digested food, to maintain a constant heat of 98 degrees in a mass of flesh that will weigh 900 lbs, and repair the waste in the same. It may not be far from the truth to say that eight pounds of the matter furnished by the ten pounds of blood must be burnt to keep the body warm. The carbon and hydrogen daily expelled from the lungs of a cow or horse in the form of carbonic acid gas and vapor are more than equal to all the carbon and hydrogen contained in eight pounds of dry starch, sugar or oil. The other two pounds must furnish each muscle with new fibrin, and the brain, nerves, bones, liver, lungs, and all other organs with new elements of precisely the right character and condition, to suit the peculiar wants of each living tissue. It is not merely theory but fact, that both the food and blood of animals often contain either an excess of combustible elements for warming the system, or a deficiency of the same. In either case a loss is inevitable; but it is greater in case there is too little, rather than too much fuel. Nature has provided adipose tissues for storing up fat or fuel when there is an excess in the blood, to be used in time of need. But no such provision is

made for laying up a surplus of the ingredients that make muscular fibre, nerves, brain and bone. Hence, any excess there may be, in the food of any animal, must escape from the system either by the bowels, or as *urea* or other compound in the excretions by the kidneys, by insensible perspiration, or as gas and vapor through the lungs. It has been found that to increase the oil, starch, or saccharine matter in the food of a cow giving milk, with a view to augment the yield of butter, while the supply of tissue-forming or brain-forming elements was neglected, results in a *loss* instead of a *gain* in butter. To fatten an animal, it must have not only an excess beyond daily consumption of the elements that make fat, but enjoy a fair supply of all the other ingredients required to form its lean meat, bones, &c.

It is practicable by good and skilful keep, to augment the daily secretion of milk, and its richness in butter and cheese. To attain this result, the *comfort* and *health* of cows must be studied, and lie at the foundation of the improvement.— Their food in winter should be cooked, so far as roots, tubers, and grain are used in feeding them. They should be well bedded, watered and salted, as well as fed with a *variety* of suitable nourishment. The importance of variety in the food of herbivorous animals is too much overlooked by most agriculturists. Remember this unvarying law: Every part of the system must be supplied with its appropriate elements in an available form; and every excess of any element beyond the requirements of nature is so much loss to the owner of the stock. We must resume the investigation of this interesting subject, and endeavor to point out to practical farmers the composition of various plants, and their true value in forming fat, lean meat, bone, brain, wool, cheese, and other animal products. We know that we tread on slippery ground; for it is now six years since our study and remarks on vegetable and animal physiology subjected us to public ridicule by grave Senators in their places at the Capitol of the State. Many of our readers doubtless now believe that it is all humbug to think of adapting food to the natural requirements of the muscles, bones, brain and nerves of their domestic animals. They know that all animals eat food and make blood, but that the quality of the latter depends on the composition of the former they utterly discredit. All the consolation that we have is, that the next generation will think better of men that give their time and money to investigations of this character.

CHARCOAL.—MR. ALEX. COFFIN says, in the Cultivator, that he put about a peck of charcoal around each of three peach trees in the spring of 1844, which greatly improved the bearing of the trees as well as the quality of the fruit. Those around which no charcoal was placed bore no good fruit in the years 1845 and '6, and if nothing be done to prevent it, will soon die.

"Science and Agriculture."

MR. J. J. THOMAS replies in the January number of the Albany Cultivator to our criticism on his Prize Essay, and makes the following remarks: "Dr. LEE occupies nearly a column in controverting the *fact* that, animals secrete highly fertilizing substances; and concludes by saying 'no farmer must expect his domestic animals to supply him with more or better manure than their food and drink will furnish.' According to this assertion then, the richest stable manure is no "better" than hay, straw, oats and water, spread over the surface of the land—a ridiculous error, which every farmer must see at a glance."

The question of transforming "hay, straw and oats" into manure, and that of "animals secreting highly fertilizing elements" out of nothing, to enrich one's farm, is obviously a matter of great public interest. It is not then from any love of controversy, nor a spirit of hypercriticism, nor feelings of hostility toward the respected author, that we again allude to this subject. He has received from the State Society more money for his agricultural compositions, within the last five years, if we mistake not, than all the other writers in the State and country put together. This is mentioned to his credit, and high reputation as an author, not as an intimation of favoritism in certain influential quarters. Hence, what he says is entitled to respectful consideration. Mr. THOMAS thinks we commit "a ridiculous error" when we say that "no farmer must expect his domestic animals to supply him with more, or better manure than their food and drink will furnish." To make out his case, Mr. T. must show from what other sources besides their food and drink, animals can obtain "fertilizing elements" for the benefit of the dung heap and the crops. This he will not attempt to do, and if he should, "a ridiculous" failure would be inevitable. So far from adding anything to the weight and substance of the matter taken into their stomachs, only about sixty per cent of this is voided by their bowels and kidneys. The other forty per cent escapes in the form of air or vapor from their lungs, and by insensible perspiration. On page 377, Bousingoult gives the particulars of an experiment of feeding a horse, in which he consumed in 24 hours, 20 lbs of hay, 6 lbs of oats, and 43 water. He voided in his dung and urine only 41½ lbs; giving off from his lungs and through his skin 27½ lbs. Thoroughly dried, his food weighed 22 lbs 6 oz.; while the dry matter in his excretions weighed only 10 lbs 3 oz. Here was a loss of more than one half in the dry solid matter taken into the stomach of the animal. The horse took into his system 10 lbs 6 oz. of carbon in his food. Of this only 3 lbs and 11 oz. were found in his dung and urine; the balance having been

burnt to keep the animal warm, and escaped from the respiratory organs in the form of carbonic acid gas.

A cow consumed in after math hay and potatoe, dry weight, 28 lbs. 1 oz. 1 dwt, in 24 hours. This was her regular allowance. She gave in dry matter:

In her dung—	10 lbs.	8 oz.	12 dwt.
" " urine—	2 "	6 "	17 "
" " milk—	3 "	1 "	00 "
	16	4	9

The loss in this case was 11 lbs. 8 oz. 12 dwt. out of 28 lbs. 1 oz. 1 dwt., or some 42 per cent. Must not a cow "secrete fertilizing elements" very powerfully out of nothing, to make good this loss daily of 42 per cent of the elements of plants taken in her food, which escape into the air, and never go to the dung heap? Is the author of this \$100 Prize Essay profoundly ignorant of these things?

Nothing is easier than to weigh all the substances consumed, and voided by domestic animals. According to some recent researches instituted by order of the British government, and made by Prof. THOMSON, of the University of Glasgow, it appears that when a cow consumes 7 lbs. of carbon in her daily food, 6 lbs. go to generate heat, and escape into the air, like so much hay burnt in a stove. He remarks that, in burning 6 lbs. of carbon, a cow consumes all the oxygen in 956½ cubic feet of atmospheric air, showing the great necessity of ventilating cow houses, horse stables, &c.

The expense of warming animals by the combustion of hay and grain deserves far more attention than it has hitherto received. Some four years ago we went into an elaborate calculation on the subject, and proved the needless annual loss in this branch of rural economy equal to \$4,000,000 taken from the pockets of the farmers of this State alone. It is about time that we went over the ground again, for the Genesee Farmer has many new subscribers.

Ashes on dry Plains.

MR. ED TOR:—I wish to know the fact whether one bushel of dry or unleached ashes is worth as much as four bushels of leached ashes, to put on dry plains. It is contended by some that the lye of ashes is not what the dry plain land wants.

Yours, respectfully,

ROSWELL LOCKWOOD.

North Springfield, Vt., 1847.

REMARKS.—For the first crop, one bushel of unleached ashes is worth as much as four of leached. But in the course of ten years the latter will be worth more than the former.—ED.

CATO, the Censor, said to a very debauched old fellow, "Friend, old age has deformities enough of its own—do not add to it the deformity of vice."

Muck and Lime.

At a recent meeting of the New York Farmer's Club, the following remarks were made on Muck and Lime:

Mr. HAGGERTY said he was an old man, but a young farmer, and had come there to hear what valuable suggestions might be made by those present. But he wished to relate an experiment he had made with muck, drawn from a pond which was drained for the purpose. The muck was laid in winnows after being drawn out on the fields, and a compost heap was formed by layering from six to eight inches of the muck, two or three inches of lime, then stable manure, and so on until a heap of from 6 to 7 feet in height was formed—no particular measurement being used. This compost was applied to a 10 acre field, and from it Mr. H. raised more than 300 bushels of wheat, 296 bushels of which were of excellent quality and sold to the miller at a good price, but we did not catch the figures.

A gentleman who declined giving his name, stated that he had some experience with muck, and must dissent from any idea previously expressed that a mixture of lime with muck is injurious. He had drawn out upon his land 4,000 loads of muck, made it up in ranges, English fashion, and afterward mixed it with one bushel of lime to the load, while the lime was in a hot state, each range being then turned over. Now, if lime is not mixed with the muck until it has become carbonaceous, it will not answer the purpose nearly so well. The gentleman went on to state his reasons for this opinion, and said he would prefer one load of muck thus prepared to two of common stable manure.—By its use he had been enabled to commence digging potatoes and sending them to market on the 15th of June, and by the last of July a five-acre field was entirely dug over, the product amounting to \$380 clear of all expenses. By the use of bone dissolved in sulphuric acid he obtained from the same field 1,200 bushels of turnips, after the potatoes—thus forming the second crop. He related several experiments made; we have not room for more, but the foregoing will show the manner of proceeding, all the fields yielding abundant crops.

Dr. FIELD disapproved, from his own experience, of using Plaster of Paris in stables, as had previously been recommended.

In regard to the use of gypsum in horse stables for the purpose of fixing the ammonia evolved from the urine and dung of the animals, there is no doubt that the oil of vitriol some how comes in contact with the stable floor, in passing from the lime in the gypsum, to the ammonia so as to corrode and rot it. SQUIRE M. BROWN, late President of the Onondaga Agricultural Society, and others who have tried the use of plaster for the purpose indicated have informed us that their stable floors have been speedily rotted by the application of gypsum to the moist places where the horses stand. Gypsum should be applied to the dung heap.—Ed.

ANALYSIS OF THE OAT: By JOHN P. NORTON, Farmington, Connecticut.

This is the Essay for which the Highland Agricultural Society awarded a premium of fifty sovereigns. We have perused it with care, and think it reflects much credit on the professional skill and industry of the author. Mr. N. has received the honor of a Professorship in Yale College, and has gone to Holland to fit himself for the station.

HE who acts without thought or design, acts foolishly, and he who aims at an unlawful end, acts wickedly.

Bone Mill.

DR. LEE:—The subject of manures has been often presented in the Genesee Farmer, and its paramount importance urged by the most cogent reasoning; yet the fact can hardly be too often reiterated, that success in agricultural pursuits depends in a great measure upon economy in the manufacture and application of manures. I wish to call the attention of the friends of agricultural improvement, and manufacturing industry, to the mutual advantage which would arise from the erection of a bone mill in the midst of this grain-growing region, to increase the productiveness of our extensive and beautiful fields. The repeated croppings to which the soil is subjected on many farms, will be productive of ruinous consequences, unless the most strenuous exertions are made to render available all the means of fertility that can be commanded.

Rochester is perhaps more favorably located for such an establishment than any other place in Western New York, and the productiveness of the investment I think could not be a matter of doubt. Will not some man possessing the requisite enterprise and capital, by engaging in this undertaking, arrest the extravagant waste of this invaluable manure, one bushel of which is estimated to be equal to three loads of barn-yard manure? About one-half of the substance of bones is phosphate of lime—a compound indispensably necessary to the production of a crop of wheat—yet very sparingly found in other fertilizers. Manure may well be termed the Philosopher's stone; for it produces results far more important to the human species, than would have been the success of the wildest day dreams of the Alchemists. Every resource within the reach of the farmer should be brought into requisition, to restore the wasting aliment of the wheat plant; for on its successful cultivation depends, in a great measure, the continuance of the unparalleled prosperity of Western New York.

The foregoing is respectfully submitted for publication, if you consider it of sufficient importance to justify the appropriation of the space it will occupy.

Yours with respect,
Peoria, N. Y. J. n., 1847. A. BLAKE.

BREAKING STEERS.—Not long since I saw a lad of some ten or twelve summers, driving a pair of spring calves yoked to a little cart. (This was in Autumn.) They were perfectly orderly, and did not appear to have suffered, even in their growth, from having been early trained to habits of obedience. "Just as the twig is bent, the tree's inclined," is true of animal nature generally, whether it be found in the shape of children, or of calves and colts. Try it, ye, who have occasion. H.

THE bar of the tavern leads to the bar of the bench, and the prison bar speedily follows.

Running into Debt, and paying Interest on Money.

OUR brief remarks on this important subject, under the head "Laconics" have been greatly misunderstood, and called forth the communications given below. We do not regard the paying or receiving of interest, whether the sum be one or two per cent, as morally wrong, when considered as a separate and independent question. That is not the point at which our remarks were aimed. *Interest* is only one link, but a shining one, in a chain of causes and effects, which operate to enrich the few at the expense of the many, in all civilized communities. We hold this truth to be self-evident, that Society can not give one tenth of its members in annual rents or interest for their consumption and accumulation, a sum equal to one half of the products of the labor of the other nine tenths, and not compel the latter to live on half allowances.

If our esteemed friends McVEAN, and "LABORER" can contrive any way by which they will make a John Jacob Astor in every town, taking from human muscle and intellect half a million a year, and leave nobody the poorer by the operation, then we will acknowledge our error, and admit that the "evil one" has nothing to do with any "contrivance" by which a person begins with nothing, produces nothing, and yet acquires a million of dollars. We beg them however, to bear in mind this important, this alarming fact: In all civilized nations, paupers, and especially those living from hand to mouth, just above pauperism, increase faster than population increases. Why? Because it takes all the surplus earnings of many families, over and above their necessary consumption, to make one family rich, and support them in the style they live in, without producing any thing. If our friend McVEAN will permit us to speak the truth plainly, we desire to say to him that we regard the "principles of political economy" which he supposes to be "so well settled," as very defective, inasmuch as they operate practically to feed and clothe the few in idleness and extravagance by the sweat of other men's faces instead of their own. We have studied the economical writings of Adam Smith, Say, Malthus, McCulloch, and other authorities with great care. But we regard the Bible as better than all of them, and feel constrained to judge their principles by their fruits. And what have been the *fruits* of the principles of the Political Economists of Europe for the last 50 years? In Great Britain they have made a few families exceedingly rich, and *four millions of public paupers!* In the city of Paris there are 135,000 public paupers this day. All now admit, had it not been for the restraining influence of the laws of entail and primogeniture, the landed estates of the Kingdom of Great Britain would have fallen into fewer hands than they now are, owing to the gambling, spec-

ulating operations of trade and commerce, and the almost universal love of games of chance.— In this country, there are no checks whatever on the centralization of property. Had we room, it would be easy to demonstrate that such is our morbid passion for the speedy acquisition of wealth by trade in lands, or speculations of some kind, that fortunes are acquired and lost at *somebody's expense*, both easier and faster in this country than in England. Will "LABORER" contend that he can take a part of what A. has and give it to B. and still have A. *plus* as well as B?

Kind friends do not deceive yourselves in this great and weighty matter, and seek to muzzle a free press. Is it a *fault* in us that we have some slight appreciation of the evil consequences one day to result from our present habits, customs and legislation, which operate continually to make the rich richer, and the poor poorer, and more numerous as well as more dependent?— Rely upon it, this is a bad system, an unnatural system, which cannot always last. Why then are you unwilling that we shall show up the supreme folly of running into debt, and undertaking to pay annual interest on "dead matter, which can not add one particle to its own weight, nor one cent to its own value"?

In a late number of this journal, "LABORER" said: "If you would be rich, you must produce more than you consume." This we contend is not enough, although it is good so far as it goes. You must learn to *keep* your surplus, over and above consumption as well as to produce more than you consume, or you may work hard, fare hard, live poor and die poor, to enrich others.— This is really all the difference there is between us: We would have others not only labor as he labors, but keep as he keeps, what he earns.

In our "Laconics" we say: "The elevation of fallen man in morals, in knowledge, and in physical comfort, is the work of *Time*. Agrarianism, and all ideas of a division of property are at best mere quack remedies, calculated to do infinite harm rather than good." We never had a particle of confidence in Fourier's excessively artificial system for reorganizing Society. In His own time, a good Providence will work out the highest happiness of our race on this planet. This is *our faith*; and we labor only for the obvious, attainable good, within our reach.— The best are less than half-civilized, half-moralized, half-christianized. We expect persecution because we dare to say that man has still some things to do, as well as some not to do, before every one shall have his own, keep and enjoy his own—no *more*, no *less*. The excellent farmers, however, whose communications we now insert are too liberal minded to censure any one for mere opinions, no matter how mistaken, if honestly entertained. We adopt the maxim of Solomon: "The rich ruleth over the poor, and the

borrower is servant to the *lender*;" therefore it is the part of wisdom to keep out of debt, and pay no interest on money. We war not against Capital; and would be the last to depreciate its value. All we desire is that more of it shall remain permanently in the hard hands that give it existence, that *all* may have enough and to spare.

MR. EDITOR:—From the tenor of your editorials in the *Genesee Farmer*, the inference is unavoidable, that you entertain opinions, and inculcate principles, on the subject of Political Economy, perhaps somewhat peculiar, or at variance with the teachings of our most esteemed and standard authors. The importance of correct views of this science cannot be overrated—connected as it is with the economical, political, and practical relations of life—influencing, as it does, the prosperity and peace of society. Perhaps on no subject of equal importance is there so general lack of knowledge, as upon this; yet even upon this subject there is generally much common sense, and particularly, much practical experience. Hence there is no danger, upon a thorough discussion and exposition of the subject, but that the interests of *all* classes of society, will be found to harmonize and identify.

It will be found that capital will yield nothing, unless united with labor—that labor will yield nothing unless united with capital. The greater the ratio of capital to labor, the higher will be the price of labor. The greater the ratio of labor to capital, the lower will be the rate of wages, and the greater the profits of the capitalist. Hence, the laboring classes are really more interested in increasing the capital of a country than the wealthy classes; as whatever tends to destroy, or diminish, the annual accumulation of capital, tends directly to lower the rate of wages. Hence the inconsistency of leading one class of community to rejoice at the prosperity of another class.

It is by a judicious connection of skill and industry with pre-accumulated capital, that simple laborers are enabled to advance to the condition of laboring upon their own capital; and eventually of becoming, in their turn, lenders and capitalists. Do they by this process injure community, or cease to constitute "Humanity?" or become agents to promote "a contrivance of the Devil, by which he enables one man to retake from another all that he gives, and something more?" Certain it is, that by this process, all national and individual wealth is accumulated. And this is the happy condition of the great mass of the American people: they are laborers and capitalists.

Of course lenders will sometimes be avaricious and oppressive, and borrowers fraudulent and profligate. The one is usually not more benevolent than the other. Each enters upon the transaction for his own advantage. And it is just as honorable to lend as to borrow.

To the harmonious and beneficent connection of capital and labor there will occur exceptions, as when governments consume unproductively large masses of capital in war; or by injudicious policy, suddenly direct industry from old into new channels; whereby masses of men are thrown out of employment. To provide temporary labor and pay for these, may well engage the attention of the philanthropist and statesman.

But why should I dwell upon the subject—you must be familiar with it. You are doubtless aware, that the study of Political Economy has engaged the best minds of Europe and America—that it is an established science—that its truths are demonstrable, upon the basis of observation and experience of cause and effect—that there is little or no conflict of opinion among writers of established reputation, in regard to its principles—and that it would be an arduous undertaking to impeach their conclusions before an intelligent tribunal. You, as a teacher in Israel, must understand their views; and if you disagree with them, must be able to render a reason. If, in addition to, or conflict with, these, you have views which would tend to ameliorate the condition, or promote the happiness of mankind—if, as you say you have, "truths of vital moment to society, which ought to be proclaimed on every house-top," let us have them, systematically, definitely, boldly. They cannot injure, but must benefit yourself and community. I ask you to give them definitely, because I may ask the privilege of a friendly and respectful discussion in the *Farmer*. And to me, at least, there is an obscurity in the phraseology, and in regard to the meaning and tendency of your teachings.

Does the term "Humanity," of such frequent occurrence in your text, mean labor? and if so, why not use the word? How happens it that money, (or rather the value, of which money is the representative—to wit, capital,) which you elsewhere represent as so productive, becomes to the borrower "dead matter, which can not add one particle to its own weight or one cent to its own value; and a consuming ulcer upon the body and soul of humanity?" Is it more iniquitous, or consuming, to pay interest for money, (capital,) than to pay rent for lands, buildings, materials, or implements in manufacture? Are they not alike capital, and identical? Can you suggest any disposition or use of capital, more beneficial to society, upon the whole, than to let it increase and diffuse, in connection with industry, notwithstanding any temporary inequality of accumulation?

What action of the "controlling majority will secure to every man an equal chance to labor for himself, and have all that his honest toil can call into existence," otherwise than in accordance with the profits of labor, as resulting from the laws of supply and demand? What amount of coercive or arbitrary interference, with the accumulation, (capital,) would it require to destroy or banish it,—to paralyze production—introduce anarchy, and reduce a prosperous people to the condition of savage hordes, or to welcome such order as prevails in Warsaw?

These are questions which appear to me to arise by natural and legitimate inference; from the spirit and seeming tendency of certain remarks in your January number. I have designed to treat these remarks with candor and moderation, as I may have misapprehended their import. If so, it will please me to be instructed. I wish to ascertain truth; and desire that the *Farmer* may be the vehicle of just views and truthful principles. And that there may be no disguise on my part, I subscribe, Yours respectfully,

Wheatland, Jan. 13, 1847.

J. McVEAN.

MR. EDITOR:—Pardon this freedom, for be assured that it originates in the purest motives, and most sincere good wishes. I was exceedingly sorry to see the spirit of agrarianism so strangely avowed in the January number of the *Genesee Farmer*, by the uncalled for attack on capital, and the unreasonable abuse of the capitalist. And what is capital that it makes men such demons? It is the fruits of industry and economy, directed by skill. Wealth is the reward of toil; the knave deserves it when he tills the soil; and no one has a right to deprive him of it, unless he gives what is considered an equivalent in exchange. Destroy the right of property, and the value of capital, and the activity, enterprise, and industry of the capitalist, must cease, and civilization will be at an end—for the active energies of social Man never can be called into action without them. If capital was not rewarded, we could not have the active enterprise of the capitalist, nor could we have any commerce; no railroads nor canals, no labor-saving machinery, no colleges with their thousands as endowments, no sciences, no literary men—nor any of the valuable improvements of civilization, for individual labor never can be collectively united so as to produce them.

The Fourierites resolved to correct the evils in society, and renovate the world, by performing the necessary operations of social life without the tax of capital, or the agrandizement of the capitalist, and what has been the result? Imbecility, starvation, and ruin are the fruits of the experiment.

In what respect or in what way does the employment of capital ever injure the poor? The value of labor, like every other thing, depends upon the demand and supply, and common sense must tell every one, that the greater the amount of capital there is employed, that there must be more demand for labor, and the better will be the compensation; and it is equally as self evident that if capital is not rewarded it cannot be employed. What would be the effect on society if the productive capital, even in this country, should be withdrawn? The hundreds which now receive the comforts of life from their labor, would be thrown out of employ, and deprived of the means of subsistence; and the productive industry of that capital lost to community, without benefiting any one, or producing any valuable result in society.

Under the head of "Yankee Enterprise," published in the present (January) number of the *Genesee Farmer*, it is stated that a man paid the wives and children of N. Hampshire for knitting ten thousand pairs of stockings. I think that it will be very difficult to imagine what harm the pay for knitting those stockings would do those wives and chil-

den; and the New Hampshire man must have had capital or he could not have found yarn and paid for making the stockings. But "capital has hitherto been in the service of the evil one." Rather strange business for the evil one to be employed with.

"Interest is a contrivance of the devil." If so, he has done some good, for it has been the means of thousands of active, industrious men to procure capital which enabled them to earn the comforts, and become the owners of, an independent home, and productive members of community. Money is only a representative of wealth, and wealth is the fruit of productive industry. If A. saves the value of fifty days work from his year's earnings, and B. needs the value of it to enable him to commence business, what injustice, cruelty, or inhumanity is there in B's compensating A. for the use of his fifty day's labor, which is interest for money. If the lenders of money received no compensation, there would be no money to lend, and the enterprising community would not have the means to carry on their business; and society would not have the benefit of their skilful industry.

But those poor laborers, who are so much abused by the inhuman capitalist and money lender, are not money borrowers; they pay no interest; the devil's contrivance does not tax them. It is the active and enterprising men, (who are called capitalists) who borrow money and pay interest; and if he is such an inhuman being, it matters little if he should be shamed by the devil's contrivance.—Such are the facts settled by the experience of all civilized society.

But, my dear sir, I can say, with sincerity, that I believe you had no intentions of interfering with the active enterprise of community, when you penned those articles.—Your laudable zeal for literary acquirements, and your great love of Agricultural Chemistry, has led you to see in vivid colors, the evils which exist in society; and that they originate in the unequal division of property, and to remedy them it is only necessary to instruct.

A LABORER.

Monroe County, January 14, 1847.

The Farmer.---His Position, Responsibilities, and Duties.

NUMBER SIX.

THERE are in the State of New York over 11,000 School Districts, giving a school house within sight of almost every farm in this wide domain. It is a sublime spectacle to behold a great State so dotted over with places for mental discipline; but let us extend the inquiry, who compose the trustees and officers of these school districts, who have control over them in ninety-nine cases out of a hundred? They are farmers; and it is no common responsibility—no ordinary privilege—which the agriculturists of the State have thus cast upon them. The education of the masses, the mental training of the millions is in their hands, and under their direction.—But let us now, for a moment, turn from the general to the specific, and see if we cannot find in these nurseries of learning a convenient and most potent agency for the elevation and improvement of agriculture. Who can estimate the influence of the 11,000 schools in the State of New York in disseminating agricultural information, and in fitting and preparing the sons of farmers to pursue intelligently and successfully, the noblest of all pursuits, viz: that of tilling the soil? And, I ask, may not this mighty power be used? May not Agricultural Chemistry be taught in our district schools? May not

the nature and properties of soils be learned in them? May not the nature and adaptation of soils, the objects, uses and influence of manures, be taught in them? May not the best and most approved methods of cultivation, of rotating crops, be matters of instruction in them? May not every school district in the State have all the apparatus necessary for analyzing the soil of every farm in such district, and that too, without taxation, by reserving for a year or two a portion of the library fund? All these interrogatories must, I think, be answered in the affirmative.—And few, I think, will deny their practicability. Who compose the great, the overwhelming mass of scholars in the district school? Who but the farmers sons? In the winter the large boys attend, and there it is that, in connection with other studies, they might pursue those above indicated; and having thus studied the principles during the winter, they are prepared, during the summer, to apply, by practical experiment, and every day farming operation, the knowledge thus acquired. I ask the farmers of the State to think of this matter—to apply their minds seriously to the subject. It does appear to me that no system could be better devised, or better fitted for its end, than our district school system, for the aim and design above indicated. How easy for the farmers to use the agency thus placed in their own hands, and under their own keeping, for the permanent elevation and advancement of their noble calling. We want more books than we have, and those we shall soon have, for the supply will be forthcoming if the demand exists; and when we have these, let the farmers in the different school districts see to it that the studies above alluded to be introduced into their schools, and that they form a part of the course, one of the permanent branches of education, in their schools. How easy and simple the work, the whole matter is in the hands of the farmers themselves, and they must accomplish it. No body else will look to it, for no one else is interested in its consummation. The men who till the soil, who labor with their hands, who earn their own and the bread of the world, must cast about and by their own efforts secure the desirable end. The work is not to be accomplished in a day, nor a year; it must be a slow and gradual work, requiring time, patience and perseverance. Let the farmers of the State fix their eye on the work, and march steadily, firmly on, and they will reach it.

I have observed in the papers some discussion in regard to a University for western New York, a thing in itself all right and proper; but I would say, and would urge as a high and solemn duty, that the farmers of the State secure first, and as of more consequence, than all things else in the way of schools, Agricultural Colleges and Universities, or two or more high schools for the State, where agriculture, theoretically and prac-

tically, shall be made the leading object of study—the primary design of the institution. Such schools the farmers need, as moral institutions, where teachers may be made, and prepared, and sent out over the State. I say, and so will the farmers of the State generally say, God speed all efforts for the education of the people. But I do insist that, as farmers looking towards the elevation of our own calling, the elevation of our own class, we should go on right, nor turn to the right hand nor the left, until we have secured educational advantages for our own business, and which shall of itself tend to lift up our occupation to its real dignity—its high and rightful position. Have not the farmers of New York been almost criminally negligent on this point? Have they *asked* for their rights in the matter?—and of course they have not obtained them unasked.

I here repeat, what I have before said, there is nothing in the pursuit of agriculture to restrain or prevent the development, in all their power, of the intellectual faculties—nothing to stint the mind, or repress its noble aspirations.

Let no farmer think so meanly of his pursuit, and above all let no father imbibe so false a notion, and as a consequence turn the child of his hope away, to waste his *energies and morals* behind a counter, or in a professional gentleman's office. I speak not this in disparagement of merchants, lawyers or doctors; but I speak what I believe, when I say that nine out of ten of farmers sons who are placed in stores and offices, either become enervated in mind and body, or else become dissolute, dissipated, and a source of grief to friends and parents. Better keep your bright and active boys on your farms—better inure them to labor—better educate them for farmers, mechanics and laboring men—than thus expose them to moral and physical wreck and ruin.

Education, as a means in the prosecution of agriculture—as the great lever to lift the calling up to its true and lofty position—should be rung in the ears of the farmers of the State. Knowledge is the corner stone upon which we must build men of accurate, scientific information, men of mental culture, and intellectual attainments. This is what the farmers of the State want, if they would *lift up and hold up* their calling to its legitimate and commanding position. Ignorance is incompatible with independence. The farmer must be a hewer of wood and a drawer of water, to other and vastly inferior classes, or else he must come up to an equality in scientific acquirements and mental power with them. Will any farmer deny that, as a profession, we want at the present time, science, with its light and improvements, in the culture of our farms, and in the production of our crops? We must and we may grasp these potent engines of power, and wield them with ir-

resistible force in the up building, and in the sure, steady and continued advance and prosperity of our own great calling. D. A. OGDEN.

Penn Yan, Jan., 1847.

Water for Stock in Winter.

It is important that domestic animals should have a constant supply of pure water in winter. Many cattle in our country do not have this privilege, and thereby are left to suffer for the want of it. In this section of country the land is seldom supplied with running brooks, and therefore cattle and sheep oftentimes have to do without it. Some farmers of my acquaintance are of the opinion that cattle will do well without water.— This I will admit; but how will they look when spring arrives? Great care and attention is required of the farmer, in the winter season, in taking care of his domestic animals. Cattle and sheep should have good shelters, and a plenty of good hay to eat and water to drink. Every farmer should have a well in his barn yard, or near by, that his cattle and sheep may drink any time they wish. Some farmers say that sheep will do better not to have water than to have free access to it. This does not look reasonable, nor do I believe any thing in it, because nature teaches us better than to believe in such absurd doctrines.

Many farmers in this section winter their stock exposed to the inclemencies of the weather, and will not believe that protection is of any use.— Those who practise this mode of wintering animals, are the very ones I have often tried in vain to get to subscribe for the *Genesee Farmer*. So long as such men will remain ignorant of the facts published in the *Farmer*, just so long they will follow in their predecessors foot-steps, and keep sheep and cattle exposed to our long and cold winters. If cattle do not have water their food cannot do them as much good. The greater part of the food that cattle and sheep eat in the winter is very dry, and of course must create a thirst for drink; and if that thirst cannot be quenched, they will grow poor, and by spring look as if they had been pretty poorly wintered. *Cayuga Co., Jan., 1847.* W. S. T.

If we would enjoy ourselves we must take the world as it is, mixed up with a thousand spots of sunshine—a cloud here and there—a bright sky—a storm to-day, calm to-morrow—the chill piercing winds of autumn and the bland, reviving air of summer.

No man, says an exchange, should be ashamed of the occupation which secures to him an honest livelihood.

In all your undertakings consider the end you have in view, and be sure it be really good, or at least innocent.

TAKE great care to fix right principles in your mind, and often review them.

Top Dressing Wheat.

It seems not very well settled, in how great a degree mineral manures are beneficial as a top dressing for wheat. The only ones within the farmers reach, being cheap and native materials, are *Lime, Plaster, Salt and Ashes*. In Lime I have very little faith, used in any way in western New York, or the western States, except in stiff, unctuous clays as an ameliorator and loosener; as yet our soils generally possess a redundancy for all the purposes of the production of grain. If we need any thing it is potash to form the silicates necessary to make a strong and vigorous straw, which with a proper quantity of decomposed vegetable matter (*humus*.) deep plowing and thorough pulverization, and perfect draining—which, by-the-by, is of primary and vital importance—we probably possess the best and most certain wheat region in the world, except perhaps England, where from the security it has against freezing out and the long period the season allows for stooing out and setting, they produce greater crops per acre than we can; but their harvests are so late and precarious, that if we took half their pains in preparing for a crop, our chances are decidedly preferable.

In all primitive regions lime is of the greatest importance. Granite and the felspar rocks produce the potash in abundance, which accounts why in the eastern States they get straw without the berry. I have no doubt but that with from 60 to 100 bushels of lime per acre and a proper quantity of vegetable matter, that wheat can be yet raised in any proper location in any of the New England States.

Plaster.—It is still a mooted point with many of our best wheat growers, whether gypsum is a direct benefit to the wheat plant: they all use it, but principally to force the growth of clover, which experience proves to be the most natural and legitimate manure for wheat. Those who recommend its use for the benefit of the wheat plant say it should be plowed or dragged in at the sowing.

Salt.—There is a good deal said about this article, without any well grounded experiments and results, and if of any lasting benefit, the rationale of its operations are not well understood. It is so readily soluble that any moderate rain carries it off in a moment, beyond the reach of the roots of the plants. It is a compound, being the *muriate of soda*, or speaking more modernly, the *chlorate of sodium*, and its acid clings with such tenacity to its base, that it is with the utmost difficulty that they can be parted; a red heat does not divorce the parties. Whether the vegetable economy possesses agencies or affinities to decompose this salt is not known.

Ashes.—This article probably contains more of the requirements of a top dressing mineral manure, than any of the foregoing; but princi-

pally the potash, the necessary solvent to form the silicates, and is not near as soluble as salt.—Its effete residuum possesses absorbing powers for the base of ammonia from the atmosphere—and experience proves its value on all crops and all soils. I consider it superior to plaster, bushel for bushel; the market price for ashes is only 6d, while we pay 12½ cents per bushel for plaster and tote it many miles. There is no family but what can make a waggon load or two if they would save them. Ashes are the secret of the productiveness of the Prairie soils of the west, which possess a fertility that we know nothing about in this country, producing wheat 10 years in succession, and then too much straw for the berry. The annual burning of the surface for unknown periods, clothed with a heavy and luxurious growth of vegetation, upon a calcareo-argillaceous soil, (lime and clay,) has created a soil of soluble silicates, carbon, (charcoal) phosphate of iron of wonderful productiveness.

I intend this spring, and I propose that so many others as may read this article, that shall think the "play worth the candles," shall try the following experiment:

In the month of May, at the first period of any drouth, when one would say, a little rain would do good; to select four pieces of land in a wheat field, under the same circumstances as to soil and other contingencies, say on a little height, sloping down to low land, and sow upon each separately, a good heavy dose of lime and plaster and a less portion of salt and ashes; lying side by side, if there was any difference, it could be readily seen, and if there was none palpable to sight and observation, why let it slide, the experiment is tried, and my speculations blown to the — never mind. Yours,

Stone Point, Jan., 1847.

B. MANLY.

Preserving Hams.

MR. EDITOR:—In the last number of your valuable paper I observe an article on preserving hams, the writer of which calls for a better mode, if others should have one. I think I have a better way, which I have practised a number of years with good success. The recipe is as follows:

Take two quarts of salt, four ounces of salt petre pulverized; mix them together. Lay your hams on a bench or table; wet them by dipping your hand in water and rubbing them all over; then rub on your preparation with the hand, and make all stick to them that is possible. Lay them away on a bench or table, and in about a week or ten days go through with the same process again. Then lay them away on your bench, and in four weeks they will be ready to smoke—or they will keep much longer with perfect safety if you are not ready to smoke them so soon.

A. W. TURNER.

Ontario, N. Y., Jan., 1847.

Poultry. --- Management, Profits, &c.

MR. EDITOR:—It gives me great pleasure to comply with your request to furnish you some facts relating to the management of fowls, verified by the experience of the past two years.—Following the example of some others I commenced on the first day of November, 1845, to keep an account of the expenses of my hen-house, and of the eggs and chickens taken therefrom: the result has been that, during the year ending the 1st of November last, thirty-two hens yielded a nett profit of thirty dollars and forty cents. As fowls are commonly kept I doubt not but that they are a source of expense instead of profit to the farmer, and are only tolerated because their food is stolen from the stack, or fed from the bin, and considered as costing nothing. In such cases the hens lay little, except in the spring, when eggs are plenty and cheap—while my hens last year laid the greatest number of eggs in February, when they sold readily at 19 cents a dozen. The greatest number laid in any one day during that month, by 32 hens, was 27, worth 42 cents; the average price of their food each day was 7 cents. The more eggs that can be obtained, at the time the price is the highest, the greater will be the profit. To do this requires a good house and proper feeding.—Herewith you will find a plan of a house, feeder, nests, &c.; and I shall be happy, at any time, to exhibit mine to any person who takes an interest in the subject.

A hen with the best care will not commence laying until she has entirely recovered from the effects of moulting, which is not often until February, while pullets begin when they are from seven to eight months old; consequently the earlier in the spring you can get chickens, the earlier next autumn you will have eggs. My brother's chickens hatched last February, made their nests in October, and his March pullets are now laying 2 or 3 dozen eggs each week. Mine were hatched later, and are now just commencing to lay.

Fowls should have proper food, and the house where they are kept should be warm, dry, clean, and light. Some have even kept their hen-houses warm by a stove, but it is sufficient if water do not freeze there the coldest nights. A light cellar makes a good place for fowls, provided it be dry; nothing sooner generates disease among them than dampness.

I keep always in my feeder wheat screenings bought at the mills, that being here the cheapest food, and have found that my fowls have at all times relished them. During the winter I sometimes give them boiled potatoes, mashed and fed warm, and with occasionally a cabbage or other green vegetable. When they cannot get plenty of worms, I have in their house a kettle of scraps, softened with hot water, of which each laying hen will eat about two ounces a day. Animal



Ostrich Fowls. (Fig. 10.)

food is absolutely necessary for the formation of eggs: some give oats fried in fat, but I have found these scraps much the cheapest and the least trouble. They can be procured of S. Moulson, on Front st. at 50 cents per hundred lbs. Fowls also need dry ashes and sand to roll in; gravel to aid digestion, and lime or some substance containing it to furnish the proper shell. Old mortar pounded is very good, but perhaps the best and most convenient is to give oyster or clam shells, burned and pounded.

Never kill the finest and fattest chickens, as is the common custom; never keep a hen after she begins to moult, unless she has some peculiarly good qualities.

VARIETIES.—I have tried and rejected the *Malays* and the *Javas*, and have now on hand the *Ostrich* and *Dorkings*.

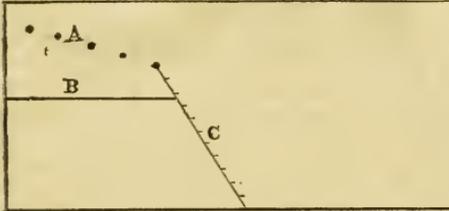
The *Malays*, at two or more years are the largest; but when young are too long legged, besides being very tender and hard to rear.—Their flesh is not first rate, and the hens are in different layers and bad setters.

The *Javas* are large, compact, and handsome; but they are exceedingly quarrelsome, and on that account not desirable. When a hen wants to sit, a confinement of two weeks is sometimes necessary to wean her from her nest; and if she is allowed to take her own course, she will generally break or spoil all the eggs in it.

The *Ostrich* (sometimes called *Bucks County*), are large, small boned, finely formed, black and white fowls—very hardy, even while young.—The cocks are peaceable; the hens are good layers and sitters, and excellent mothers. This is the capon fowl of Philadelphia, and when well fattened, often sell in that market at \$5 a pair. At the head of this page (Fig. 10.) is a drawing of them, copied from "Bement's American Poulterer's Companion." My best cock, 7 months old, weighs eight pounds; a pullet of same age five pounds; a hen, eighteen months old, six pounds.

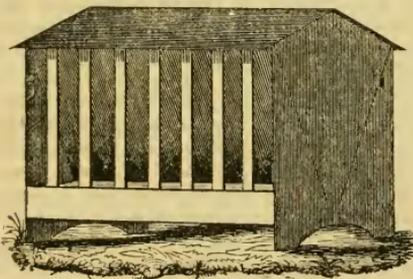
I have but recently procured any *Dorkings*, and of course have not given them a trial. They

are about the size and form of the last described, and have ordinarily five toes. Having been known in this county but few years, their reputation is chiefly imported. L. F. ALLEN, Esq., of Black Rock, who first introduced them, and who gave me mine, likes them better than any he has ever known. If they possess more good qualities than the *Ostrich* breed, they are a most valuable acquisition. Though they are now together, I have two houses and shall breed them separate.



(Fig. 11.) Section of a Hen-house.

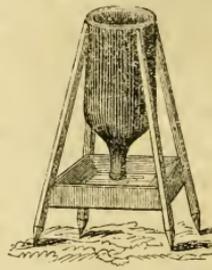
Figure 11 represents the section of a hen-house, the size to be proportionate to the number of fowls. The dots at A are roosts, rising a little toward the rear. B is a tight floor about two feet below; this catches all the droppings of the fowls, which are thus saved unmixed with seed. Hen manure saved in this manner is about as good as guano. The floor under B should be covered with hay or straw a few inches deep; the fowls like to stand upon and scratch among it. C is a ladder—a board with cleats by means of which the fowls can reach the roosts without flying.



(Fig. 12.) Feeder.

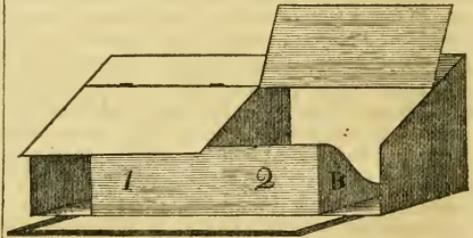
Figure 12 will convey some idea of a feeder, which is alike on both sides, or may be made in half by cutting from the ridge of the cover down, and closing up that side. The dotted lines at the end represent the position of the boards forming the hopper for the grain. The lower edges should be left about an inch apart, and the same distance from the bottom board, to allow the feed to fall down to replenish the stock below. The slats should be made of lath or thin boards, and set about two inches apart. The lower front board upon which they are nailed should be two or three inches wide to prevent the fowls spilling the grain. A large feeder costs but little more

than a small one, while it obviates the necessity of being frequently replenished.



(Fig. 13.) Fountain.

Figure 13 shows a fountain,—simple and easily constructed. An ordinary junk bottle forms a reservoir; the trough below contains very little water, yet is never overflowed. Pointed lath, nailed to the sides and stuck into the ground, keep the whole upright. Young chickens require near them a constant supply of clean water. If it is given to them in a dish, they will soon spoil it with dirt, and in cold days often injure themselves by getting wet in it. This plan obviates those troubles.



(Fig. 14.) Improved Nests.

Figure 14 gives a perspective view of improved nests, numbered for registering the day a hen commences to set. The front aperture should be about eight inches square, and the nests at least a foot square in the clear. They are nailed or hung up at the sides of the house, or in any barn or shed, and may be without any other back than that thus afforded. The board B should be at least 3 inches high in the narrowest part, to prevent the first chickens running out before all are hatched. A is a narrow strip of board, fastened to the nests by projecting pieces; without them the fowls would hardly find out what nice quarters were provided. Not more than two nests should be together. If placed in rows, with uniform openings, the hens trouble each other—and setting hens very often have their nests broken up by intruders, or by going to wrong boxes after feeding. A flour barrel sawed in two, with part of each head knocked out, and each half nailed to the wall by the bilge, makes two very good nests.

I have followed your wishes to condense as much as possible. No newspaper communication can contain all, or half the information on this subject that the man who wishes to make his fowls profitable will need; the personal inspection of a good "hennery" is necessary, and will save many useless and unprofitable experiments.

Yours, J. W. BISSELL.

Brighton, Dec. 15, 1846.

Annual Meeting of the N. Y. State Ag. Society.

We give below a synopsis of the proceedings at the Annual Meeting of the State Ag. Society, held at Albany on the 20th and 21st of January.

The committee appointed to report the names of officers of the Society, for the ensuing year, and to designate the place of holding the State Fair—reported through the chairman—

First, in favor of Saratoga Springs, as the place of holding the Annual Fair.

Secondly, in favor of the following as officers of the Society for the ensuing year :

GEORGE VAIL, of Rensselaer, *P* resident.

1st District, Wm. T. McKOWN,

2d do. JOHN A. KING,

3d do. C. N. BEMENT.

4th do. SAMUEL CHEEVER,

5th do. O. C. CHAMBERLAIN,

6th do. ELIC FROST,

7th do. HENRY S. RANDALL,

8th do. WILLIAM BUELL,

Vice Presidents.

B. P. Johnson, *Recording Secretary.*

Joel B. Nott, *Corresponding Secretary.*

J. McD. McIntyre, *Treasurer.*

Executive Committee.—Wm. A. Beach, Joshua T. Blanchard, Luther Bradish, G. V. Sackett, and Thos. J. Marvin. The report was accepted.

The following premiums were awarded by the several committees :

On Cheese Dairies and their management.—Newberry Bronson, Warsaw, Wyding county, first premium, \$50. Average produce of 400 lbs. to each cow, in dairy of 40 cows. Mr. and Mrs. Wm. Otley, Phelps, Ontario county, second premium, \$30. Average produce of 400 lbs. to a cow, in a dairy of 8 cows.

On Butter Dairies.—B. H. Hall, New Lebanon, Columbia co., first premium, \$25.

Indian Corn.—Charles W. Ellis, Kirkland, Oneida co., first premium, \$15. 123½ bushels per acre, and 56 lbs. to the bushel. Benjamin Enos, De Ruyter, Madison co., second premium, \$10. 111 52-56 bushels per acre. Robert Ellis, Westmoreland, Oneida co., vol. Trans. 103½ bushels per acre.

Peas.—Amos Miller, Vernon, Oneida co., second premium, \$10. 47 bush. per acre.

Farms.—Sets of Society's Transactions were awarded to James Callamar, New Scotland, Albany co., and to James Van Sicler, Jamaica, L. Island.

Prize Essays.—"Extirpation of Canada Thistles," Ambrose Stevens, New York, \$10. Lorenzo E. Todd, Lake Ridge, Rompkins co., set Transactions.

Experiments on Indian Corn.—J. F. Osborn, Port Byron, Cayuga co., \$20.

Root Crops—Carrots.—Wm. Wright, Vernon, Oneida co., first premium, \$10. 909 bush. on 127-100 acres, at an expense of \$25.77. Wm. Risley, Fredonia, Chautauque co., second premium, \$5 ; 1590 bush. on 1½ acres, at an expense of \$109.25.

Sugar Beets.—J. F. Osborn, Port Byron, Cayuga co., third premium, vol. Transactions. 774 bush. on 1 acre 15 rods.

Designs for Farm Dwellings.—Mr. J. M. Ellis, Onondaga Hill, Onondaga co.; \$15.

GRAIN CROPS—Barley.—Calvin Pomeroy, East Bloomfield, Ontario co., first premium, \$10. 48½ bush. per acre on the whole crop. Samuel H. Church, Vernon Centre, Oneida co., second premium, \$5. 44½ bush. per acre. E. C. Bliss, Westfield, Chautauque co., third premium, vol. Transactions.

Spring Wheat.—Robert Ellis, Westmoreland, Oneida co., second premium, \$10. 20 42-60 bush. per acre.

Oats.—Nathaniel S. Wright, Vernon Center, Oneida co., first premium, \$10. 75½ bush. per acre. Robert Ellis, Westmoreland, Oneida co., second premium, \$5. 77 bush. per acre, for 1 acre 37 rods.

Timothy Seed.—E. C. Bliss, Westfield, Chautauque co., first premium, \$10.

Culture Flax.—E. C. Bliss, Westfield, Chautauque co., first premium, \$—.

The Committee on Fruit made a report and recommended the following list of Apples as best adapted to home use and exportation :

Early.—Early Harvest, Early Bough, Strawberry, Williams' Favorite, Early Joe.

Autumn.—Fall Pippin, Golden Sweet, Gravenstein, Jersey Sweeting, Rambo, Detroit.

Winter.—Baldwin, Yellow Bell-flower, Hubbardston Nonsuch, Newtown Pippin, Northern Spy, Blue Pearmain, Rhode Island Greening, American Golden Russet, Roxbury Russet, Swaar, Ladies' Sweeting, Talmans Sweeting, Esopus Spitzenberg, Vandervere, Waxen Apple.

To Correspondents.

COMMUNICATIONS have been received, during the past month, from J. McVean, D. A. Ogden, A. Laborer, B. Manly, A. W. Turner, A. Woman, A. Blake, H., Another Farmer, E. R. Porter, Roswell Lockwood, E. S. Bartholomew, Joseph Wykoff, Wm. Durfee, Jesse Hendrick, C. W. M., F. C. Kanaga, W. S. T., Wm. Martin, J. O. W., L. Wetherell, L. Barker, J. L. Randall, A. H. Powers, ***,—and several others, (in letters containing remittances,) which will receive due attention.

ANSWERS TO INQUIRIES.—Owing to the absence of the Editor we are unable to answer several inquiries recently received. They will receive attention next month.

A. B., Westfield.—We have forwarded your letter, asking information relative to ribbon houses, to T. C. PETERS, Esq., of Darien. Mr. P. will oblige us by furnishing an article on the subject, for publication in the Farmer.

W. J. P., Elmwood, Ill.—We will answer your questions next month, or by letter previous to that time. Also the inquiry of F. C. K., *Urbana, O.*

☞ WE occasionally send specimen numbers of the Farmer to Post Masters and others who are not subscribers. Will those who thus receive it, introduce the paper to the notice of their friends and acquaintances, and obtain and forward subscriptions according to our club terms? We think it will compare favorably with other agricultural publications, especially when its SIZE and TERMS are taken into consideration. Those who like the manner and matter of the Farmer can essentially aid in sustaining it, by exercising a portion of their influence in its behalf—and we shall duly appreciate and acknowledge all such favors.

☞ WE shall endeavor to commence the publication of a list of acknowledgments in our next number, giving the names, &c., of those who have forwarded 13 subscribers or over. This will obviate the necessity of sending receipts, and at the same time exhibit a goodly list of the substantial friends of improvement. In the mean time we shall be happy to hear again, and often, from those engaged in promoting the usefulness of the Farmer by extending its circulation.

AN AFGHAN ORCHARD.—The following description, which we take from an exchange, will serve to illustrate the natural richness of a portion of the Afghan country:—

"Fine standards, of the size of forest trees—apples, pears, apricots, were surmounted and overhung with gigantic vines, festooned from tree to tree in a wild luxuriance of growth, such as I had never dreamed of seeing in fruit trees and the vine. It was the first month in spring, and they were covered with blossoms which perfumed the air and presented an appearance of horticultural beauty surpassing description.

WINTER GARDENS.—We notice that one person in the city, who in the summer has a small, neat garden, has introduced into it various pine, fir, hemlock, and cedar trees and shrubs, and thus put it in winter dress. The effect of the evergreen shrubs about his dwelling and along his flower borders and skirting his enclosures is exceedingly pleasant, while the expense is very trifling. Fifty cents or a dollar in money, and a few hours time are all which need be required to put most of our city enclosures into an attractive winter dress, and giving them an appearance of taste and comfort.—*Bangor Wag.*

The Farmer's Interests and Rights.

MR. EDITOR:—It is not often that I take the liberty of troubling the conductor of a public press. This you will probably discover from the style of this communication. Yours is a paper through which farmers ought to be allowed to express their sentiments on subjects which affect their own interest; and, as they are the foundation of all prosperity, I may add the interests of all classes of community. Oppress the tiller of the soil, and you sap the foundation of our national prosperity, and shorten the duration of our free institutions. Let the laboring man occupy the place in community which he deserves, and we are in a measure safe in the enjoyment of our privileges. I have often wondered why it was, that in the estimation of society, the primitive calling of man, had come to be the lowest calling. Why it was that a calling, which first received the sanction of Infinite Wisdom, as one fit to engage the time and attention of man, should become menial to so many other artificial employments brought into existence by vice, folly and inhumanity. The order of nature seems to have been reversed, and the great *first* has become the insignificant *last*. By this, I only mean that the lawyer, the doctor, the merchant and the man who struts about with "bullet buttons" on his coat, and "curled wire on his shoulder," look upon the farmer very much as the farmer looks upon his manure, a thing inseparable from his prosperity yet all the better for being trodden under foot. Is not this so in relation to these professional gentlemen?

One answers, no. I grant that there may be some honorable exceptions, yet they are by far too few. Where we find one professional man, or one in pursuit of a profession, who when he meets a farmer in the street, greets him as a being not his inferior in all that constitutes the noblest work of God, we see an hundred who with "soap-locks," delicate fingers, averted eye, and a gentleman's gait, pass by the man of the sun-burned brow, and hard hand as a being unworthy of their notice. And only when sordid interest dictates will they deign to open their delicate lips in conference with him. Perhaps they ought not to be blamed, for it is certainly owing to a weakness in the "upper regions," nor do I hold the farmer entirely blameless. It is certainly folly on his part to allow such a state of things to exist. Why do they allow themselves to be trodden upon one moment and flattered into friendship the next? Why allow professional men to do the work which belongs to themselves? I apprehend it is the want of confidence, a diffidence in assuming responsibilities which require a little mental application, and an unwarrantable modesty in accepting stations that would bring them prominently before the people. These situations are generally

courted by those who live by the tongue and the quill, but who never add one iota to the wealth of the people. And we, "good easy souls," are willing to lift them from their obscurity, and carry them on our backs to a pinnacle where we can but see them every time we lift our eyes from the work that employs our hands. And they, with no just sense of the responsibility that rests upon them, act with an eye single to their own aggrandizement.

Now I hold this to be wrong; men ought to be more jealous of their rights, and have more respect for themselves. Men who are the most independent of any on the globe, whose powers and privileges are unequalled by any set of men in any country, who are continually conversant with the works of God, in forms beautiful and sublime, ought to know their duty better, and knowing, ought to do it. I think there is a want of associate feeling among farmers, altogether incompatible with their true interests. A man living isolated and alone, can never know the feelings and wishes of his neighbor. Men in every other occupation in life associate together, and by mutual council and information, advance immeasurably their own interests. Now, if farmers would associate together more, impart to each other advice and information, with more freedom, store their minds with knowledge appropriate to their occupation, have confidence in and support each other, they might take a position far in advance of what they now occupy.

I am far from thinking that the information of the farmer should be confined strictly to a knowledge of farm operations. No, it should extend to every thing that interests an American citizen, and ever be ready to scrutinize the acts of his Legislative servants with an enlightened mind, a mind stored by reflection and reading, with practical wisdom, and common sense. If farmers would oftener see themselves represented in our halls of legislation, I have no doubt that their interests would be an hundred fold better attended to than they are at present, and the burdens they are now compelled to bear, materially lessened.

In conclusion, I wish to say, that every farmer will find himself the gainer by subscribing for an agricultural paper, and the Genesee Farmer is certainly not the least deserving of them all. You may put this communication on the table, or under the table, or in the Genesee Farmer, as you please.

ANOTHER FARMER.

Batavia, January, 1847.

CUTTING GLASS.—A great secret has been made of a discovery for cutting and boring glass—which is nothing more or less than using a common drill with spirits of turpentine. The bottom of a tumbler may be readily bored through by hand with a common saw file ground to a bevil. *

Breeds of Improved Cattle.

MR. EDITOR:—In a paper generally so accurate as the *Genesee Farmer*, when errors or misstatements do occur, you will, I presume, have no objection to set your readers right in relation thereto. For this purpose, I notice your article in the December number, (last issued) at page 281. Under the title, "Cattle," you remark:—"Bakewell, the celebrated English breeder of fine Cattle, so improved the New Leicester stock, (the old long-horned Durham,) from an inferior race to one that took precedence of all others at the time of his death, in the year 1795. The race degenerated in the hands of his successors. Figure 1 represents a new Leicester Ox." Now, with your leave—as I consider all erroneous statements of whatever kind exceedingly mischievous in their effects—let me remark: that Bakewell took the long-horns,—there is no such breed of cattle as the long-horned Durhams—(which he afterwards named the "new Leicester,") from the elder breeders, (Sir Thomas Gresley, Welby, of Linton, and Mr. Webster, of Caxley,) of that stock, who had them in great perfection, (not an inferior race,) many years before he (Bakewell,) commenced breeding. He was certainly very successful in keeping up their quality and reputation, and made much money from the sales of his cattle. They have not "depreciated," although in the hands of his "successors;" and there are as good long-horns now in England—if we are to believe the accounts of eye-witnesses—as Bakewell ever bred. Neither is figure 1 a portrait of a new Leicester ox. It is an attempt at a portrait of "the Durham ox," a thorough bred short-horn, bred in 1796 by Charles Colling.

Again you remark: "Mr. Charles Collins imported cows from Holstein or Holland, and by crosses and skilful management got up the Holdernes breed, one of which, his bull, "Comet," sold for 1000 guineas at auction, in 1810.—Closely connected with this breed are the "short-horned Durhams." Now, permit me to correct this: Charles Colling—not Collins—who was a celebrated breeder of short-horns, or Durhams—although they are no more Durhams, than Northumberland, or Yorkshires—never imported cows or bulls from Holstein or Holland; nor never, "by crosses and skilful management," or in any other way, "got up the Holdernes breed" of cattle; nor was "his bull Comet," for which he certainly *did* get 1000 guineas, of the Holdernes or Holstein breed at all, but a pure short-horn, or Teeswater. Neither are the short-horns connected closely with the Holdernes breed of cattle; but are of themselves a distinct breed, or variety, as well known and understood in England, and by their breeders in this country, as any other kind of animals whatever.

As to their "popularity" and "superiority" for "dairy," or any other purposes, that is a matter of individual opinion, which those who breed and prefer them to all others will adjust to their own satisfaction. All they ask is, that their cattle be not misrepresented in the public prints by those not understanding the subject. And I am a little more surprised at this article, as you have the American Herd Book at hand, which does give the *true* history of the short-horns, or "Durhams," with which every one who pretends to write about them, should be well acquainted.

Excuse this freedom. It is only to correct an error, that I ask you to insert this in your paper.

Very truly yours,

LEWIS F. ALLEN.

Black Rock, Dec., 1846.

REMARKS.—The article alluded to by Mr. ALLEN, was published in the absence of the Editor of the *Farmer*, and without his knowledge. If the reader will refer to "Gardner's *Farmer's Dictionary*," and read from page 135 to 140, he will find that the principal statements in our article were founded upon good authority. M.

RED ANTS.—A correspondent of the *Albany Cultivator* gives the following remedy for preventing the ravages of red ants, which are troublesome insects when domesticated:

"He made a thick mark with chalk about an inch wide around the article or vessel to be protected from the ants, at any convenient distance from the bottom of the vessel, and he found that they would not attempt to pass over it. I watched their motions for some time. They crawled as busily as ever up as far as the chalk, where they seemed to get very much excited, but not one of them attempted to pass over.

TO MAKE RED INK.—Take 2 oz. of the best of Brazil wood, half an ounce of alum, and half an ounce of crystals of tartar, and boil with 16 oz. of rain water down to half its bulk, add half an ounce of gum Arabic, after it is strained. To this add also one half ounce of cochineal, made into a tincture with 1½ oz. of alcohol.

HOW TO KEEP SMOKED HAMS.—The best method of keeping hams is, after they are smoked, to put them back into the pickle, and the smoky taste is preserved as perfectly as when put in ashes or kept in a dry place.

IN Vermont they are making furniture and flooring of a beautiful variety of green and red slate, lately discovered. It takes a beautiful polish, and splits into any sized slab required.

THE HOG CROP of the United States, this year, is three times the worth of the cotton crop.—The "standing army" of swine consumes annually two hundred millions of bushels of corn.



HORTICULTURAL DEPARTMENT.

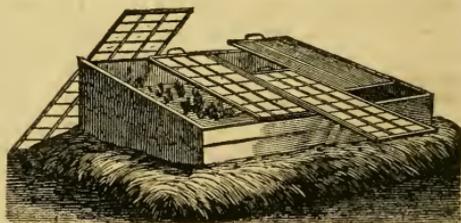
CONDUCTED BY P. BARRY.

Construction and Management of Hot-beds.

THE prevalent opinion amongst farmers respecting *hot-beds*, is, that they are expensive articles, requiring the skill of professed gardeners to manage them, and almost entirely outside the range of farming economy. Both suppositions are decidedly erroneous, and we hope that every one who reads this will arrive at such a conclusion. We do not propose that every farmer should go into the regular routine of forcing vegetables, at extraordinary seasons; but that every one, however humble his circumstances may be, should, at least, have one hot-bed to forward such plants as he may want to cultivate in his garden, and which he has either to purchase from gardeners—and then get poor, weak, badly grown things—or else wait for the regular process of open garden culture, which, in our climate, under the most favorable circumstances, will not allow him the taste of a vegetable until the summer is half gone. We are surprised to see farmers come to the city and purchase a dozen of poor, weak withered cabbage, tomato, or celery plants, when they might have raised an abundance at home, far superior, and in better season.

The value of culinary vegetables, as we have often said, is not at all appreciated by those who, of all others, ought to appreciate it—the professed cultivators of the soil. No effort, worth speaking of, is bestowed upon them, as a general thing. We have seen what is called the gardens of some of the best field farmers in this county, produce little else but *weeds*, at a season when it should have been teeming with all the variety of healthy, nutritious vegetables. Let us urge upon them, for their own sakes, and for the credit of our agriculture generally, the importance of a reform in this regard. In the midst of the improvements of the day, the vegetable garden, that may contribute so largely to the health and comfort of every family, should surely not be neglected. Let it participate, largely and fully, in the improvement, and it will yield ample compensation. This is the season to make preparations while there is leisure.

A simple hot-bed for forwarding plants, such as cabbage, tomato, celery, brocoli, cauliflower, egg plant, pepper, melons, cucumbers, &c., may be constructed by any man having but ordinary ingenuity. The size may be adapted to circumstances. For raising such plants as we have mentioned, a frame of about 12 feet long and 6 wide, which will allow of 3 sashes, each 3 feet wide, will be found large enough for any family. It should be made of common two inch plank—the back about three feet high, the front about half that, the ends having a regular slope from back to front. This will give an angle sufficient to throw off rain, and give the full benefit of eternal heat and light to the plants within. If the beds are narrow the front must be higher in proportion. The sides and ends are simply nailed to a strong post, four inches square, or more, placed in each corner. For the sashes to rest and slide upon, a strip 6 inches wide is placed across the frame, the ends morticed or sunk in the sides of the frame, so as not to cause a projection. The sashes are made in the ordinary way, but without cross bars; and in glazing, the lights are made to overlap an eighth or quarter of an inch, to exclude the rain. Such a frame, costing a mere trifle beyond the labor, will last for years. Where so large a frame, as the dimensions here given, may not be wanted, an old window may be used for sash, and all expense of glazing be avoided. The annexed figure will convey an idea to those unacquainted with it. One of the sashes is moved down as in admitting air, and the other laid off entirely.



Hot beds should occupy a dry situation, where they will not be affected by the lodgment of water during rains or thaws. They should be exposed to the east and south, and protected by fences or buildings from the north and northwest.

Where it is intended to merely grow plants for transplanting to the garden, they may be sunk in the ground to the depth of 18 inches, and will in such a case require not more than 2 feet deep of manure; but when forcing and perfecting vegetables, a permanent heat must be kept up, and the bed must be made on the surface, so that fresh and warm manure may be added when necessary. A depth of three to four feet of manure will in such cases be wanted. Manure for hot beds should go through a regular process of preparation. It should be fresh stable manure, placed in a heap, and turned and mixed several

times, promoting a regular fermentation; thus it is made to retain its heat a long time, otherwise would burn and dry up, and become useless.

Those who wish to force cucumbers, radishes, salad, &c., should begin, if the weather be favorable, about the latter end of February. For raising plants it is time enough to begin in March. In forcing cucumbers, Bridgeman says:

"The substance of dung from the bottom of the bed should be from three to four feet, according to the season of planting, and the mould should be laid on as soon as the bed is settled, and has a lively, regular-tempered heat. Lay the earth evenly over the dung, about six inches deep; after it has lain a few days examine it, and if no traces of a burning effect are discovered, by the mould turning of a whitish color and caking, it will be fit to receive the plants; but if the earth appears burned, or has a rank smell, some fresh sweet mould should be provided for the hills, and placed in the frame to get warm; at the same time vacancies should be made to give vent to the steam, by running down stakes

After the situation of the bed has been ascertained, and the heat regulated, the hole should be closed, and the earth formed into hills; raise one hill in the centre under each sash, so that the earth is brought to within nine inches of the glass; in these hills plant three seedlings, or turn out such as may be in pots, with the balls of earth about their roots, and thus insert one patch of three plants in the middle of each hill. The plants should be immediately watered with water heated to the temperature of the bed, and kept shaded till they have taken root.

The temperature should be kept up to 60°, and may rise to 80° without injury, provided the rank steam be allowed to pass off; therefore, as the heat begins to decline, timely linings of well prepared dung must be applied all round the frame. Begin by lining the back part first; cut away the old dung perpendicularly to the frame, and form a bank two feet broad, to the height of a foot, against the back of the frames; as it sinks, add more; renew the linings round the remainder of the bed as it becomes necessary, and be careful to let off the steam, and give air to the plants at all opportunities.

Give necessary waterings, mostly in the morning of a mild day, in early forcing; and in the afternoon, in the advanced season of hot sunny weather. Some use water impregnated with sheep or pigeon dung. As the roots begin to spread, and the vines to run, the hills should be enlarged by gathering up the earth around them, for which purpose a supply of good mould should be kept ready at hand, to be used as required.

When the plants have made one or two joints, stop them, by pinching off the tops, after which they generally put forth two shoots, each of which let run till they have made one or two clear joints, and then stop them also; and afterward continue throughout the season to stop at every joint; this will strengthen the plants, and promote their perfecting the fruit early."

Radishes, Lettuce, &c., may be forced in beds similar to that described for cucumbers, and the earth in the dung bed should be a foot deep.—They do not require so much heat. The plants require to be well thinned out, air to be regularly admitted, and water gently and regularly supplied. In admitting air to hot beds, a mat should be thrown over the opening to prevent the plants from being chilled.

Earth for hot bed plants should, in all cases, be good rich friable loam, mixed with a third of well rotted manure, and some coarse sand to make it porous. We will add some further remarks in our next, and hope that the brief and necessarily imperfect hints here given will stimulate some, at least, to action. We have had several inquiries as to what work is best calculated to aid beginners in the general operations of

gardening. We may say here that, on the whole, Bridgeman's "Young Gardener's Assistant" is the best we know of. The latest edition, 1845, is quite complete, and may be had at the seed-stores or bookstores. Price \$1.50.

Northern Spy Apple.

WE publish the following, with pleasure, from Mr. WATTS, who is one of the most tasteful amateurs in our city. He has a fine garden, well filled with fruits and flowers; and amid all the cares of an active business life, finds it a source of much pleasure. Long may he live to enjoy it. The fruit growing world are indebted to him for his earnest efforts in bringing to notice and disseminating fine fruits.

MR. BARRY:—In the February number of the Farmer, 1845, you gave the public an interesting account of the "Spy" Apple. As that paper may not be seen by all who wish to cultivate the fruit and have it, I wish you to join me in noticing the apple and tree again. I have what follows from Mr. O. C. CHAPIN, of East Bloomfield, N. Y., who kindly furnished the particulars.

He says that the seeds were brought from Connecticut, in the year 1800, and planted by a Mr. Elisha Taylor. (It would be interesting to know if an apple bearing a resemblance to it is now known in Connecticut.) The original tree was set in an orchard by Mr. HEMAN CHAPIN, and some sprouts from it were transplanted by a Mr. ROSWELL HUMPHREY, and by him the first fruit was raised, as the original tree, from some cause, died. East Bloomfield has, then, the honor of producing the first fruit in this region. It would be gratifying could we know why Mr. HUMPHREY or Mr. CHAPIN gave it the name Northern Spy. (I hope Mr. CHAPIN, when he sees this, will try to learn the reason.)

In your article you mention the tree as being thrifty, rapid, and upright. Mr. CHAPIN confirms it, and says, "it bears well every season, and that a portion of the apples are as good as any they have there, and under favorable circumstances the apples will keep until June." What a valuable property this is; and to be so fresh at that season.

He adds, "There is but one objection to it. A large proportion of the fruit is small and scrubby, and of little value." This we are sorry to learn; nevertheless what good fruit there is, is superior in size, beauty, flavor, and general appearance, and will keep. Many inquiries have been made about it, and the numerous calls I have had to purchase and see samples of it, show what an interest is taken in it. I trust that if the trees bear but few, that more, on that account, will be planted, to make up, in that way, for its scarcity, as well as by grafting.

I am, very truly, yours,

JAMES H. WATTS.

Rochester, Jan. 25, 1847.

N. B. In the debates at Albany, at the meeting of the State Society, I see most honorable mention is made of the "Spy." The pleasure I have had the past season in distributing them (some 65 barrels, sent all over the country,) is much added to by finding them so well appreciated.

Yours,

J. H. W.

To Correspondents.

E. R. Porter, Plattsburg.—We are much obliged for your communication on "Transplanting Evergreens." It will appear next month—it will then be just in season. We will be glad to hear from you in future.

Laying out grounds.—Several inquiries on this subject are on hand—they will be attended to in season. We have in preparation a design for a country dwelling, and will accompany that with some hints on this subject.

NEVER engage in more business than what you are morally certain you can execute with pleasure and punctuality.

ADDRESS BEFORE THE AURORA HORTICULTURAL SOCIETY, September 1, 1846: By DAVID THOMAS, President.

We give a hearty welcome to the Annual Message of this excellent and flourishing Society, and congratulate the people of Aurora and that section of country on the success which has so far rewarded their enlightened and public spirited efforts. May it be no less, but much greater in future.

The address of its President, before us, is brief and confined wholly to the subject of *Fruit*; but like all of Mr. THOMAS' productions, it is every word to the point. His intimate knowledge of the condition of Fruit Culture in this country, and of the difficulties that lie in the way of collecting and cultivating choice varieties, enables him to treat on these points in such a manner as cannot fail to interest and instruct those who can be interested on such subjects.—Let us quote a few paragraphs:

How many of the inhabitants of this blessed land of ours—under such glorious skies—raise any thing of the kind better than the old pie cherry, or the sour morello?—than the horse plum or the little damson? How many feast, during the proper season, on apricots, the better class of peaches, and on the seckel and virgalieu pears? There is not one in a hundred—probably not one in a thousand—who has a full supply of the finer fruits.

In bringing about a better state of things, however, there are many difficulties to encounter. Trees cannot be had without some exertion: we may be cheated with spurious kinds, or they may die in transplanting; they may be infected by disease, or infested by insects: the fruit when young may be destroyed by frost, or when ripe, by plunderers; and under a view of all these discouragements, would it not be better and cheaper to buy our fruit? Here let us pause a moment, and ask, Of whom could we buy? If all the fruit of the country was divided amongst us, we should have so little, and that little so dear, (apricots three cents a piece at Rochester,) that we should only be tantalized, and never satisfied. No—to have plenty, we must raise it ourselves.

The first step, then, is to select the best kinds; and on this point we cannot be too careful. Differences of climate, even on some hardy sorts, is very great; and three degrees of latitude may produce more than three degrees of flavor; so that the *excellent* somewhere else, may not be *excellent* here. As an instance: the Bezy de la Motte pear is very fine at Philadelphia, while with us, it is unsuited to human lips in four seasons out of five. Let me give another instance: From nearly twenty kinds of peaches—fine on the sands of New Jersey, whence I procured them—I shall not have more than three or four well suited to this district. But what a loss we sustain in trying such experiments! It is far better to get such *sorts* of high character as have been fully proved to be adapted to this particular climate, though the trees may be obtained from the south, east, or west.

Once travelled on a steamboat with a gentleman from another state; and in the course of conversation, he said, "You can't raise as good peaches in New York as we do in the south." What is the proof? "I never met with any as good." Where were they obtained? "In the market." Why, that is not the place to find the best peaches. They are gathered while they are hard enough to bear transportation; but stone fruit improves by hanging on the tree—the longer the better. I might have added another reason; Market men want the most showy or productive kinds; and fine flavor is only a secondary object. Many sorts of peaches, indeed, do better in the south, for this fruit never attains its highest flavor in cool weather; but I am satisfied that we—north of the Alleghany—have varieties equal to their best. To have the best in the best condition, however, we must raise it ourselves.

It is not desirable to have many varieties in a fruit garden, but we want the *very best*: and we want them to ripen in succession. People often inquire for the earliest

fruit,—that is right; but I should like to have some when the earliest were gone.

Flavor, productiveness, and size, are three points of the greatest importance in the character of fruit. At the head stands *flavor*,—for without it fruit is worthless. Next stands *productiveness*,—for if the tree is a poor bearer, it is of little value. *Size* is the third in importance; and still lower down in the scale is *beauty*, including *shape and color*. Many cultivators, however, reverse this order, recommending large and showy sorts, chiefly because they are large and showy. The Monthly Reviewer once wittily said, "I prefer a peach to a pumpkin;" and I conclude that a similar preference has prevailed when I see small varieties cultivated. This is finely illustrated by the Seckel pear—small, but very superior.

The closing paragraph of the address, though a perfect truism, cannot be too strongly or too frequently urged on all engaged in growing fruit. We know many, very many, who will take a world of pains to procure new and rare sorts, and when they have got them, *starve them to death*. Mr. THOMAS says:

I wish to make one more remark. Though we have the finest varieties, the finest soil, and the finest seasons, yet we cannot have the finest fruit, unless the ground be well cultivated,—ready to catch and detain every shower, or to attract moisture from the air in time of drought. Generally, the largest specimens of any one variety, are the highest flavored; and some sorts are worthless unless they are well grown. This is particularly so with some kinds of pears. We should therefore remember that the better the culture the greener the leaves; and the greener and healthier the leaves the richer the juices, swelling into richer and finer fruit. To dig a wide circle round the tree, will do much good; but the whole soil, as in a potatoe patch, ought to be reduced to a fine tilth.

Entomology.

We have been favored with a very interesting letter touching upon various odds and ends of fruits and fruit culture, from our friend A. HUDEKOPER, Esq., of Meadville, Pa., an amateur Horticulturist of the right spirit. We take the liberty of extracting from it the following remarks and queries in relation to Entomology, as likely to draw some attention to a subject of vital import to Horticulture:

I observe DOWNING, in his work on Fruit Trees, page 66, speaks of the woolly aphid, or American blight, as a dreadful disease of the apple abroad. The woolly aphid has been very common in our country, for many years, and large tufts or branches of it may be seen in the forest at any time, in the fall on the limbs of the alder and beach trees—but I have not noticed it upon the apple trees until within two years past—though it might have existed and not been observed. I have observed more little tufts of this insect in the crevices of the apple trees this year than there were last; but as the insect does not attain its winged state, or show any signs of locomotion until about November, when the frosts chill it, I have not observed any evil consequences from its existence. Have you any trouble from it with you?

The apple borer, which has been so destructive of fruit for some years past, first made its appearance in any great numbers in this country in 1839, until then we were nearly free from it. This year it has been *less* troublesome than usual, and the Hornet and Yellow Jacket much *more* so.

We will defer any remarks of our own, at present, as we have been given to understand, that the Committee of the Horticultural Society here, who has had the subject under investigation during the past year, intend soon to present a full report. We are glad our Society has taken this matter in hand, and we trust it will

prosecute its researches with such vigor and efficiency, from year to year, as will contribute greatly to the progress of the science and the interests of the community. Our correspondents and friends in all parts of the country will oblige us much by communicating such facts as may come under their observation. It is the duty, as well as the interest of all engaged in the culture of the garden or the field, to be *observing*—minutely and continually so in regard to this matter.

Grafting the Pear on the Thorn.

Mr. BARRY:—Will you please to state your experience or what you know about grafting Pears on the Red or White Thorn?—and oblige a subscriber.

Smithville, N. Y.

N. O. BOSWORTH.

We have very little experience as to growing the pear on the *thorn*. We know that it is practised to a limited extent for dwarfing the pear. We have a few trees thus grafted on our own place, but they do not flourish at all like those grown on the quince. Mr. DOWNING says, in his "*Fruit Trees*":

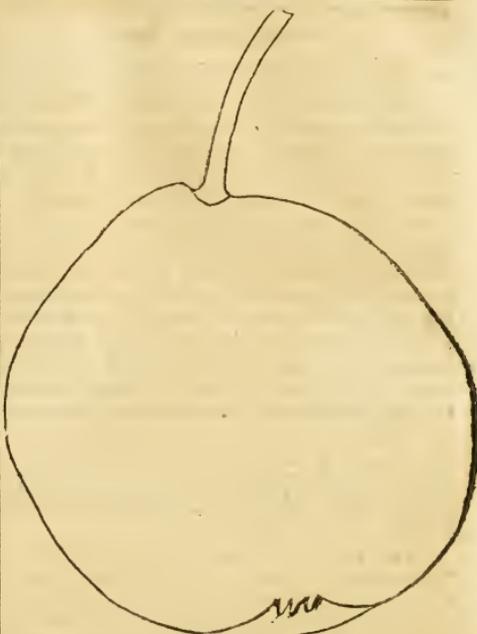
"The *thorn* makes very good stock for the pear, except, that if grafted above ground, the tree is often apt to be broken off, at the point of union, by high winds. This is obviated by grafting a little below the surface. Grafting in the *thorn* is a very useful practice for strong clayey soils, as, on such stocks the pear may be grown with success, when it could not otherwise thrive."

The remark, respecting the liability of the graft to be blown off the *thorn* stock, applies to the quince to a certain degree, and to all cases of grafting or budding on a slower growing stock, for dwarfing; it should be done low, at, or below, the surface of the ground. It might be inferred from the extract we have quoted from Mr. DOWNING that the pear cannot be successfully grown, on its own stock, or "in strong clayey soil." This is not so, as far as our experience and observation goes. Such soils, *if free from standing moisture, and if kept well cultivated*, will produce pears in great perfection. Some varieties, we know, require a lighter and warmer soil.

We would recommend to all cultivators of the pear, to use the pear stock where standards for orchard culture are desired; for dwarfing, garden culture, and early bearing, the *quince*.—Where the latter cannot be had, the *thorn* or mountain ash may be used as substitutes; but they cannot be recommended as stocks to be used in a general way.

Beurre d'Amalis Pear.

We consider this fruit scarcely surpassed by any of the great number of fine varieties recently introduced. This seems to be the opinion of all who have tested it in this country. It is figured and described in Hovey's Magazine, Vol. IX, page 369. He says, "Among the new Belgian Pears, few are superior to the *Beurre d'Amalis*; of large size, good form and rich flavor,



Beurre d'Amalis Pear.

it is scarcely excelled by any of the varieties which ripen at the same season."

The late Mr. MANNING says, in page 89, Vol. VI, of Hovey's Magazine, (which was the first notice as it in this country,)—"The scions of this new Pear were received from the London Horticultural Society. It is a first rate fruit, ripening in Sept. and Oct."

It is figured and described in Ive's edition of the "New England Fruit Book." We think the figure is too large and too long to convey a correct idea of its average general appearance. It is there said to be of "large size, flesh melting and juicy; flavor sweet and excellent; tree vigorous."

Thus we see that all agree on its excellence. We imported our specimen tree from France, in 1844, and the past season it bore an immense crop; indeed they required thinning, and the tree had to be supported. Every specimen ripened perfectly on the tree, and we thought, and so did our friends who ate of them, that they were not easily surpassed.

We subjoin Mr. DOWNING's description which we find corresponds minutely with our own observations:

"A Belgian pear, of excellent quality, nearly first rate. Very productive. Fruit large, obovate, not very regular, a little swollen on its sides. Skin rather thick, dull yellowish green, with a pale reddish brown cheek, overspread with numerous brown dots and russet streaks and patches.—Stalk a little more than an inch long, set rather obliquely in a shallow, irregular cavity. Calyx open, with broad divisions; basin shallow. Flesh yellowish, somewhat coarse, but buttery, melting, abundant, rich, with slightly perfumed juice. September."

Swan's Orange Pear.

Swan's Orange, (Ellwanger & Barry's Catalogue.)
Onondaga Seedling, (of some.)
Onondaga, (Horticulturist, and some Catalogues.)

OUR readers will excuse us for introducing this pear again to their notice. We wish to give them all the information respecting it that has been obtained, opinions of other journals, &c.

The last number of the Horticulturist contains a figure, description and history of this fine fruit, all of which we gave a year ago in this journal, with some additional information respecting it in our December number. In our notice, (January, 1846,) we stated that "its large size, productiveness, beauty, unsurpassed richness of flavor, and delicacy of texture, rank it among the very best autumn pears we have ever seen."

MR. DOWNING says:

"It is a fruit of the first class unknown, to our cultivators, and we have very little doubt, from what we have ourselves seen of *Van Mons Leon le Clerc*, a very celebrated recent variety, about the same size and season, that the *Onondaga* will prove superior to it."

This is no small recommendation for the "*Onondaga*," surely, as *Van Mons Leon le Clerc* has been generally considered the best of all pears. We expect to have it bear next season, and if it equals our *Swan's Orange* or *Onondaga*, we will be well pleased—better we can hardly expect.

We must be pardoned for claiming a little credit from the pear growing world, for ourselves and others in Rochester, for the public notice and general dissemination of this variety during the past two or three years. Many years ago an attempt was made to sustain a Horticultural Society in Rochester. Capt. L. B. SWAN was one of its projectors and supporters. He brought this fruit from his father, in *Onondaga*, without name, and the Horticultural Society called it "*Swan's Orange*," to distinguish it. Mr. H. N. LANGWORTHY got some scions from Mr. SWAN, and some three or four years ago his tree began to bear. As soon as we saw it, we began to cultivate it; and since then we have grown and sold several hundred trees, (perhaps 1000,) scattered all over the country—and we have it now bearing in our own specimen grounds.—Here around Rochester, we feel indebted to Capt. SWAN.

DOWNING says: "Neither *Swan's Orange*, nor *Onondaga Seedling*, local names, by which this fruit is somewhat known in western New-York, can, with any propriety, be retained as the name of this variety," and suggests that it be called simply "*Onondaga*." We have no objections. We like the name very well; but we cannot see that it has any more meaning or appropriateness than "*Swan's Orange*." In this matter of nomenclature uniformity is of all things most desirable; a change of name should be studiously avoided except where an error is to be corrected, or an act of plain justice to be

done. Neither object was to be attained here.—Several hundred cultivators have procured this variety, and now cultivate it under this name; and it is not known to a dozen cultivators by any other. Any other fruit might be re-named in the same way, and for similar futile reasons. We ought to have kept the popular name till we had traced out, if possible, the original.

We find another instance of this throwing away a popular name and adopting a new in the case of the *Oswego Beurre*. This pear was originated by Mr. WALTER REED, and called there, and known, where known at all, as *Reed's Seedling*, a most appropriate name surely. We repeat that this changing of names is the very way to perpetuate and multiply the errors and difficulties in which American Pomology is so deeply involved. It seems that every man who finds a fruit he does not happen to be acquainted with, wants to give it a name of his own. The Horticulturist should discountenance this.

Peaches.

WE cannot forbear to call attention to the subject of an increased effort on the part of our horticultural friends, to produce new varieties of this delicious fruit.

Our friend Dixie of Worcester, Mass., from a few stones taken from a basket of White Flesh Peaches from this market, six years since, has thirteen trees, each of which produce different varieties of fruit, and none like those from which the seed was selected. Many of those raised by him this fall measured ten inches in circumference, and a few measured thirteen inches. The largest fruit, which is very early, he has named *Eureka*. He has also *Malacatan*, *Yellow* and *White Cheek Clingstone*, *Rareripe* and *late Frost Peach*, and all from the same planting. Of his new variety, Mr. D. has sold buds and young trees budded from the *Eureka*, to the amount of several hundred dollars.—*Farmer and Mechanic*.

We have seen several seedling peaches of fair quality exhibited the past season in Rochester. Mr. H. N. LANGWORTHY, of Irondequoit, had some beautiful specimen's of seedlings in the Horticultural Society's show-case, some of which may prove to be valuable. We hope the matter of producing new varieties will receive due attention at the hands of our peach-growers, who have the best facilities for conducting such experiments. What we want most of all, is a first rate *early* peach, to take the place of the poor *Early Ann*, and keep the New Jersey people out of our market.—ED.

THE WEATHER.—So far our winter, here, has been remarkable for sudden changes and general mildness—heavy and frequent rains and little snow. Some days in January have been as warm as May—succeeded immediately by severe frosts; thermometer within 2 or 3 degrees of zero. We fear that young, tender trees and plants will suffer considerable injury.

A LARGE YIELD.—Mr. Nathaniel Swift, of Andover, Mass., has picked this season sixteen barrels of merchantable apples, and four barrels of inferior quality, from one tree; twenty barrels in all.

LADIES' DEPARTMENT.

MR. EDITOR:—I have noticed in the January number of your paper, in the "Ladies' Department," a short article headed "The Wife;" and would be glad to see the following, taken from an exchange paper, if it will not occupy too much space, in the next number of the Genesee Farmer.

A WOMAN.

Aurora, N. Y., Jan. 1847.

Female Trials.

My heart always "stirs within me" when I read selections made by editors of newspapers, even "christian citizens," which are designed for their married ladies, setting forth our duty with relation to making our homes happy to our husbands, that we should always welcome them with a cheerful smile when they come in from the cares and fatigues of the day, and do all we can to make married life pleasant to them, &c. Now this is well I acknowledge, and trust I strive daily to reduce a good theory to practice. But allow me to enquire if the cares and fatigues of the wife are always—I might say ever—appreciated by the husband?

Shall I give a short sketch of domestic life as it is, not of course describing a family as it should be, but I wish to give a fair example of every day life at home.

My neighbor, Mr. Benson, a lawyer by profession, is what the world calls a respectable man. His income is small, but he married a lady who was able to furnish their small house handsomely, and they have some hopes of prosperity in reversion. Mrs. B. was educated in modern times, and somewhat fashionably, so that the host of evils which ignorant young housekeepers are heir to, came thick and fast upon her when she started on the doubtful pilgrimage of matrimonial life.

But she had firm principles, energy of character and devoted love for her husband—all good stimulants in the path of duty. She braved like a heroine all the "tea-pot tempests" which often come from clouds not so "big as a man's hand," and in due time succeeded in making a cheerful and faithful manager of their economical establishment. Mrs. B. has been a wife twelve years, and a mother of five children, the youngest but a babe, and the family are as happy as a large portion of families.

It is Monday morning and this speaks "unutterable things," to a New England wife, who has been married a dozen years. Mr. Benson has had his breakfast in season—has kissed the children and gone to the office where the boy has a good fire—the books and papers are all in order and Mr. B. sits down, to answer a few agreeable demands upon his time, which will eventually turn to cash. He goes home to his dinner punctually and at one o'clock—it is ready for him, he takes it quietly, perhaps; frolics ten minutes with the baby, and then hurries back to the office. At the hour for tea, he goes home—every thing is cheerful, and to quote the simple rhyme of an old song,

The hearth was clean, the fire was clear,

The kettle on for tea;

Benson was in his rocking chair,

And blessed as man could be.

But how has it been with Mrs. Benson through the day? She has an ill-natured girl in the kitchen who will do half the work only, at nine shillings per week. Monday morning, eight o'clock—four children must be ready for school—Mrs. B. must sponge their faces—smoothe their hair—see that books, slates, paper, pencils, pocket-handkerchiefs, (yes, four of them) are all in order, and now the baby is crying—the fire is low—it is time Sally should begin to wash, the parlor, the chambers, the breakfast things are all waiting. Well, by a song to the baby, who lies kicking in the cradle—a smile to smoothe ruffled Sally, and with all the energy that mind and body can summon, things are "straightened out," and the lofty pile of a week's rearing begins to grow less; but time shortens with it—it is almost dinner time—by some accident that joint of meat is frozen—company calls—Mr. Benson forgot to get any eggs on Saturday, Mrs. B. must do the next best way—the bell rings twelve—the door opens and in rush the children from school—John has torn his pantaloons—Mary must have some

money, then, to get a thimble, she has just lost hers—William has cut his finger with a piece of glass, and is calling loudly for his mother.

Poor Mrs. Benson endeavors to keep cheerful and to look delighted in the hubbub; and now the dinner, by her efforts alone, is upon the table; her husband comes in and wonders the "pie is not a little better warmed," and with this comment and a smile on the baby, he is off till it is time for tea. I forbear to finish the day, Mr. Editor, and shall only say, the afternoon was made up of little trials too small to mention, but large enough to try the faith and patience of all the patriarchs.

Now, sir, this wife has surely borne the burden and heat of the day, her limbs are wearied—her whole energy of mind and body exhausted, and she is exhorted "to welcome her husband with a smile." She does it, for a woman's love is stronger than death. I would ask, should not Mr. Benson give his wife a smile? What has he done to lighten her cares through the day?—How is it? In nine cases out of ten, after sitting an idle hour, he "wishes Mrs. B. would put all those noisy children to bed—he should be glad to have her tell David to go to the post office for letters and papers," and at length, when half way between sleeping and waking, he looks at his pale exhausted help-mate, and exclaims—"well, wife, you begin to look a little exhausted."

I cannot ask you, Mr. Editor, if my picture is not a true one, for you are a stranger to the joys and cares of married life; but I pray you be more just, and now and then exhort husbands to do their part towards making home agreeable to their wives, when the latter have, like Atlas, borne a world of cares and vexations through the day.

Recipe for making Buckwheat Cakes.

Do, dear Jane, mix up the cakes;
Just one quart of meal it takes;
Pour the water in the pot,
Be careful that its not too hot;
Sift the meal well through your hand;
Thicken well—don't let it stand;
Stir it quick—clash—clatter—
Oh! what light delicious batter.
Now listen to the next command:
On the dresser let it stand
Just three quarters of an hour,
To feel the gentle rising power
Of powders melted into yeast,
To lighten well this precious feast.
See, now it rises to the brim—
Quick—take the ladle, dip it in;
So let it rest until the fire
The griddle heats as you desire.
Be careful that the coals are glowing,
No smoke around its white curls throwing.
Apply the suct softly, lightly—
The griddle's face shines more brightly.
Now pour the batter on—delicious!
(Don't, dear Jane, think me officious,)
But lift the tender edges slightly—
Now turn it over quickly, sprightly.
'Tis done—now on the white plate lay it.
Smoking hot, with butter spread,
'Tis quite enough to turn our head.
Now I have eaten—thank the farmer
That grows this luscious mealy charmer—
Yes, thanks to all—the cook that makes
These light, delicious buckwheat cakes.

A SHREWD old gentleman once said to his daughter: "Be sure, my dear, that you never marry a poor man; but remember, the poorest man in the world is one that has money, and nothing else."

CHILDREN.—Speak to a child—any child—in a calm, positive, clear voice, and he will be sure to obey you, if you speak once, and only once.—Mrs. Sigourney.

THERE is a luxury in remembering a kind act.

**MOUNT HOPE BOTANIC GARDEN AND NURSERIES,
ROCHESTER, N. Y.**



THE Subscribers respectfully solicit the attention of the public to their large and choice stock of TREES, SHRUBS, and PLANTS, which they offer for sale the ensuing spring, (1847.)

The collection of FRUITS embraces all the leading sorts of established merit, and most of the recent varieties of Europe and America. No pains or expense have been spared in making the collection as complete, in every way, as possible. The trees are all thrifty, healthy, and well grown, and have been propagated with the utmost exactness from specimen trees on this establishment, or from sources of the highest reputation for correctness. The collection of specimen trees, for testing the merits of the various sorts, is now among the largest in the United States. The assortment of Apples includes several thousand fine trees of the NORTHERN SPY, universally considered one of the best keeping apples yet known.

Pears.—All the leading well known sorts, such as Madeline, Dearborn's Seedling, Bartlett, Zeeckel, Virgalieu, &c., and a small supply of the rare and unrivalled *Swan's Orange* or *Onondaga*, *Knights' Monarch*, and *Van Mon's Leon le Clerc*; the price of these is \$1 each. A few thousand trees of choice varieties can be furnished on quince stocks. These are beautifully adapted to garden culture, and generally bear the second, and older trees even the first year after planting.

Plums.—Besides the well known popular sorts, a small number of the *Jefferson*, *Columbia*, *Lawrence's Favorite*, and *Dennisom's Superb* are offered at \$1 each.

Cherries—a collection of upwards of 40 of the best varieties, earliest to latest—beautiful trees.

Peaches.—Forty choice varieties of established merit, including Tillotson, Early York, Crawford's Early, Jacques' Rare Ripe, Crawford's superb or late Malacatoon, &c.—beautiful trees.

Ornamental Trees and Shrubs.—A large collection, including all the finest popular articles in that line. *Roses.*—A superb collection of upwards of 250 select varieties. *Double Dahlias*—100 beautiful varieties, including several of the finest fancy sorts, such as *Harlequin*, *Illuminator*, *Marchioness de Ormonde*, &c.

Descriptive priced catalogues (edition for 1846 & 7,) will be sent gratis to all post paid applications, and only to such

Trees and Plants packed in the best style, and shipped or forwarded according to orders. It will be for the interest of purchasers to send their orders early, in order to secure such kinds as they may want, and have them forwarded at the proper season. Address, post paid,

Feb 1, 1847. ELLWANGER & BARRY.

Agricultural Almanac for 1847.

THE AMERICAN CULTIVATOR'S ALMANAC, edited by Dr. LEE, just published and for sale at this office. It is got up in good style—printed on new type and excellent paper, and illustrated with over 30 engravings.

TERMS.—\$15 per 1000; 500 for \$8; \$2 per 100—or three dozen for \$1. All orders, (post paid,) will receive prompt attention. Address D. D. T. MOORE.

Farmer Office, Sept. 1846.

NEW SEED AND IMPLEMENT WAREHOUSE.

GENESEE SEED STORE AND AGRICULTURAL WAREHOUSE.

No. 10, Front Street, Rochester, N. Y.

THE SUBSCRIBERS respectfully announce to the public, that they have opened the above establishment for the sale of GARDEN, FIELD, and FLOWER SEEDS, of all sorts—Agricultural and Horticultural Implements, Machines, &c., &c.

They intend to have always on hand a complete assortment of all the articles wanted in this line by the Farmer and Gardener. No pains will be spared to procure articles of the best quality. No seeds will be offered but such as are undoubtedly fresh and genuine—raised in the best establishments of this and foreign countries. The implements will embrace all the newest and most approved kinds, from the best manufacturers in the country.

Fruit and Ornamental Trees, Shrubs, Plants, &c., will be furnished to order from one of the best establishments in the country—the well known MOUNT HOPE NURSERIES.

The principal conductor of this establishment has had many years practical experience in the business in Rochester; and being well known to a large portion of the agriculturalists in Western New York, the undersigned hope, by devoting constant and careful attention to the management of their business, to merit and receive a liberal share of patronage. Farmers and others interested, are requested to call at the GENESEE SEED STORE.

The proprietors of this establishment gratefully acknowledge the very liberal patronage which they have received from the public the past season, and most respectfully solicit a continuation of the same.

From the very liberal share of patronage we have received during the past season, (which with us is the first and one of experiment,) leads us to believe that our exertions to get up an establishment of this kind, and to offer no Seeds or Implements of any kind but such as can be depended upon, duly appreciated by the generous public.

We would say to the Farmers and others in this section and at a distance, that we are now making a large addition to our stock of Seeds and Implements, any and all of which we will sell at the lowest prices.

Rochester, Feb. 1, 1846. RAPALJIE & BRIGGS.

**New Agricultural Implement and Seed Store,
AT AUBURN, N. Y.**

The Subscriber is now opening a Depot for all kinds of AGRICULTURAL IMPLEMENTS, where the farmers can find, in their season, all of the most improved Implements manufactured in the United States. He has now on hand Rieh's Patent Straw Cutter, Burrall's Premium Corn Sheller, the best ever invented, Arnold's Washing Machines, &c. He will also have in their season, a choice assortment of *Garden, Field, and Flower Seeds*, which are put up in the choicest manner, and are warranted genuine.

JAMES B. COOPER.

No. 84 Genesee-st., Auburn,

N. B.—Manufacturers who have Implements to dispose of will find it to their interest to leave them with me, as it is the only Agricultural Depot in Cayuga County. J. B. C.

Colman's Tour in Europe.

J. H. WATTS, agent for above work, has received No. 3, and will deliver to subscribers immediately.

He has also rec'd No. 1 of Vol. 12 of Hovey's Magazine of Horticulture, published in Boston, for which he solicits subscriptions. Monthly—\$3 per annum.

Cash for Clover and Timothy Seed.—500 bushels Clover and Timothy Seed, wanted at the Genesee Seed Store and Agricultural Ware House, Front street, by RAPALJIE & BRIGGS.

Peas Wanted.—Marrowfat and Field Peas wanted for which the highest Cash price will be paid by RAPALJIE & BRIGGS, Front street, Rochester.

Ellwanger & Barry's new Descriptive Catalogue for 1846 & 7 is just published, and will be sent gratis to all post paid applications.

Mt. Hope Garden & Nurseries, Rochester, Oct. 1, 1846.

REMOVAL.

The Rochester Agricultural Ware House has been removed from Front-street to No. 23 Buffalo-street, Talman Block, opposite Reynolds' Arcade. See advertisement below.

Rochester Agricultural Ware House,

HARD-WARE AND SEED STORE.

(No. 23 Buffalo st., opposite Reynolds' Arcade.)

Where can be found most kinds of GARDEN and FIELD SEEDS, Hard-ware, Tin-ware, Wooden-ware, Willow-ware, House Trimmings, Kitchen Furniture, &c.

The late proprietor of this Establishment, (THOS. NOTT,) feels grateful to his many patrons for their very liberal patronage during the past year, and would solicit a continuance of the same—promising to sell them as good articles in his line, and as cheap, as can be purchased at any other establishment west of Boston or New York. He has formed a co-partnership with Mr. E. J. ELLIOTT—and the business of the establishment will hereafter be conducted under the firm of NOTT & ELLIOTT.

We shall keep constantly on hand, a full assortment of *Shaker Garden and Flower Seeds*, the reputation of which needs no comment.

We are continually manufacturing the celebrated Massachusetts Sward C Plow—to which has been awarded the greatest number of Premiums—which we shall sell at the low price of \$7, with an extra point. Also—shall keep on hand an assortment of the various approved Plows and Points, Cultivator Teeth, Root Cutters, Straw Cutters, and Corn Shellers—with a hundred and one other articles, too tedious to mention.

Farmers from a distance, as also those in our immediate vicinity, are respectfully solicited to call at our new establishment, and examine our assortment before purchasing elsewhere.

NOTT & ELLIOTT,

Rochester, Jan. 1, 1847. No 23 Buffalo-street.

Agricultural Implements.

In order to accommodate the subscribers to the Farmer, from whom frequent inquiries and orders for implements are received, I have made arrangements to supply the following articles:

Pitts' Thrasher and Separator,	price, \$150 00
The above, including Horse-Power,	250 00
Pitts' Corn and Cob Mill,	40 00
Seymour's Sowing Machine,	45 00
Sanford's Straw-Cutter,	15 00
Burrall's Patent Corn-Shellor,	10 00

Also, most kinds of Plows, Cultivators, &c., &c., at the usual prices. As my only object is the accommodation of subscribers to the Farmer who reside at a distance, (without fee or reward,) all orders should be post paid and accompanied with the cash. The implements will be carefully selected, and shipped per order.

D. D. T. MOORE.
Farmer Office, Rochester, September, 1846.

Wanted Immediately!—A practical nurseryman, who understands his business thoroughly, to take the place of foreman in an established nursery in Cleveland, Ohio.

Satisfactory testimonials of honesty and efficiency will be required.

Apply immediately, (if by letter, *post paid*,) stating salary expected and other particulars, to P. BARRY,
Dec. 1, 1846. Genesee Farmer Office, Rochester.

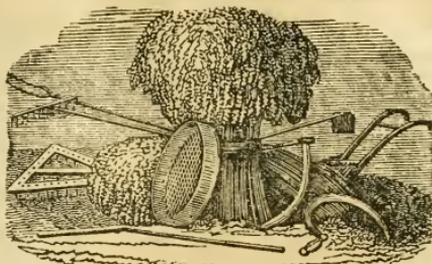
Seedling Apple Trees wanted.—The subscriber wishes to purchase a few thousand seedling Apple Trees. Apply personally, or by mail, to S. MOULSON,
Rochester, Jan. 1, 1847.

Back Volumes of the Genesee Farmer—The subscriber has on hand the Volumes of the Genesee Farmer for 1841, 1842, 1843, 1844, and 1845—neatly bound, which he will sell very cheap.

JAMES P. FOGG,
Rochester Seed Store, Front-st.

Apple Seeds—Growth of 1846, for sale at the Rochester Seed Store, by JAMES P. FOGG.

Straw Cutters, of all the most approved kinds, used Western N. Y., for sale cheap, by

RAPALJE & BRIGGS,
No. 10, Frio-st.

ROCHESTER SEED STORE.

[Established in 1831.]

No. 4 FRONT STREET, NEAR BUFFALO STREET.

By JAMES P. FOGG.

The subscriber begs leave to say to Farmers, and others, who have for the last three years so liberally patronized the *Old Rochester Seed Store*, that he has fitted up the Store, No. 4 Front street, on the west side of Front street, where he will be happy to see all who may want any article usually to be found in a Seed Store.

The subscriber is well aware of the important relation which the seedman holds to the whole farming community, and that on his honor and veracity the crop and profit of a season in some measure depend. The greatest care has been used in selecting the seeds offered at this establishment for the ensuing year, and they can be relied upon as pure and genuine, carefully selected and raised from the very best varieties, and properly cured. Many kinds were raised in the immediate vicinity of this city, by Mr. C. F. Crossman, and under the inspection of the proprietor; others were raised by experienced seed growers, and all can be recommended as genuine and true to their kinds.

AGENTS for the sale of seeds by the package, put up at the Old Rochester Seed Store:

Attica, H. D. Gladding,	Wyoming, J. C. Farris & Son.
Amsterdam, J. W. Sturtevant	Cleveland, Ohio, J. W. Watson,
Auburn, Hudson & Buckbee	Albion, Charles W. Perkins,
James B. Cooper,	Buffalo, W. & G. Bryant,
Albion, Charles W. Perkins,	Batavia, Lucas Seaver,
Buffalo, W. & G. Bryant,	Brookport, A. B. Bennet,
Batavia, Lucas Seaver,	Cawandaigua, L. C. Cheney & Co.,
Brookport, A. B. Bennet,	Cazenovia, Dr. A. Ford,
Cawandaigua, L. C. Cheney & Co.,	Castile, Halsted & May,
Cazenovia, Dr. A. Ford,	Elmira, Tracy Beadle,
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Garden Seeds put up at this establishment in small papers, may be found with most of the merchants in the States of New York, Ohio and Michigan, and in Canada.

Be very careful to call at the right place. The old Rochester Seed Store is altogether a different concern from the one farther down the street. JAMES P. FOGG.
Rochester, N. Y.

Bound Volumes of the Farmer.

A few copies of Volume VI, bound, for sale at this office. Price 50 cents. Also, bound copies of Volume VII, 1846.

MARKET INTELLIGENCE.

ROCHESTER, JAN. 28, 1847.

The recent foreign news has produced a very favorable change in the price of grain and provisions—as will be seen by our quotations and extracts.

Rochester Produce Market—Wholesale.

Wheat,.....	1,06	Pork, cwt,.....	10,00	11,00	
Corn,.....	38	41	Pork, cwt,.....	4,00	4,50
Barley,.....	38	Beef, cwt,.....	3,00	3,50	
Oats,.....	27	Lard, lb,.....	6	7	
Flour,.....	5,25	Butter, lb,.....	19	12	
Beans,.....	62½	37½	Cheese, new lb,.....	5	6
Apples, bushel,.....	18	25	Eggs, doz,.....	14	
Potatoes,.....	38	Poultry,.....	5	8	
Clover Seed,.....	3,50	4,00	Tallow,.....	7	
Timothy,.....	1,00	1,50	Maple Sugar,.....	6	7
Hay, ton,.....	6,00	3,00	Sheep Skins,.....	33	50
Wood, cord,.....	2,50	3,00	Green Hides, lb	3	
Salt, bbl,.....	1,12	Dry " " " " "	3		
Hams, lb,.....	5	6	Calf Skins,.....	6	7

[By Magnetic Telegraph.]

NEW YORK, Jan. 23.

Less activity in Flour, and market to-day not firm as it was. A sale of 5000 bbls was made for shipment at \$7, with some privilege of storage, and 3 or 4000 at \$6 ½c to 64 for Michigan and Genesee, to the trade.

Sales 1100 bbls round hoop Ohio was made on private terms. The stock is now much reduced. Meal is still in request. Sales 5 or 6000 bbls at \$5, for Pennsylvania, Brandywine, and Jersey, mostly for future delivery. Sales bag meal at \$1 62½c. Rye flour, \$4 50 to 4 75. Wheat is in large request; quotations still advancing; sales 25,900 bu. mixed Genesee at \$1 45 to 1 56½, all for shipment. For fair parcels mixed \$1 48 was bid. Corn is in demand at \$1. Sales 3000 bushels to arrive and on the spot. A cargo of old inferior sold at 97 cts. Rye—12,000 sold at 92c and thereabouts, for export. Sales 4000 bu. Barley for shipment at 76c. Rough flax seed is \$9 25 nominally. Sales 30,000 lbs prime Tallow at 8½c cash, for export. Provision still very buoyant, and prices rule higher. Sales 5 to 300 bbls Pork at \$10 75 all for prime, and \$13 50 to 13 75 for mess.—A sale of 500 bbls at 60 days was made at \$14 25, and 100 bbls new at \$14 50. 100 bbls sour prime at \$3 62½. In Beef the market is better, with fair transactions. Sales at \$7 25 to 50 and 9 50 to 9 75 from country. Large operations have been made in pickled meats. Sales 100,000 lbs Bacon without bone at 9 cts. 30,000 lbs Hams in pickle 9½c.; and 1000 do dry salt at 9c, all for England. Sales of bbl Lard to arrive at 8½, and 500 kegs Leland's at 10 cts.

BUFFALO, Jan. 23.

The sales of flour that have occurred since our last are to the extent of 5000 bbls, viz: 1800 bbls Black Rock at \$4 76—1800 do also Black Rock at \$4 80—1000 do two good brands Michigan at \$4 75, and 400 do also Mich. at the same figure. Holders of wheat are firmer this morning, and \$1 seems to be the asking price for fair samples.

PUBLISHERS' NOTICES.

To Post Masters, Agents, &c.

We request all Post-Masters to act as Agents for the Farmer, according to our club terms. Also such other persons as feel an interest in extending the circulation of the Farmer, and thus promoting Improvement in Agriculture, Horticulture, and their kindred sciences. We shall feel truly grateful to any and all persons who will lend their assistance. Any person sending us 16 subscribers, (remitting \$6,) shall receive an extra copy gratis—or a bound volume of the Farmer for 1846.

To Clubs.—Any Post Master or other person who has sent us eight or more subscribers, will be furnished with any additional number of copies at the club price—37½ cents each. We hope those who have formed clubs, will bear this in mind, and forward the subscriptions of such as may hereafter want the Farmer. Back numbers can be supplied—so that all may have the entire volume.

1847.]

VOLUME VIII.

[1847.]

GENESEE FARMER,

A MONTHLY AGRICULTURAL AND HORTICULTURAL JOURNAL:

Illustrated with numerous engravings of

Improved Implements, Farm Buildings, Domestic Animals, Fruits, &c. &c.

THE PROPRIETOR of the Farmer gratefully acknowledges an INCREASE of over FOUR THOUSAND subscribers, since the commencement of the current volume. He considers this the most conclusive evidence of the merit and popularity of the work—and respectfully presents it to the friends of Improvement for their examination and patronage. Dr. LEE, its principal Editor, is at the head of the 'Western N. Y. Agricultural School'—and his ability, and the means at his command for obtaining and disseminating information relative to the Science and Practice of Agriculture, are unsurpassed by any agricultural writer in the country.—The Editor of the Horticultural Department, P. BARRY, Esq., (of the 'Mt. Hope Garden and Nurseries,') is one of the most experienced Horticulturists in the State.

Each number of the Farmer contains **Twenty-four large Octavo Pages**, and is illustrated with handsome and appropriate engravings. It is printed on new type and good paper. Since its enlargement from 16 to 24 pages, (in January, 1846,) it is universally pronounced the **CHEAPEST AND BEST PAPER OF ITS SIZE AND KIND IN THE UNION.**

TERMS—50 cents a year, in advance; FIVE COPIES FOR \$2; EIGHT FOR \$3; THIRTEEN FOR \$5. Any person sending us 13 subscribers, (remitting \$5,) will receive an extra copy gratis.

Volume 8 will commence in January, 1847,—and all subscriptions should be sent in previous to that time, if convenient, in order that the publisher may determine how large an edition will be necessary.

☞ Specimen numbers sent gratis to all post paid applications. All friends of Agricultural and Horticultural Improvement who receive a copy of this Prospectus, are requested to Act as Agents for the Farmer. Subscriptions may be sent (post paid,) at the publisher's risk.

D. D. T. MOORE,

NOVEMBER, 1846.

Publisher, Rochester, N. Y.

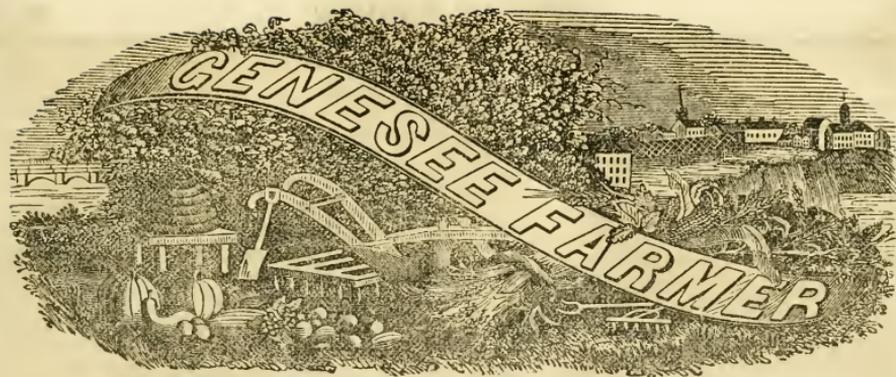
☞ Editors will greatly oblige us by copying the above Prospectus; and to those who do so, (sending us a number of the paper containing it,) we will send one or more copies of the Farmer, without an exchange.

☞ POST MASTERS are authorized, by law, to send Post Office Drafts for subscriptions. Persons residing at a distance, can order the Farmer in this manner, and thus save postage and discount.

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VOL. 8.

ROCHESTER, N. Y.—MARCH, 1847.

No. 3.

THE GENESEE FARMER :

Issued the first of each month, in Rochester, N. Y., by

D. D. T. MOORE, PROPRIETOR.

DANIEL LEE, EDITOR.

P. BARRY, Conductor of the Horticultural Department.

Fifty Cents a Year :

FIVE copies for \$2—EIGHT copies for \$3. Subscription money, by a regulation of the Post-Master General, may be remitted by Post-Masters free of expense. [] All subscriptions to commence with the first number of the volume.

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POST-MASTERS, and all other friends of Agricultural Journals, are requested to obtain and forward subscriptions for the FARMER. Address D. D. T. MOORE, Rochester, N. Y.

[] The Farmer is subject to newspaper postage only. []

To Correspondents.

COMMUNICATIONS have been received during the past month from J. L. Randall, Solomon Hitchcock, Wm. Garbutt, M. M. Rodgers, M. D., A. Huidekoper, L. Wetherell, B. P. Johnson, John H. Robinson, P. A. Palmer, L. H. C., D., W. E. Parmalee, John Kishlar, Joseph Wilson, S. W., J. H. Wright, W. S. T., L. W., H. H., A Friend to Improvement, Wm. H. Newton, A Farmers' Wife, Enquirer, C. Pierpont, L., Wm. Brown, M. D., N. J. K., A. W., *, J. F. G., N. Y. State Agricultural Society—and also a number of articles, inquiries, &c., (in letters containing remittances,) which have not been particularly examined.

We are greatly indebted to our friends for their favors. The great number of communications now on hand compels us to defer many valuable articles—but they will receive attention as soon as space will permit.

BOOKS, Pamphlets, &c. have been received from various persons and sources. Those not noticed in this number will receive attention next month—among others an "Essay on the Hessian Fly, by ASA FITCH, M. D."

AMERICAN AGRICULTURE: By R. L. ALLEN, Buffalo. Published by SAXON & MILES, New York.

WE find on our table a handsomely bound, neatly printed volume, of 437 pages, with the above title. The work is mainly devoted to practical agriculture, which is treated of in a plain, brief, methodical, and satisfactory manner. To large experience as a farmer, the author has added extensive reading and research in all that pertains to tillage, the breeding of domestic animals, and the improvement of rural economy in this country. Although his work is not free from defects, still it is unquestionably the best production of the kind that has ever issued from the American press. The few errors in the first edition we hope to see corrected in the second, and the work placed in each of the 11,000 school libraries of this State. As it is, it will have an extensive sale; for it is not a re-hash of other men's notions and books, but a lucid exposition of the views and knowledge of the author on the subject of "American," not European, "Agriculture."

FIRST ANNUAL REPORT OF THE OHIO STATE BOARD OF AGRICULTURE. Columbus, Ohio.

WE are indebted to Mr. BATEHAM of Columbus, Editor of the Ohio Cultivator, for a copy of this truly interesting Report. We regret that our little space left will not permit us to give it an extended notice. As a beginning in a great and noble enterprise, we hail its appearance with unmingled pleasure. Whatever defects there may be in the organization of the State Board, experience will disclose and good sense correct. Those who have so honorably embarked in the good work of improving the agriculture of Ohio, if they persevere in well doing, will reap a rich harvest of enduring fame and applause, throughout the Union. The Legislature can hardly fail to give the Board the \$500 per annum asked for, in aid of its extensive and important operations.

If we mistake not, the editor and founder of the Ohio Cultivator is entitled to no small share of the credit of "setting this ball in motion."

Hop Culture.

MR. EDITOR:—We wish to learn something about hops and hop-raising. Will you be so kind as to give us through the medium of your excellent publication, all that is important upon the subject? We contemplate next season laying out a hop garden, if we are justified in the undertaking, and should like all the definite and necessary information we can obtain.

Please inform us first how to lay off a hop garden?—how to plant it?—how much manure to apply on common red clay soil?—what situation to choose, hill-side or low land?—how to attend such a vine garden when planted?—what is the average yield per hill or per acre?—how to prepare them for market when gathered?—(don't they have to be dried?)—In a word, if it be profitable business, where the price may range from 13 to 25 cts. per pound?—or will the outlay and labor bestowed not justify the undertaking?

For the above information we will not only remain obliged to you, but will allow you the balance of the remittance over what will renew our subscription for another year to your valuable periodical, for your trouble.

We remain, yours, very respectfully,

FLETCHER C. KANAGA.

Urbana, O., Dec. 24, 1846.

MR. EDITOR:—One of your subscribers, (Mr. WILBUR.) wishes to know, through the Farmer if convenient, where he can obtain hop roots—the soil best adapted, and the best manner of cultivation. He contemplates setting about five acres.

Canandaigua, Jan. 1847.

WM. MARTIN.

THE above is a fair sample of a large number of letters on all subjects pertaining to rural affairs, that constantly accumulate on our hands. To do full justice to these numerous inquiries, to ourselves, and the important subjects referred to, would not only consume our whole time, but require a journal twice as large as this. Hitherto, hop-growers have had very little of editorial service and we feel bound to give them a liberal space in this number, to the seeming neglect of other interests.

The Hop (*Humulus lupulus*) is a valuable plant. Its successful, and profitable culture, require some experience, and much care. It is a crop in the production of which Science can render the most essential aid. This aid to the practical hop-grower we aim to impart in this article, while we shall briefly describe for our western correspondent the general practice for its culture, so far as we are informed.

The land should be naturally rich, or made so, by well rotted manure, lime, and ashes. Chemistry informs the practical farmer that the hop blossom (*strobulus*,) and bitter elements (*lupulin*) abound in salt-petre, or nitrate of potash; while long experience teaches him that this plant grows most luxuriantly in a soil about as rich as an old nitre bed near a stable or barn-yard, can make it. In England the ground is often trenched, and the excavation filled with compost, that the roots may go deep, and imbibe their appropriate nourishment from a large surface. Deep, and thorough plowing, are indispensable. A side hill, or a southern exposure should be selected, if practicable.

The roots are perennial, and will live and bear annual crops for many years, with good culture, and good luck. They are usually planted

in rows six feet apart either way, and from four to six inches deep. They are cut from the hills of old plants, whose roots have been laid bare by the plow. The portions planted should contain one or two eyes, of which eight or ten are enough for a hill. They should be well separated on the ground, i. e. placed a foot apart, that the future roots may have room, and easily spread in all directions. No poles are needed the first season; and a hoed crop may be grown on the land, which should be kept clean, and in good tilth.—In November, the ground should be plowed and the earth turned toward the hills. Early in the spring the hillocks are opened, and the last year's shoots cut off within an inch of the main stem; and all the suckers quite close to it. Two or three substantial poles, from 16 to 25 feet in length, should be firmly set with an iron bar in each hill. When the plant has grown three or four feet, it should be trained and tied to the pole below the third set of leaves, and started in its windings upward in a direction with the sun. Care should be taken not to let too many vines grow from a hill, as their foliage will shade the blossoms, and greatly injure their fruitfulness. Two or three vines to a pole are enough.*—Hops are plowed and hoed in this State like corn.

The gathering, kiln-drying, and bagging of hops, is an important branch of the business of the planter. It is in this part of the process that experience and good judgment are most valuable. The time to gather the blossoms is indicated by the turning of the lower leaves on the vine, and the bright straw color of the seeds.

The vines should be cut a foot or two from the ground, as the bleeding of the stems will weaken the roots if severed close to the earth. The poles are laid over long narrow boxes, which receive the hops as girls and others pick them from the vines. After the latter become dry, they should be cut off the poles, burnt, and the ashes kept to apply to the hills of the parent roots next season.

We will describe the drying and bagging process in our next; as we have yet to illustrate by a drawing and description the anatomical peculiarities of this cultivated plant. Don't be frightened at botanical names. The information communicated will be found of much practical value to all hop-growers that happen not to be acquainted with the class *Diacia*, and many are thus situated.

The *Humulus lupulus* belongs to the class *Diacia*, i. e. to one in which the pistils and stamens, (the organs that form seeds and propagate the race,) grow on separate, and often distant, plants. Letter *a*, in the drawing below, shows a male, or staminate hop, which prepares pollen, or fertilizing dust, not unlike that which falls on the silk of corn from the spikes above. The male plant is often regarded as a wild hop, and

* Some hop-growers allow only one vine to a pole.

is most unfortunately extirpated from some plantations. It is truly worthless as a *bearer*, but invaluable as a *fertilizer*, in the economy of nature. The letter *b* represents a female blossom, or



pistillate flower, which is the part gathered for market. In Kent, (England,) where attention was first called to the diœcious character of the hop, Mr. RHAM says: "A bushel of hops collected the fourth year from the seed, *male plants being near*, weighed 36 pounds. Those grown from cuttings under similar circumstances weighed 35 pounds; while a bushel grown in a garden where the male plants were carefully extirpated, weighed only 22 pounds." Other experiments show that while the loss in *weight* exceeds 50 per cent., the loss in *quantity* is still larger by neglecting to provide staminate plants. One male to forty or fifty female plants is a fair proportion. The absence of staminate hops prevents the blossoms gathered for use from bearing *seed*; one of which should grow at the base of each petal, or flower leaf. A blasted clover blossom is very light, and nearly worthless without seed. So, too, is a hop blossom, and poor in bitter lupulin. In Flanders, great use is made of night soil in the culture of this crop, and it is said with signal success, owing to the large amount of nitrogen it consumes, under the most favorable circumstances.

The chemical properties of the yellow dust (*lupulin*) of the pistillate blossoms (*stroboli*) deserve to be studied. But we will let that pass, and amuse the general reader, contrary to our sober, working habit, with a few historical references apropos to our subject.

Speaking of the diœcious, date-bearing palm tree, PLINY says: "If the male tree be cut down, *his wives* will afterwards become barren, and bear no more dates, as if they were *widows*."—Another author remarks: "It is the practice of the orientals in war, to cut down the male date trees of their enemies, which often produces famine, for the female trees yield no fruit after the death of the other sex."—"Linnaeus, in his 'Dissertation on the Sexes of Plants,' speaking of the date tree, says: 'A female date-bearing palm flowered many years at Berlin, without producing any seeds; but in the year 1749 the Berlin people, taking care to have some of the

blossoms of the male tree which was flowering at Leipsic sent them by post, they obtained fruit by these means; and some dates, the offspring of this impregnation, being planted in my garden, sprang up, and to this day continue to grow vigorously.' M. Geoffrey cites a story from Jovicus Pontanus, who relates that in his time there were two palm trees, the one a male, the other a female, in the woods of Otranto, fifteen leagues apart; that this latter was several years without bearing any fruit, till at length rising above the other trees of the forest, 'so as it might see' (says the poet) 'the male palm tree at Brindisi, it then began to bear fruit in abundance.' M. Geoffrey makes no doubt but that the tree then only began to bear fruit, because it was in a condition to catch on its branches the farina of the male, brought thither by the wind."

According to the census of 1840, there was grown in the United States the year previous 1,238,502 pounds of hops, of which more than one third was raised in this State. The yield per acre is exceedingly variable, and, crop of course quite uncertain. In looking over English journals we find that 44,485 acres of hops in 1844 gave an average of 6 cwt. 2 qrs. 3 lbs. per acre. The excise duty on this crop exceeded £110,322. In 1845, 48,058 acres gave an average of 6 cwt. 3 qrs. 6 lbs. per acre; yielding £158,008 revenue. In New York, crops vary from nothing up to 2000 lbs. per acre.

We shall take another time to describe the best method of drying hops, and preparing them for market.

TRANSACTIONS OF THE AMERICAN AGRICULTURAL ASSOCIATION. Part I.

We find a copy of this quarto publication on our table, for which we suspect we are indebted to ANDREW H. GREEN, Esq., of New York, Corresponding Secretary of the Association.

The Transactions contain several valuable papers: one from Dr. GARDNER, author of the Farmer's Dictionary, "on the Chemical Principles of the Rotation of Crops"; another on the "Culture of Hops," by the Corresponding Secretary; others from Messrs. PELL and CLARK, on Manures and the Preservation of Timber.—This Association numbers many gentlemen of science and distinction among its members.—Hon. LUTHER BRADISH is President. They are doing good service to their country and their race, in laboring to enlighten the popular mind, and make it comprehend the laws of nature which control the results of rural industry.

THE FARMER'S LIFE is shunned by many because it seems one of mindless drudgery. If our farmers would study and reflect more, they might do less hard labor, and yet accomplish more in the course of a year. Ten hours work in summer, and eight in winter, ought, with good management, to give any man a good living.

Maple Sugar.

THE season has arrived when every one blest with a Sugar Orchard, should have all things in readiness for the skillful manufacture of this delicious sweet. Old buckets should be new hooped, if needed, cleansed and soaked, so as not to leak. Spiles must be overhauled, repaired to fit exactly the size of the auger, or bit used to bore the trees, that no sap, or "sugar water" as the Kentuckians call it, be wasted. Whatever your storage apparatus may be, see that it is clean, sweet, and water tight.

Don't be over anxious to begin operations, and tap too early, nor so dilatory as to lose the first good run of your trees. When to tap is a matter that depends on all the uncertainties of the weather. The place to bore into the tree is to be selected, first, not too high, if the sap is to fall through the air, into a bucket standing on, or near to the ground, as the wind will occasionally blow the falling sap out of its perpendicular descent on to the ground. Tap low, or suspend the bucket on the spiles, or nail driven into the tree. Benches of a cheap structure can be made and used to bring the bucket up to the spile, and avoid their upsetting by the melting of snow, and other causes.

For making the proper incision into the trunk of the tree, we prefer a bit, or a half inch or $\frac{3}{4}$ auger fitted to a bit stalk, as the operation of tapping can be neatly and rapidly executed by such an instrument. That side of the tree which shows the largest, and most vigorous growth of top and root, will yield the most sap, and should be selected unless too much cut already by previous incisions. Trees yield sap the earliest on their south sides, and latest on their northern exposure. Three inches are deep enough to bore into the tree—some penetrate less than two.

In our sugar making days, the custom of the bush was to gather the sap either with oxen or horses hauling a hogshead with two heads in, and fastened to a sled. This had a wooden funnel made of a sap bucket or trough. By driving the load of sap on to an elevated spot, either natural or artificial, and turning a faucet all the sap in the hogshead on the sled ran into the reservoir, near the boiling pans or kettles. In small establishments most men gather sap with a wooden neck-yoke, carrying two large 16 quart pails or buckets at a time. This is pretty hard work in a widely distributed bush, when the snow is 2 feet deep, and not quite hard enough to bear up a man, or a boy that hopes soon to be one.

For boiling, the kettles should be well set in a stone or brick arch, in all permanent orchards.—Furnace men are making cauldrons that will hold some 16 gallons set in a stove, for ten, twelve or fifteen dollars, according to size, that look as though they would answer an excellent purpose for sugar making. Sheet iron and copper pans

have the merit of evaporating fast. In our bush we always had a stream of cold sap just equal to the water given off in steam constantly running into each kettle or pan. This arrangement is effected by having the kettles and arches low, and wastes no time nor sap in filling kettles.

Great pains should be taken to keep leaves and dirt of every kind out of the sap. After all your care, the syrup should be well settled before it gets too thick, and the clear liquid poured off for making into granulated sugar. The sediment should be diluted and settled again or strained. In some cases straining as well as settling is necessary to remove all foreign matter. Wood for boiling should all be prepared before hand, hosed, or set on end, dry and close at hand.

For "sugaring off," large brass, copper, or common five pail kettles are used. Care should be taken not to have too hot, nor an unsteady fire in this process; nor should the evaporation be carried too far. A little experience soon informs one of the proper time to pour the warm or hot sugar into the vessel for caking it. Some have all their sugar for family use quite liquid, like molasses; others stir it off quite dry.

Sugar trees vary greatly, both in the quantity and quality of their saccharine juice. As a general rule a bush that the sun can come in well, will yield less sap, but a good deal more sugar, than one in a dense, native forest. A bush should be well underbrushed, and all cattle and sheep kept out, if you wish young maples to spring up and grow. They can be transplanted, with little labor and great profit.

We have a specimen of maple sugar equal to double refined loaf from cane, made by MOSES EAMES, Esq., of Rutland, Jefferson county, whose admirably conducted farm and dairy establishment we visited while giving lectures for the State Agricultural Society.

Of our numerous young readers, how many can tell where the sugar comes from, which is dissolved in water, and circulates as sap through the *alburnum* of the maple? What advances have you made the past winter in studying vegetable physiology? Where are the elements elaborated that form the large, and most beautiful development of thousands of leaves on a single sugar tree? Does Organic Chemistry reveal any new light by which the quantity of sugar can be augmented that any 100 trees will yield in a state of nature?

Young friends, we have a story to tell about what it is that nature uses to form sugar in the trunk of a leafless tree, and how to increase the sugar.

Do not begin farming by building an extensive house, nor a spacious barn till you have something to store in it.

Avoid a low and damp site for a dwelling house. Build sufficiently distant from your barn and stock yard to avoid accidents by fire.

Hints for the Month.

If the sleighing lasts get your plaster home, as no good wheat farmer, who follows a systematic rule of rotation with clover, can do without it. Get your summer's wood, rail timber, posts, stakes, and timber and boards from the mill, and all other foreign jobs; it is much handier than prying about on wheels—besides it relieves the spring work.

Look well to the security of your potatoes, and to saving them in every way, for use and for planting. They will be dear and scarce this spring; in many neighborhoods they will be worth 75 cts. to \$1 per bushel. Try early planting, as early as the middle of April.

Litter your barn yards, sheds, and stables freely; every armful of straw under the cattles' feet is a bushel of corn; and if it is not decomposed and rotten, the hollow tubes of the straw retain the urine and juices of the droppings, beyond the reach of the rains and snows. If you cannot house the manure made in stables, keep it as much in piles as possible to avoid leaching.

Slop and nurse cows that come in early, or you will have poor milkers next summer. Beets and bagas, and carrots, are excellent for this purpose.

Put farming tools in order; and make this month *two good farm gates*—the sign is right in the heavens, as we have consulted them astrologically—and get rid of *two* of those *devils*, *warping bars*, which are such a nuisance on your farm, especially if before your door.

Cattle need a little extra feeding this month or they will be in bad heart for grass.

Smoke your hams, and as soon after as they are dry, put them singly into any kind of cotton cloth bags—tie fast and hang them up in the garret.

Put scions this month for grafting, especially cherries and plums. Apples and pears may be cut later, if neglected this month. Set the ends in the earth on the cellar bottom. Mind and graft early, which is the great secret of success.

Do up all of your cousin visiting—give your mite to the suffering Irish—take the Geneese Farmer—read it—pay for it—do your duty to God and man, and “defy the foul fiend.” *

WILD TURKIES.—Mr. Charles Louis Bonaparte, in his Natural History of the United States, asserts that the wild turkey is a native of America, and was a stranger to the old world, till after the discoveries of Columbus. It was sent from Mexico to Spain in the early part of the year 1514. By degrees it spread over Europe, Asia and Africa. The English supposing it to have come from Turkey, through Spain, gave it the name of Turkey. The wild and domestic Turkey is of the same species.

Price of Breadstuffs.

This is a delicate subject to handle, just at this time. From all we can learn, from a careful perusal of several of the best English journals, and the due consideration of the subject, we hazard the opinion that prices can not very much recede till near, or after, the next harvest in Europe. But nothing is easier than for the best informed to misjudge on such a question. Panic and excitement are so easily awakened in either direction, by speculators on both sides of the Atlantic, that one can hardly guess what a day will bring forth. Freights to British ports are enormously high. We think they must come down, which will help dealers in this country.

European Agriculture.

PART VIII of this work by Mr. COLMAN, should have been noticed in our February number. It is more practical than any of its predecessors, and decidedly an improvement, conveying much valuable information on the culture of crops, the care, and breeding of domestic animals, dairy husbandry, and the manufacture and application of manures.

Mr. C. feels sore from the criticism of the Agricultural press in this country; but the application has evidently done him good, and will result in adding to his well earned reputation as an author. Mr. J. H. WATTS is agent for the sale of the work in this city.

AMERICAN JOURNAL OF AGRICULTURE AND SCIENCE: Conducted by Dr. E. EMMONS and A. OSBORNE, Esq.

This quarterly has been changed to a monthly journal, and the price reduced from three to two dollars per annum.

Prof. EMMONS of Albany, has been long, if not from the commencement, connected with the Geological Survey of this State. He has studied its rocks and various soils, and their constituent elements, with peculiar care. His Journal of Agricultural Science may be regarded by some as a whortleberry above the heads of practical farmers. To a small extent this may be true; but they have only to hold their heads perpendicular to their feet, and let their minds *work* as well as their hands, to comprehend the whole subject. To the young men who desire to raise the cultivation of the earth to the dignity of a learned profession, we commend this journal as worthy of their study. It contains a good deal of information on the practice of various branches of rural economy.

Weeds exhaust the strength of the ground, and if suffered to grow may be called garden sins.

The hand and hoe are the instruments for eradicating weeds yet; if there is room between the rows for the spade it is well to use it.

Importance of Experimenting.

MR. EDITOR:—If the cultivators of the soil would but take the trouble, or I would rather say, would they but enjoy the exalted pleasures of testing by experience the numerous unsettled facts relative to their pursuits—was every farmer an experimenter, and each one's farm an experimental one, and the results of those experiments annually published in the agricultural journals—what a fund of useful facts would yearly be produced. It can easily be done, at a trifling expense; and the gratification of observing the various operations of nature, in producing the numerous vegetable and animal productions from the earth, would of itself be a sufficient recompense for the time spent, independently of the valuable results which would follow an accurate knowledge of the various operations of our multifarious calling. And, I repeat it, that every farm ought to be an experimental one. No cultivator of the soil should allow a season to pass without testing some practical experiment on tillage, on manures, seeds, breeds of animals, or on some one of the numerous varieties of vegetables for animal food, &c., &c.

One land, or ridge, could be plowed deep, another shallow—harrow one five or six times through the summer, another only once, or not at all. Treat some with the numerous varieties of manure, to determine the quantity most profitable to apply at a time to each crop, and how to apply it, whether on the surface, slightly covered, or plowed under deep—whether barn-yard manure ought to be applied green, fermented, or rotten. Test the quantity of the various seeds to sow per acre, with the best method of preparing them.

And many valuable facts might be settled relative to the breeding and feeding of animals—the different kinds of food most profitable to feed with, for the various operations of labor—or for making Milk, Wool, and Flesh. Examine with accuracy and care the result of those experiments, and publish them in our journals, that all may receive the benefit of each individual's experience; the beneficial results would be beyond calculation.

And, Fellow Cultivators, why do we not do it? In no way can we spend a little time so usefully. Let each one of us resolve that in future no season shall pass without our testing some practical experiment relative to our calling.

WM. GARBUTT.

Wheatland, Feb. 10, 1847.

LARGE CATTLE—The Auburn Daily Advertiser states that Mr. Elon Sheldon, of Sennett, has one pair of yearlings, weighing 2,100 lbs., one pair of two year olds weighing 3,000, and one pair of three year olds weighing 3,600, and one pair of four year old oxen weighing 4,550, lbs. Can this be beaten!

Scientific Farming.

MR. EDITOR:—Will you oblige a subscriber and an occasional contributor to your paper by publishing the annexed extract from an article reviewing "Essays on the Progress of Nations in Productive Industry, Civilization, Population, and Wealth; illustrated by Statistics of Mining, Agriculture, Manufactures, Commerce, Banking, Revenues, Internal Improvements, Emigration, Mortality, and Population." By Ezra C. Seaman.

The writer of the article referred to after speaking of Great Britain, says—

"Turn now to our own country. In the manufacturing State of Rhode Island, the earnings of labor and capital amount to 110 dollars annually for each person. In Massachusetts the amount 103 dollars. In the agricultural State of Indiana it is only 44 dollars. These estimates are taken from tables which are considered too favorable to agriculture.

Now we have nothing to do with the political bearing of these facts. We do not look at them with the eyes of a politician; it is our object rather to consider them as economists and its lovers of moral truth. And first we are urged to say, that the case of agriculture is not so bad as it may at first appear. The cultivation of the soil can hardly be as profitable as some other occupation, yet it is safe. And, moreover, it may be made tolerably profitable by the same application of science which has secured such wonderful results in the mechanic arts. Agricultural Chemistry is still in its infancy; and yet it is already almost certain, that a small farm, scientifically cultivated, and not too remote from a market, may be made a mine of wealth. This matter is not well understood. There is no wisdom in our practice of dispersing ourselves over immense tracts of country, out of the reach of schools, churches, and markets. Individuals and the nation at large, are insane upon the subject of territory. A vast amount of grain is every year wasted in our country, because it cannot be brought to market. We have no right, except in cases of necessity, to go into the wilderness. The culture of choice fruit trees and of fine vegetables, the dairy, the poultry-yard, and the flower-garden, are not made sufficiently prominent. There are articles suitable to be eaten besides beef and pork. Let the eastern farmer stay at home, and make the old farm more productive. We cannot dispense with the influences of agriculture. It is a most captivating and ennobling employment; the children of the earth gain strength from the touch of their mother, and drink in health with her warm sweet breath. And through the aid of system and of science, we can accomplish all that is necessary in a thickly settled country, and escape dangers to which our western friends are exposed."—*Christian Examiner*, 1847.

What has not science done for the mechanic arts? And yet the mechanic does not rest satisfied—he is constantly seeking for new inventions—new discoveries—new and improved applications of principles already known and used.

Not so with farmers. Here you find a class of men, intelligent and industrious, who, to a considerable extent, are opposing the discoveries and applications of science to their art—speaking with reproach of the application of science to farming—and ridiculing him whom they call a "scientific farmer." A brighter day is however dawning for the farmer—a day when the principles will be applied to his art as they now are to the mechanics'. L. W.

Monroe County, Feb., 1847.

ASPARAGUS.—This delicious vegetable was first introduced into England in 1608. It is now extensively cultivated throughout Europe, and is one of the most desirable plants known.

A new Disease in Grasses.

MR. EDITOR:—I wish to call your attention, and that of your readers and correspondents, to a subject I deem important to the farming interest, and which I have not seen discussed in any of the agricultural papers. I allude to a disease of the *Grasses*, which has prevailed for several years past in this section of country. It affects all varieties, but especially the timothy. As many as five years ago, we began to discover scattering white dead heads among the timothy, just before haying. These greatly multiplied in after years. On taking hold of these white heads the stalk easily separates just above the upper joint, where it has the appearance of having been eaten or rotted off. Of late years, however, the disease has made its appearance earlier in the season, so as to prevent the heading out of the grass at all. Consequently the crop is greatly diminished.

The evil has fallen most heavily on old meadows and rich bottom lands; and where we formerly had grass waist high, yielding from two to three tons per acre, we now get less than half that quantity of short fine stuff like rowen, but more dead and dry; easy to pitch to be sure, but requiring much patience. Plowing up old meadows and seeding anew have been resorted to, as a partial remedy; but what is most discouraging is, that the new ones and pastures also begin to feel the effects. Indeed, I consider the evil to be alarming; and, in this section, not less so than the potatoe disease itself.

As to the extent of the evil I cannot say definitely; but it seems to be spreading far and wide. I have seen its effects more or less in the counties of Tompkins, Cortland, Madison, and the last two seasons in the south part of Oneida. I have also heard of it in other parts of the State.

As to the cause of this calamity I am not prepared to say much, except negatively. First: it is not the effect of the frost, as was at first generally supposed. Although in some seasons past we have had untimely and severe frosts, which may have injured meadows in some degree, yet I think we cannot ascribe this wide spread, and continued malady, to such a cause. Beside, the manner of the effect will not warrant such a conclusion. Neither can I believe the cause to be worms at the root of the grass. It is true we have plenty of the grub and wire worm always at work and making mischief, but not more than usual when our meadows were flourishing.

But the question still recurs, *what is it?* I think it may be an insect extremely minute, the egg of which is deposited about the joints of the grass, and may probably be discovered when the top begins to change its color; but whence it comes or whither it goes is a mystery. What can be done to alleviate or remedy the evil—or how lasting it will probably be, are questions

which I believe many of your subscribers would like to have discussed in your excellent paper.

P. S. A subscriber wishes to know how to prevent *smut* in oats. H. H.

Locke, Cay. Co., Feb. 6, 1847.

We thank Mr. HAMLIN for the above interesting communication; and shall be happy to receive any new light that our readers may be able to throw on the subject.—Ed.

Potato Rot.

SOME well attested experiments made by Mr. BIGELOW, of Hartford, Conn., show that potatoes under precisely the same circumstances, as to soil and period of planting, when manured in the hill with barn-yard manure and with house ashes, rotted excessively; while those treated with mineral coal ashes and plaster were exempt.—Lime, applied after cutting the seed and wetting, by putting as much dry slacked lime as would adhere, has, in some cases, proved beneficial; in others of no avail. A better process would be, to scatter a handful over a larger space before covering.

Very early planting should be tried, as it is pretty conclusively settled that potatoes left in the ground, or self sown, are never affected—if so, deep planting in the fall ought to be tried.—It is said that a potato may be frozen entirely solid and thawed, without contact with air, and not have its vital or nutritious character changed or affected.

It does not seem that the rot is injurious to animal life, as many persons are feeding them, and a poor family of my acquaintance have been using the sound ends of those affected with perfect impunity. Neither am I advised that the disease is propagated by using the diseased tubers.

Yours, &c.,

L. BARKER.

Monroe Co., 1847.

We think our correspondent is mistaken on the subject of freezing. The potato, when frozen and thawed in cold water, becomes soft and flaccid, and by tapping it you may squeeze out nearly all of its starch, gum, and farinaceous qualities in a liquid state. Its vitality is entirely destroyed, so that in fall planting it should be laid below the reach of frost, which, in this climate, is not usually more than 6 inches. A potato completely frozen is not injured for cooking in any way, if used before thawing, or is thawed in cold water—in fact it improves in sweetness to some tastes. *

THE CULTIVATION OF YAMS.—Yams have been cultivated in Jefferson county, Ky., with success. They are considered an excellent substitute for the potato.

LYELL, the geologist, asserts that there is more coal in the single State of Illinois than in all Europe.

The Starving in Ireland.

FARMERS, what excuse do you make for withholding your mite from the famishing poor in Ireland? M. M. NOAH, of the New York Sunday Times, a Jew, not always "outwardly," says—"The poor woman, with her hungry, ragged children, stands but a poor chance of relief from the ladies benevolent societies in the city of New York, unless she can produce a certificate that she belongs to Dr. so and so's church!" Methinks I hear many a fat farmer exclaim—"the Irish don't belong to my church—a wide ocean is between us—we have poor enough at home, and besides, England, that great plunderer of nations, is rich enough to support her own poor." I would ask, do such narrow-minded excuses come with a good grace from a class of men, above all other, benefitted by the extra price and quick sale of their productions, induced by this very famine abroad we now propose to alleviate. I would also ask, are such excuses compatible with our christian civilization? The great Author of our religion compassionated the sufferings of both Jew and Gentile; His aversiveness was as expansive as the ocean, and as indiscriminate in its bounties, to both saint and sinner.

Our cities and villages have responded nobly to the call of the starving hundreds of the laboring Irish, have divided their scanty pittance, to send the small moiety to their suffering countrymen. These poor people seem to have a living sense of the torturing anguish of a parent's heart, which is awakened by the child's low, plaintive, sleepless cry for bread!

Farmers will you be behind hand in alleviating this great desolating famine, when to you in particular, accrues the benefit of the high prices induced by it? Your pockets are full. It was averred by an officer of a Bank the other day, that the farmers had absorbed the whole Bank circulation, and that he had not notes enough left to pay a small check. S. W.

Agricultural Information Wanted.

MR. EDITOR:—It has long been my intention to become a Farmer, believing that it is the most honorable, healthy and profitable pursuit that a man can follow. I am now prepared to enter on my favorite pursuit.

If I am blessed with health I intend to commence farming in the spring—having purchased a farm of 200 acres, 150 acres of it under what is called good improvement, with dwellings that will answer for the present, although not such as I would like to have them. The improved land is all arable, and every foot of it capable of producing wheat, of which there are 50 acres on the ground, which I get with the farm at \$50 per acre; the remainder is all in grass.

I have for years been a faithful reader of the Genesee Farmer, and other agricultural journals, yet I find myself deficient in the necessary knowledge how to commence my operations, not having been able to obtain the necessary information from any of my agricultural reading.

Now, Mr. Editor, if you or any of the excellent farmers who are contributors to your useful journal will give me the necessary information in the April number of the Farmer, you will confer a great favor on a new beginner. I wish to be informed how much men's help it will be necessary for me to employ in summer, and in winter, to carry on my operations to the best advantage. Not being accustomed to labor I do not expect to do much myself, except overseeing.—How much team shall I want, and of what kind, whether horses or oxen, and what may be their probable cost in the spring? Also what quantity of other stock it will be most profitable for me to keep, viz: cows, sheep, and swine; and when I commence my operations, how many acres must I annually sow to wheat, barley, oats, or peas; how much plant with corn, potatoes, and other roots, so as to produce the greatest profit for the labor employed and capital invested? Also, how many acres of meadow I must keep so as to have plenty of fodder in winter—and how much ground it would be best to keep in pasture? And last, but not least, what amount of profit may I reasonably expect, annually, to receive from the proceeds of the farm?

On looking over the reports of the Committees on Field Crops, I see that the nett profit per acre ranges from 20 to \$40, averaging about \$30 per acre nett profit per annum—a very liberal compensation to the cultivators of the soil—and I see no cause why 150 or even 200 acres of good soil cannot be cultivated so as to produce the same amount of profit per acre that one does. Now if I can but realize \$20 per acre nett profit from my 150 acres of cultivated ground, I will think that farming is a pretty fair business and has not been too much extolled. D.

Genesee, Feb. 15, 1847.

WILL some of our practical and experienced correspondents answer the above questions?

A CURIOSITY.—Mr. Samuel Dudley of Roxbury, has brought us a number of Pears from one tree, that has borne three crops this season. The first specimen is a large Pear four inches in length—the second specimen is two and a half inches—and the third is fully one and a half inches long.

Mr. Dudley says the tree put forth its second blossoms in the latter days of June, and its third set in the latter part of July.—*Mass. Ploughman.*

It is an error to plant seeds from a State further south. In a cold season only the seed of a colder climate will ripen well.

Bone Dust as a Manure.

TO THE READERS OF THE FARMER—I apprehend that it is both the privilege and the duty of every one who wishes the advancement of the science of Agriculture, to lend their influence in promoting every rational suggestion, the object of which is to improve this greatest of all arts. In this light I view the valuable suggestions of our estimable friend of Agriculture, A. BLAKE, of Peoria, on the subject of bone dust as a manure, and the erection of a bone mill, which are very common and successful in Europe.

My former business (that of making sausages for the Albany market,) has led me to make many experiments to ascertain the amount of bone in pork; which I find to be from 7 to 9 lbs a hundred. The general average is about 8 lbs of bone to a hundred weight of pork.

I have much wanted to see something published on this subject, as I am a farmer, and have likewise recently become the keeper of the Monroe County Poor House; in which is kept on an average, about 225 inmates, who consume about twenty thousand pounds of pork annually; weight of bone, at 8 lbs a hundred, 1600.—Twenty thousand pounds of beef, at 16 lbs a hundred, 3200. For veal, mutton, &c., say 500. Total weight of bones for one year in County House, 5,300 lbs., which, if ground, would make, at 50 lbs a bushel, 106 bushels.

Suppose the seventy thousand inhabitants of the County to consume in like ratio, they would pick and waste no less than 1,613,333 lbs of bones; which, if ground, would make 32,266 bushels of bone dust; which, if applied to land at 3 bushels per acre (a quantity which it is said would increase the productiveness of the soil for 6 years,) would manure near 11,000 acres. And if one bushel is equal to 3 loads of barn yard manure, which is considered to be a fact, it would be equal to 96,798 loads of manure, which is annually lost and thrown away; equal to \$72,598, at the moderate price of 75 cents a load.

With these things to look at, which I believe to be within the bounds of truth, who can doubt but a bone mill would be profitable, if erected in the vicinity of Rochester, as well as other places.

I was led to reflect on the above subject the more because my predecessor as keeper of the County House was in the uniform practice of carting the bones to and throwing them in the Genesee river. I have for the want of a mill to grind them, deposited them with the manure in the barn-yard. In the absence of a mill, will some one tell me what better can be done with them? I am satisfied it is not the best method except under the existing circumstances.

JOHN H. ROBINSON.

Rochester, 2d mo. 1847.

REMARKS.—This is an important subject; and

we are glad that one man more has called public attention to it. Within the last five years we have published more than twenty times a statement of the fact that, bones can be boiled in strong lye to a powder; and then, by mixing the bones and lye in a compost of vegetable mold, manure, or muck and lime, a most valuable fertilizer is ready for use.

SHELTERS FOR STOCK.—The *Naturalist*, published at Nashville, Tennessee, gives its readers some important advice on this head, in a few words. It says that no farmer at the north, thinks of exposing his cattle, sheep and hogs to the peltings of the storm; but that it is not so at the South. He adds—"if there be reason in anything, shelters are quite as important at the South as at the North. We have much more cold, rainy weather here, and it is the kind to injure stock more than snows, or the cold northern blast." This is no doubt true; but stock are not as much sheltered, even at the North, as they should be, or as would be for the interest of the farmer; though the practice of sheltering is much more general here than in the section alluded to. We agree, however, in the remark that shelter, of some kind, is as important there as here, and would be attended with as great advantages in the saving of food and in increasing the comfort of animals.

PLANT TREES.—Plant trees every where, we say; let them shade our streets, and grow wherever there is room for them. Especially plant them in the country, where open fields will admit, and be sure that in the end they will surprise the planter by their growth whilst he and his children are sleeping! In evidence of this, let us quote an anecdote to the purpose.—It is related of a farmer in Long Island, that he planted an ordinary field of fourteen acres, with suckers from the locust (a native of this country) in the year of his marriage, as a portion for his children. His eldest son married at twenty-two. On this occasion the farmer cut about 15 hundred dollars worth of timber out of his locust wood, which he gave to his son to buy a settlement in Lancaster county. Three years after he did as much for his daughter. And thus he provided for his whole family; the wood in the mean time repairing by suckers all the losses it suffered.—*Boston Transcript*.

Never keep your cattle short; few farmers can afford it. If you starve them they will starve you.

It will not do to hoe a great field for a little crop, or to mow twenty acres for five loads of hay. Enrich the land and it will pay you for it. Better farm 30 acres well than 50 acres by halves.

In dry pastures dig for water on the brow of a hill; springs are more frequently near the surface on a height than in a vale.

Rain is cash to a farmer.

Saxon and Merino Sheep.

MR. EDITOR:—It seems to me that writers on this subject usually leave out one important part, viz: the living weight of their sheep, which they otherwise describe. We cannot judge any thing about the profits of a sheep or flock, without having the weight of the animals at some particular season (say after shearing;) also the weight of their fleeces, and their fair cash value per lb. Several of your correspondents dwell particularly on the weight of their fleeces—forgetting that the weight of the fleece is no sure criterion of a profitable breed.

It is now admitted by prominent wool-growers, that sheep consume food in proportion to their own weight; and also (other circumstances being the same,) that it requires an equal amount of food to produce a pound of wool without regard to the size of the sheep. So, after having the weight of the fleece and its value per pound, it is necessary to have the weight of the living animal, from which to calculate the cost of growing the fleece, before we can decide on its profits.

A part of my small farming business has been wool-growing for the last 13 years. My flock at present numbers 425, principally Merinos, which I have taken care of most of the time personally. About one year ago I became of the opinion that as many pounds of Saxon wool from ewes weighing about 62 lbs. each (the common weight of a full grown Saxon ewe,) could be raised on one hundred acres of land, as could be grown on the same of (equally clean) Merino wool, from ewes weighing 88 lbs. each (about the common weight of a full grown Merino ewe.) Bucks, weathers, and younger sheep of each breed would weigh of course in the same proportion to each other as the ewes. With the view of testing this by experiment, I went last February to Saxon-Hill, Dutchess county, where THOMAS W. SWIFT, Esq., owns a choice flock of sheep which are descended directly from imported Saxons. For symmetry, quantity and quality of fleeces, *collectively* considered, I have seen none superior to his. It is true they are not so large as Merinos, but this is of but little consequence when we consider that 100 lbs. of the Saxons produce the same amount of (equally clean) wool as the same weight of Merinos—and that it costs no more to keep 100 lbs. of the one than of the other. I am aware there are Saxons, ill-shaped, thin woolled, with weak constitutions, made so by bad selections, and worse breeding; but MR. SWIFT'S sheep are free from these objections. From this flock I purchased four ewes, (all he would then dispose of,) and five bucks. From a neighbor of his, who formerly obtained his sheep from Swift's flock, I selected thirteen ewes from about 150. The reputation of this last flock was not as good as Swift's, but my opportunity for selecting was such that the

ewes I got were equally nice in every particular.

Should you think the above worth publishing, in another article I will compare the profits of these Saxons with Merinos according to my late experiments, and former experience in wool-growing. I had forgotten to say that three gentlemen in our vicinity who have had considerable experience in growing Merino wool have just sent to Dutchess county, and to Litchfield county, Conn., for a lot of full-blood Saxons.—This breed is undoubtedly obtaining more favor than formerly in our county, which (the census of 1845 will show,) grows more wool in proportion to its size than any other county in the State.

SOLOMON HITCHCOCK.

Conesus, Liv. Co. Jan., 1847.

Cleaning Clover Seed.

MR. EDITOR:—It has become a matter of some importance to this section of Illinois, to possess some facility for separating clover seed from the chaff. At present we have no means of doing this, except tramping with horses, which is very tedious; and the consequence is, we import our clover seed from other states, instead of getting out and using our own. We are told a machine is in operation in your State, by horse power—and which is moved from place to place with no more inconvenience than an ordinary threshing machine—which successfully and cheaply accomplishes this labor. If from your position at the head of Western New York farmers, you are able to furnish information of such a machine—its maker, cost, &c., &c., you will confer a special favor upon myself and neighbors by communicating to us. Our only apology for troubling you in this matter, is that we read your paper.

Very truly yours,

W. J. PHELPS.

Elmwood, Ill., Nov. 30, 1846.

REMARKS.—There are several kinds used in this State. The one we are most acquainted with is manufactured by THOS. D. BURRALL, of Geneva, N. Y. It is a small machine about the size of a wheat thresher, and is attached to any horse power. It costs, we believe, from 80 to 100 dollars, and performs its duties perfectly.—Persons in this vicinity travel with them over whole townships. *

WOOD ASHES.—Professor Jackson, in one of his highly able and scientific lectures in Boston, illustrating the manner in which the improvement of soil, immediate and permanent, may be effected, says that "a farm within his knowledge, with a blowing sand, a pine barren, and almost hopeless soil, on which ten bushels of corn to the acre could scarcely be grown, by the judicious application of ashes, has been made to produce forty or fifty bushels to the acre."

Good fences make good neighbors.

Chess.---A new case of Transmutation.

MR. EDITOR:—I do not know but I shall be sneered at by the knowing ones, but being only a plain illiterate farmer, I shall venture to relate the facts of a singular case that occurred on my farm. I noticed them particularly at the time, without having my philosophy much disturbed; but since the agitation of the *chess* question, and the light thrown on that subject, I admit that it has been a serious stumbling block in my mind—but to the facts. In 1825 I took possession of the premises on which I now reside, the county then being new and in the original forest state. In 1826 I cleaned off a small field on the west side of the creek, and on the 4th day of July sowed it to oats. The season was dry; and they were not all fairly up under four weeks. We had early frosts, and it was apparent that they would not ripen; so, when about in the milk, I had them cut and cured for fodder, which proved excellent.

The next spring on examining the ground, there appeared at the roots of the stubble a strong, new, fresh growth, appearing like oats or timothy; but when it headed out, behold it was *chess*, every particle, and a glorious crop too. These were cut and cured for fodder, which did me good service, as my cattle eat it with great avidity. But the *vagaries* of nature did not stop here; the next spring the ground was entirely green again, but the leaves were not as broad and stout as before. I rested till it headed out, and what should it be but *timothy*, and a fine heavy crop it was, which I continued to mow for a number of years, till it was turned into pasture, and within three years to turneps, flax, and corn.

Now, sir, these are facts. I cannot, nor do I pretend, to account for these transformations, for I have not even a theory on the subject. There was no *chess* or *timothy* sown—that I am sure of. I expect some of your correspondents will blow me up on this subject, but they can't scare me out of the truth of these statements.

Yours, &c., JOHN KISHLAR.

Greece Center, Feb. 1847.

NOTE.—We publish the above as it came to hand, without remark—premising that the writer is a respectable farmer of the town of Greece, in this county—of an inquiring and speculative turn of mind, and of undoubted veracity.

A few words about Chess.

MR. EDITOR:—I have a fact with regard to the growth of *chess*, that I think worthy of communicating to you, and which I will state in as few words as possible. In cleaning a quantity of very smutty spring wheat, in the fall of 1845, we blew out a number of bushels, composed almost entirely of smut balls—a very few kernels of good wheat, and some pretty sound were

among it. We poured this out, a half bushel at a time in one place; (it was at the edge of an orchard sowed with winter wheat, not on to what was sown, but close up to it.) A thick moss of something, we did not then know what, came up, lived through the winter, came to maturity, and was a thick moss of *chess*.

Now we cannot reasonably suppose that more than two or three, if any, kernels of *chess* could have fallen on there by the sowing of the winter wheat close to it—especially as there was no unusual quantity in that, and spring wheat I suppose never has it in. Now the question is, what caused this growth of *chess*? If you will explain it, a young farmer who does not believe “wheat will turn to *chess*” will be much obliged, and I presume it will interest your readers generally. You may be assured the facts are as stated above.

Yours, &c.,

Sodus, Jan. 30, 1847.

L. H. C.

REMARKS.—The only way we can account for the appearance of *chess* is to suppose that there was, by some means, kernels of *chess* in the cleanings of the spring wheat; for our correspondent will hardly admit that the defective grains of spring wheat could have withstood the winter, and lived over, even for the purpose of producing *chess*. *

ORIGIN OF THE UPAS TREE STORY.—A real valley of death exists in Java; it is termed the Valley of Poison, and is filled to a considerable height with carbonic acid gas, which is exhaled from crevices in the ground. If a man or any animal enter it he cannot return; and he is not sensible of his danger, until he feels himself sinking under the poisonous influence of the atmosphere which surrounds him; the carbonic acid of which it chiefly exists, rising to the height of eighteen feet from the bottom of the valley.—Birds that fly into this atmosphere drop dead; and a living fowl thrown into it dies before reaching the bottom, which is strewn with the carcasses of various animals that have perished in the deleterious gas.

This gas is precisely similar to that formed in the human system, and in the bodies of all animals by the combustion of a portion of their food. This gas is expelled from their lungs every time they breathe. In the particular locality in Java, the carbonic acid gas is disengaged in the earth by heat acting on limestone; or on coal in the presence of oxygen.

It is said that water in which potatoes have been boiled, sprinkled upon plants of any kind, is sure death to all insects, in every stage of their existence.

The deprivations of birds are fully compensated by the services they render in preying upon insects.

Meteorological Observations.

BY I. WETHERELL.

Annual abstract of the Meteorological Observations made in Rochester, in the years 1845 and 1846:

Monthly mean temp. of	Jan. 1846,	27.56;	do.	1845,	28.05
"	Feb. "	22.79;	do.	"	23.10
"	Mar. "	34.80;	do.	"	33.41
"	April "	47.36;	do.	"	46.42
"	May "	60.24;	do.	"	53.78
"	June "	64.45;	do.	"	64.66
"	July "	69.87;	do.	"	69.58
"	Aug. "	69.86;	do.	"	69.35
"	Sept. "	65.71;	do.	"	56.80
"	Oct. "	47.39;	do.	"	49.1
"	Nov. "	42.67;	do.	"	39.41
"	Dec. "	29.41;	do.	"	24.78
Annual mean temp. of		43.66;	do.		47.44
Highest degree,		96;	do.		102.
Lowest "		1;	do.		0.
Greatest range,		95;	do.		102.
Warmest day,	July 10;	do.	July 13		
Coldest "	Feb. 26;	do.	Feb. 1		
Winds. North, in	23 days;	do.	27½ d'ys		
" Northwest,	43½ "	do.	19½ "		
" East,	14 "	do.	6 "		
" Southeast,	38½ "	do.	21 "		
" South,	13½ "	do.	20½ "		
" Southwest,	47½ "	do.	50½ "		
" West,	75½ "	do.	73½ "		
" Northwest,	109½ "	do.	146½ "		
Prevailing wind of both years, northwest.					
Number of fair days in	1846, 163;	do.	1845, 154½		
" cloudy days in	" 202;	do.	" 210½		
" days on which rain fell	" 99;	do.	" 105		
" " snow	" 65;	do.	" 74		
" " rain & "	" 13;	do.	" 17		
Rain Gauge,	1846, 37.13 in.;	do.	1845, 34.44 in.		
First frost in autumn of	Oct. 3;	do.	Sept. 12		
First snow "	" 17;	do.	Oct. 12		

REMARKS.—The reader will observe in comparing the mean temperature of the corresponding months of the two years given in the abstract, that there is not the difference of a degree in temperature between January of 1845 and January 1846, and so of the corresponding summer months. Between the corresponding months of February and December, there is a difference of a little more than five degrees.

The difference of the annual mean temperature of the two years given, is only about a degree. The difference between the amount of rain and melted snow, as seen, is but little. So of the winds from the different points of the compass; and so of nearly all the corresponding results given in the abstract. The greatest amount of rain and melted snow which has fallen during any month for the last six years, the period during which I have kept the rain gauge, was last October: the total amount of rain and melted snow for the month being 6.79 inches.

The amount of rain and melted snow that fell between Oct. 1st and February 8th is 17.75 inches—about one half of the annual fall, and this during the months when we usually have but small fall of water. The river has been very high most of the time since the month of October—the weather mild—and we have had but little snow. The past year will be remembered for its fine weather. Sleighing was good nearly all winter and continued until March 10th, when

the weather became warm, the snow soon disappeared, and spring birds made their appearance; and on the 27th the farmers commenced sowing wheat. The season was early and productive—the summer very warm and dry—the river lower, as reported by a miller, than it had been before for twenty years. The autumn was mild—no frost until after the first of October. The harvest, both the early and the latter, was plentiful.

Preservation of Fence Posts.

MR. EDITOR:—I wish to inquire of you if you know of any process by which fence posts, or other posts set in the ground, may be made more durable? Is it beneficial to boil them in any liquid or composition? or does it make any difference which end of a post is downwards, the top or butt, as to their durability?

And can you inform me of any way to destroy the worm or grub preying on the roots and body of the peach tree, and what is the best manure for peach trees, &c. D.

Ovid Center, N. Y., 1847.

REMARKS.—Charring fence posts so far as the earth reaches, or a little above the portion set in the ground, will greatly retard their decay.—Boiling them in any liquid will be of little or no service. Surrounding them in the earth with leached ashes, is a good preventive against rotting. Green posts can be perfectly saturated with strong brine, or copperas water, in a way we have not now room to describe. It shall be done in our next. As there are no valves in the tubes through which sap or water circulates in trees, it matters little which end of a post is set in the ground.

An acquaintance of ours has driven grubs away from his peach trees, and made them grow finely, by removing a portion of the soil around each tree, and applying pounded charcoal to the roots, and leached ashes to the surface, over the coal. Another finds coal alone to answer the purpose.

AGRICULTURAL WARE HOUSE.—MESSRS. NOTT & ELLIOTT have opened a large assortment of the most improved, and highly finished Agricultural Implements of Boston and Rochester manufacture, ever offered in this city, at No. 23 Buffalo street. This establishment well deserves the attention of farmers, gardeners, and fruit culturists in Western New York. Messrs. N. & E. deal in Shaker Garden Seeds. They have also a full assortment of Hardware, adapted to the wants of all classes of community.—Rochester American.

Obtain good seed, prepare your ground well sown early, and pay very little attention to the moon.

Accounts should be kept, detailing the expenses and products of each field.

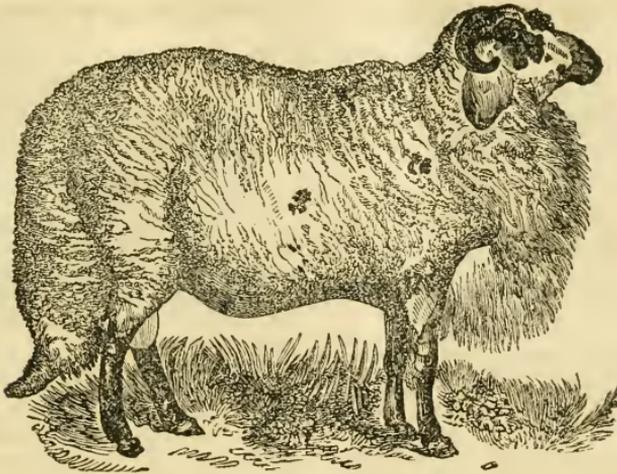


Fig. 18. THE BROAD OR FAT-TAILED SHEEP.

THIS race of sheep is found throughout Asia, a great part of Africa, and throughout the north-eastern part of Europe.

Dr. Russell, in his history of Aleppo, gives the following account of it, as it appears in Syria:—"The dead weight of one of these sheep will amount to 50 or 60 lbs., of which the tail makes up 15 or 16 lbs., the tail alone composing one third of the whole weight. This broad, flat-tail is mostly covered with long wool, and becoming very small at the extremity, turns up.—It is entirely composed of a substance between marrow and fat, serving very often in the kitchen instead of butter, and cut into small pieces, makes an ingredient in various dishes."

Dr. Russell further remarks:—"Animals of this extraordinary size (150 lbs.) are, however, very rare, and kept up in yards, so as to be in little danger of hurting their tails from the bushes. The shepherds in several places in Syria fix a thin piece of board to the under part, which is not, like the rest, covered with wool, and to this board are sometimes added small wheels; whence, with little exaggeration, we have the story of the Oriental sheep being under the necessity of carts to carry their tails. But the necessity of carriages for the tails of the African sheep, mentioned by Herodotus, Rudolphus, and others, is real. The tail of that animal, when fat, actually trails, not being tucked up like those of the Syrian Sheep."

In Persia the fat-tailed sheep greatly predominate; and although the chief source of wealth to a large class, no efforts are bestowed upon their improvement. The shepherds still follow the wandering life of their ancestors. In Frazer's account of Persia, they are thus described:

"When the pastures are bare, they shift to some other spot. The march of one of these par-

ties is a striking spectacle. The main body is generally preceded by an advanced guard of stout young men, well armed as if to clear the way; then follow large flocks of all kinds of domestic animals covering the country far and wide, and driven by the lads of the community. The asses, which are numerous, and the rough, stout yabooos (small horses,) are loaded with goods, tents, clothes, pots and boilers, and every sort of utensil, bound confusedly together. On the top of some the burdens may be seen mounted the elder children, who act the part of drivers, and the lesser urchins holding on manfully with feet and hands. A third class of animals bear the superannuated of the tribe, bent double with age, and hardly distinguishable from the mass of rags that form their seats. The young men and women bustle about, preventing, with the assistance of their huge dogs, the cattle from straying too far. The mothers, carrying the younger infants, patiently trudge on foot, watching the progress of their domestic equipage. The men, with sober, thoughtful demeanor, armed to the teeth, walk steadily on the flanks and rear of the grotesque column, guarding and controlling its slow and regular movement."

Much wool is grown in those districts of Persia, where the majority of the inhabitants lead a pastoral life; the most valuable is found in the province of Kerman. This is a very mountainous country, hot and dry in summer, and intensely cold in winter.

BUCKTHORN FOR HEDGES.—Mr. A. H. POWERS, of Seneca, writes for information whether the seeds or plants of the *Buckthorn* can be had at the nurseries in this vicinity? He wishes to use them for growing a durable living fence.—Will the nurserymen answer?

New York State Agricultural Society.

AGRICULTURAL ROOMS, Feb. 11, 1847.

Present—George Vail, *President*; J. M. Sherwood, *ex-President*; Wm. Bull, Sam'l Cheever, C. N. Bement, *Vice-Presidents*; A. McIntyre, *Treasurer*; B. P. Johnson, *Secretary*; T. J. Marvin, W. A. Beach, J. T. Blanchard, *Executive Committee*; A. Stevens, E. P. Prentice, Dr. A. Thompson, Wm. H. Sotham.

Mr. PRENTICE, from the committee on the premium list, reported that the committee had been unable to complete the list in time for this meeting. And the same was recommended to the committee to report to the Board at their next meeting—and the Secretary was added as a member of the committee.

Letters were read from Hon. ADAM FERGUSON, Woodhill, Canada West; GEORGE GEDDES, Esq., Fairmount; W. H. Sotham, Albany.

A communication from E. C. M. GALE, M. D., on the cause of abortion in cows, was read and referred to the committee on preparations and transactions.

Communications from Hon. BENJ. ENOS, Madison county, and the PRESIDENT, on the adoption of rules for measuring corn crops, &c., were read and referred to the committee on premium list.

Statement of a crop of oats raised by HAMILTON MORRISON, was presented and read, and no premium awarded, as the rules required by the Society as to the measurement of the land and of the crop, had not been observed by the applicant, nor any sample of his grain presented.

On motion of Mr. STEVENS, the plan of show grounds at Auburn was ordered engraved, under direction of Messrs. McIntyre, Tucker, and Stevens.

On motion of Mr. JOHNSON, the President, Mr. Sherwood and Mr. Stevens, were appointed a committee to prepare regulations for grain crops.

The Secretary was directed to return the thanks of the Society to P. L. SIMMONS, Esq., of London, for his valuable communication to the Society on grasses, and forward to him the transactions of the Society for 1844 and 1845.

On motion of Mr. JOHNSON, vols. 4 and 5 of the Society's transactions were ordered to be furnished to the N. Y. Historical Society.

On motion of Mr. STEVENS,

Resolved, That a set of the transactions of the Society be furnished to the New York Agricultural Association.

Messrs. Johnson, Stevens, and Bement were appointed a committee to superintend the preparation and printing of the transactions of the Society.

On motion of Mr. STEVENS,

Resolved, That the show and fair of the society be held at Saratoga Springs, on the 14th, 15th, and 16th of September, 1847, and that the first day be devoted exclusively to the examinations by the committees, and the 2d and 3d days to the exhibition—on condition that the persons who have presented a written guarantee to the board, furnish a bond executed by themselves or others in exchange for the same at the next meeting of the board—conditioned, that this society shall not be charged with any of the expenses of the fair at that place.

Messrs. Howard, Bement, and Johnson were appointed a committee to prepare subjects for the weekly agricultural meetings.

Resolved, That the meeting adjourn to Thursday, the 18th inst., at 11 o'clock, A. M.

B. P. JOHNSON, Secretary.

P. S. The premium list of the last year is left with the Secretary at the Society's rooms in the old State Hall, where premiums will be paid, in the absence of the Treasurer.

Officers of county societies who have not forwarded their reports, are requested to do so immediately, to the Sec'y.

Publishers of papers, and others who have business with the Society, are desired to direct their papers and letters to the Secretary, at the Agricultural Rooms, Albany.

B. P. JOHNSON, Secretary.

CORN IN NEW JERSEY.—A correspondent of the Trenton News states that persons competent to judge, estimate the surplus product of corn of New Jersey as now worth a million and a half of dollars.

Cultivation of the Cranberry.

WE have been furnished by the Rev. H. B. Holmes, of Auburn, Worcester, Co., Mass., with the following extracts from a letter received by him from a friend, in regard to the culture of the cranberry.—*Cultivator*.

"1st. You must not think of sowing the seed—but set out the roots.

"2d. You wish to know how to prepare the ground. It is important that you contrive some way to prevent and destroy the growth of the grass and bushes, if there are any. This can be done either by plowing, burning, paring, or covering with gravel.

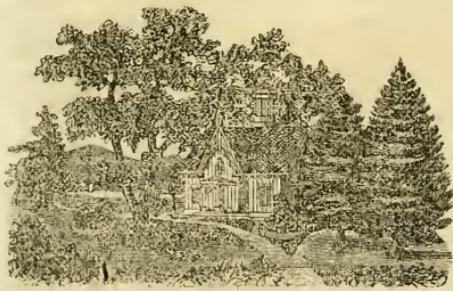
"3d. How to set out the roots. After the land is prepared, procure your roots in bunches about as large as it is convenient to take up with a common shovel. It is important to be careful in taking up the roots. Have a sharp shovel or spade so as to disturb them as little as possible, and turn aside the vines, so as not to cut them off. Dig a place in your prepared ground about the size of your bunches of roots and set them in. You can have them about as near as hills of Indian corn usually are, or nearer if you please. The nearer they are the sooner they will cover the ground. They are not difficult to make live, but the better you prepare the ground, and the more carefully you set them out, the better they will flourish.

"4th. As to the time of setting them out.—This may be done in the autumn or spring; but I should prefer the spring; because when set out in the autumn, the frost is apt to throw them out of their place. This however can be prevented by a little flowing. I should set them out as early as possible in the spring.

"5th. As to flowing. It is regarded as very important to be able to flow at pleasure. Supposing you set out your roots next spring; if you can flow them a little in the coming fall and winter, just so they may not be troubled by the frost and consequent heaving of the ground, they will come out bright and healthy in the spring.

"6th. During the summer when the vines are growing, and the fruit is upon them, it is important to look out for the weather, and if there is danger of frost, flush the water over the ground, so as to prevent the bad effects upon the vines and the crop. When you can flow at pleasure in this way, you are almost sure of a crop annually."

BEES.—R. R. Child, of Pittsfield, Vt., thinks keeping bees is very profitable. He says every farmer may, by the investment of a few dollars, supply his family abundantly with honey, provided the bees are properly managed. He says one of his neighbors, Mr. A. Colton, has realized more profit for the last four or five years, in the produce of honey, than any other man in Pittsfield with "five times the amount of money invested any other way."



HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

Hints for the Month.

WITH this month Orchard and Garden labors begin in earnest, and it may not be amiss to simply remind our readers of a few of the more important items that require attention immediately.

Scions for grafting should all be cut this month; and, where it is intended to procure some from a distance, they should be sent for at once.

Pruning orchards and trees generally, where necessary, may be done now, before the hurry of other work comes along. It is perfectly idle to expect a crop of fine, fair fruit from a tree that is grown into a perfect thicket, impenetrable to sun and air. We have lately been a good deal in the country, and have been much surprised to find so many fine orchards neglected in this respect. There are some sorts of apple, such as the Spitzemberg, Greening, Holland Pippin, Golden Sweet, &c., of an open, straggling habit, that will bear well without pruning for many years; but there are others, of an upright, compact, bushy growth, that require regular, careful, thinning out of the weak surplus limbs, to keep the head open. Such are the Sweet Bough, Early Harvest, Northern Spy, Swaar, Talman Sweeting, and many others.—Some excellent suggestions will be found in the communications of our correspondents to which we refer the reader.

Transplanting Trees should be commenced as soon as the ground is free from frost. Spring planting should be done as early as circumstances will allow. Last season we commenced here on the 24th of March, and the season previous on the 10th. As a general thing, we begin in March. Those who desire information on this subject will find much in the past volume of this paper, and some good suggestions from our correspondents in this number. Gooseberries, currants, and raspberries should be transplanted first, and all trees and shrubs that vegetate early. *Salt* may be applied to plum trees this month. Considerable attention is directed, now, to this subject. We have collected a num-

ber of important extracts on this point in another part of this paper. We suggest great caution and care in the application—better use *too little* than *too much*.

VEGETABLES.—*Asparagus beds* should be dressed as soon as the ground is thawed, by forking in the manure spread over them last fall. This loosens and enriches the beds. When this is done they should be carefully raked off.

Early Peas, Lettuce, &c., may be sowed as early as the ground is open, in a warm border. Raise cabbage, cauliflower, celery, tomato, cucumber and melon plants in hot beds, as directed last month.

Ornamental Department.—Prune shrubs, roses, &c., where necessary to keep in proper shape or promote vigorous growth. Hedges and box edgings should be clipped.

Destroy insects. This is a matter that should not fail to receive prompt and continued attention. The means are now familiar to all who read our paper. Some suggestions will be found in the present number. The work should be commenced now, and vigorously followed up the whole season.

Questions about the Plum Tree, Curculio, &c.

A CORRESPONDENT at Morgantown, Va., asks the following questions:

1st. "What is the course to be pursued to prevent the depredations of the curculio?"

2d. "What is the method of preventing the disease of the plum tree?"

3d. "What is the proper time for grafting the plum, and what the process?"

Our querist is evidently quite a novice in fruit culture, and we fear that we have neither leisure nor space to answer his questions as fully as he may wish or expect. We would advise him to procure at once some such books as *Downing's Fruits and Fruit Trees*, or *Thomas' Fruit Culturist*. The former costs but \$1.50, the latter only 50 cents. We will refer briefly, however, to his questions.

QUES. 1st. The Curculio.—We have yet to hear of a remedy that is completely effectual.—The most efficient we know, is, to begin as soon as the insect makes its appearance, shake them from the trees and kill them. DAVID THOMAS, of Aurora, first proposed this method through the *Genesee Farmer*, in 1832, and has ever since practised it with success. Our friend and neighbor, J. W. BISSELL, Esq., has practiced it the last season with great success—whilst he has found syringing with whale oil, soap suds, tobacco water, &c., wholly ineffectual. In an article from Mr. BISSELL, published in the January number of the *Horticulturist*, he says:

By making each day last spring a careful examination, I ascertained that the Curculios commenced their depredations upon Plums first, and on the first day of their appearance, (May 20,) I killed twenty. For the space of nearly

a month from that time, the trees were thoroughly shaken almost every day, and occasionally until the 15th of July, though in the latter part of the time very few were caught. During the first month, the number killed from fifty trees sometimes amounted to 500 each day, in July hardly a dozen. The manner of taking them was effectual, though somewhat laborious: a large white cloth was spread under the tree, reaching as far as the foliage extended; the body and the larger branches were then repeatedly jarred with a pole about ten feet long, the end of which was covered with thick cloth, and an old india rubber shoe to prevent injury to the bark, and the insects as they fell were killed with the fingers. Shaking the tree or the branches violently with the hand, stopped the operations of the Curculio for a short time, but they would not quit their hold; to make them do that, required the sudden jar, such as was given by the pole.

This is the mode of operating against the curculio that we recommend; and beside this, to pick up carefully, and destroy all the punctured fruit that fall from the trees.

Ques. 2d. We do not know what diseases our correspondent alludes to. The principal disease of the plum is the *black knot*, or *wart*, the cause of which is not yet clearly determined—some supposing it to be caused by the stings of the curculio, or some other insect, and some to be owing to a deranged state of the sap. For our own part, we have found no difficulty with this disease, and we think none others will, if the soil is properly cultivated, and these excrescences removed as soon as they begin to appear. *Salt* is highly recommended by some experienced cultivators as a remedy for this as well as for the curculio. Jno. M. Ives, of Salem, says in the Horticulturist:

"I may fairly claim to have had some experience with salt, as I have probably used as much or more of this article in the cultivation of the plum, as any individual, having applied in February, 1845, *five hogsheds* (of 8 bushels each,) on an acre, and the year previous about one-third of this quantity; and for the last two seasons my trees have produced greatly, particularly the Green Gage."

Dr. SHURTLEFF, of Boston, who excels in raising fine plums, says in a communication to the Horticulturist:

"In 1839, my plum trees were covered with the black fungus, commonly known as the *black knot* or *wart*. At the same time they cast their fruit, so that I did not get specimens enough to deride the genuineness of the kinds. Observing in several gardens that had been made on salt marshes, that the plum trees, in every case, were unusually vigorous and healthy; that they produced full crops, and did not cast their fruit; I was led to the conclusion that salt was a preventive of the disease, and that it also destroyed the curculio.

The next winter I gave each of my plum trees a dressing of about two quarts of salt. I directed my man to put it on in a circle, about twelve inches from the tree. [We presume, meaning that the circle of salt did not come nearer the trunk than twelve inches.—Ed.] It being salt that was the residuum of a pork barrel, I cautioned him not to put on the brine. He did, however, put about a gallon around one tree, and it killed it. The others blossomed well, and the fruit remained on the trees until fully ripe. In the spring I cut off all the fungi or warts, but put nothing on. The wounds healed up nicely, and from that time, I have been in the habit of putting on salt annually; and the only trouble now is, that my trees bear too much fruit, so as to destroy its fine quality, unless a portion is thinned out.

In 1840, I set out some trees, quite covered with the fungus or warts. I treated them in the same manner as just described, cutting the trees deeply wherever any disease was found, and the next year the wounds were all healed, and no excrescences have since appeared.

Mr. Downing says:

The Plum is naturally a marine tree, and it is surprising

how much salt it will assimilate and thrive upon. We have, ourselves, given a single large tree a half bushel of salt in a season, applied to the surface of the ground in the spring, over an area as wide as the extent of the branches. The tree was in a sickly and enfeebled state, and it had the effect of restoring it to a healthy and luxuriant condition.—But we consider this an extreme case, and should not recommend the abundant use of salt every year.

Ques. 3d. *Time and process of grafting the Plum.*—The time for grafting is just as soon as vegetation starts in the spring, which is known by the swelling of the buds. In Virginia we suppose this occurs about the beginning of March—here, the latter end of that month, or beginning of April, as the season may be. The Cherry and Plum require to be grafted earlier than any other fruit trees, such as the Pear, Apple, &c.

The process is the same in all trees, and for this we must refer to back numbers of this paper, or to some of the books we have mentioned.

Horticultural Premiums for 1847.

THE Horticultural Society of the Valley of the Genesee offers \$400 in premiums, for the ensuing year, as follows:

Vegetables, \$40; Fruit, \$200; Flowers and Plants, \$124; Ladies' premiums for annual flowers, \$25; Native flowers, \$11.

PREMIUMS FOR 1848.

Herbaceous plants, best display.....	\$15
Flowering shrubs, do.....	10
Tulips, do.....	5
Hyacinths, do.....	5
Herbaceous Poenies, do.....	5
Tree " do.....	5

THE NORTHERN SPY.—JOHN J. THOMAS says in the last number of the Horticulturist—

"The rule may be laid down as nearly invariable, that in all cases the fruit of the Northern Spy will be large, fine, and handsome, provided the pruning and cultivation are sufficient to maintain a vigorous growth of the young branches. Cultivation which does not produce this effect, will not accomplish the desired object.

With regard to the value of this fruit for "market," I need only state, that it commands a price two or three times as great as the Spitzenberg, Rhode Island Greening, and other fine winter varieties. One cultivator sold his entire crop the past season for \$2.50 per barrel, while most of our best winter fruit has sold considerably less than a dollar per barrel.

It will be seen that this corresponds precisely with the opinions advanced by us in our last volume, page 193, in noticing some statements made by Mr. W. R. Smith.

TO CORRESPONDENTS.—Communications have been received from J. H. Wright, Esq., New Haven, and A. W. of Marcellus. They will receive attention in our next.

C. Pierpont, *Allen's Hill*, N. Y. The apples you sent us are the *Northern Spy*. Your remarks as to late blossoming, hanging long on the tree, and keeping till July, are certain characteristics of this variety.

PRECIOUS beyond rubies are the hours of youth and health.—Let none of them pass unprofitably away.

Golden Reinette.

SYNONYMS.

German Golden Reinette.
 Kirke's Golden Reinette.
 Reinette Gielen, of the Germans.
 Reinette Dore. } *French Catalogues.*
 Reinette Jaune tardive. }
 Princess Noble, and many others.

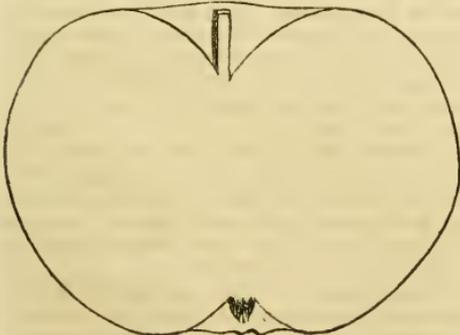
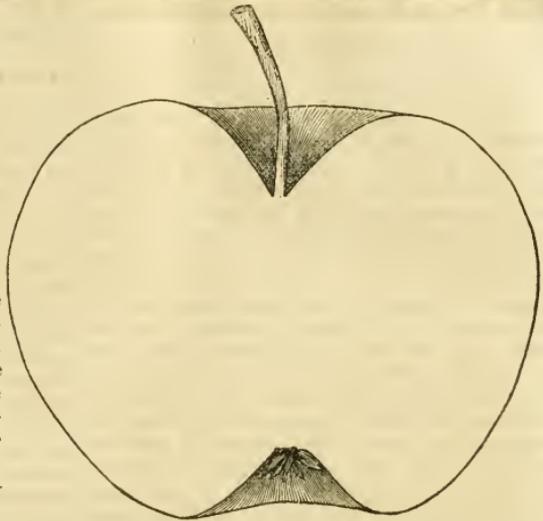
THIS Apple is a great favorite in England, and more particularly on the Continent of Europe, and like all other general favorites, is well furnished with a variety of names. It has fruited with us for three years past, and we are now able to recommend it to orchardists and amateur fruit growers as a truly excellent and valuable sort. Mr. ELLWANGER imported our tree from Germany some seven years ago.— Since it commenced bearing it has borne an enormous crop every year, more than half the fruit having to be thinned off.— The tree grows vigorously. Ours is on a paradise stock, on which it does well; but we are sure it will do just as well as a standard.—

It is noticed, but not figured, in *Downing's Fruit and Fruit Trees*, page 129, (not 121 as the index has it.) We quote below the remarks and description, as being strictly correct:

"The Golden Reinette is a very popular dessert fruit in England and on the continent, combining beauty and high flavor. It is yet but little known here.

"Fruit below medium size, very regularly formed, roundish, a little flattened. Skin smooth, greenish,—becoming golden yellow in the shade, washed and striped with fine soft red, on the sunny side, mingled with scattered, russet dots. Stalk long, and inserted moderately deep. Calyx large, set in a broad, but shallow basin. Flesh yellow, crisp, with a rich, sugary, or scarcely acid juice. October to January."

The London Horticultural Society's Catalogue says it is "a handsome, regularly formed, and excellent dessert fruit, of first rate excellence; trees good bearers."



The Early Joe Apple.

THIS is a seedling Apple of Western N. York, originated in Bloomfield, Ontario county, in the orchard of OLIVER CHAPIN, Esq., of that place. It was first brought to Rochester by Judge STRONG, who has had it bearing for a number of years; and it is now in the course of being disseminated as fast as scions or trees can be procured.

We have had an opportunity of learning the opinions of a large number of our best fruit growers and connoisseurs, as to the merits of this fruit, and, without a single exception, they have pronounced it *the finest of its season.* W. R.

SMITH says in the *Horticulturist*—"It may safely be set down as the best of any season." For our own part, we can say, that, although it partakes of a deficiency, common, more or less, to many of our American Apples, that of *high flavor*, yet we have never tasted an apple more agreeable to our taste.

It merits a prominent place among first class fruits, such as *Dutchess of Oldenburgh*, *Gravenstein*, *St. Lawrence*, *Porter*, &c. The tree while young is moderately vigorous, but when it attains a bearing size the growth is very slow; it is a regular fine bearer, and under careful culture the fruit is generally perfect and beautiful.

Fruit rather below medium size; round and regularly formed—some specimens flattened; skin, smooth, of a beautiful bright red color, with stripes of darker in a pale yellowish ground; the whole surface covered with a delicate bloom, like a plum-stalk, short, set in a pretty deep, regular cavity; calyx small, closed, in a shallow basin slightly furrowed; flesh white, tender and melting, like a fine pear; flavor delicate and pleasant.

The English language is a great puzzle.— Thus, one man may be engaged in "sealing" on the water—another in "ceiling" a room—another in "sealing" a letter, according to the best rules of Murray.

Fruit Trees.—Destruction of Insects, Culture, Grafting, &c.

BY A. HUIDEKOPER, MEADVILLE, PA.

WITH the return of spring the attention of farmers will again be directed to their orchards, budding, grafting, pruning, &c.; and with the awakening interest in agricultural matters, all careful pomologists cherish the hope that a more general attention will be given not only to the right mode of culture, but also to the more effectual destruction of the injurious insects, which, for several years past, have been multiplying in our country. In addition to protecting insectivorous birds, one of the most effectual methods of accomplishing the latter, is the washing of fruit trees at the *appropriate* season. If incubation is perfected, and the young insect produced the same season that the egg is deposited, then the washing should take place as soon as the ovipositor has accomplished its task. If hatching, however, is not effected until the following year, then early in the spring is a leisure and good time to anticipate and prevent the evil.

A good deal has been said about the best application for this purpose—one recommending lime, another a solution of soft soap, and another a solution of potash. All these are very excellent, but sometimes fail of being applied from an unwillingness in the farmer to take a drive to the village in search of them, or from the false economy which regards the slight expense of procuring them. If there is anything equally beneficial, and within every one's reach, we think it should be substituted, as doing away with the last apology which a lazy man can give for neglecting his trees; and we think that this article may be found in wood ashes, of which every farmer has an abundance. I have tried the solution of black salts, the application of soap, and also that of wood ashes; and so far as my observation goes, for large trees with rough bark, the latter is quite as good, if not better than the former.—A wash of ashes and water can be made as strong as you please, and if put on some dry day, a good deal of the ashes will remain adhering to the bark, which the subsequent rains wash into the crevices. This wash, if applied in the summer time, will, while the ashes remain on the tree, make it offensive and disagreeable to the insects, and deter them from lighting upon it; it also ultimately makes the bark smooth and healthy. Simple lime and water I should suppose would have the same effect. Whether the white-wash that is usually applied containing glue, and making a thick coating sufficient to affect the solar and atmospheric influences upon the tree, is equally good, I leave for those who have tried it to say—theoretically I should suppose it would not be.

By those who wish for healthy and productive orchards, too much attention cannot be given to

the bark of their trees. We frequently meet with forest trees whose interior has been almost entirely destroyed by fire or decay, and which yet seem healthy and flourishing, by virtue of a vigorous bark; and any one who has tried the experiment, must have observed how both shrubs and trees, that have become enfeebled by age and neglect, can be re-juvenated by attention to their exterior condition. We don't mean to recommend to any one to procure old or large trees for his orchard in place of young ones, but if he has an old apple tree worth improving, by removing the *outside* of the whole bark on it late in the spring, he will find that he has given to the tree much additional vigor. Upon smaller trees and shrubs a liberal scraping with a trowel and an application of ashes and water will have the same effect.

When trees grow in grassy land, a pretty good way to keep them from being sod-bound is to remove, in the fall, the sod for two or three feet around the tree, and on this turn about half a wheel-barrow full of manure; the winter rains and snows will wash the strength of it down to the fibrous roots. In the spring the manure may be scattered about under the tree, and in lieu of it, substitute leached ashes. This, besides being beneficial to the tree, prevents the grass from approaching the stem of the tree during the summer; and what grass grows over the ashes is easily removed in the fall.

I mentioned in an article on budding, in July last, that grafting could be done as well in August as in the spring. This is true so far as the condition of the tree and the scion are concerned; but in observing the result of some grafting that I did on the last day of July, I notice that the scions that were screened by the other limbs, took and did well, while a few that were set on the extreme top of a tree, exposed to the sun, were destroyed by the heat. It is a good plan with regard to solar heat in grafting, to cover the grafting wax with a small strip of white paper, which, by reflecting the heat, gives additional protection to the stock.

In conclusion we would say, that the farmer who carries his horse twice a day, finds himself abundantly rewarded for his toil in the improved strength and appearance of his animals; why won't he *curry* his trees one or twice a year, and reap a larger reward for the labor and the capital thus invested?

Transplanting Evergreens.

MR. EDITOR:—I have recently become a subscriber to the *Genesee Farmer*, and have this day received the first number. I observed at the head of the Horticultural Department, a picture of a cottage, surrounded with a few specimens of that beautiful evergreen tree, the "*Balsam Fir*." I thought I would send you, for publication, a few hints on the subject that heads

this article—they being the result of several years experience, which is allowed to be the best instructor.

The popular idea has formerly been, and probably still exists in some measure, that evergreens should be removed in the month of June, after vegetation has considerably advanced.—Some seven or eight years since, wishing to ornament my grounds with the Balsam Fir, I adopted the above plan, and the result was a total failure. I have transplanted from ten to twenty fir trees annually, almost every year since; and have now nearly one hundred about my house growing luxuriantly. I have learned by experience that, although the native soil of the fir is a swamp, they will flourish *better* on rich, dry, gravelly, or sandy soils, than on low bottom lands where there is much water. My practice is to remove the trees from the swamp or nursery early in the spring, as soon as the frost is out of the ground; dig them carefully, and not by any means allow the roots to dry, and set them in well prepared soil, and they are as tenacious of life as almost any other forest tree. The holes should be dug large, and a foot or more in depth, and then partly filled with chip-dirt or muck, so as to raise the roots near the surface. In filling the holes, the earth should be mixed with fine chip-dirt, and a pail of water dashed in, so as to bring the earth in close contact with the roots. After the hole is filled, spread a bushel or more of chip-dirt, (a coarse article will answer,) about the tree, to retain the moisture during the drouth of summer. In very dry weather, an occasional watering is necessary, the first season after transplanting. In soils partly, or wholly composed of clay, without the above preparation, I believe that ninety-nine trees in a hundred would die the first year.

Three or four years since, I prepared a piece of ground for a row of fir trees, in the following manner, and with the following results: A land about six feet wide was plowed three or four times, turning the furrow outward each time, so as to make quite a trench in the centre, which I supplied plentifully with fine manure from the *chip*, and barn yards. The land was then back-furrowed so as to bring it to a level, and the manure and soil well mixed with the plow.

My trees were carelessly *pulled* from the swamp, and as carelessly planted. In a row of twenty-five or thirty trees, although they were six or seven feet in height, there was not a single failure; which I attribute principally to the above preparation of the soil. I have found *chip-dirt* to be the most valuable kind of manure, applied on the surface of the ground, around fruit trees and shrubs of every kind. The "whys and wherefores" I could explain, but I am reminded of the Printers' rule, "Be short."

E. R. PORTER.

Prattsburgh, N. Y., Jan. 13, 1847.

Culture of the Quince.

MR. EDITOR:—Will you or some of your correspondents give some information concerning the cultivation of the Quince!—whether it may not be grafted with good success on stocks of other varieties of fruit, when grown on unfavorable soils? I have seen it grafted upon apple stocks, the past season, with promise of good success. I have never found any communication on this subject. Downing merely says, "The better sorts are frequently budded on common seedling quince stocks, or on the common thorn." I have found its cultivation unsuccessful on a stiff clay soil, while the apple and some varieties of pear grow luxuriously. If it can be budded or grafted with good success, what is the best time? Very respectfully yours,

Acron, Liv. Co., Feb. 1847.

N. J. K.

WE have no doubt but the quince will unite upon the apple or pear, but we cannot say how successful the results would be. If any of our readers have experience of this sort, we will be glad to receive it. We know that it does very well on the thorn, and we should say that this would be the best stock to use under the circumstances above stated.

Grafting and budding the quince is performed at the usual seasons for these operations on pear and apple trees.

Woodpeckers.

MR. EDITOR:—There is a small speckled bird called "Woodpecker," (I do not know its classical name,*) which frequently picks apple trees. I have known it sometimes almost to girdle the tree just below the branches, (and sometimes also the larger branches,) by picking a regular row or circle of small holes, and sometimes several of them, just through the bark. I have not ascertained its object. Will you, sir, or some one of your correspondents, have the goodness to inform me on the subject? Are the little transgressors in pursuit of the eggs, or larvae, of insects? or do they pick the bark for food? Is it advisable to kill them, or to let them alone? ENQUIRER.

Let them alone. They are only performing a service to your trees that *you* should do—that of removing the larvæ and eggs of insects. It is only old, or neglected trees, where the bark and wood have become a prey to insects, that this bird attacks. It knows too well where its prey is to attack others. It does not feed upon bark or wood; but it does upon ripe fruit, and generally manages to get the first and finest. They are active, roguish fellows, and do much good as well as evil, in the garden and orchard.

NEW PEAR.—A Seedling Pear has been originated by Judge R. S. LIVINGSTON, of Red Hook, which was tasted by upwards of forty members of the New York Farmers' Club, and pronounced equal, if not superior, to the Virgalieu. The fruit is fair, of good size, prolific, and ripens in October. It was found wild in a hedge, and is now but eight years old, and bears freely. L.

* The Woodpeckers belong to the genus *Picus* of Linnaeus: characterized as having the "bill long or medium size, straight, angular, wedge shaped at the tip; nostrils basal, open, covered by setaceous feathers; tongue round, veniform; legs strong; toes two before and two behind—rarely one behind; anterior toes pointed at their base, the posterior divided; tail of twelve strong feathers, the lateral very short."—ED.

LADIES' DEPARTMENT.

Farmer's Daughters.

It is often remarked with some surprise, that farmers' daughters seldom prefer husbands of that profession; and many farmers believe, that educating girls produces a disrelish for rural life. Others have thought the blame with mothers, in not confining them to business sufficiently to make it agreeable to them, or that they had neglected to impress them with the idea, that farmers were the only men suitable for husbands.—In my humble opinion, if they would look to themselves for the cause, they would be quite sure of finding it.

It is not education we have reason to fear, but the want of it. The thoroughly educated woman understands her duties and responsibilities better, and is far better qualified to discharge them than she otherwise could be; neither do I believe want of employment to be any part of the reason.

Our girls hear much said of the safety of the agricultural profession—of the almost sure independence of the farmer; but have they ever seen, or ever heard of independence for the farmers wife? Do they not see that for her there is no cessation from toil—that, as their father's lands increase, so does their mother's cares?

They hear that their father has worked *hard* long enough, and intends to relax from labor, and only oversee his business, without hearing it even hinted that their mother could live more comfortably. Though they see their father employ extra help when his work becomes troublesome, (which makes the mother's task still harder,) they see no indication of her toil being appreciated as long as she can endure it; and if help *must* be employed, it is not that she may live *casier*, but because she can not do what must be done.

And when the farmer finally determines to take his ease, and sells or rents his farm, he prudently suggests to his wife the necessity (as he has given up business,) of her managing in such a manner as not to depend on him for funds; perhaps proposes to keep an extra cow, a few sheep, or something of the kind, to enable her to supply herself with necessaries. Who ever heard of a farmer's wife being able to live without work, while she had the use of her feet and hands?

There is no class of women of whom so great an amount of care and labor is required, as among farmers, nor where the dependence of wives is more abject; and while this is the case, it is as unreasonable to expect us to advise our daughters, or they to choose, to marry farmers, as it would be to expect, because a woman had married a drunkard, that she would advise her daughters to marry drunkards also.

Covington, 1847.

A FARMER'S WIFE.

DRUMMOND'S PATENT CANDLE MAKER.—This is described in the New York Farmer and Mechanic, as simply a Candlestick which makes its own Candles. That paper says:—"It is very ingeniously constructed, with a reservoir of tallow, lard, or similar materials for making candles, also a place in the bottom for a wick, which passes through a tube in the center and comes in contact with the tallow on its being forced up, and, both going up together, form a perfect Candle, either in short or long length, as may be desired. The reservoir holds one-half pound of tallow, enough for four candles, and, when exhausted, must be refilled through an opening at the top of the reservoir.' The tube has a screw cut upon it, which, being turned, carries up a follower and forces out the candle."

PUBLISHER'S DEPARTMENT.

Acknowledgments.

WE this month commence publishing a list containing the names of the agents and friends of the Farmer who have obtained 13 subscribers, or over, to the current volume. The list will be continued in our next number;—meantime we hope to receive many additions from new friends, as well as those who have already sent from 5 to 12 subscribers each.

The list gives the number of subscribers forwarded by each, as follows:

P. W. Van Alstyne,	16	Henry Fellows,	50
Jas. Aldrich,	13	J. H. Gould,	47
D. A. Agnew, P. M.,	13	E. H. Gilbert,	37
Edw. Birdsall,	48	J. M. Grover,	18
Dr. E. Bowen,	35	Jas. Gordon, P. M.,	16
E. C. Bliss,	24	D. T. Greenleaf,	14
E. S. Bartholomew,	18	R. T. Howard,	40
C. Brewer,	18	Erasmus Hurd,	21
C. A. Bacon, P. M.,	17	Wash. Hadley,	21
Paris Barber,	16	Aaron Hampton,	16
J. E. Beebe,	15	D. Halsted, P. M.,	13
Edw. Burchell,	14	T. W. Hall, P. M.,	13
G. W. Buel,	14	Thos. Harrop,	13
J. R. Brown, P. M.	13	E. B. Hawks,	13
Jno. Bery,	13	John Hunt, P. M.,	13
G. M. & B. Copeland,	50	H. S. Jarvis, P. M.,	16
J. Chadwick, P. M.,	32	M. Jackson, P. M.,	16
W. T. Coddling,	21	S. Jaqueth, P. M.,	14
W. Chamberlain, P. M.	21	C. A. Knox, P. M.,	23
L. P. Clark, P. M.,	18	Jas. Kevell, P. M.,	20
John Clow,	18	N. J. Kellogg,	13
O. C. Constock, jr.,	17	Jas. Little, P. M.,	22
Jno. Case, P. M.,	16	E. W. Lawrence, P. M.,	24
Lincoln Cummings,	16	T. T. Lake, P. M.,	20
Wm. Cozzens,	13	G. H. Lapham,	14
W. J. Curtis, P. M.,	13	Jno. Lawson,	14
Henry Chapin,	13	Calvin Leet,	13
H. S. Carter, P. M.,	13	J. Ladd, P. M.,	13
B. Densmore,	30	Thos. Lee,	13
Geo. Duulap,	19	D. McDonald, P. M.,	50
Jas. De Puy,	14	C. P. Stone,	23
S. B. Dudley,	13	H. Munson, P. M.,	27
John Davis,	13	H. McCarty, P. M.,	26
Moses Eames,	50	L. N. Mead,	25
C. English,	30	R. Miller, P. M.,	19
Robt Evans,	28	J. W. Merrill,	19
M. Eager, P. M.,	17	Chas. Miner,	16
S. A. Frost,	27	O. W. Moore,	16
L. C. Fargo, P. M.,	26	D. D. T. Moore, P. M.,	14
E. M. Foot,	22	Ira L. Moore,	13
Win. Frazer, P. M.,	13	U. Munger,	13
Levi Fay, P. M.,	13		

Prospects of the Farmer.—Thanks.

THANKS to its numerous firm and active friends, the GENESEE FARMER is making fine progress on its eighth voyage. The demand for the present volume has been such that we were obliged to publish a second edition of the first number previous to the 15th of January. We have now, however, several thousand of that number on hand—and shall print a very large edition of the present (February) number, in order to furnish the entire volume to all who may desire to become readers and supporters of the Farmer. Its Editors, and numerous Correspondents, (able and practical men,) are capable of making this paper worth ten times its subscription price to almost every farmer in the country—and especially to those of Western New York. And, while we desire no *patronage*, we frankly ask the friends of industry, progress, and improvement, to lend such portion of their influence toward extending its circulation as they think its merits may deserve. Without their approval and aid, the Farmer would be restricted in circulation and influence—with them, we trust it will soon be second to none of its contemporaries in either respect.

Post-Masters, Farmers, Editors, and all others to whom we are indebted for timely and substantial favors, will please accept our grateful thanks—the only acknowledgment we can now make in return for their liberality.—P. C. Farmer Office, February, 1847.

Persons ordering the Farmer will please state whether they have the January and February numbers.

MOUNT HOPE BOTANIC GARDEN AND NURSERIES, ROCHESTER, N. Y.

The Subscribers respectfully solicit the attention of the public to their large and choice stock of TREES, SHRUBS, and PLANTS, which they offer for sale the ensuing spring, (1847.)

The collection of FRUITS embraces all the leading sorts of established merit, and most of the recent varieties of Europe and America. No pains or expense have been spared in making the collection as complete, in every way, as possible. The trees are all thrifty, healthy, and well grown, and have been propagated with the utmost exactness from specimen trees on this establishment, or from sources of the highest reputation for correctness. The collection of specimen trees, for testing the merits of the various sorts, is now among the largest in the United States. The assortment of Apples includes several thousand fine trees of the NORTHERN SPY, universally considered one of the best keeping apples yet known.

Pears.—All the leading well known sorts, such as Madeline, Dearborn's Seedling, Bartlett, Zeckel, Virgalieu, &c., and a small supply of the rare and unrivalled *Swan's Orange* or *Onondaga*, *Knights's Monarch*, and *Van Mons's Leon le Clerc*: the price of these is \$1 each. A few thousand trees of choice varieties can be furnished on quince stocks. These are beautifully adapted to garden culture, and generally bear the second, and older trees even the first year after planting.

Plums.—Besides the well known popular sorts, a small number of the *Jefferson*, *Columbia*, *Lawrence's Favorite*, and *Dennison's Superb* are offered at \$1 each.

Cherries.—A collection of upwards of 40 of the best varieties, earliest to latest—beautiful trees.

Peaches.—Forty choice varieties of established merit, including Tillotson, Early York, Crawford's Early, Jacques Rare Ripe, Crawford's superb or late Malacatoon, &c.—beautiful trees.

Ornamental Trees and Shrubs.—A large collection, including all the finest popular articles in that line. *Roses*.—A superb collection of upwards of 250 select varieties. *Double Dahlias*.—100 beautiful varieties, including several of the finest fancy sorts, such as *Harlequin*, *Illuminator*, *Marchioness de Ormonde*, &c.

Descriptive priced catalogues (edition for 1846 & 7,) will be sent gratis to all post paid applications, and only to such

Trees and Plants packed in the best style, and shipped or forwarded according to orders. It will be for the interest of purchasers to send their orders early, in order to secure such kinds as they may want, and have them forwarded at the proper season. Address, post paid,

Feb 1, 1847.

ELLWANGER & BARRY.

Rochester (N. Y.) Nursery.

Fruit and Ornamental Trees and Shrubs.

THE Subscriber offers for sale a choice collection of Fruit and Ornamental Trees, and Hardy Shrubs, which have been cultivated with great care, and are of suitable size for transplanting this spring. Persons wishing a succession of fruit, and not being familiar with the necessary varieties, by leaving the selection to the subscriber may depend upon receiving the most desirable assortment. In every such selection, QUALITY, and not the size of the trees, will be the rule adopted.

20,000 of the celebrated Northern Spy trees, at 50 cents large, 37½ cents medium, and small sizes at lower rates.

The large quantity of trees furnished in this vicinity, for the last dozen years by this establishment—the excellence of the kinds furnished, when the selection has been left to the proprietor—and the fact, that another establishment has of late adopted the same name, is sufficient evidence of the excellent reputation that this establishment enjoys, and renders a lengthy or puffing advertisement entirely unnecessary.

For particulars see Catalogue, which may be had by application. Orders from a distance will be carefully packed and shipped according to directions. Nursery, East North st., 3 miles north of Rochester. Office 36 Front-st.

March 1, 1847.

SAMUEL MOULSON.

Winter Route for New York and Boston,

VIA TROY AND GREENBUSH.

Avoiding the expense, delay, and danger of crossing the River at Albany. Continuous Railroad Track from Rochester to Boston and Bridgeport, via Troy.

THE CARS leave Rochester at 1 P. M. and 9½ P. M. daily, for Troy, through in 17 hours, carrying the United States Mail.

The U. S. Mail Line for New York, leaves Troy at 6 A. M. intersecting at East Albany the Western Railroad, which leaves at 6½ A. M. via Housatonic Road, through to Bridgeport, without change of cars or baggage, and to New York by day-light.

The cars also leave Troy at the same hour for Boston, Worcester, Springfield, and Pittsfield, via Western Railroad, through in 12 hours to Boston, without change of cars or baggage.

The trip is as quick, and the fair as low by Troy as by Albany, and passengers are set down and taken up by the cars directly in front of, and but a few steps from the Public Houses in Troy, thus avoiding the expense, exposure to cold and wet, and danger of crossing the river at Albany, at so early an hour as 6 o'clock in the morning.

The Housatonic Road has been relaid with the heavy H Rail, and the new and fast steamer Mountaineer placed on the route to run between Bridgeport and New York, for the passengers and the mails exclusively, which render the trip safe, pleasant, and expeditious.

FREIGHT

Will continue to be carried by Railroad until the opening of the canal, and that going east of Schenectady to Troy, New York, Boston, or any intermediate place, should be sent by way of Troy, care of L. R. Darrow, and avoid the delay, cartage, and transhipment in crossing the Hudson River at Albany. The Freight Tariff is the same by Troy as by Albany, and can be ascertained by calling at any of the Railroad Depots on the line between Buffalo and Troy.

Remember, and mark freight via Troy, care of R. L. Darrow, Freight Agent, Troy, who will attend to receiving and transferring it to New York, Boston, and intermediate places, at Troy and Greenbush.

March 1.

N. RANDALL, Agent.

Northern Spy and Swaar Apple Grafts.—The subscriber has a supply of scions cut from the celebrated Northern Spy and Swaar apple trees, from the Orchard of R. I. Hand, of Mendon, who has supplied the Rochester market with better apples of the kind mentioned than any other person. They can be sent by Express, and any orders (post paid,) shall be punctually filled. Price \$1.00 per hundred.

Rochester, Feb. 20, 1847.

JAMES H. WATTS.

Ellwanger & Barry's new Descriptive Catalogue for 1846 & 7 is just published, and will be sent gratis to all post paid applications.

QUERY.—Where can you obtain so much valuable Agricultural and Horticultural matter, for 50 cents, as in the Genesee Farmer?

ROCHESTER COMMERCIAL NURSERY,
MAIN STREET—ONE MILE EAST OF THE COURT HOUSE,
ROCHESTER, N. Y.

Office No. 1 Arcade Hall.



Deodar Cedar.

plicants.

March 1, 1847.

TO NEW YORK FARMERS AND EMIGRANTS.

ILLINOIS LANDS FOR SALE.—115,000
acres, in tracts of 40, 80, 120, 160, acres, or more, to suit purchasers. The lands are all first rate, and among the very best in the State, and are situated in the counties most densely settled, viz. Morgan, Scott, Cass, Mason, Menard, Green, Sangamon, Logan, Christian, Macon, McLean, Woodford, and Macoupin. To actual settlers every reasonable indulgence will be given as to time of payment. The price from \$3 to \$5 per acre.

A correspondent of one the New York papers writes, respecting this section of Illinois, as follows:

BEARDSTOWN, Cass Co., Ill., Jan. 10, 1845.

The Riches of the West—Gothamites on the Wing.—It is now six weeks since I left the city of Gotham, during which time I have seen considerable of the Western country, and I must say the beautiful prairies of Illinois far excel what I had anticipated, and this country may truly be called the garden of the world. There is nothing to prevent farmers in this country from getting rich, as the land is the most fertile in the world, and it will produce everything grown in the vegetable kingdom.

A New England man would hardly believe me if I would tell him that some farmers here produce ten thousand bushels of corn and half as many bushels of wheat in a year, to say nothing of cattle and hogs, of which some raise as many as five hundred head. One farmer told me he had raised, the last year, 6,000 bushels of corn, and it was all produced by the labor of two men only.

Cattle and sheep feed upon the prairies all winter, as they are seldom covered with snow.

Most of the above lands may be cultivated 100 years or more without manuring, being of the richest alluvial soil. The titles are indisputable and the lands will be sold at low prices and in quantities to suit purchasers. Letters (post paid) addressed to D. B. AYRES, Esq., of Jacksonville, Ill., or to the subscriber, will receive prompt attention. As many persons out of the State have an idea that the taxes are very burdensome in Illinois, we state that they range from \$1.50 to \$2.00 per annum on 80 acres of land.

JOHN GRIGG.

No. 9 North Fourth-st. Philadelphia.

March 1, 1847.

[3]

Peas Wanted.—Marrowfat and Field Peas wanted for which the highest Cash price will be paid by

RAPALJE & BRIGGS,

NEW SEED AND IMPLEMENT WAREHOUSE.

GENESEE SEED STORE AND AGRICULTURAL WAREHOUSE.

No. 10, Front Street, Rochester, N. Y.

THE SUBSCRIBERS respectfully announce to the public, that they have opened the above establishment for the sale of GARDEN, FIELD, and FLOWER SEEDS, of all sorts—Agricultural and Horticultural Implements, Machines, &c., &c.

They intend to have always on hand a complete assortment of all the articles wanted in this line by the Farmer and Gardener. No pains will be spared to procure articles of the best quality. No seeds will be offered but such as are undoubtedly fresh and genuine—raised in the best establishments of this and foreign countries. The implements will embrace all the newest and most approved kinds, from the best manufacturers in the country.

Fruit and Ornamental Trees, Shrubs, Plants, &c., will be furnished to order from one of the best establishments in the country—the well known MOUNT HOPE NURSERIES.

The principal conductor of this establishment has had many years practical experience in the business in Rochester; and being well known to a large portion of the agriculturalists in Western New York, the undersigned hope, by devoting constant and careful attention to the management of their business, to merit and receive a liberal share of patronage. Farmers and others interested, are requested to call at the GENESEE SEED STORE.

The proprietors of this establishment gratefully acknowledge the very liberal patronage which they have received from the public the past season, and most respectfully solicit a continuation of the same.

From the very liberal share of patronage we have received during the past season, (which with us is the first and one of experiment.) leads us to believe that our exertions to get up an establishment of this kind, and to offer no Seeds or Implements of any kind but such as can be depended upon, duly appreciated by the generous public.

We would say to the Farmers and others in this section and at a distance, that we are now making a large addition to our stock of Seeds and Implements, any and all of which we will sell at the lowest prices.

Rochester, Feb. 1, 1847. RAPALJE & BRIGGS.

**New Agricultural Implement and Seed Store,
AT AUBURN, N. Y.**

The Subscriber is now opening a Depot for all kinds of AGRICULTURAL IMPLEMENTS, where the farmers can find, in their season, all of the most improved Implements manufactured in the United States. He has now on hand Rieh's Patent Straw Cutter, Burrell's Premium Corn Sheller, the best ever invented, Arnold's Washing Machines, &c. He will also have in their season, a choice assortment of Garden, Field, and Flower Seeds, which are put up in the choicest manner, and are warranted genuine.

JAMES B. COOPER,
No. 84 Genesee-st., Auburn.

N. R.—Manufacturers who have Implements to dispose of will find it to their interest to leave them with me, as it is the only Agricultural Depot in Cayuga County. J. B. C.

Agricultural Implements.

In order to accommodate the subscribers to the Farmer, from whom frequent inquiries and orders for implements are received, I have made arrangements to supply the following articles:

Pitts' Thrasher and Separator,	price, \$150 00
The above, including Horse-Power,	250 00
Pitts' Corn and Cob Mill,	40 00
Seymour's Sowing Machine,	45 00
Sanford's Straw-Cutter,	15 00
Burrell's Patent Corn-Sheller,	10 00

Also, most kinds of Plows, Cultivators, &c., &c., at the usual prices. As my only object is the accommodation of subscribers to the Farmer who reside at a distance, (without fee or reward,) all orders should be post paid and accompanied with the cash. The implements will be carefully selected, and shipped per order.

D. D. T. MOORE.
Farmer Office, Rochester, September, 1846.

REMOVAL.

The Rochester Agricultural Ware House has been removed from Front-street to No. 23 Buffalo-street, Talman Block, opposite Reynolds' Arcade. See advertisement below.

Rochester Agricultural Ware-House, HARD-WARE AND SEED STORE.

(No. 23 Buffalo st., opposite Reynolds' Arcade.)

Where can be found most kinds of GARDEN and FIELD SEEDS, Hard-ware, Tin-ware, Wooden-ware, Willow-ware, House Trimmings, Kitchen Furniture, &c.

The late proprietor of this Establishment, (THOS. NOTT,) feels grateful to his many patrons for their very liberal patronage during the past year, and would solicit a continuance of the same—promising to sell them as good articles in his line, and as cheap, as can be purchased at any other establishment west of Boston or New York. He has formed a co-partnership with Mr. E. J. ELLIOTT—and the business of the establishment will hereafter be conducted under the firm of NOTT & ELLIOTT.

We shall keep constantly on hand, a full assortment of *Shaker Garden and Flower Seeds*, the reputation of which needs no comment.

We are continually manufacturing the celebrated Massachusetts Sward C Plow—to which has been awarded the greatest number of Premiums—which we shall sell at the low price of \$7, with an extra point. Also—shall keep on hand an assortment of the various approved Plows and Points, Cultivator Teeth, Root Cutters, Straw Cutters, and Corn Shellers—with a hundred and one other articles, too tedious to mention.

Farmers from a distance, as also those in our immediate vicinity, are respectfully solicited to call at our new establishment, and examine our assortment before purchasing elsewhere.

NOTT & ELLIOTT,

Rochester, Jan. 1, 1847. No 23 Buffalo-street.

ROCHESTER NEWSPAPERS.

ROCHESTER DAILY DEMOCRAT, TRI-WEEKLY DEMOCRAT, and MONROE DEMOCRAT, the largest Daily and Weekly Papers west of Albany!

PRINTED ON TAYLOR'S IMPROVED NAPIER STEAM PRESS.

The *Rochester Daily Democrat* is one of the oldest and largest daily newspapers in Western New York, and contains a far greater amount of reading matter, than any daily paper west of Albany. Its columns will always afford ample room for a full summary of Foreign and Domestic News, without the inconvenience to which smaller dailies are subjected of mutilating or suppressing important news. Corret, early, and full reports of the proceedings of the National and State Legislatures will also be given during their sessions. The latest New York, Rochester, Buffalo, and Western Markets will always be found in its columns, with extensive Commercial and Statistical tables, of vast importance to all business men.

THE MAGNETIC TELEGRAPH

is already completed from Washington to Buffalo, and will very soon be extended to nearly every State and commercial city in the Union. The proprietors of the "Democrat" will avail themselves of its advantages to obtain regular daily as well as special reports of every thing important in the way of news or business.

The *Tri-Weekly Democrat* is issued every Tuesday, Thursday, and Saturday mornings, and contains every thing which appears in the Daily. To those who have only *Tri-Weekly* Mails, it will be found exceedingly convenient and useful. The

MONROE DEMOCRAT

is issued from the same office every Tuesday morning, and is the largest weekly paper west of the City of New York.—It will contain an immense amount of reading matter upon Agricultural, Literary, and Miscellaneous subjects, together with News, Markets, Congressional and Legislative proceedings contained in the Daily.

Terms.—To mail subscribers the terms are as follows: Daily, (city sub.,) \$8 per year, or (by mail) \$6 in advance. Tri-Weekly, \$5 " " " " Weekly Democrat, \$2 " " " "

Packages of ten subscribers to the Weekly, \$15 " " Address orders to A. STRONG & CO. Proprietors of Daily and Weekly Democrat, Rochester.

ROCHESTER SEED STORE.

[Established in 1831.]

No. 4 FRONT STREET, NEAR BUFFALO STREET.
By JAMES P. FOGG.

The subscriber begs leave to say to Farmers, and others, who have for the last three years so liberally patronized the *Old Rochester Seed Store*, that he has fitted up the Store, No. 4 Front street, on the west side of Front street, where he will be happy to see all who may want any article usually to be found in a Seed Store.

The subscriber is well aware of the important relation which the seedman holds to the whole farming community, and that on his honor and veracity the crop and profit of a season in some measure depend. The greatest care has been used in selecting the seeds offered at this establishment for the ensuing year, and they can be relied upon as pure and genuine, carefully selected and raised from the very best varieties, and properly cured. Many kinds were raised in the immediate vicinity of this city, by Mr. C. F. Crossman, and under the inspection of the proprietor; others were raised by experienced seed growers, and all can be recommended as genuine and true to their kinds.

AGENTS for the sale of seeds by the package, put up at the old Rochester Seed Store:

<i>Attica</i> , H. D. Gladding,	<i>Wyoming</i> , J. C. Farris & Son.
<i>Amsterdam</i> , J. W. Sturtevant	<i>Cleveland, Ohio</i> , J. W. Watson,
<i>Auburn</i> , Hudson & Buckbee	<i>Columbus, O.</i> , John Miller
" James B. Cooper,	<i>Mount Vernon, O.</i> , H. A. Raymond & Co.,
<i>Albion</i> , Charles W. Perkins,	<i>Sandusky City, O.</i> , W. T. & A. K. West,
<i>Buffalo</i> , W. & G. Bryan.	<i>Toledo, O.</i> , Raymond & Co.,
<i>Batavia</i> , Lucas Seaver,	<i>Adrian, Mich.</i> , Howard, Smith, & Co.,
<i>Brockport</i> , A. B. Bennet,	<i>Detroit, Mich.</i> , J. W. Strong Jr.,
<i>Canaanauiga</i> , L. C. Cheney & Co.,	<i>Monroe, Mich.</i> , L. B. Wing.
<i>Cazenovia</i> , Dr. A. Ford.	<i>Pontiac</i> , " Rogers & Dunklee,
<i>Castile</i> , Halsted & May,	<i>Ypsilanti, Mich.</i> , Hewitt, Brothers & Co.,
<i>Elmira</i> , Tracy Beadle,	<i>Chicago, Ill.</i> , N. Sherman
<i>Geneva</i> , Hemip & Cone,	<i>Milwaukee</i> , " C. Holtton & Goodall,
<i>Geneseo</i> , L. Turner.	" W. M. Cuningham.
<i>Homer</i> , W. Sherman & Son,	<i>ham.</i>
<i>Ithaca</i> , Lewis H. Culver,	<i>Hamilton, C. W.</i> , S. Kerr & Co.,
<i>Lockport</i> , S. H. Marks & Co	<i>Kingston, C. W.</i> , C. Heath
<i>Mamford</i> , J. Phelps & Co.,	<i>London</i> , " Ed. Adams.
<i>Mount Morris</i> , R. Sleeper,	<i>St. Catharines, C. W.</i> , L. S. St. Johns,
<i>Oswego</i> , C. & E. Canfield,	<i>Toronto, C. W.</i> , R. Love.
" Meade & Carrington	<i>Port Hope</i> , " C. Hughes
<i>Perry</i> , R. H. Smith,	
<i>Penn Yan</i> , John H. Lapham,	
<i>Palmyra</i> , Wm. May,	
<i>Port Byron</i> , Kendrick & Yates.	
<i>Scottsville</i> , Garbutt & Co.,	
<i>Schenectady</i> , D. L. Powell,	
<i>Syracuse</i> , Tallman & Williams.	
<i>Ulta</i> , J. E. Warner & Co.,	
<i>Troy</i> , J. Daggett & Co.	

Garden Seeds put up at this establishment in small papers, may be found with most of the merchants in the States of New York, Ohio and Michigan, and in Canada.
Rochester, N. Y. JAMES P. FOGG.

Back Volumes of the Genesee Farmer—The subscriber has on hand the Volumes of the Genesee Farmer for 1841, 1842, 1843, 1844, and 1845—neatly bound, which he will sell very cheap.
JAMES P. FOGG.
Rochester Seed Store, Front-st.

Seedling Apple Trees wanted.—The subscriber wishes to purchase a few thousand seedling Apple Trees. Apply personally, or by mail, to S. MOULSON, Rochester, Jan. 1, 1847.

Cash for Clover and Timothy Seed.—500 bushels Clover and Timothy Seed, wanted at the Genesee Seed Store and Agricultural Ware House, Front street, by RAPALJIE & BRIGGS.

Straw Cutters, of all the most approved kinds, used Western N. Y., for sale cheap, by RAPALJIE & BRIGGS.

Bound Volumes of the Farmer.

A few copies of Volume VI, bound, for sale at this office. Price 50 cents. Also, bound copies of Volume VII, 1845.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,.....	1,00	1,12	Pork, bbl,	12,50	
Corn,.....	44	53	Pork, cwt,.....	4,00	5,00
Barley,.....	44		Beef, cwt,.....	3,50	4,00
Oats,.....	25	28	Lard, lb,.....	7	8
Flour,.....	5,25		Butter, lb,.....	10	14
Beans,.....	87		Cheese, new lb.,	5	6
Apples, bushel.	25	37	Eggs, doz,.....	14	
Potatoes,.....	50		Poultry,.....	5	7
Clover Seed,.....	4,75	5,00	Tallow,.....	6	7
Timothy,.....	1,75		Maple Sugar,...	6	7
Hay, ton,.....	7,00	3,00	Sheep Skins,...	38	50
Wood, cord,.....	2,90	3,00	Green Hides, lb	3½	
Salt, bbl,.....	1,12		Dry ".....	8	
Hams, lb,.....	6	8	Calf Skins,.....	6	7

[By *Magnetic Telegraph.*]

New York, Feb. 21—7 P. M.

Pearls are up to \$5,62½ a \$5.71; sales 40 bbls.; market continues steady.

Sales 4000 bbls. Flour. Genesee \$7 for export, and 1100 do. Oswego at \$6.91. To arrive in May, 2000 bbls. Genesee, sold at \$6. There were some sales mixed Michigan at \$6,87½, and 400 do. round hoop Indiana at \$6,69. 700 bbls. fancy Genesee at \$7,50.

Meal is scarce for early delivery; to arrive in March it is worth \$5. Sales 1000 since the steamer at \$5,12½.

A sale 600 bbls. Rye flour, to arrive at the opening of river to Albany at \$4,75.

Corn rather heavy; sales 30,000 bu. ranged from 97 cts. to \$1. For parcels corn near at hand, \$1. A lot of 20,000 bu. to arrive on the opening of canal at 75 cts.; and some 5000 do. from the head of river at 90 cts. Sales 1500 do. old cut for distilling at 93 cts.

Barley is neglected. Sales 10,000 bu. Oats to arrive from Albany at 44 for export. Oats on the spot 50 cts. and scarce.

Pork is quiet; sales 500 bbls. at \$13 a \$15. Sales 60,000 lbs. pickled hams at 9½ cts.; 22 hlds. marked hams at 11½ cts.; and 300 city 12 cts.

Prime Lard firm; sales 700 kegs at 11 cts. 2000 do. and 400 tierces 10½ a 10½

1000 packages Cheese 7½; Butter in good demand at 14 and 24 cts.

1847.]

VOLUME VIII.

[1847.

GENESEE FARMER,

A MONTHLY AGRICULTURAL AND HORTICULTURAL JOURNAL:

Illustrated with numerous engravings of

Improved Implements, Farm Buildings, Domestic Animals, Fruits, &c. &c.

THE PROPRIETOR of the Farmer gratefully acknowledges an increase of over FOUR THOUSAND subscribers, since the commencement of the current volume. He considers this the most conclusive evidence of the merit and popularity of the work—and respectfully presents it to the friends of Improvement for their examination and patronage. Dr. LEE, its principal Editor, is at the head of the 'Western N. Y. Agricultural School'—and his ability, and the means at his command for obtaining and disseminating information relative to the Science and Practice of Agriculture, are unsurpassed by any agricultural writer in the country.—The Editor of the Horticultural Department, P. BARRY, Esq., (of the 'Mt. Hope Garden and Nurseries,') is one of the most experienced Horticulturists in the State.

Each number of the Farmer contains **Twenty-four large Octavo Pages**, and is illustrated with handsome and appropriate engravings. It is printed on new type and good paper. Since its enlargement from 16 to 24 pages. (in January, 1846,) it is universally pronounced the CHEAPEST and BEST PAPER of ITS SIZE and KIND in the UNION.

TERMS—50 cents a year, in advance; FIVE COPIES for \$2; EIGHT for \$3; THIRTEEN for \$5. Any person sending us 13 subscribers, (remitting \$5,) will receive an extra copy gratis.

Volume 8 will commence in January, 1847,—and all subscriptions should be sent in previous to that time, if convenient, in order that the publisher may determine how large an edition will be necessary.

☞ Specimen numbers sent gratis to all post paid applications. All friends of Agricultural and Horticultural Improvement who receive a copy of this Prospectus, are requested to Act as Agents for the Farmer. Subscriptions may be sent (post paid,) at the publisher's risk.

Address D. D. T. MOORE, Publisher, Rochester, N. Y.

☞ Back numbers supplied to new subscribers.

PUBLISHERS' NOTICES.

To Post Masters, Agents, &c.

We request all Post-Masters to act as Agents for the Farmer, according to our club terms. Also such other persons as feel an interest in extending the circulation of the Farmer, and thus promoting Improvement in Agriculture, Horticulture, and their kindred sciences. We shall feel truly grateful to any and all persons who will lend their assistance. Any person sending us 16 subscribers, (remitting \$6,) shall receive an extra copy gratis—or a bound volume of the Farmer for 1846.

To Clubs.—Any Post Master or other person who has sent us eight or more subscribers, will be furnished with any additional number of copies at the club price—37½ cents each. We hope those who have formed clubs, will bear this in mind, and forward the subscriptions of such as may hereafter want the Farmer. Back numbers can be supplied—so that all may have the entire volume.

☞ We occasionally send specimen numbers of the Farmer to Post Masters and others who are not subscribers. Will those who thus receive it, introduce the paper to the notice of their friends and acquaintances, and obtain and forward subscriptions according to our club terms? We think it will compare favorably with other agricultural publications, especially when its SIZE and TERMS are taken into consideration. Those who like the manner and matter of the Farmer can essentially aid in sustaining it, by exercising a portion of their influence in its behalf—and we shall duly appreciate and acknowledge all such favors.

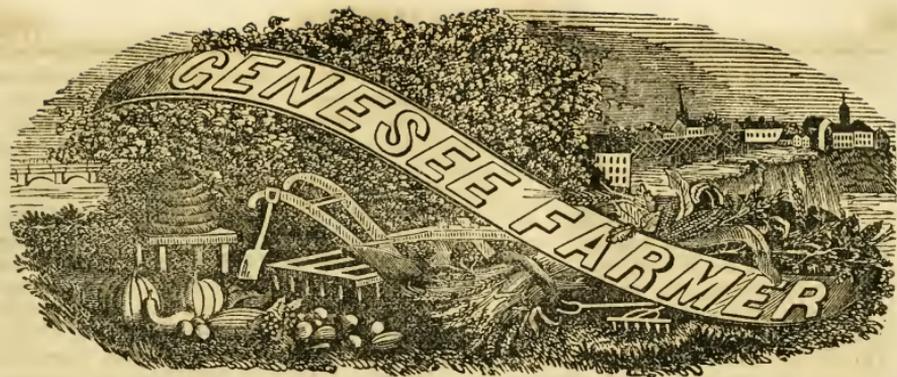
☞ All letters to the Publisher should be post paid or free.

☞ Back numbers promptly forwarded to new subscribers.

☞ See Publishers' Acknowledgments, page 76.

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VOL. 8.

ROCHESTER, N. Y.—APRIL, 1847.

No. 4.

THE GENESEE FARMER:

Issued the first of each month, in Rochester, N. Y., by

D. D. T. MOORE, PROPRIETOR.

DANIEL LEE, EDITOR.

P. BARRY, Conductor of the Horticultural Department.

Fifty Cents a Year:

FIVE copies for \$2—EIGHT copies for \$3. Subscription money, by a regulation of the Post-Master General, may be remitted by Post-Masters free of expense. [] All subscriptions to commence with the first number of the volume.

PUBLICATION OFFICE in Talman's Block, Buffalo street, opposite Reynold's Arcade—where all subscriptions not forwarded by mail should be paid.

POST-MASTERS, and all other friends of Agricultural Journals, are requested to obtain and forward subscriptions for the FARMER. Address D. D. T. MOORE, Rochester, N. Y.

[] The Farmer is subject to newspaper postage only. []

The Prospect.

AT no period within our remembrance has the prospect of the American Farmer been so full of promise as at present. The facts that there are so many thousands of human beings in Western Europe, almost entirely dependent on the potato plant for their ordinary means of subsistence—and that there is no cheaper article of food down to which Avarice can force Humanity, but these millions of our race must be brought up to the the daily consumption of maize, and other cereal plants—are destined to exert a most powerful influence on the foreign demand for American bread-stuffs. Although the present suffering of the destitute in Europe is awful to contemplate, yet it is consoling to believe that this fearful dispensation of Providence is to be made the extreme of human depression—the turning point from which Man is to commence rising in his daily physical comfort, and in the enjoyment of that just care and consideration which are due from one accountable being to another. A higher standard of comfort for the laboring millions of Europe, and especially of England, Wales, Scotland and Ireland, is inevitable. These four United Kingdoms are now annually adding some 400,000 souls to their previous numbers. Consider for a moment the vast quantity of food which an army of 400,000 persons will consume in a year. Then contemplate the yearly addition of such an army to the home islands of the British Crown. Then recollect the progress of Civilization, the extension of that Christian, t hat

God-like maxim "Love thy neighbor as thyself," and you will see that the demand for our surplus food must be great, in all time to come.

While each year adds scores of millions to the mouths to be fed on this planet, it adds nothing to the surface of soil for cultivation. How important, then, that information in tillage, in rural knowledge, and true science, be widely diffused among the farmers of the United States? To scatter broad-cast over the land the practical wisdom of the best agriculturists in America, some hundreds of whom honor this journal with their correspondence, there is no other agricultural paper so cheap as the GENESEE FARMER. Only three shillings a year, where eight copies are taken together—a large octavo volume of about 300 pages, with original engravings, &c., at thirty seven and a half cents! The very liberal Publisher has 2000 extra copies which must be sold before they can fulfil their high mission. As a Horticultural journal the Farmer is worth five times its cost to subscribers. Who will not lend a hand to extend its circulation and usefulness?—The expense of the publisher is large, and he richly deserves a mammoth subscription list.

Farmers, teach one another. Is not the united experience of 20,000 tillers of the soil worth something to each man that shall avail himself of their practical knowledge? Peruse this number of our journal carefully, and see if it is not indeed a most useful medium through which a score of practical agriculturists instruct thirty thousand of their fellow farmers, while they learn from others ninety-nine one-hundredths of all that they themselves know? Again we say, Farmers and Gardeners teach one another; and all aid the publisher in extending the circulation of his very cheap periodical. Think for a moment how much good might easily be done if each subscriber would only add one more to the list in his neighborhood. Does any one who knows the Editor doubt that his whole heart is devoted to the advancement of Agriculture, and the elevation of those that till the earth? His hope of usefulness lies mainly in the extensive circulation of the Farmer. The many errors we all commit, afford proof positive that all have much to learn. Let us then, one and all, faithfully study our noble profession, that we may attain true agricultural knowledge.

AS THE NEW POST OFFICE LAW limits the privilege of publishers, relative to sending specimen numbers, prospectuses, &c., to individuals, we request subscribers to introduce the Farmer to the notice of their agricultural friends—particularly in those sections where it is not generally circulated.

Milk---Its Production and Properties.

THERE is no product of modern husbandry that better deserves the study of the farmer than that of Milk. It is the natural and most appropriate food for the young and growing bodies of the highest order of living beings. Milk is remarkable for holding in solution every element required by nature to form lean meat, tendon, bone, brain, nerves, hair, wool, and every other organized substance found in the body of man, or his domestic animals. When we compare the yield of this life-sustaining fluid, as drawn from the best cows in civilized society, with that afforded by the native wild cattle of California, or the unimproved breeds of Missouri and southern Illinois, we witness a demonstration of the fact that, the natural secretion of milk can be vastly augmented by artificial means.

It is a practical question of great moment to determine whether human skill and science can farther improve the milk-forming capacity of the one million of cows now kept in the State of New York. Can any available change be made, either in the breeding or feeding of these animals, by which any given quantity of grass, roots, or grain will yield more milk, more butter, and more cheese than it now does? Is it possible in the course of time to produce a million of cows in this State all of which shall be as valuable for dairy purposes, as the one thousand best cows now kept in it?

That such a result can be accomplished, we entertain not a doubt. And were it accomplished, the nett productive value of the cows of New York would be increased five-fold beyond what it now is. Let us suppose that the annual expense of keeping a cow is ten dollars, making the cost of a million ten millions of dollars. As a whole, the capital invested in this property would yield a fair interest if the cows gave a nett profit of two dollars each. To yield this, each cow must pay all expenses and one quart of milk a day for 200 days in a year, worth a cent a quart. If all the cows in the State could be made to pay all expenses and yield five quarts of milk a day surplus, where they now yield but one quart, it is plain the profits would be five times larger than they now are, so far as pounds of butter, cheese, pork, and other products of the dairy are concerned.

We make these preliminary remarks, because farmers are apt to forget that a cow which yields from a given amount of forage consumed only one quart of milk a day, over and above the expense of her keep, is really worth only one fifth as much for dairy purposes, as she would be if her daily product was five quarts instead of one, surplus.

It is not our present purpose to enter into the matter of breeding cows on scientific and physiological principles, in order to show how any race

will be likely to grow better and better, for many generations to come. as it has already been improved for the production of milk, butter, and cheese. It is the improvement of the quality, and an increase of the quantity of milk from cows already in hand, that now claim the attention of the reader. The writer has charge and the management of 50 cows belonging to the "Rochester Milk Company." Experience at this establishment has shown that steeping, or soaking cut corn stalks in boiling water, or other food for cows, greatly increases the secretion of milk.—Carrots are regularly fed at least once a day to each cow. We intend to plant ten acres in carrots and five with sugar beets, for feeding cows this season. The company have six acres of winter rye sown for early feed by cutting the same. The cows are kept in a stable or yard the year round. Major STEWART, who has had the control of the farming operations for the last three years, is confident that he has cut full eleven tons of dry corn fodder from a single acre sown broad-cast—the land of course is very rich. Oats and peas cut green are excellent for soiling, and on suitable land yield well. Clover mown, and about half made into hay, is capital food for cows. By keeping all animals off the field, manuring well with the things that nature uses to make clover, and seeding thick, three heavy crops may be cut in a season. All ruminant animals need a variety of food to preserve their systems in a healthy condition. Hence, a feed of clover, timothy, oats, peas, corn and cob meal cooked, brewer's grains, shorts, cornstalks, potatoes, turneps, carrots, beets, pumpkins, &c., can be variously combined so as to suit the appetite or whim of each cow, and cause her to elaborate a generous quantity of milk, if nature has endowed her with the power for so doing. Water, salt, pure air, and clean stables must all be strictly attended to, as well as regular feeding and milking.

Repeated analyses made by pupils in the laboratory of the editor, show that two pounds of good milk contain as much dry matter, exclusive of water, as one pound of fresh beef steak. The latter usually has 25 per cent. of dry solid meat, and milk 12½ per cent. of cheese, butter, and sugar.

Of the twelve and a half parts of solid matter in 100 of milk as it comes from the cow, we usually find not far from three and a half butter, four sugar, and five cheese. The sugar of milk is obtained by evaporating whey to one-third or less of its bulk, and placing it in a warm oven to form crystal of sugar just as crystals of common salt may be formed by solar evaporation.—Before evaporation, care should be taken to separate all the curd and oil or butter from the whey. We may take occasion, if we can find room, to describe the process by which any intelligent person may test the quantity of cheese, butter, sugar, and water in the milk of any cow he may have on his farm.

There is but little doubt that the casein or curd in milk is held in solution by the presence of soda, which being neutralized so soon as lactic acid is formed in warm weather, the curd becomes thick, and whey is evolved. The sal-soda of the shops is cheap, and the addition of a few drams in a pan of sweet milk, will keep it so for 8 or 10 hours after it would become sour and coagulated without some chemical check.—Soda does no injury whatever either to butter or milk, for tea or coffee.

Where cream is churned, its temperature should be about 55 degrees; if all the milk is churned, its temperature should be ten degrees higher.—Considerable care is necessary to separate all the butter from the butter milk. By evaporating the latter to dryness, and testing for butter, we often find a quantity which, if saved, would add considerably to the products of the dairy during a season. Still greater care is necessary in making cheese, not only to coagulate all the casein, (cheese,) but to save from running into the whey the oil or butter in the curd. Cheese is apt to be injured by an excess of rennet, an excess of salt, or those of a bad quality.

“Farmer’s Agricultural Chemistry.”

WE have received a long and fairly written defence of the above work from its author, in reply to our criticism, which we should gladly publish, if we could do so in justice to the many pressing demands on our columns. The subjects discussed relate to abstruse points in chemical and geological sciences. Dr. RODGERS has quite as good a right to entertain and express his opinions on these questions as we have; but neither has a right to fill this journal with disputes, to the exclusion of matter of a more useful, and practical character. Our criticism, Dr. R. will live to acknowledge, has done both him and his book an essential service—for it has prompted him to re-examine all his authorities, extend the sphere of his research, and correct whatever his maturer judgment shall regard as doubtful, or erroneous. This is precisely what we desired—not to give pain to him, nor to injure the sale of his book.—He says:

“The second edition of my book, *enlarged and corrected*, will be forthcoming, and I will send you a copy, which, if it passes through the *fire*, may come out unscathed, and with a better reputation than its not unlucky predecessor.”

We ask the author to consider us as his friend, to weigh well our present remarks on the most important points in his communication now before us, which we copy:

“On page 49 of my book it reads, ‘As the carbon and nitrogen are derived from the atmosphere, the benefit of manuring consists exclusively in the supply of the salts, and soluble earthy matters essential to the development of plants.’ You say, ‘This carries theory farther than facts and experience will warrant.’ On this subject I will give you the conclusion of Liebig in his own words. Agricultural Chemistry, page 5, he says: ‘The carbon must be derived from other sources; and as the soil does not yield it, it can only be extracted from the atmosphere. The facts which we have stated in

the preceding pages, prove that the carbon of plants must be derived *exclusively* from the atmosphere.’ Again, p. 12, ‘Plants, and consequently animals, must therefore derive their nitrogen from the atmosphere.’ Page 14. ‘By means of manure, an addition is only made to the nourishment which the air supplies.’ Page 15. ‘No conclusion can have a better foundation than this, that it is the ammonia of the atmosphere that furnishes nitrogen to plants.’

“My position, then, is sustained upon the authority of a chemist who stands second to no man living as an analyst and experimenter.”

The above is your strongest evidence against the soundness of our criticism. It devolves on us to show that you wholly mistake the meaning of your “authority,” or that Dr. LIEBIG as well as Dr. RODGERS is mistaken.

That plants and animals naturally die and rot on the surface of the earth, will not be denied by any one. Nor will it be disputed that while decaying, they load the surrounding atmosphere with various gases, chief among which are carbonic acid and ammonia. Water has a strong affinity for both of these gases. A common smelling bottle will give the unlearned reader some idea of what *ammonia* in water is; and a glass of foaming soda water, some notion of *carbonic acid gas* escaping from water when liberated from the great pressure of a soda fountain. The rains, snows, and dews alike bring to the earth more or less ammonia and carbonic acid, and as the water enters the roots of growing plants, the gases named pass with it into the circulation of these living beings, which *re-organize* the elements of former plants and animals, in their various tissues. So far we all agree.—Now for the matter in which we disagree. Dr. R. says “the benefit of manuring consists *exclusively* in the supply of the *salts*, and soluble earthy matters essential to the development of plants.” We say, “this carries *theory* farther than *facts* and *experience* will warrant.”

Manure is vegetable or animal matter in the process of decomposition. A sound, healthy animal or plant is not manure; nor is a ton of sound grain, flesh, hay, or wood, manure. Suppose a farmer has a ton of rotting straw mixed with a like weight of the dung and urine of his horses, cattle, and sheep, duly spread and plowed in, so as to be in contact with the roots of an acre of growing corn. Will Dr. RODGERS tell us how he can prevent the water that falls from the clouds from taking up the carbonic acid and ammonia liberated from the manure, and conveying this food of plants into the circulation of the growing crop?

Again, dare you affirm that the open pores (spongioses) in the roots of plants can not imbibe gaseous nutriment as well as their leaves? Did you never hear of a plant being quite inverted, making its roots put forth leaves in the atmosphere, and its branches roots in the ground?

To assert that all dead plants and animals, all manures, discharge into the air *all* their carbon, nitrogen, oxygen, and hydrogen, to have these elements of plants fall elsewhere on the earth

than the place of their growth, or deposit, is a "position" so contrary to nature, and common observation, that no human "authority" can give it credibility. That a part of the organized elements of manure, while undergoing decomposition, thus escape into the atmosphere, we freely admit. But that every farmer should endeavor to prevent the loss of ammonia and carbonic acid from his manure heaps, that these elements of plants may be fed to his crops and enter their roots directly from the soil, is a "position" from which it will be hard to drive the editor of this journal—Liebig to the contrary notwithstanding.

That the earthy salts found in plants and manure are indispensable to their growth, we know as well as any one. But it is an absurdity to say that, the carbonate of ammonia evolved in the moisture of a potato hill, from a shovel full of dung, must first evaporate, travel to the clouds, and fall back again in rain water, before it can possibly enter the roots of this plant!

We assure Dr. R., in conclusion, that we will give his second and corrected edition as favorable a notice as our judgment will permit.

Dr. Lee's Criticisms.

Is the first number of the current volume of the Cultivator, an attack of Dr. LEE was noticed, showing that he had strongly censured me for doing the same thing which the most eminent chemists had done, and which he had himself done in a more glaring degree; and also glancing at his error in asserting that animal excrements were no better as manure than water and dried vegetables. He has again appeared with nearly two columns in his paper, in which he avoids the original matter in dispute, and attempts to make his readers believe that I hold the opinion, that animal substances are secreted "out of nothing." He builds his argument on this point on the very singular assumption, that the terms *secrete* and *create* are synonymous. He must know that I have not advanced any such absurd position; and I ask him, candidly, if he is not bound, as a just and honorable man, to retract his former censorious and uncalled for remarks, now that I have shown their injustice, which he himself tacitly admits, by attempting a new issue.—J. J. Thomas, in Cultivator for March.

FRIEND THOMAS, thou art a strange man.—We ask thee "candidly," in reply, why hast thou twice asserted in the Cultivator that "Dr. LEE has attacked" JOHN J. THOMAS, while the readers of that journal are not permitted to know one paragraph of his remarks on thy Prize Essay, from which to judge of their truth or error? It is a great mistake to say that "Dr. LEE has attacked" thee at all. Thy errors were pointed out in a fair manner, and with no feelings but those of kindness, and a love of truth. Knowingly, we do "injustice" to no human being.—Our columns are ever open to thee to correct whatever may even seem to be wrong in our remarks on thy most valued production. We lay no claim to perfection. Speaking of thy Prize Essay in our December number, it was remarked: "We have perpetrated our share of blunders, and trust few have endeavored to profit more by the criticisms of others. In our January number we took the liberty to point out the palpable

errors of LIEBIG, in reference to the composition of manures. We did the same thing in regard to Mr. THOMAS, because *he is justly looked up to by thousands* as good authority on agricultural subjects."

Tell us, kind reader, when you say of a writer that "he is justly looked up to by thousands as authority," do you manifest unkindness toward such writer, that you should retract your friendly correction of his errors? Would there not be gross injustice in misrepresenting the true letter, spirit, and meaning of your language, instead of copying it to the numerous readers of another paper—the Albany Cultivator?

What "original matter in dispute" have we "avoided"? Where has "Dr. LEE assumed that the words *create* and *secrete* are synonymous"?

FRIEND THOMAS, whether thou knowest it or not—such a *design* we will not impute to thee—thou hast, from beginning to end, put words into our mouth which we never used. Thou hast placed us in a false position before the readers of the Cultivator. As those of the Farmer had alone seen our criticism on thy Essay, to that journal thou shouldst have sent thy reply, that *one tribunal* might hear both sides of the question. Didst thou fear to speak to the readers of the Farmer? They are thy friends, and will be the last to undervalue thy acknowledged public services. Better frankly confess thy errors—"to err is human"—and seek to avoid their repetition in future, than attempt to carry them on thy strength of character, which must suffer by the association. Remember that placing "Dr. LEE" in the wrong, does not place thee in the right. Long have we ardently desired to see the agricultural literature of America second to that of no nation in the world. Thou hast done good service in the cause, and we trust will yet achieve a higher and wider fame. Our friendly criticism will keep thee on the right track, and in the end do thee infinitely more good than ignorant, unmingled praise.

POTATO ROT.—It is known that the plat of ground formerly owned by the Wadsworth estate, in the south part of this city, was sold and mostly planted in 1846. The soil was first plowed last season. That portion owned by Mr. ISAAC HILLS, President of the Horticultural Society, was plowed in April, and planted early in May with Mercer Potatoes. They were dug in September, and proved good and entirely free from rot—while the ground's of the same lot on the opposite side of the road were planted in June, with the same variety of potatoes, by Judge SAMPSON, and the whole crop perished. So much for early planting and digging. *

VALUABLE COLT.—One of our subscribers—MR. NATHAN CASE, of Perrinton, in this county—recently sold a two years old colt, of the Morgan breed, for one hundred and fifty five dollars.

Hints for April.

Don't play the fool; the work of this month is the starting point of a year's operations.

Sow your clover and grass seeds the first fall of snow, that you may be enabled to sow it even; and do it at any rate before the hard frosts are passed, as the heaving of the earth is important to the covering of the seeds.

Regulate fences that are down, or want repairing. Stake and rider them if possible; it wonderfully improves a low fence, and bothers unruly cattle. We prefer the process of placing the stakes in the middle of the rail, and not at the corners, and riding with long poles, or even heavy and mis-shaped rails—they are out of the way of the plow.

Make two more farm gates this month, and if that is the extent of your ability we will forgive you, dear reader, for this year; but those bars have got to come down—*Delenda est Cuthargo*.

Sow oats, spring wheat and barley—and plant a few potatoes, sound ones and defective, and note the result.

Clear some ore field of stumps; and when you come to plow it, say if you are pleased with the operation; if not, charge the expense—not to us, but the town pump.

Look to the furrows and ditches in your winter wheat; perfect drainage is so important that it cannot be neglected with impunity. One hour's hot sun on a wheat plant immersed in water, scalds it, and turns it to chess—as some dumber heads think.

You may prune orchards this month, that is, thin out and properly balance the bearing wood; not by simply cutting off the lower limbs and sending up the top so high that you will need Jacob's ladder to reach the fruit.

Cut scions, if neglected to this time, and perform the grafting, particularly cherries and plums. In grafting old trees, use the lower limbs, and cut out the old center or large reaching arms.—About one half of the old wood may be cut away the first year, and the balance the year after. *

Indian Corn for Exportation.

MR. EDITOR:—In my estimation, the attention of the farmers of Western New York should be called to the increasing importance which Indian Corn, as an article of export, is likely to assume. It is but two years since it began to attract attention, for this purpose, to any considerable degree, and it has already increased to such an extent that the amount is measured by millions; and, if it continues to increase in a proportional ratio, it will quickly be exceeded by no agricultural production, except cotton. Its price likewise has been higher, in proportion to the cost of production, than that of any other agricultural production. Independent of the extra demand occasioned by the failure of the potato

crop, it will hereafter enter largely into the consumption of the people of Great Britain, both as an article of human food, and also for consumption by domestic animals.

In this state of facts if an annual average of fifty or sixty bushels per acre can be raised, with a considerable increase in the amount of land laid down with this grain, (which may be done without materially decreasing our other grain crops,) it will add many millions to the value of our agricultural productions—and, by inevitable consequence, to the wealth, comfort, and convenience of all other classes. All admit the value and excellence of Indian Corn, yet most farmers pay but little attention to it here. The most common objection we hear raised against it is, the great amount of labor required to produce it; but this objection vanishes at once, if we only get good pay for the labor we do perform—for every man knows that it is only by labor that he attains any thing valuable. Therefore, if you get pay in proportion to the time and labor employed, the more labor the greater profit. It is true that with crops averaging from twenty to thirty bushels per acre, which is as much as many farmers get, the profit will be nothing, because it requires about that amount of grain to pay the expense of production. But with a very small additional amount of expense and labor, the produce may be doubled, making the average from forty to sixty bushels per acre—leaving a good profit to the producer. The writer of this thinks this can be done on most of the good grain growing lands of Western New York, in ordinary seasons, as he has verified it in his own experience.

Beside the value of the grain, there is no grain we produce of which the stalks or straw is of so much value as feed for domestic animals. An acre of good corn stalks, well saved, will generally be worth as much as one and a half tons of hay, which, in Monroe County, will be as high as six dollars a ton—making the stalks worth about nine dollars—no inconsiderable item towards defraying the expense of its production.

He is the wise man, Mr. Editor, who uses the blessings Providence has bestowed upon him to the best advantage for his own and the benefit of his fellow men. If our climate is not so congenial to the growth of this great staple as that of a more southern latitude, we have a soil amply fertile, and our commercial position, and our means of getting our productions cheaply and expeditiously to market, are unrivalled. Why, then, should we not bestir ourselves and reap the golden harvest God has laid open to us? Let us be diligent, then, and labor for our own and the public good, and our children will rise up and call us blessed—and the children of other lands will rise up and call us blessed—and the blessing of him that is ready to perish shall be upon us.

Wheatland, March, 1847.

W. S.

Clearing Land.

IN my remarks on "Forests," (given in the preceding volume of the Farmer,) I have shown what I believe to be some of the legitimate effects of clearing a country of its natural covering, its forests. These effects I consider to be the following: to wit,

A change of climate and its consequences.—These consequences are seen,

1st. In the severe and parching drouths that have of late visited our own country as well as others, some of the effects of which are, the failure of crops, the drying up of streams, springs, wells, &c. 2d. In the uncertainty of raising grain, fruit, &c. 3d. In the multiplication of troublesome insects, &c.

These evils are by no means appreciated.—Many never think of them; many do not believe, or think of, the cause of them; and many do not care for them, provided they can only make a few dollars. But the more I think on the subject, the more I am convinced of its truth and importance. I would, therefore, that the subject were known and understood through the length and breadth of the land. Let travelers and Geographers give attention to it, and collect and spread before the public the results of their observations, so that the present generation may profit by the errors of the past.

I will now endeavor to point out a few other evils resulting from the same cause, the destruction of our forests. And 1st. All, or nearly all, our cleared land has been so long under tillage, and much of it injudicious tillage, as to require much care, labor, and expense, to secure a good crop; and there being little more land to be cleared, the evil is likely to increase rather than diminish.

A second evil is, that many farmers are now under the necessity of buying fuel. It is true, perhaps, that by clearing their lands they may have realized more immediate profit, than if they had left them in their wild state; yet now, when fuel bears a high price, and the raising of grain has become more difficult and expensive, they are obliged to take of their former gains, or their present hard earnings, to purchase fuel, and to renovate an exhausted soil. What then have they gained? Very little, perhaps nothing; especially when we take into the account the injury done in many cases, to their own children. This evil, like the former, will increase with time.

A third and still greater evil is, the injury we thus inflict upon posterity. The present generation may not suffer for the want of fuel; but unless means shall be adopted to revive the growth of timber, or to preserve what we know have, posterity must suffer the consequences of our folly and extravagance.

I am aware that the reliance is upon coal; but to this there are several objections. 1st. It

is rendering us dependent on others for that which every farmer ought to have of his own. 2d. It is reasonable to suppose that the price of coal will increase with the demand. 3d. To those who live at a distance from the coal region, or from any canal or rail road, it will be found a very expensive kind of fuel. 4th. The supply of coal may eventually fail; for, although considered by some inexhaustible, yet when we remember that only about two-thirds of the absolute quantity can be rendered available, and that this country has yet to sustain a dense population to the end of time, it cannot be wholly unreasonable to think of the future. Hence, I may add, that the discovery of coal may yet, with all the advantages that result from it, prove an injury to some portions of the country. For, relying on coal, many will be less economical of wood, and thus waste what they have, because there may be a substitute within their reach. This will both increase the evils mentioned above and, by increasing the consumption of coal, sooner bring about its final failure.

But allowing that the supply of coal is truly inexhaustible, I would still be unwilling, for reasons given above as well as for others that might be given, to see our country divested of its forests. I can hardly imagine a more uninviting prospect, than would be presented by such a scene. A sultry summer's sun pouring its scorching rays upon a naked and thirsty earth, with nothing to mitigate its fervor; and the chilling blasts of winter, sweeping in mad and unrestrained violence over its naked bosom—alas! deliver me from a sight like this! Let any one look across a succession of naked fields on a scorching summer's, or bleak winter's day, with nothing to break the monotony of the scene, and it appears to me the sight would be sufficient to cure him of his love of desolation.

I know that some will consider me unnecessarily anxious about posterity, but I hold it to be highly selfish to live for ourselves alone. No one can enjoy beyond a certain amount, however great his possessions. How selfish, then, for him to accumulate beyond the power of enjoyment, at the expense of posterity! Even his own children will begin to feel the evils of his avarice; and each succeeding generation will feel it more severely than the preceding.

Again, it may be said that Providence will always supply the wants of his creatures. To this it may be replied,—1st. He has made provision, which, if judiciously used, will prove abundant; and if the supply should ever fail, it will be the result of man's imprudence. 2d. He has not promised any thing without, and more especially in opposition to, our own exertions. He will only reward our diligence. He will not provide by a miracle. If he has promised results he has connected the promise with certain conditions upon which the fulfillment of his promise de-

pends. Hence the attention of all who have opportunity, is earnestly invited to the cultivation of forest trees, as well as of those for fruit and ornament. They should set them along the highways, about their dwellings, and on every spot, and corner, or fragment of land that is not capable of profitable tillage. Thus the country would soon be covered, to some extent, with trees, which, though sparse, would exert considerable influence on the climate, enhance greatly the beauty and value of our lands, and provide, in some measure, for the wants of coming generations.

II.

Fairport, Feb. 24, 1847.

Hop Culture.

MR. EDITOR:—As you have stated some things, in your last Farmer, that do not correspond with the experience and practice of hop growers in this section of the State, where many hops are raised, I take the liberty to make some statements relative to raising them here.

In the first place, choose a piece of land nearly or quite level, that will produce forty or fifty bushels of corn to the acre, on which, put fifty loads, or more, of good rotten manure to the acre. Also be careful to select such a piece, that you can readily make holes, for setting the poles, in a dry time. Having selected the ground as above, prepare it the same as you would for corn, by plowing it deep, and harrowing it well. Plant the hills of hops eight by nine feet apart, so that the poles, when set, may stand eight feet apart each way, by setting two poles to a hill, (which is enough,) one foot apart. It is also a good plan to set a stake about a foot long to each hill, as soon as planted, as no poles are set the first year. A hoed crop should be planted with the hops the first year. Corn is to be preferred, as a hill may be planted near to every hill of hops, the vines of which will run up the stalks, and thereby take root better. If the land be not suitable for corn, any other hoed crop may be planted, but in such a manner as not to disturb the hills of hops in harvesting it. The best time for planting is in the spring, about the same time you would corn. The hills should be kept as nearly level with the ground as may be, care being taken not to plow the dirt on to the hills, as it will only make large hills, which are a damage to the crop, besides being very inconvenient. The pieces of roots should be about a foot long, and contain five or six eyes. Two such pieces will answer for a hill; but they should, in no wise, be disturbed the next spring after planting; and after that, they should not be cut off closer than eight or ten inches from the center of the hill, and many times not at all; but the dirt may be carefully loosened about the hill, before the poles are set—especially if the ground be rather hard.

The poles should be set a little flaring, so

that the tops be far enough apart to prevent the vines growing together. Two vines are enough to a pole, and should be tied to the poles, as soon as long enough, and before they twist together. The remainder of the vines should be carefully lain on the ground, till those on the poles have attained the height of six or eight feet, so that those on the poles may be taken down, (if any thing should happen to them, which is often the case,) and others put up; after which, the rest should be cut off close to the ground.

The hops should be hoed at least three times, and be kept entirely free from weeds, in doing which a corn cultivator is much used. The poles should be stripped and stacked immediately after being divested of the hops, as it is almost impossible to cut the vines when dry; besides, I had rather pull, strip, and stack the poles at once, than even strip them after being thrown into heaps. I would suggest one idea more, which is, that all statements respecting the cultivation of hops should be minutely written, if intended to benefit those wholly unacquainted with the business.

Yours, &c.,

LINCOLN CUMMINGS.

Augusta, Oneida Co., March, 1847.

WE thank Mr. CUMMINGS for the above; and shall be farther obliged if he will describe, at his earliest convenience, the best plan for drying and bagging hops after they are gathered.—ED.

Ashes on Corn.

MR. EDITOR:—I wish to inquire through the Farmer, of some of its able correspondents, what is the best method of applying ashes on corn.—Should it be put in the hill when planting?—on the top of it after planting?—or after it comes up? And what is the quantity to be applied, either way, of unleached or leached?

A YOUNG FARMER.

Macon, Mich., 1847.

REMARKS.—The above are questions of considerable importance. Last season we injured a crop of corn, or rather saw it injured, by the application of *ashes* and *salt* in contact with young, tender plants. These were thrown with the hand on each hill. Had the application been made as soon as the corn was covered at planting, spreading the ashes and salt over considerable surface, no injury would have been done, while the fertilizers would have been extremely beneficial.

We shall use this season on a five acre field a compound of 3 bushels of unleached ashes, 1 of salt, 1 of gypsum, and a like quantity of bone dust per acre. This we shall scatter over each hill as soon as planted.—ED.

When an implement is no longer wanted for the season, lay it carefully aside, but first let it be well cleaned.

"Agricultural Information Wanted."

MR. EDITOR:—In answer to D.'s inquiries on page 64 of the Genesee Farmer, it may not be improper to say, that the amount of men's help he will want will depend upon the area of land he shall cultivate and the kind of grain, &c., he shall raise. When he makes up his mind how many acres he will have plowed, and sown or planted, and then calculate that one team will plow from an acre to one and a half acres a day, and harrow about six acres in a day, he can easily see how much team work he will want—for the same teams that do his plowing and harrowing can do all his other work.

He will of course want one hand to each team, and an extra hand in the summer; and, as he is "not accustomed to labor himself," the extra hand should be more than an ordinary laborer. He should be well enough acquainted with practical work on the farm to see that all hands do their duty, and advise Mr. "D." how much they ought to do, and how to do it.

Whether some of his teams should be oxen depends on his taste, for there are too many opinions on this point for settled advice. As to "what quantity of other stock it will be profitable for him to keep, viz: cows, sheep, and swine," I have no doubt that the present and prospective prices of wool will not sustain the wool growing business, where land costs \$50.00 per acre, (the price D. paid.) The great facilities for transporting such a light article as wool from the western cheap lands, will monopolize that business. The number of cows and swine will depend upon how many acres of pasture and meadow he has. In this section of country, we make the keeping of cows our principal business, and generally allow 3 acres for a cow—2 of pasture and one of meadow, with some coarse fodder.

Mr. "D." has probably bought a "grain farm," and if his land is suitable for all kinds of grain, he should sow enough of barley, oats, peas, &c., to enable him to rest his wheat fields, which should be his main crop. If Mr. "D." continues to be "a faithful reader of the Genesee Farmer, (after becoming a *practical farmer*,) and other agricultural journals," he will be better enabled to realize their usefulness. I fear he will be greatly disappointed in his profits; for he says as the average nett profits of the premium crops is \$30 per acre, he has reason to expect \$20 per acre nett profit from his 150 acres of improved land. Now the accounts of premium crops generally show the bright side of the picture. They are never charged with fencing, with their proportion of sustaining farm building, or agricultural implements, &c. Besides, if we could see an expense and income account of the whole farms to which they belong, they would probably show the other side of the picture.

The only expense account, &c., which has

been presented by any of the competitors for the premiums on whole farms since the formation of the N. Y. State Ag. Society, is that of Mr. Wm. GARBUTT, in 1845, and he figures a nett profit of about five dollars per acre—and he did not charge any thing for dry-goods, groceries, his own or his family's services. Some of the other competitors give some items, which seem to show a similar result. We hope, however, that our new brother "D." will persevere in his new vocation, which he will not find to be the doubtful road to princely splendor, but the sure way to a competency. A. P.

Little Falls, N. Y., March, 1847.

YOUR correspondent D., in the March number of the Farmer, wishes information as to how much team, &c., he shall want to cultivate properly a farm of 150 to 200 acres—and how annually he must manage his farm, as to succession of crops, &c. He is desirous, or rather *will be content*, to secure \$20 per acre nett profit.—That will be, I think, "a pretty fair business," if he realizes it on his farm of 200 acres.

But as to the team and laborers needed, I would refer him to a Prize Essay in the 5th volume of the Transactions of the State Agricultural Society (pp. 78 to 81,) which gives all the information necessary. I would also suggest to your correspondent, that if he will carefully read the papers that have been published by the Society, he will find from the experience of practical and experienced farmers, much that will enable him to make his investment a profitable one, and pleasant otherwise to himself, if he *actually engages* in the culture or superintendance and management of his farm.

In the same Essay he will also find, at page 92, suggestions as to rotation of crops, which will be found useful and worthy of his attention.

As all that D. wishes to ascertain, except as to the \$20 nett profit, is to be found in the Essay referred to, I forbear any further suggestions.

Yours, H.

Albany Co. March, 1847.

IN addition to the above, we have received an excellent though somewhat lengthy article, upon the same subject, from C. ROBINSON, Esq., of Clarendon, Orleans county. Want of space prevents its publication in this number.

CREDIT.—Many of our exchange papers are in the habit of taking articles from this journal, without the least acknowledgment. The Louisville Journal copied our "Study of Agriculture," which cost us a good deal of labor, and an article on "Wheat Culture," together, and gave no credit. The able and valuable letters of our correspondents are appropriated by leading journals, and made to appear as original therein.

A favorable spring, thus far, in this section.

Fence Posts.

MR. EDITOR:—I observe one of your correspondents has made some inquiries on the subject of preserving fence posts from rot and decay.—It is a very important subject, and I am pleased that it is started, as it may develop some valuable information, experiments and results. Under these considerations I will contribute my mite, with my experience, and such information as I possess.

In 1839 I set about sixty rods of high picket fence on the road in front of my orchard; the posts were black ash, first and second cuts from trees 8 to 10 inches in diameter. When completed, one half of the posts were bored with an inch and half auger, in a diagonal line, from 3 inches above the earth to 3 inches below, and filled with fine salt and nicely plugged. The next spring, on examination, the salt was found missing and they were refilled, and not again looked after. In about 6 years some of the smaller ones began to fail and so on, to this winter, when about 6 rods blew down, in one piece of the salted posts, every one completely decayed and rotten. There was no other difference in the failure of the posts, except the salted ones seemed to fail first, as they were weakened by the borings.

At the same time, to test the experiment in the shortest period possible, I chose two posts from the most fragile wood I could select, which was green bass-wood or Linden, cut in June, the bark peeled off, and set as horse posts in front of my yard. One was salted and one left without. The next July, a year or more after, a friend called upon me in a sulkey and fastened his horse to one of the posts. After sitting in the house a few minutes, a boy reported that the horse and sulkey was going off. On examination it was found to be the salted post, completely rotten, and the horse was drawing it away by his halter. Considering the other as unsafe and dangerous, I then attempted to break it down, which, although evidently defective, I was not able to effect. It stood till the fall, when it was so much decayed that a man's strength broke it. So much for salt, and if any of your readers have a mind to try the experiment, I don't believe *salt will save them*.

I am aware of the good effects of charring posts 6 inches above and 6 inches below the surface; it adds a few years to their durability, but is not sufficiently effective.

I have great faith in setting them in leached ashes, and in lime mortar, having seen some notable examples of durability. The ashes need not extend more than 6 inches below the surface, as within that distance the decay takes place.—A well seasoned post set in a tub of strong lye, or solution of Potash, or boiled until thoroughly saturated, would probably have the same effect.

The *rationale* would seem in this case to be,

that the alkalies neutralize the acids of the wood, to which all saps have an inevitable tendency, were it not that acids have the same or a more palpable effect. *Kyanising*—saturating with corrosive sublimate; and *cupreising*—saturating with the sulphate of copper (blue vitriol,)—for both of which processes there is a patent—which renders wood as indestructible from decay by rot as the metals or the best stone. It has been well tested, and is indisputably a fact. Sulphate of iron (copperas) is said to have the same effect, and there is no good reason why it should not, as they are all salts with a metallic base. Both the copper and iron preparation are very cheap, and worthy a trial, which I intend this summer to test again with my bass-wood experiment.

The choice of timber for durability in their natural states, will be found about in this ratio: Red Cedar, Locust, Yellow or White Cedar, White Oak, Chestnut, Yellow White-wood and Black Ash, Pine, Hemlock, &c. Most woods will endure about one year for every inch added to their diameter. There are some remarkable stories told, of the advantage of setting posts with the natural upper end down, which from their credibility I am not disposed to discredit.

Now, Mr. Printer, if all your correspondents who have any experience on this subject, should inflict as long a yarn as I have, there is some doubt whether *salt would save you*.

Greece, Monroe Co., N. Y. L. B. L.

Destroying Sorrel.

MR. EDITOR:—Having been for some years a subscriber for, and I trust a much benefited reader of the *Genesee Farmer*—but not having seen any thing in it which meets the particular point on which I wish information—permit me to propose the following statement and queries:

I have a piece of land which I design to prepare for wheat the coming season; the soil a yellow loam, thickly overrun with a growth of red sorrel, so much so in many places as to choke out the last crop of wheat almost entirely. When I last prepared it for wheat I intended to destroy the sorrel by thorough fallowing, but did not succeed. What is the remedy? Will lime, by neutralizing the acid in the soil, destroy the sorrel? If so, I wish to know at what time it should be applied—whether before breaking up, or at the time of preparing the ground for seed. Also, in what condition the lime should be applied—what quantity per acre, &c. Finally, if lime is not the proper remedy, will you, Mr. Editor, or will some one of your numerous correspondents, put me on the right track?

By giving the above an insertion in your journal you will much oblige,
Yours, &c.,
Webster, March 5, 1847. A. REYNOLDS.

WILL some one that has had experience in the matter, answer the above?—ED.

The Farmer. -- His Position, Responsibilities, and Duties.

NUMBER SEVEN.

IN my last number I referred to the establishment of Agricultural Schools, and their influence in elevating the farming interest of the country. Reflection but increases my conviction of the utility and practicability of the pursuit of agriculture as a science. I am clear in the opinion that it may and should be taught as a distinct branch of education in all our schools, high and low; but I have no idea that this will be accomplished at once, nor without persevering effort and patient industry on the part of the farmers of the State. The study must be introduced gradually, and slowly find its way into the school houses scattered over the State. It will have to encounter prejudice, indifference, and downright opposition—but for all that it will in the end prevail. I now invite the farmers of the State to a few facts stated in a general way; by and by, if need be, I may enter into particulars.

We have in this State some five or six Colleges and Universities: these for the last ten years have been receiving annually, more or less, from the funds of the State; and they are now making a vigorous effort before the legislature to continue the full amount of this bounty. In addition to these Colleges, there are a great number of Academies, which, for a still longer time, have received a portion of the funds of the State. To all this I raise no objection—enter no complaint—but simply ask the question, have these institutions of learning, these Colleges and Academies, ever made agriculture a prominent or even secondary branch or consideration in their course of study? In truth, have the farmers of the State ever received one dollar from the State in aid of their calling, in an educational point of view? And why? Not, I imagine, so much because the State has been unwilling, as because there have been no agricultural schools, until recently, which the funds of the State could aid. I ask, is this right and as it should be? Is it not time the farmers began to ask the Legislature of the State to bestow a portion of the educational funds of the State, to aid Agricultural Schools?

It seems clear to my mind that while our law makers are giving their thousands to our Colleges, we, as agriculturists, ought to insist that they give an equal amount to sustain or establish agricultural high schools, where the farmer's sons may be educated to pursue the calling of their fathers—and where young men may learn the principles and practice of farming, and fit and prepare themselves to become teachers. I suggest that the farmers of Western New York ask the present Legislature to appropriate from the Literature fund ten thousand dollars, to aid in sustaining the agricultural school, established

by Dr. LEE, near Rochester—and that they provide that, for ten years thereafter, five thousand dollars be appropriated annually for the same purpose. I have no doubt that such an appropriation of money would do more real good towards advancing the real interests of the people, and the cause of science, than any similar appropriation ever made before. I am perfectly willing, indeed I think there should be a similar appropriation for the eastern part of the State. I ask the intelligent farmers of Western New York to think over the subject, and if the proposition strikes favorable, that they bestir themselves to carry it out. It may be done, and done this session of the Legislature—and now is the time to do it—the best time that will occur for years.—A recent visit to Albany has satisfied me that we may now succeed in securing this appropriation, and I fully believe it will be an important step towards the permanent advance and improvement of the agricultural interest of the State.

I would also suggest, in connexion with the above, an appropriation from the same fund (the Literature) of one thousand dollars, to be offered as a premium for the best class of text books, on agricultural subjects or science, adapted to the use of our Common Schools. This trifling sum comparatively, would, I think, secure a class of school books, absolutely necessary to the pursuit of agriculture in our district schools, and thus supply a desideratum really indispensable.

I have thrown the above suggestions out hastily, but not without much reflection on the subject—and I have yet to hear that they are not practicable and worthy of the most earnest attention of farmers.

D. A. OGDEN.

Penn Yan, Feb. 1847.

AGRICULTURAL SCHOOL.—We thank Mr. OGDEN for the interest he takes in our Agricultural School. The above letter was intended for the March number, but it came too late for insertion.

We have not abandoned the idea of getting up an Agricultural Institution; and have delayed operations a few months only to see what success is likely to attend the efforts now making to found a University in this city. To the numerous correspondents who have written us on the subject of our school, whose letters we have had no time to answer, we desire to say that we can accommodate five or six pupils in our family and laboratory. The analysis of soils, fertilizers, milk, plants, &c., in connection with the cultivation of 100 acres of land, and the care of fifty cows, will give these pupils a fair chance to learn much of the science and practice of rural economy. Those that do not work will be charged \$30 a quarter for board, tuition, chemicals, &c.—ED.

CLOVER ROOTS.—A gentleman in Norwalk, Mass., says that he has known roots of clover to grow three feet in a season.

Interesting Items from S. W., of Seneca.

FARM LABOR.

MR. EDITOR:—A correspondent of the last Farmer asks how many hands he must employ to work his 150 acre farm. I like such questions; they are redolent of that early hope which practice and disappointment has not yet disabused. I once saw a Captain turn a man on shore, saying, "it is worth more to get the work out of you, than your work is worth." Should your correspondent be so unfortunate as to engage such *help*, it is hard telling what his farming would bring forth, let him have *never* so much of it.

The secret why a premium crop affords more profit to the acre, than is given by any other part of the farm, is, that the land is prepared, planted, and tended, *con amore*. The boss now works himself, with a will and an enthusiasm, the spirit of which infuses into his hired man an unwonted industry, turning toil into pleasure. The corn leaves never curl, or turn yellow, on a field thus done and cared for; hence the prize is certain.

INDIAN CORN PLANTED FOR FODDER.

MALCOLM LITTLE, JR., of Tyre, planted a single acre of corn in drills, two and a half feet by eight inches apart. All the labor he bestowed on the growing corn was to plow between the rows with a shovel plow, twice, before the corn had attained the height of six inches. He cut and cured, in August, six tons of small edible stalks, encumbered with many small nubbins of corn. He values the fodder more than hay. It was bound in bundles, and stood in the field until late in the fall. Now let every farmer plant an acre or two of corn for fodder, as soon as his spring work is over, as we may with good reason anticipate a dry season and a short crop of hay.—The unusual quantity of rain that has fallen the past year, presupposes a coming year of drouth. If the drouth is trying to the plants, work among them the more, and if possible while the dew is on.

HOP GROWING.

IN the south part of Oneida and Madison counties, hop growing is very successfully pursued; but, as in corn growing, it is found that the maximum yield depends on the manuring and culture. Fifty cents the two horse load is paid at Waterville for *still* manure, to apply to the hop fields, already rich by nature and good farming. It did me good to see the Oneida farmers employed daily this winter, hauling still manure two or three miles to their hop fields. Such a sight I never saw in Seneca county, although thousands of loads of still manure may be had gratis, and the soil needs it quite as much as the soil of Oneida. Our farmers, blessed with a warmer climate, neglect their crops with more impunity than they can do it east. But we have yet to learn the waste of capital and labor in growing diminished and diminishing crops.

MATCHED HORSES.

JOSEPH WRIGHT, of this village, has a beautiful pair of sorrel horses, fast trotters, so exactly alike in size, color, motion, and conformation of limb and muscle, that they out Dromio all the Dromio's. The owner himself cannot tell one from the other. The tails of each have been set up in the highest civilized mode. Amateurs come from a distance to see the matchless pair. They are valued at one thousand dollars.

Waterloo, March, 1847.

S. W.

Plaster on New Land.

MR. EDITOR.—I wish to inquire, through the Farmer, what the effect of plaster will be on a crop of wheat now growing on a piece of land that one year ago was a dense forest? The timber was cut into wood for your city, and the land well burned off; wheat harrowed in, in the best manner. The soil is a sandy loam, naturally dry.

Now I know just enough of chemistry, and its application to agriculture, to expect that plaster thrown upon a soil so recently covered with ashes might produce some effect upon the crops. But would not salt, lime, charcoal, or some other article, be preferable? A SUBSCRIBER.

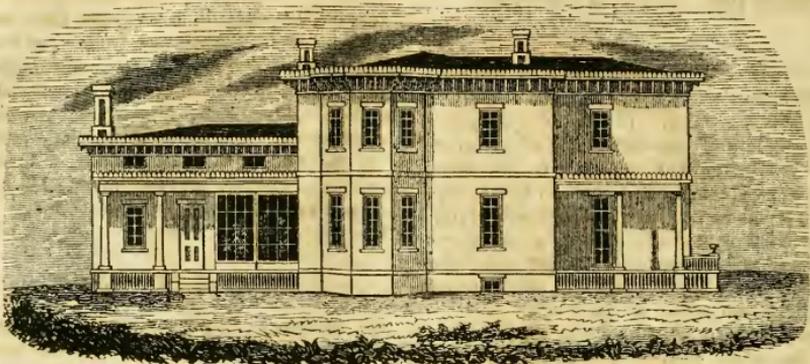
Adams Basin, March, 1847.

REMARKS.—If you are anxious to make your soil very good for wheat, scatter over it as many bushels of good ashes as the wood made that was taken from it, and sent to this city. A mixture of ashes, and bones boiled therein to powder, will be better still. Plaster, lime, and charcoal will do no harm, and may be used, in moderate quantities, at a profit.

Ignorance? or Prejudice? or Both?

IN a recent conversation with a gentleman on the subject of farming, I enquired of him whether he took any Agricultural paper. Answering in the negative he remarked, substantially, that practical farmers would hardly be willing, or could hardly be expected to abandon a system of farming which they had found to be successful and profitable, for the theories or speculations of a body of men whose knowledge on the subject of farming was acquired in the study. Having set him right on this point, he remarked, that if his land should fail to produce good crops, he would observe, investigate, &c. When cornered here likewise, and made acquainted with the difficulties in his way, I found him still attached to his old opinions, and endeavoring to fortify himself in his old practices. This man, like many others, will have to learn wisdom by experience; and will find when too late, that even *practical farmers* may learn something from books; *i. e.* from the experience of others. II.

THE love of nature is sure to expand itself into the love of God.

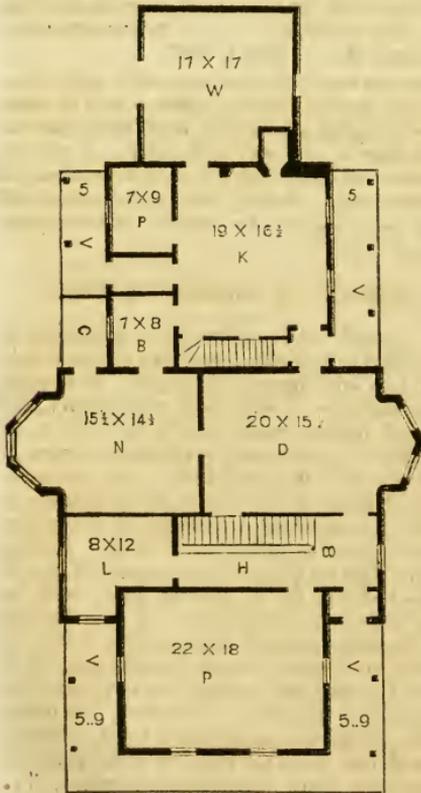


ITALIAN COTTAGE. — (SIDE VIEW.)

Original Design of an Italian Cottage.

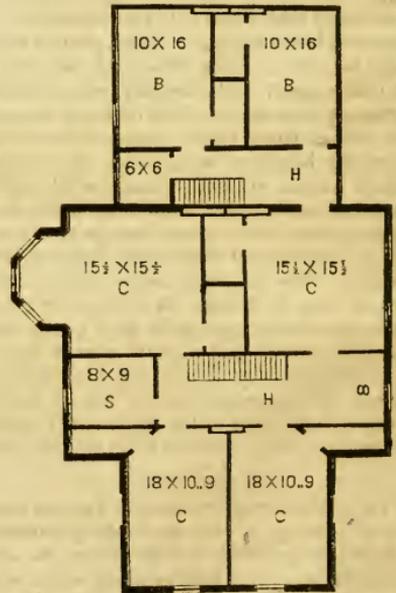
THE above elevation and accompanying plans of a Cottage in the Italian style, have been kindly furnished us by D. C. McCALLUM, Esq., a talented architect of this city. The design is

not perhaps, in all respects, exactly suitable for a farm dwelling; yet it possesses the great merit of uniting *beauty* with *convenience*—two admirable points in a Cottage Residence, whether located in town or country.



FIRST FLOOR.

V, V, V, V, Veranda; P, Parlor; H, Hall; L, Library; D, Dining room; N, Nursery; C, Conservatory; B, Bath room; K, Kitchen; P, Pantry; W, Wood-house.

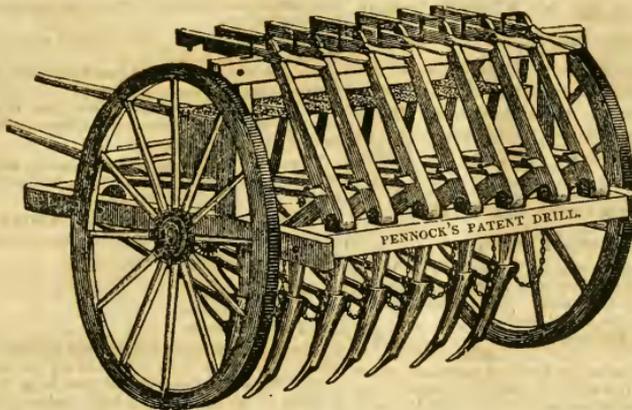


SECOND FLOOR.

B, B, Bed-rooms; H, H, Halls; C, C, C, C, Chambers; S, Store-room.

Mr. L. D. Ely, of Brighton is preparing to erect a Cottage from this design. It is to be situated on the south side of the main road from Rochester to Brighton, about one and a half miles from the centre of the city. The elevation, as above given, represents a side view of the building. First story to be 10 feet high; second story, 9 feet; bracketed cornice; terrace on north front. It is to be built of brick. The estimated cost is \$2,500. [The illustrations here given are on a scale of 20 feet to one inch.]

We have no space to give, in this connection, an essay upon Cottage Architecture. The intelligent reader will see from the plans, &c., (which we doubt not will be readily understood by all,) that the design is creditable to the architect, and well adapted for a pleasant and convenient residence.



Pennock's Patent Grain Drill.

THE above engraving gives a fair representation of this truly valuable labor-saving implement. This Drill was patented some years ago, and has been thoroughly tested in Eastern Pennsylvania, Delaware, and other sections. If the testimony which we have seen relative to its operation be correct, its introduction into Western New York will prove very beneficial to our grain-growing farmers. The machine will sow from 10 to 15 acres of wheat, or other grain, in a day—at a saving of seed, and doing the work in the best manner. It received a Diploma at the last Fair of the N. Y. State Ag. Society—and previously awards of premiums from various other Societies, in this and other States.

The Drill may be found at the Agricultural Warehouse of RAPALJE & BRIGGS, No. 18 Front street, in this city. They wish to have farmers examine and try it. If the machine proves as valuable here as it is reputed to be elsewhere, they will hereafter manufacture and keep it for sale.

As we have referred to their establishment, we will add that Messrs. R. & B. have an extensive assortment of excellent Agricultural Implements, Tools, &c., for the spring trade.

To Correspondents.

COMMUNICATIONS have been received during the past month from Lincoln Cummings, S. W., A. P., H., A. Reynolds, C. Robinson, A Young Farmer, W. S., A Subscriber, A. C., H. Y., *, A Young Farmers Wife, B. P., N. P. Stearns, L. B. L., Philip P. Bonesteel, Wm. Webb, E. L. Johnson, O. C. Comstock, jr., L. D., Another Farmer, Elias Parks, J. H. Watts, P. S., and W. C. R.

Several articles from correspondents, intended for insertion in this number, are deferred for want of room. They will receive early attention.

Foreign Demand for Breadstuffs.

WE have received, by the steamer our regular files of foreign journals down to March 4th. On a careful examination of these, particularly the Mark Lane Express, (the best informed, and most reliable paper in the Kingdom,) we see no reason to expect a fall in the price of breadstuffs till after harvest. It is difficult to condense the evidence into the small space we have left for this article, on which this opinion is founded.— We will give a few facts only:

Bread is higher in Paris than it has been in fifty years. Several German States have prohibited the exportation of grain, from fear of a famine. There are not vessels enough in the world that can be spared from other branches of commerce, to overstock the British islands with food. The Government has recently borrowed forty millions of dollars, with which to buy grain for the destitute. They are to be fed till harvest, and have no potatoes. If the hungry millions can get one half that nature demands, they will consume more breadstuffs than we dare to estimate in figures. The London Morning Chronicle says, the grain needed will load some 2,500 vessels of 600 tons each. Nothing like this number can be found to transport grain from the United States to England.

Prices cannot well rise much higher here, because flour, wheat, corn, and meal can only be shipped in limited quantity, no matter what their value in Europe. In the event of short crops, at the coming harvest, a wide-spread famine is regarded as inevitable. Many are hoarding grain in anticipation of such an event. Fresh meat is said to be very cheap, by reason of the fact that animals are killed to prevent their consumption of food needed for human sustenance.

Great complaints are made of the bad condition in which American Provisions and Wool reach the British market. Bales of wool have been returned, on account of dirt, gum, &c.

Annual Exhibition of the N. Y. State Agricultural Society,

To be held at SARATOGA SPRINGS, September 14, 15, and 16, 1847. The first day to be devoted exclusively to the examination by the Judges of the Animals and Articles exhibited, and no persons will be admitted within the enclosure on that day but the Officers of the Society, Judges and Exhibitors.

List of Premiums for 1847.

MANAGEMENT OF FARMS.

For the best cultivated Farm of not less than Fifty Acres, exclusive of wood-land and waste-land, regard being had to the quantity and quality of produce, the manner and expense of cultivation and the actual profits:—
 First premium,.....\$50 | Second do.....\$30
 Third do.....\$20

The persons making application for these premiums, must submit written answers to a series of questions, printed copies of which may be obtained on application to B. P. JOHNSON, Sec'y, Albany.

EXPERIMENTS AND ESSAYS.

Stall Feeding Cattle.—Best experiment in stall feeding cattle or sheep. A full and detailed statement will be required. 1st. Weight and age of animal when feeding commences. The weight weekly during the process. 2d. The kind and exact quantity of feed and its value. 3d. The weight when slaughtered, and the price at which sold, and the account of profit or loss. 4th. Any other particulars that may be important to a full and complete account of the whole process,.....\$20

Draining.—Best experiment in draining. 1st. Statement of the situation of the land previous to the commencement of process—the kind and condition of soil. 2d. The method pursued, with a particular account of the expense. 3d. The result and increased value of the land, if any,....\$10

Top Dressing Grass-land.—Best experiment. 1st. Situation of land and of soil. 2d. The kind, quantity, and value of manure used. The manner of its application. 3d. The results—giving the increased product, &c. To be answered in 1848,.....\$20

Root Crops.—Best experiment on not less than half an acre. 1st. State of land previous to crop and how manured. 2d. The kind, quantity, and value of manure applied, and in what manner. 3d. The kind of soil, and the manner of cultivation, with a detail of the expense. 4th. The result,.....\$10

Experiments in fattening Animals on Indian Corn, to test its value for that purpose.

ON PIGS.

1st. Lot of 10 Pigs of about 100 lbs. weight each, in lots of 5; to be shut up between 20th November and 20th December, and weighed separately when put in—the weight to be registered, as well as the sex, breed and general characteristics of the Pigs, and arrange them in the pen by sex, age, and size; to be fed on Indian Corn alone. 2d. Weigh a quantity of Indian meal, and feed it at regular hours—to be cooked and fed two weeks, and the corn dry two weeks, alternating the feed every two weeks. 3d. Have the pigs kept clean. 4th. At the end of two weeks weigh each pig, and enter its weight, and make an account, to be entered, of how much all have gained, and upon how much feed.—5th. At the end of each succeeding two weeks perform the same process, and continue to do so for at least 12 weeks, and sum up the entire gain, quantity and value of the feed, the market value of the pork, and where marketed, at the time each of the pigs is slaughtered and disposed of. A premium of.....\$25

For experiments in fattening the like number of pigs, under the same regulations as above, on any other kind of grain or vegetables,.....\$25

The statements required, and every thing connected with the experiment in each case, to be verified by the affidavit of the owner and at least one other person.

FARM-DWELLINGS, &c.

For the best design, accompanied with plans, elevation,

and cost of construction, combining convenience, economy, and good taste,.....\$20
 For the best design, accompanied with plans and cost of construction, of a piggery,.....\$10
 For the best design of a farm barn with plans and cost of construction, and out-buildings,.....\$15
 Competitors for the above premiums must forward their manuscripts to the Secretary previous to the 1st of December, 1847. Free of postage.

The above premiums for experiments and essays will be open to citizens of other States, as well as residents of this State.

PREMIUMS ON CHEESE DAIRIES FOR 1847.

The number of cows not less than 20. B. P. JOHNSON, chairman of committee.
 Special,.....\$50
 First premium,.....50
 Second premium,.....30
 Third premium,.....20

The persons making applications for premiums, must submit written answers to the following questions:—

1st. What is the locality of your farm, its elevation, and latitude? 2d. How much land under cultivation? How much in pasture and in meadow. 3d. What is the nature of your soil and subsoil? 4th. What plants or grasses do you use for pastures? What for hay, and how are your meadow lands treated, and how much hay do they yield per acre? 5th. How many pounds of milk from each cow?—How many from the whole herd? 6th. How many pounds of cheese to 100 lbs. of milk? The quantity of milk and cheese during the season? The quantity of milk and cheese to each cow? 7th. At what time do you commence and close making cheese? 8th. Do you rear the calves? Do you keep swine? 9th. Is any food used besides grass and hay? 10th. A particular account of the method of making cheese? The quantity of the cheese, and its price in market, and place where sold? 11th. The number of cows milked? the breed of the cows and their age? 12th. What difference is there in the quantity of cheese yielded by the same quantity of milk given by different cows? 13th. Has any particular kind of herbage been noticed to have an influence in increasing the proportion of *cheesy matter* in a given quantity of milk? and what kind of herbage produces the most and best milk? 14th. If any butter made during the season, state how much? 15th. What are the principal causes which produce bad cheese? 16th. State such other particulars as from experience and observation are deemed important, so that correct results may be obtained as to the best manner of managing a Dairy.

It is expected that the questions will be answered with precision, and that all the operations of the Dairy to be carefully noted during the season. The object of the society is, to ascertain as far as practicable all that relates to the manufacture of cheese, the quantity of milk and cheese per cow, and the quantity of cheese from each 100 lbs. of milk, and the kinds of plants and grasses best adapted to producing milk for cheese; the best breed of cows, and the location of farms best adapted to the manufacture of cheese.

The statements presented must be verified by the affidavits of the competitors, and also by one or more persons who assisted in the dairy and is acquainted with the operations.

ON BUTTER DAIRIES.

The number of cows not less than 20. HON. R. DENNISTON, chairman of committee.
 First premium,.....\$30
 Second premium,.....20
 Third premium,.....10

Persons making applications for premiums on *Butter Dairies*, must in all respects comply with the regulations required for Cheese Dairies, adopting their answers to butter instead of cheese.

Statements as to Cheese and Butter must be forwarded to B. P. JOHNSON, Secretary, Agricultural Rooms, Albany, on or before the 1st of December, 1847.

CATTLE.

CLASS I.—DURHANS.

Best bull, 3 years old,.....\$20	Best cow, 3 years old,.....\$20
Second best,.....15	Second best,.....15
Third best, . . Am. Herd Book	Third best, . . Am. Herd Book
Best 2 years old,.....\$15	Best heifer, 2 years,.....\$15
Second best,.....10	Second best,.....10
Third best, . . Am. Herd Book	Third best, . . Am. Herd Book

Best year old bull,....\$10
 Second best,..... 5
 Third best,....Am. Herd Book
 Best bull calf,.....\$5
 2d do..Washington's Letters

Best year old heifer,....\$10
 Second best,..... 5
 Third best,....Am. Herd Book
 Best heifer calf,.....\$5
 2d do..Washington's Letters

CLASS H.—HEREFORDS.

Best bull over 3 years old\$20
 Second best,..... 15
 Best bull between 1 and 3
 years old,..... 15
 Second best,..... 10
 Best bull calf,..... 5
 Second best, Wash. Letters.

Best cow, 3 years old,....\$20
 Second best,..... 15
 Best heifer between 1 and
 3 years old,..... 15
 Second best,..... 10
 Best heifer calf,..... 5
 Second best, Wash. Letters.

CLASS III.—DEVONS.

Best bull, 3 years old,....\$20
 Second best,..... 15
 Best bull between 1 and
 3 years old,..... 15
 Second best,..... 10
 Best bull calf,..... 5
 Second best, Wash. Letters.

Best cow,.....\$20
 Second best,..... 15
 Best heifer between 1 and
 3 years old,..... 15
 Second best,..... 10
 Best heifer calf,..... 5
 Second best, Wash. Letters.

CLASS IV.—AYRSHIRES.

Best bull, over 3 y'rs old, \$20
 Second best,..... 15
 Best bull between 1 and 3
 years old,..... 15
 Second best,..... 10
 Best bull calf,..... 5
 Second best, Wash. Letters.

Best cow,.....\$20
 Second best,..... 15
 Best heifer between 1 and
 3 years old,..... 15
 Second best,..... 10
 Best heifer calf,..... 5
 Second best, Wash. Letters.

CLASS V.—CROSSES, NATIVES, &c.

Best cow, over 3 y'rs old \$20
 Second best,..... 15
 Third best,..... 10
 Best 2 year old heifer,.... 15
 Second best,..... 10
 Third best,..... 5

Best heifer calf,.....\$5
 Second best, Wash. Letters.
 Best yearling heifer,....\$10
 Second best,..... 5
 Third best,..... Vol. Trans.

WORKING OXEN.

Best team of 20 yoke from
 any one county,.....\$25
 Second best,..... 15
 Best yoke of Oxen,..... 15
 Second best,..... 10
 Third best,..... Vol. Trans.

Largest number not less
 than 10 yoke of oxen
 from any one town,....\$20
 Second largest,..... 10
 Third largest,..... Col. Tour.

THREE YEAR OLD STEERS.

Best yoke,.....\$10 | Second best,.....\$8
 Third best,..... Vol. Trans.
 Best team of ten yoke from any one county,.....\$15
 To boys between the ages of 16 and 20 inclusive, who shall
 exhibit the best broke yoke of three year old steers, of
 their own training, Colman's Tour.
 Second best do. Wash. Lett. | Third best do... Vol. Trans.

Best yoke,.....\$10 | Second best,.....\$5
 Third best,..... Vol. Trans.
 To boys under 16 years of age, who shall exhibit the best
 broke yoke of 2 year old steers, of their own training,
 Colman's Tour.
 Second best, Wash. Letters. | Third best,.... Vol. Trans.

TWO YEAR OLD STEERS.

Best yoke,.....\$10 | Second best,.....\$5
 Third best,..... Vol. Trans.
 To boys under 16 years of age, who shall exhibit the best
 broke yoke of 2 year old steers, of their own training,
 Colman's Tour.
 Second best, Wash. Letters. | Third best,.... Vol. Trans.

Best yoke,.....\$8 | Second best,.....\$5
 Third best,..... Vol. Trans.
 To boys under 16 years of age, who shall exhibit the best
 broke yoke of yearling steers of their own training, Col.
 Tour.
 Second best, Wash. Letters. | Third best,.... Vol. Trans.

YEARLING STEERS.

Best yoke,.....\$8 | Second best,.....\$5
 Third best,..... Vol. Trans.
 To boys under 16 years of age, who shall exhibit the best
 broke yoke of yearling steers of their own training, Col.
 Tour.
 Second best, Wash. Letters. | Third best,.... Vol. Trans.

Best yoke,.....\$10 | Second best,.....\$5
 Third best,..... Vol. Trans.
 To boys under 16 years of age, who shall exhibit the best
 broke yoke of yearling steers of their own training, Col.
 Tour.
 Second best, Wash. Letters. | Third best,.... Vol. Trans.

In awarding the premiums on working oxen and steers, the single teams will be subjected to a trial on a loaded cart or wagon under the direction of the committee; and particular reference will be had to the matching, training, and docility of the animals, as well as their general appearance.

FAT CATTLE.

Best pair fat oxen,.....\$15 | Second best,.....\$10
 Third best,..... Colman's Tour.
 Best ox or steer,.....\$10 | Second best,.....\$5
 Third best,..... Vol. Trans.
 Best fat cow or heifer,....\$10 | Second best,.....\$5
 Third best,..... Vol. Trans.

Best pair fat oxen,.....\$15 | Second best,.....\$10
 Third best,..... Colman's Tour.
 Best ox or steer,.....\$10 | Second best,.....\$5
 Third best,..... Vol. Trans.
 Best fat cow or heifer,....\$10 | Second best,.....\$5
 Third best,..... Vol. Trans.

A fat ox taking a premium as one of a pair, cannot compete singly for another premium.

FAT SHEEP.

Best fat sheep,.....\$10 | Second best,..... Col. Tour.
 Third best,..... Vol. Trans.

Best fat sheep,.....\$10 | Second best,..... Col. Tour.
 Third best,..... Vol. Trans.

Applicants for the premiums on Fat Cattle and Sheep, must furnish statements of the manner of feeding the animals, and the kind, quantity, and cost of the food.

BEST MILCH COW.

The cow to be kept on grass only during the experiment and for 15 days previous to each period of trial,.....\$20
 The time of trial, from 10th to 20th of June, and from 1st to 10th of September.

Statement to be furnished, containing—1st. The age and breed of cow, and time of calving. 2d. The quantity of milk in weight, and also of butter, during each period of 10 days. 3d. The butter made to be exhibited with the cow at Saratoga, and the statement to be verified by the affidavit of the competitor and one other person conversant with the facts.

HORSES.

CLASS I.—FOR ALL WORK.

Best over 4 years old,....\$15 | Third do.,...Yonatt on horse.
 Second best,..... 10 | Fourth best,....Vol. Trans.
 Best brood mare, (with foal at her foot,) for all work,....\$15
 Second best,.....\$10 | Third best,..... Yonatt.
 Fourth best,..... Vol. Trans.

CLASS II.—DRAUGHT.

Best over 4 years old,....\$15 | Third best,..... Yonatt.
 Second best,..... 10 | Fourth best,....Vol. Trans.
 Best brood draught mare, (with foal at her foot,)....\$15
 Second best,.....\$10 | Third best,..... Yonatt.
 Fourth best,..... Vol. Trans.

CLASS III.—BLOOD.

Best over 4 years old,....\$15 | Third best,..... Yonatt.
 Second best,..... 10 | Fourth best,....Vol. Trans.
 Best brood blood mare, (with foal at her foot,)....\$15
 Second best,.....\$10 | Third best,..... Yonatt.
 Fourth best,..... Vol. Trans.

THREE YEAR OLD STALLIONS.

Best 3 years old stallion \$10 | Best mare 3 years old,....\$10
 Second best,..... 5 | Second best,..... 5
 Third best,..... Yonatt. | Third best,..... Yonatt.
 Fourth best,....Vol. Trans. | Fourth best,....Vol. Trans.

GELDINGS AND MATCHED HORSES.

Best Gelding,.... Diploma. | Second best,..... Yonatt.
 Best pair matched horses,.....\$8 and Diploma.
 Second best,.....\$5 | Third best,..... Vol. Trans.

SHEEP.

CLASS I.—LONG WOOLED.

Best buck,.....\$10 | Best 5 ewes,.....\$10
 Second best,..... 5 | Second best,..... 5
 Third best,....Am. Shepherd. | Third best,....Am. Shepherd.
 Best pen 5 lambs,.....\$5.

CLASS II.—MIDDLE WOOLED.

Best buck,.....\$10 | Best 5 ewes,.....\$10
 Second best,..... 5 | Second best,..... 5
 Third best,....Am. Shepherd. | Third best,....Am. Shepherd.
 Best pen 5 lambs,.....\$5
 This class includes the South Down, Norfolk, Dorset, Native, &c.

CLASS III.—MERINOS AND THEIR GRADES.

Best buck,.....\$10 | Best 5 ewes,.....\$10
 Second best,..... 5 | Second best,..... 5
 Third best,....Am. Shepherd. | Third best,....Am. Shepherd.
 Best pen 5 lambs,.....\$5
 This class includes all those generally denominated Merinos, whether of pure or mixed blood.

CLASS IV.—SAXONS AND THEIR GRADES.

Best buck,.....\$10 | Best 5 ewes,.....\$10
 Second best,..... 5 | Second best,..... 5
 Third best,....Am. Shepherd. | Third best,....Am. Shepherd.
 Best pen 5 lambs,.....\$5
 This class includes all those generally denominated Saxons, whether of pure or mixed blood.

When sheep are presented for premiums unshorn, evidence will be required of the age of the fleece.

[Remainder next month.]

No FRIEND of Improvement should allow an opportunity of advancing the cause to pass unheeded. Much may be done this month, if the time be improved, to promote the farming interest, by calling attention to the importance of sustaining Agricultural Societies, Journals, &c.



HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

Culture of Annual Flowers.

We are glad to perceive, on all sides, a growing taste for the culture of Ornamental Annuals. It would be strange, indeed, if such a taste should not keep pace with the other departments of ornamental gardening. Annual Flowers commend themselves to us, not only by the vast variety of floral beauty they afford us, in a small space, but by the ease, rapidity, and trifling expenditure with which that beauty is produced.

In April or May we sow the seeds, and in a short month or two of pleasant care and labor, we are rewarded with bright and beautiful flowers.

This is the department that, in a particular manner, belongs to the ladies; and in their tender care we must, in a great measure, leave it. We trust there are but few of the fair readers of the "Farmer," who are blessed with the calm pleasures of a country life, insensible to the health and cheerfulness imparted by a little labor in the pure air, beneath the bright sun. Are men to monopolize these delightful and innocent enjoyments of life, and woman to be caged up within the walls of a dwelling, devoting their lives *exclusively* to the monotonous routine of household duties? We hope not. We know these duties must be performed, but surely their performance will be made lighter and sweeter by being mingled with the exciting exercises of labor among the floral gems of earth. A love of flowers is said to be natural to the gentler sex; but it is only when they rear them up with their own hands, that they can love them with that intensity that possesses a meaning and reality.

The Horticultural Society of the Valley of the Genesee, with a view to encourage this taste, has offered two splendid premiums, exclusively to ladies, for the best display of annual flowers at their exhibitions the ensuing year. One is Mrs. Loudon's Flower Garden of Ornamental Annuals—a splendid work of three hundred pages, with colored plates of grouped flowers—worth about \$15. The other is the American Flora—a beautiful American work with colored plates, worth \$8.

These premiums will justly call forth great exertions. They are in themselves valuable, but it will be a greater object to earn the credit of possessing the skill and taste that will bear the palm of success. Many will be induced to take up the *hoe* and the *rake*, the *pruning shears* and *trowel*, that have never before thought of using these implements.— They will begin to appreciate the interesting phenomena of nature that have hitherto been to them a dead letter. Rains and dews, sunshine and clouds, will become full of interest—and open on them a new existence, fraught with glowing influences, and a thousand elevating and pleasant influences.

The number of species and varieties of annuals now cultivated is almost without end. Some are worthless, and many are not adapted to common garden culture—that is, they will not attain perfection without the aid of Green Houses or hot beds—appliances which few in the country can or will avail themselves of. It is therefore an important point to make a good selection.— Among the prettiest, of easy culture, we may name the *Phlox Drummondii* of various colors; *Portulaccas*, bright scarlet and crimson, requiring plenty of sun; *Dwarf Lupins*, various colors; *Lobelia gracilis*, and *Ramosa*, very pretty blue; *Gilia tricolor*, and other species; *Clarkia elegans* and *pulchella*, dwarf, with pretty pink flowers; *Scarlet Malope*, showy; *Clintonia*, *Schizanthus*; *Nemophilla insignis*, very pretty, blue with white centre; *Erysimum*, very showy; *Zinnia elegans*, various colors; *Eutoca viscida*, deep blue; *Candy tuft*, white and purple; *Petunia*, varieties; *Golden Barton*, very fine golden yellow flowers; *Yellow Sweet Sultan*; *Senecio elegans*, purple and white; *Lotus jacobea*, very dark; *Euphorbia variegata*, *Scarlet cacalia*, *Globe Amaranthus*, *Coxcombs*, *Pansies*, *10 week stocks*. Asters, Balsams, &c., are all well known. There are many beautiful climbing annuals that should be in every collection; for instance, *Cypress vine*, both white and scarlet, with delicate and beautiful foliage. The seeds of this usually require to be soaked in boiling water. *Convolvulus* or *Morning glory*, several species; *Scarlet flowering beans*; *Nasturtium*; *Sweet Peas*; the hardy *Thunbergias*; *Hyacinth Bean (Lablab)*; *Mountain fringe (Fumaria)*, besides the hardy species of *Tropaeolum*, *Loasa*, &c. The *Sweet Peas*, *Morning glory*, *Beans*, &c., may be trained to simple rods with the bark on, sunk in the ground and tied together at the top, forming a sort of cone; or in any other form the fancy may choose. The cypress vine, and some other of the taller, finer climbers, ought to be furnished with neat fixtures, when they are beautiful objects. This is made by simply driving a strong stake deep enough in the ground to keep it firm. Small sticks are fastened to the upper end of this, to which strong twine or wire for the plants to

climb on may be fastened, and connected with the ground by means of wooden pegs. The wood work of all such structures should be painted green, except it should be made of a green stick with the bark on, which is more natural and simple, and therefore preferable.

A beautiful ornamental fence may be made of rods or wire and covered with some of these climbing plants. We have seen such fences covered with *Lophospermum scandens*, and even with Scarlet Beans, that were superb objects.—The Nasturtium, Convolvulus, Sweet Peas, &c., may all be used to advantage for such purposes.

Seed Sowing.—To succeed well in growing annuals, or rather to succeed at all, the greatest care is requisite in sowing the seeds. It is a fatal error to bury all seeds the same depth in the ground. Large seeds possessing much vital power may be covered an inch deep or more with impunity, while the greater number of small seeds would never vegetate at such a depth, or could not push their way up. In sowing delicate seeds the better way is to make the surface of the ground smooth, then sow the seeds and sift a light covering over them. Another point of importance is to sow at the *right time*. Delicate seeds will not bear sudden transitions from heat to cold whilst germinating, and consequently should not be sown till the weather has become fairly settled.

Shading from the sun, and watering in dry times, are all necessary in their proper places. An article will be found in our last volume, page 144, containing some good hints on this subject.

Answers to Correspondents.

Fruit Trees. “A YOUNG FARMER,” Macon, Mich., will find his inquiries respecting the season for transplanting, manner of planting, soils, &c., answered on page 218 of our last volume. And on page 74 of the present volume, he will find some good suggestions in relation to washing the bodies of trees. It is a good practice to place manure around the roots of newly planted trees, both spring and fall. In the former it serves to retain moisture, and the latter excludes the frost from the roots. It may be worked into the soil afterwards, for the purpose of enriching it, if this be necessary.

Mountain Ash. GEO. BISHOP, jr. The berries should be gathered as soon as ripe, mixed with light soil, placed in a heap a foot or so thick, and covered with 6 inches of earth. There let them remain for a year before sowing. If sown the spring after they are gathered they will be 18 months in the ground before they vegetate.

Mountain Ash stocks for the Pear. J. H. WRIGHT, New Haven, N. Y. The Pear is in some cases successfully cultivated on the Mountain Ash; but no doubt, in time, would be overgrown by the Pear, and therefore would not be so durable as the Pear stock. It has the effect of dwarfing, and induces early fruitfulness. For

these purposes we believe the quince stock is best.

The “*New England Fruit Book*” says: “We budded twelve small trees of this sort with the Bartlett and Seckel, in 1840. A shoot of the ash was permitted to grow in connection with the pear for the first season. In the spring of the following year the first shoot (ash) was then cut off close to the main stem. These trees have done quite as good growth as upon pear stocks.” Mr. DOWNING says—“Grafting on the *Mountain Ash* is thought to render the pear more hardy, and retards the blossoming so much as to prevent their being injured by spring frosts.” This is a matter of importance in some localities, and worthy of a test.

THE FRUITS OF AMERICA: By C. M. HOVEY, Editor of the Magazine of Horticulture. Boston, Mass.

WE have received the prospectus of this new work on Fruits. It will be seen by the extract below that it is to be published in splendid style.

If the plan is carried out, it will surpass everything that has ever been attempted, or at least executed, in this country—and will be a rich, invaluable addition to American Horticultural literature. That the plan will be carried out, we do not doubt. Mr. HOVEY's long experience in pomological matters, and the facilities that Boston affords for the mechanical execution of the work, give a good guarantee. *Patronage*, we trust, will not be wanting. We shall refer to it again, when the first number appears.

“It will contain richly Colored Illustrations of Fruits, accompanied with the Wood and Leaves, from Paintings made expressly for it, under the direction of the Author: and, with the text, an outline engraving of every variety, accompanied, when important, with sketches of the Habit of the trees; leaving nothing which can, in any way, assist the Amateur cultivator, or Nurserymen, in the identification of the numerous varieties, or furnish him with the fullest information in regard to their merits.

“The work will appear in Royal Octavo Numbers, (uniform with Audubon's *Birds of America*,) and will contain four plates each, with Eight Pages of letter-press, on the finest paper, and in beautiful type; the Original Paintings executed by that distinguished artist, W. SHARP, chromolithed and retouched under his eye. The text will give all the Synonyms under which each variety is known, its origin, when to be ascertained, its period of production, with an accurate description of the Habit of the Tree, Wood, Leaves, Flowers, and Fruit, the Period of Ripening, and all other particulars worthy of note. The whole, with a few exceptions in the early numbers, from specimen trees in the extensive collection of the Author, where their comparative merits, in the same soil and locality, can be correctly estimated.

The Plates will not be numbered or paged, but left with a blank No., so that each Class of Fruit may be bound up by itself, arranged alphabetically, according to the season of ripening, or in any other way, when the Work is completed, or together as issued, at the option of Subscribers. Twelve Numbers will complete a Volume, which will be furnished with a Title-Page and Index. A list of Subscribers will accompany each Volume.”

DEFERRED ARTICLES.—We have several articles in type, for which we have not room in this number. Among these, inquiries on the *Pear Blight*, with several items of information kindly furnished us, by experienced cultivators, on this subject.

Quince Stocks for Pears.

BY S. C. PERKINS, ESQ., BOSTON.

THERE is a strong prejudice in this country against Quince seedlings as stocks on which Pears should be grafted; but I think, if the question is properly considered, it may be removed. First, it is said that they are short lived, and that they die of diseases to which the *free* or pear stocks are not liable. That they are shorter lived than pear stocks, there is no doubt; but when we consider that they are brought into bearing in a year or two after they are grafted, and when quite small, while the pear stocks require many years to bring them to the same advanced and fruitful state, we think, it is undeniably a compensation.

It is also true that a pear stock may produce ten times as much fruit, when full-grown as a quince stock, but the advantages are perhaps fully balanced in other ways, as follows: Pear stocks must be planted at least *thirty* feet apart, and even at this distance, when grown to any size, they will shade so much of your ground, as to interfere seriously with its cultivation; the roots also extend in proportion to the head, and exhaust of course, so much soil as they cover. Now quince stocks may be planted within *ten* feet of each other, and have room enough for their heads; while their roots, being all fibrous, are circumscribed in their growth, requiring very small space, and exhausting none of the soil under cultivation, and their heads shade no ground in consequence of being limited by *grazing*, to six feet in diameter, and not being allowed to extend upward more than eight or ten feet.

On an area sixty feet square, you may plant *four* pear stocks; these will shade with their branches, and exhaust with their roots, at least one-half of this square. On such a lot, you may place around its borders *twenty* quince stocks, which will neither shade the ground, nor exhaust its soil. These stocks will produce you fine melting fruit with certainty, if taken care of, while all the care of the gardener and praeporter united, will not prevent some kinds of pears from canker, cracks, and blight, if produced on pear stocks.

"But," say the advocates for pear stocks, "the quince is subject to be destroyed by the borer!"

This is true, and so is every thing subject to be destroyed in one way or another, if it is not taken care of, by those whose duty it is to look after them.

I have nearly or quite a thousand pears on quince stocks in my garden, and I doubt if any one cultivating an equal number of pear stocks of the same size, has for the last twenty-five years, lost as few trees as I have.

With respect to the borers, if care be taken to examine the trees twice a year, without fail, say in the middle of June, and the middle of October, there will be few or no borers in the garden. There is little or no trouble or labor in this, if it be done regularly. My gardener will examine and destroy all borers that he finds in six or seven hundred trees, in a day. I have counted seven hundred and thirty-four trees, which he had examined in that time. This, therefore, is no herculean trouble or labor.

These quince stock pear trees may be fruited on all sides by judicious pruning, from the top to the bottom, within a foot of the ground; and as the melting or soft-fleshed pears, which are called *Beurres*, are much better on these than they are on the pear stocks, you may have more good fruit on your quince, than you can get on your pear stocks.

If you want trees to plant in *grass ground*, I should recommend pear stocks by all means; but in *gardens* I should choose to have the bulk of my fruit on quinces.

If you undertake to raise pears on seedlings, or layers of one or two years old, you will find how much sooner they get their fruit on quinces. Quince layers are very easily obtained by any one having quince trees in their grounds. The *Portugal Quince* tree is the best to strike from, as they grow more freely and larger than the common sort, and will increase with the growth of the pear scion that is put into it; but this, the common sort will not do. But it is much cheaper, and more sure, to import from France, both your seedling pears and quince layers, if you wish to cultivate a nursery.

I have now in my garden, many pear trees on quince bottoms, growing both as standards and as espaliers, which were planted upwards of twenty years ago. They are both in perfect health, and full-bearing every summer. The only objection to the standard pear stock is, that if left to itself, its head grows too large for its roots to support it steadily in

the ground, but this objection does not apply to the espaliers. It is therefore best to keep their heads pruned within limited dimensions, if you raise them as standards, but quince bottoms are far preferable for espaliers to pear stocks.

Pears on quince stocks will live to a good age, if taken care of, and no exciting manure be allowed to come to their roots. If they become weakly, apply fresh, virgin soil to the roots in the room of manure.—*Horticulturist*.

REMARKS.—We are glad to be able to lay such a communication as the above before the readers of the Farmer. Mr. PERKINS is one of the most careful and experienced Pear growers in this country, and his commendations we consider of great weight.

We have, at several times, within two years past, recommended this mode of cultivating the Pear, on account of the great advantages it offers, as correctly stated by Mr. PERKINS. It is a matter of no small importance to the owners of small gardens and limited grounds, to grow *twenty varieties* or *twenty trees* on the same area that *four* would occupy, and at the same time to get fruit three, four, and even six years sooner.

"New Names."

MR. EDITOR:—In the February number of the "Farmer," I noticed a remark under the head of "Swan's Orange Pear," on which I wish to say a few words. It appears from the tenor of the piece that the writer is *not* in favor of rejecting "popular names," and yet in the closing paragraph he says, "It seems that every man who finds a fruit he does not happen to be acquainted with, wants to give it a name of his own. The Horticulturist should discountenance this." If by this remark the writer means simply the "finder," (as I suppose he does,) and not the "originator," of a fruit, I fully agree with him. In regard to the "originator," I would say, no one has a better right than he, to give a name, and even the "finder" of an old, and to him hitherto nameless variety, may have the same right, subject, however, to a change, if it should afterward be found that said fruit had been previously known by another name. In natural science, "whoever is first in the field has the exclusive right to give names." Successors should either adopt these, or give them as "synonyms." I consider the same rule to hold in regard to "originators" of new varieties of fruit. On this ground I would contend for "Swan's Orange Pear," and "Reed's Seedling," as the proper names of the fruits now known by these names. "The Horticulturist," I think, "should countenance this." H.

OUR correspondent is right—we are *not* in favor of rejecting popular names. The person who may happen to meet with a fruit, new to him, should, instead of at once naming it, find out, if possible, its popular name, and adhere to that. If it should prove to be a new or unknown variety, then, as "H." says, he has a right to name it.—Eo.

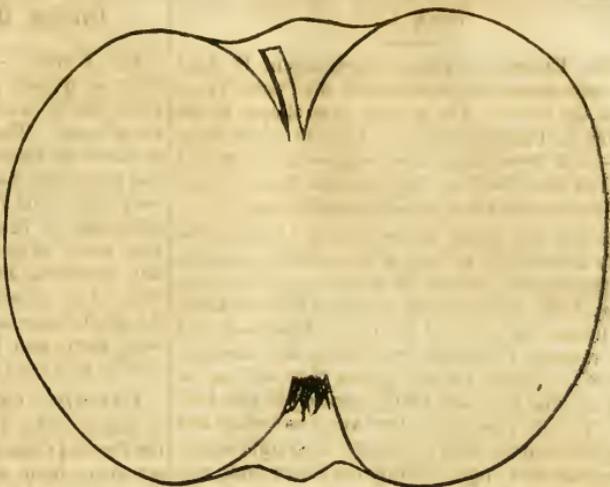
The Canada Reinette Apple.

SYNONYMS.

Canadian Reinette.
Reinette grosse du Canada.
Grosse Reinette d'Angleterre.
Reinette du Canada blanche.

THIS noble fruit is supposed, by some, to be, as its name indicates, of Canadian origin; but the fact that it is described by writers of the 17th century, induces the belief that it is a European variety, brought to Canada at an early day and thence back to Europe under a new name. Its uniformly large size, productiveness, and fine flavor, give it all the desirable qualities which the nicest connoisseur could ask. The tree in our grounds was imported from Germany some 7 years ago, and has borne the two past seasons, so that we can recommend it to fruit growers who are making choice collections. It is every way worthy of a prominent place. It is as yet but little known or cultivated in this country. We find it noticed by the late Mr. Manning of Salem, Mass., in the 7th vol. of Hovey's Magazine. He received the scions from the London Horticultural Society. It is also described in the "Fruit and Fruit Trees of America." The London Hort. Society's Catalogue says, "it is probably the best apple of its size, and surpassed by few of those that are smaller. It therefore deserves extensive cultivation."

Fruit large—often one third larger than the figure—round, flattened with large projecting ribs like a Calville. *Skin* rough, of a dull greenish yellow, sometimes a tinge of brownish red on the sunny side, and sprinkled with dots and patches of russet. *Stalk* short, in a deep, rough cavity. *Calyx* open, in a deep, furrowed basin. *Flesh* yellowish white, firm and juicy, with a rich flavor, superior to many of our American apples. In use from December to April.

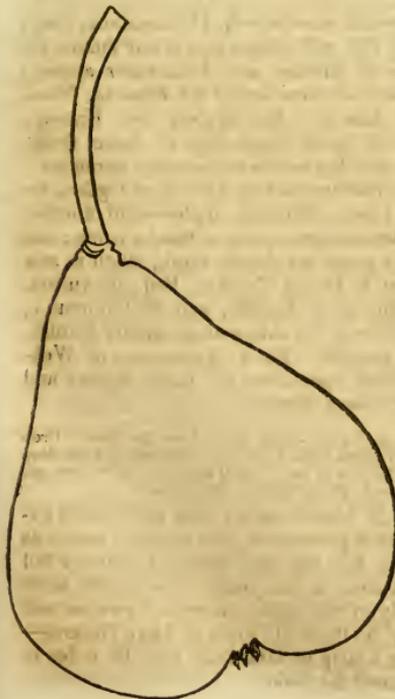


The St. Ghislain Pear.

THIS is a Belgian variety of the very first quality. It has proved so in the eastern states, as well as here. We have fruited it for two years past, and can recommend it to a place in every choice collection. The tree has no superior for vigor, hardiness, and beauty of growth, as well as productiveness. It does not come into bearing so early as some others; this is owing to its rapid, abundant production of wood. A slight pruning of the roots, in such cases, will induce earlier fruitfulness where this is desired. The heads also require an occasional thinning out, to keep them sufficiently open.

Fruit medium size; form pyramidal, broadest at the eye, and tapering regularly to the stem. *Skin* yellow at maturity, dotted with gray specks, and sometimes a tinge of red on the sunny side. *Stem* an inch and a half long, rather slender, curved and marked with fleshy rings at its junction with the fruit. *Eye* small, open in a shallow basin. *Flesh* dull white, buttery and melting, with abundance of juice, and a rich, sprightly flavor. Ripe, here, latter end of September.

It is figured and described in Downing's Fruit and Fruit Trees. He says—"When in perfection it is of the highest quality, but on some soils it is a little variable." It is also figured and described in Hovey's Magazine, vol. 11. Hovey says—"Though not a large pear, it is one of the finest autumn varieties in cultivation. The tree grows upright, vigorous, and of handsome form, bearing full crops every season." Manning says it is "one of the finest pears, and should be in every good collection."



Peach Grub.

MR. EDITOR :—Your correspondent D. asks for information, how to defend his Peach Trees from the Grub. The answer is as simple as the "way to Parish church." It is to fence them out—and there is no other way—but not with a six rail fence, without he can yoke them. I use three methods, all of which are effective.

In the first place, in the spring examine the roots thoroughly, as long as they exude red gum, containing the *exuvia* of the grub. First process: Draw with the hoe, a mound of earth about six inches high around the body of the tree, and not remove it till the first frosts, and then examine; if there are any grubs they will be so high up that they are easily discovered and killed. Or, 2d process: Clear away as before and apply around the body a quantity of straight straw, about one foot high, letting the lower ends run out a few inches on the ground to cover with earth, and bind with a straw or other band in two places. Or, 3d process: Bind on a sheet of straw paste board or binder's boards, and if tarred all the better. In all cases clean the tree the first frosts, as after that period there is no danger of the fly's impregnating the tree, as it is past its season. It is of no use to tar or apply any offensive substance to the body of the tree; for as it grows and expands the bark cracks and exposes the tender part, where the fly deposits its eggs.

The parent of this grub is not unlike the black wasp, with steel blue wings and a yellow ring around its abdomen. Its habits are very sly and active, and not easy to detect. In July the grub goes into the chrysalis state, enveloped in a reddish glazed case, and lays on the top of the earth at the root of the tree.

To manure and improve a peach orchard already set out, let him put it under the operation of some hoed crop. Manure and work among them as if they were a great corn-hill, and so keep doing till it is in a thrifty state, when it may lay a while in grass, but not to clover; their long tap roots get rather more than their share of the nutriment and moisture of the soil.

Rochester, March, 1847.

H. Y.

YELLOW NEWTOWN PIPPIN APPLE.—The opinion has almost universally prevailed that the Newtown Pippin cannot be grown in Western New York. Recently I have had several specimens in my office, which have been grown in Monroe county, pronounced to be very fine, and a letter of a recent date from LEWIS F. ALLEN, Esq., of Black Rock, acknowledging receipt of some sent him, says that they were as good as any he had ever seen grown on the banks of the Hudson river. They do best in moist, rich soil. They are a slow growing tree—but fears need not be had that they will not thrive in this region.

J. H. WATTS.

Grafting the Quince on the Thorn.

MR. EDITOR :—On the 13th of May, 1841, I set some quince grafts on stocks of the common white thorn, sawed off even with the surface of the ground. The stocks were suckers, that had sprouted up around the stump of a thorn tree that had previously been cut down. The grafts grew very rapid, and in 1844 began to bear, and have continued to bear good crops of quinces every year since, of the largest size; some of them, last fall, measured 14 inches in circumference, and were of an excellent quality. The second year the grafts were banked up about six inches high, with earth and leached ashes, and have taken root in said banking. A. C.

GRAFTING PEARS ON THE THORN.—In the spring of 1841, I set a number of pear grafts on the thorn, (*Crataegus cordata*.) The grafts were set about level with the surface of the ground. They grew vigorously, and the third year bore a good crop of pears—and have continued to bear every year since. The fruit is of good size, and excellent flavor; it is called, here, the "Sugar Pear." In 1842 I commenced surrounding them with rich fine earth to the depth of 6 or 8 inches, and since I have used some ashes around them.

At the same time that the above grafts were set, I set another in a thorn, sawed off about four feet from the ground. The graft has made good growth, and has made a larger top than the others, but has not yet borne fruit. A. C.

Milo, Yates Co., N. Y., March, 1847.

ACKNOWLEDGMENTS.—A. HUIDEKOPER, Esq., Meadville, Pa., will please accept our thanks for specimens of *Ramles* and *Fallowater* apples; and for scions of these and of the *Pomona*, *Mumford*, and *Summer Red* apples, and *Venango Grape*—with notes respecting all these fruits, which we will lay before our readers hereafter.

We are indebted to Col. COLBY, of Ogden, for beautiful *Green Sweeting* apples—and another very handsome sweet apple, without a name; too ripe; very good, we should think, when in season. Also, to DAVID THOMAS, Esq., of Aurora, Col. B. HODGE, of Buffalo, and N. GOODSSELL, Esq., of Greece, for information kindly furnished at our request. To A. REYNOLDS, of Webster, for fine specimens of *Lady Apples* and *Yellow Newtown Pippin*.

THE PEACH CROP.—How often does the Peach Crop succeed in Western New York?—Or, how many years does it generally fail out of ten? Will some one tell us through the Farmer?—J. P., of Macon, Michigan.

MR. H. N. LANGWORTHY, one of the most extensive Peach growers in this vicinity, states, as his opinion, that the crop does not entirely fail more than once in ten years. He speaks more particularly of the region between Lewiston and Sodus Bay, on the south shore of Lake Ontario—embracing a strip of land from 6 to 10 miles in width, nearest the Lake.

FINE FRUIT TREES,



FOR sale at the Nursery of J. J. THOMAS, Macedon, Wayne Co., N. Y., consisting of a selection of some of the finest varieties cultivated in the Northern States.—

None are offered for sale but such kinds as have been thoroughly proved on bearing trees, and found excellent and perfectly fitted to the climate." [E]

The Cherry and Peach trees are unusually large and fine. The Cherry trees are mostly two years from the graft, straight and handsome, and with well formed heads, and embrace such celebrated varieties as Downton, May Bigarreau, Elton, Black Eagle, Elkhorn, Carnation, Yellow Spanish, Large White Biggoreau, Black and White Tartarian, &c. Price 40 cents each.

The Peach trees are nearly all two years from the bud, with branching heads, and have been so well fitted for removal by previous transplanting, as nearly to prevent all danger. They include some of the finest varieties for the climate of Western New York. Price 20 cents each.

The Apples are young and thrifty, and embrace some of the very best and most highly esteemed varieties, among which are the Gravenstein, Autumn or Late Strawberry, Ribston Pippin, Yellow Bellowflower, Peck's Pleasant, Rhode Island Greening, Early Joe, &c.

Some of the best varieties of Nectarines, Apricots, Raspberries, Strawberries, Filberts, &c., are for sale at low prices.

THE ORNAMENTAL DEPARTMENT

includes a very choice and select assortment of ornamental Shrubs and herbaceous perennial Plants; Balsam Firs and White Spruces, well hardened for transplanting; nearly all the finest double Pæonias; and many kinds of beautiful and celebrated Roses, among which is the splendid Queen of the Prairies, pronounced by the Boston Horticultural Society, "as without a rival in this climate for pillars and arbors;" all at low prices.

Trees packed at a moderate charge, so as to be sent with perfect safety by canal or railroad.

Catalogues and information furnished gratis on all post-paid applications. April, 1847. (1m)

FOR SALE.

SHORT-HORN and DEVON CATTLE, each thorough bred of their kind. The cattle of these stocks have been bred for many years by the Subscriber, and have been selected from the best breeds, and bred with the best and latest imported blood, with a particular view to the development of their most valuable qualities.

Also—Cotswold, (long wooled,) and South-down Sheep, of the best description, descended from the choicest and most celebrated English flocks.

They can be sent from the farm of the Subscriber, east and north by canal and rail-road, and west by steamboat, with safety and dispatch. Address

LEWIS F. ALLEN,

Black Rock, April 1, 1847. Black Rock, N. Y.

SHAKER GARDEN SEEDS!

The Subscriber is agent for the *New Lebanon Society*, and has on hand a fresh and full supply of these truly excellent Seeds.

(4-2m) L. B. SWAN, Druggist,
Rochester, March 18, 1847. No. 18 Buffalo st.

New Agricultural Implement and Seed Store,
AT AUBURN, N. Y.

The Subscriber is now opening a Depot for all kinds of *AGRICULTURAL IMPLEMENTS*, where the farmers can find, in their season, all of the most improved implements manufactured in the United States. He has now on hand Rieh's Patent Straw Cutter, Burrall's Premium Corn Sheller, the best ever invented, Arnold's Washing Machines, &c. He will also have in their season, a choice assortment of *Garden, Field, and Flower Seeds*, which are put up in the choicest manner, and are warranted genuine.

JAMES B. COOPER.

No. 84 Genesee-st., Auburn,

N. B.—Manufacturers who have Implements to dispose of will find it to their interest to leave them with me, as it is the only Agricultural Depot in Cayuga County. J. B. C.

MOUNT HOPE BOTANIC GARDEN AND NURSERIES,
ROCHESTER, N. Y.

The Subscribers respectfully solicit the attention of the public to their large and choice stock of TREES, SHRUBS, and PLANTS, which they offer for sale the ensuing spring, (1847.)

The collection of FRUITS embraces all the leading sorts of established merit, and most of the recent varieties of Europe and America. No pains or expense have been spared in making the collection as complete, in every way, as possible. The trees are all thrifty, healthy, and well grown, and have been propagated with the utmost exactness from specimen trees on this establishment, or from sources of the highest reputation for correctness. The collection of specimen trees, for testing the merits of the various sorts, is now among the largest in the United States. The assortment of Apples includes several thousand fine trees of the *NORTHERN SPY*, universally considered one of the best keeping apples yet known.

Pears.—All the leading well known sorts, such as *Madelaine*, *Dearborn's Seedling*, *Bartlett*, *Zeckel*, *Virgalieu*, &c., and a small supply of the rare and unrivalled *Swan's Orange* or *Onondaga*, *Knight's Monarch*, and *Van Mon's Leon le Clerc*: the price of these is \$1 each. A few thousand trees of choice varieties can be furnished on quince stocks. These are beautifully adapted to garden culture, and generally bear the second, and older trees even the first year after planting.

Plums.—Besides the well known popular sorts, a small number of the *Jefferson*, *Columbia*, *Lawrence's Favorite*, and *Dennisov's Superb* are offered at \$1 each.

Cherries.—a collection of upwards of 40 of the best varieties, earliest to latest—beautiful trees.

Peaches.—Forty choice varieties of established merit, including *Tillotson*, *Early York*, *Crawford's Early*, *Jacques' Rare Ripe*, *Crawford's superb* or *late Malacatoon*, &c.—beautiful trees.

Ornamental Trees and Shrubs.—A large collection, including all the finest popular articles in that line. *Roses*.—A superb collection of upwards of 250 select varieties. *Double Dahlias*.—100 beautiful varieties, including several of the finest fancy sorts, such as *Harlequin*, *Illuminator*, *Marchioness of Ormonde*, &c.

Descriptive priced catalogues (edition for 1846 & 7,) will be sent gratis to all post paid applications, and only to such

Trees and Plants packed in the best style, and shipped or forwarded according to orders. It will be for the interest of purchasers to send their orders early, in order to secure such kinds as they may want, and have them forwarded at the proper season. Address, post paid,

Feb 1, 1847. ELLWANGER & BARRY.

Apple and Pear Scions.

HAVING increased my stock of scions, I hereby offer the following varieties, in addition to the "Spy" and Swaar: "Yellow Bell Flower," "Seek-no-further," "Newtown Pippin," "English and Roxbury Russett," "Red Cheek Pippin," "Sweet Pearmain," and Virgalieu Pear.—As my object is to propagate the best varieties, orders for small quantities shall be furnished in all cases.

For Apple scions, \$1.00 per hundred; Pear scions, \$3.00 per hundred; or small quantities, 4 cts. each.

Rochester, April 1, 1847. JAMES H. WATTS.

N. B. I wish to purchase 500 bbls. of apples of the Swaar, Russet, or Spitzberg varieties—to be in good order and in clean flour barrels—for which a liberal price will be given. Call at my office, corner Buffalo and State streets.

Clover and Timothy Seed.—500 bushels of Clover and Timothy Seed, for sale at the Genesee Seed Store, No. 18, (old No. 10.) Front street, by
Rochester, April 1, 1847. RAPALJE & BRIGGS.

50 bushels Spring Wheat.—We have just received and offer for sale, at the Genesee Seed Store, (that altogether different concern farther down the street,) fifty bushels Italian and Liberian Spring Wheat.

April 1. RAPALJE & BRIGGS,
No. 18 Front street.

Spring Rye.—25 bush. Spring Rye for sale at the Genesee Seed Store; it is a first rate article for sowing with oats.

April 1. RAPALJE & BRIGGS,
No. 18 Front street.

ROCHESTER COMMERCIAL NURSERY,

MAIN STREET—ONE MILE EAST OF THE COURT HOUSE,
ROCHESTER, N. Y.

Office No. 1 Arcade Hall.



Deodar Cedar.

plants.

☐ An assortment of HARDY ORNAMENTAL TREES also kept for sale.

March 1, 1847.

THE SUBSCRIBERS offer for sale the present spring, a fine assortment of FRUIT TREES, comprising several hundred of the most desirable varieties of APPLE, PEAR, PEACH, CHERRY, PLUM, &c., &c., cultivated with great care, thrifty, and warranted correctly named. Northern Spy, Early Joe, and other choice Apples in any quantity, and Onondaga and other new Pears at regular Catalogue prices.

☐ Many of our trees are larger than can be purchased elsewhere.

PEARS ON QUINCE FOR GARDENS.—We have some of the finest dwarf Pears ever offered for sale in this market, to which we invite the attention of those persons wishing to purchase this description of trees.

Priced catalogues furnished to all *post paid* ap-

BISSELL & HOOKER.

Winter Route for New York and Boston,

VIA TROY AND GREENBUSH.

Avoiding the expense, delay, and danger of crossing the River at Albany. Continuous Railroad Track from Rochester to Boston and Bridgeport, via Troy.

THE CARS leave Rochester at 1 P. M. and 9½ P. M., daily, for Troy, through in 17 hours, carrying the United States Mail.

The U. S. Mail Line for New York, leaves Troy at 6 A. M., intersecting at East Albany the Western Railroad, which leaves at 6½ A. M. via Housatonic Road, through to Bridgeport, without change of cars or baggage, and to New York by day-light.

The cars also leave Troy at the same hour for Boston, Worcester, Springfield, and Pittsfield, via Western Railroad, through in 12 hours to Boston, without change of cars or baggage.

The trip is as quick, and the fare as low by Troy as by Albany, and passengers are set down and taken up by the cars directly in front of, and but a few steps from the Public Houses in Troy, thus avoiding the expense, exposure to cold and wet, and danger of crossing the river at Albany, at so early an hour as 6 o'clock in the morning.

The Housatonic Road has been relaid with the heavy H Rail, and the new and fast steamer Mountaineer placed on the route to run between Bridgeport and New York, for the passengers and the mails exclusively, which render the trip safe, pleasant, and expeditious.

FREIGHT

Will continue to be carried by Railroad until the opening of the canal, and that going east of Schenectady to Troy, New York, Boston, or any intermediate place, should be sent by way of Troy, care of L. R. Darrow, and avoid the delay, cartage, and transhipment in crossing the Hudson River at Albany. The Freight Tariff is the same by Troy as by Albany, and can be ascertained by calling at any of the Railroad Depots on the line between Buffalo and Troy.

☐ Remember, and mark freight via Troy, care of R. L. Darrow, Freight Agent, Troy, who will attend to receiving and transferring it to New York, Boston, and intermediate places, at Troy and Greenbush.

March 1.

N. RANDALL, Agent.

BOUND volumes of the Farmer, 1846, for sale at this Office.

Genesee Seed Store and Agricultural Warehouse.

No. 13 (old No. 10,) FRONT ST., ROCHESTER.

At this Establishment can be found all sorts of GARDEN and FIELD SEEDS, a large and excellent assortment of Flower Seeds—a large lot of Clover and Timothy Seed, Orchard and Lawn Grass, Red Top, Lucerne, White Dutch Clover, Millet, Hemp, Flax Seed, Spring Wheat, Spring Rye, Buckwheat, Barley, Oats, different kinds Peas and Beans, Seed Corn of different kinds, various kinds of Seed Potatoes, Potato Onions, Onion Sets, Top Onions, &c., &c.

IMPLEMENTS, MACHINES, &c., such as Pennock's Patent Wheat Drill—Broad Cast Sowing Machines—Corn Planters, Seed Sowers, Fanning Mills—10 different kinds of Straw Cutters, prices from \$3 50 to \$23—Plows as follows: Massachusetts Subsoil, various sizes, do. Sward C. do. Eagle 25, do. different sizes Side Hill, Michigan Subsoil, Delano or Diamond Plows, Burrall's Wheel Plow, Wisconsin Plow, Gang and Corn Plows, and several kinds of plow points—Cob and Corn Grinders, different kinds of Corn Shellers, one and two horse Cultivators, Langdon's Horse Hoe or Cultivator, Drags and Drag Teeth; Horse and hand rakes, various kinds of garden rakes—steel and iron shovels and spades of different kinds—cast-steel and steel plated hoes, different kinds—ladies garden spades and hoes, toy spades and hoes—cast-steel and German steel manure forks and hooks—grain cradles; cradle, grass and bush scythes—bush and grass hooks; grain sickles; Hay knives, grafting, pruning and budding knives; clover and grass seed sieves, pea sieves—cheese presses, hoops and tubs—common and patent churns—cattle knobs and bull rings—curry combs and horse cards—ox yokes and bows—hedge shears, pruning saws—Canary birds and cages—hot bed plants in their season—Eglantine or Michigan running rose roots—and many other things which a limited space will not allow us to mention.

We have done business through one season, and are pleased to be able to say that we have been more liberally patronized than we anticipated when we began. We hope, and believe, that we have so dealt with those who have favored us with their custom, that they will not hesitate to give us their favors hereafter—and we hope others will try us. All favors will be duly and thankfully appreciated.

AGENTS.—The following persons are Agents for the sale of Garden, Field and Flower Seeds, put up at the above named Establishment:—

Attica, L. Doty,
Albion, Nickison & Paine,
Adams Basin, C. D. Graves,
Adrian, Mich., D. H. Underwood,
Auburn, Quick and Hall,
Aurora, H. & G. P. Morgan,
Batavia, J. P. Smith,
Buffalo, E. Rawson,
do. T. C. Peters,
do. H. O. Hayes,
Brookport, H. Lathrop,
Canandaigua, Chipman & Remington,
Cobourg, C. W., G. Boyer,
Dansville, M. Halstead & Co.
Detroit, Mich., F. F. Parker & Brother,
Geneese, Bond & Walker,
Geneva, Lawrence & Barnes
Holley, H. N. Bushnell,
Havanna, G. T. Hinman,
Ithaca, Schyler & Co.,

Jackson, Mich., S. Chadwick
Le Roy, J. Annin,
Lewiston, H. F. Hotchkiss & Co.,
Lockport, Wm. Keep & Co.,
Lyndonville, E. Bowen,
Mt. Morris, L. J. Ames,
Medina, J. Nichols & Son,
Middleport, J. Craig,
Milwaukie, W. T., J. S. Moulthrop,
Niagara, C. W., Wm. Johnson & Son,
Penn Yan, E. H. Huntington
Pt. Byron, Kendrick & Yates
Scottsville, Caleb Allen, esq.
Seneca Falls, Joseph Osborn
Skaneateles, C. Pardee & Co
Syracuse, E. J. Fester,
Utica, J. E. Warner & Co.,
Union Springs, W. Cozzens,
Vienna, S. E. Norton,
Youngstown, A. Emerson.

☐ Garden Seeds put up at this Establishment can be found at most of the Stores in the State of New York west of Utica, and in some parts of Canada.

RAPALJE & BRIGGS.

(4-f)

Rochester, April, 1847.

Northern Spy and Swaar Apple Grafts.—The subscriber has a supply of scions cut from the celebrated Northern Spy and Swaar apple trees, from the Orchard of R. I. Hand, of Mendon, who has supplied the Rochester market with better apples of the kind mentioned than any other person. They can be sent by Express, and any orders (post paid) shall be punctually filled. Price \$1.00 per hundred.

Rochester, Feb. 20, 1847.

JAMES H. WATTS.

REMOVAL.

The Rochester Agricultural Ware House has been removed from Front-street to No. 23 Buffalo-street, Talman Block, opposite Reynolds' Arcade. See advertisement below.

☞ ☞ ☞ ☞ ☞

Rochester Agricultural Ware-House,

HARD-WARE AND SEED STORE.

(No. 23 Buffalo st., opposite Reynolds' Arcade.)

Where can be found most kinds of GARDEN and FIELD SEEDS, Hard-ware, Tin-ware, Wooden-ware, Willow-ware, House Trimmings, Kitchen Furniture, &c.

The late proprietor of this Establishment, (THOS. NOTT,) feels grateful to his many patrons for their very liberal patronage during the past year, and would solicit a continuance of the same—promising to sell them as good articles in his line, and as cheap, as can be purchased at any other establishment west of Boston or New York. He has formed a co-partnership with Mr. E. J. ELLIOTT—and the business of the establishment will hereafter be conducted under the firm of NOTT & ELLIOTT.

We shall keep constantly on hand, a full assortment of *Shaker Garden and Flower Seeds*, the reputation of which needs no comment.

We are continually manufacturing the celebrated Massachusetts Sward C Plow—to which has been awarded the greatest number of Premiums—which we shall sell at the low price of \$7, with an extra point. Also—shall keep on hand an assortment of the various approved Plows and Points, Cultivator Teeth, Root Cutters, Straw Cutters, and Corn Shellers—with a hundred and one other articles, too tedious to mention.

Farmers from a distance, as also those in our immediate vicinity, are respectfully solicited to call at our new establishment, and examine our assortment before purchasing elsewhere.

NOTT & ELLIOTT,

Rochester, Jan. 1, 1847. No 23 Buffalo-street.

To New York Farmers and Emigrants.

 **ILLINOIS LANDS FOR SALE.**—115,000 acres, in tracts of 40, 80, 120, 160, acres, or more, to suit purchasers. The lands are all first rate, and among the very best in the State, and are situated in the counties most densely settled, viz. Morgan, Scott, Cass, Mason, Menard, Green, Sangamon, Logan, Christian, Macon, McLean Woodford, and Maconpin. To actual settlers every reasonable indulgence will be given as to time of payment. The price from \$3 to \$5 per acre.

A correspondent of one the New York papers writes, respecting this section of Illinois, as follows:

BEAR STOWN, Cass Co., Ill., Jan. 10, 1846.

The Riches of the West—Gothamites on the Wing.—It is now six weeks since I left the city of Gotham, during which time I have seen considerable of the Western country, and I must say the beautiful prairies of Illinois far excel what I had anticipated, and this country may truly be called the garden of the world. There is nothing to prevent farmers in this country from getting rich, as the land is the most fertile in the world, and it will produce everything grown in the vegetable kingdom.

A New England man would hardly believe me if I would tell him that some farmers here produce ten thousand bushels of corn and half as many bushels of wheat in a year, to say nothing of cattle and hogs, of which some raise as many as five hundred head. One farmer told me he had raised, the last year, 6,600 bushels of corn, and it was all produced by the labor of two men only.

Cattle and sheep feed upon the prairies all winter, as they are seldom covered with snow.

Most of the above lands may be cultivated 100 years or more without manuring, being of the richest alluvial soil. The titles are indisputable and the lands will be sold at low prices and in quantities to suit purchasers. Letters (post paid) addressed to D. B. AYRES, Esq., of Jacksonville, Ill., or to the subscriber, will receive prompt attention. As many persons out of the State have an idea that the taxes are very burdensome in Illinois, we state that they range from \$1,50 to \$2,00 per annum on 80 acres of land.

JOHN GRIGG,

No. 9 North Fourth-st. Philadelphia.

March 1, 1847.

[3t]

ROCHESTER SEED STORE.

[Established in 1831.]

No. 4 FRONT STREET, NEAR BUFFALO STREET.
By JAMES P. FOGG.

The subscriber begs leave to say to Farmers, and others, who have for the last three years so liberally patronized the *Old Rochester Seed Store*, that he has fitted up the Store, No. 4 Front street, on the west side of Front street, where he will be happy to see all who may want any article usually to be found in a Seed Store.

The subscriber is well aware of the important relation which the seedman holds to the whole farming community, and that on his honor and veracity the crop and profit of a season in some measure depend. The greatest care has been used in selecting the seeds offered at this establishment for the ensuing year, and they can be relied upon as pure and genuine, carefully selected and raised from the very best varieties, and properly cured. Many kinds were raised in the immediate vicinity of this city, by Mr. C. F. Crossman, and under the inspection of the proprietor; others were raised by experienced seed growers, and all can be recommended as genuine and true to their kinds.

AGENTS for the sale of seeds by the package, put up at the old Rochester Seed Store:

<i>Attica, H. D. Gladding,</i>	<i>Wyoming, J. C. Farris & Son.</i>
<i>Amsterdam, J. W. Sturtevant</i>	<i>Cleveland, Ohio, J. W. Watson,</i>
<i>Auburn, Hudson & Buckbee</i>	<i>Columbus, O., John Miller</i>
“ <i>James B. Cooper,</i>	<i>Mount Vernon, O., H. A. Raymond & Co.,</i>
<i>Albion, Charles W. Perkins,</i>	<i>Sandusky City, O., W. T. & A. K. West,</i>
<i>Buffalo, W. & G. Bryant,</i>	<i>Toledo, O., Raymond & Co.,</i>
<i>Batavia, F. Follett, P. M.</i>	<i>Adrian, Mich., Howard, Smith, & Co.,</i>
<i>Brookport, A. B. Bennet,</i>	<i>Detroit, Mich., J. W. Strong Jr.,</i>
<i>Canandaigua, L. C. Cheney & Co.,</i>	<i>Monroe, Mich., L. B. Wing,</i>
<i>Cazenovia, Dr. A. Ford,</i>	<i>Pontiac, “ Rogers & Dundlee,</i>
<i>Castile, Halsted & May,</i>	<i>Ypsilanti, Mich., Hewitt, Brothers & Co.,</i>
<i>Elmira, Tracy Beadle,</i>	<i>Chicago, Ill., N. Sherman</i>
<i>Geneva, Hemipuf & Cone,</i>	<i>Mitcheakie, W. T., Holton & Goodall,</i>
<i>Geneseo, L. Turner,</i>	“ <i>W. M. Cuning</i>
<i>Homer, W. Sherman & Son,</i>	<i>ham,</i>
<i>Ithaca, Lewis H. Culver,</i>	<i>Hanilton, C. W., S. Kerr & Co.,</i>
<i>Lockport, S. H. Marks & Co</i>	<i>Kingston, C. W. C. Heath</i>
<i>Mumford, J. Phelps & Co.,</i>	<i>London, “ Ed. Adams,</i>
<i>Mount Morris, R. Sleeper,</i>	<i>St. Catharines, C. W., L. S. St. Johns,</i>
<i>Oswego, C. & E. Canfield,</i>	<i>Toronto, C. W. R. Love,</i>
“ <i>Meade & Carrington</i>	<i>Port Hope, “ C. Hughes</i>
<i>Perry, R. H. Smith,</i>	
<i>Penn Yan, John H. Lapham,</i>	
<i>Palmyra, Wm. May,</i>	
<i>Port Byron, Kendrick & Yates,</i>	
<i>Scottsville, Garbutt & Co.,</i>	
<i>Schenectady, D. L. Powell,</i>	
<i>Syracuse, Tallman & Williams,</i>	
<i>Utica, J. E. Warner & Co.,</i>	
<i>Troy, J. Daggett & Co.</i>	

Back Volumes of the Genesee Farmer—The subscriber has on hand the Volumes of the Genesee Farmer for 1841, 1842, 1843, 1844, and 1845—neatly bound, which he will sell very cheap.

JAMES P. FOGG.

Rochester Seed Store, Front-st.

Seedling Apple Trees wanted.—The subscriber wishes to purchase a few thousand seedling Apple Trees. Apply personally, or by mail, to S. MOULSON, Rochester, Jan. 1, 1847.

Cash for Clover and Timothy Seed.—500 bushels Clover and Timothy Seed, wanted at the Genesee Seed Store and Agricultural Ware House, Front street, by RAPALJE & BRIGGS.

Straw Cutters, of all the most approved kinds, used Western N. Y., for sale cheap, by RAPALJE & BRIGGS.

Bound Volumes of the Farmer.

A few copies of Volume VI, bound, for sale at this office. Price 50 cents. Also, bound copies of Volume VII, 1846.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,.....	1,12	1,15	Pork, bbl,	12,50
Corn,.....			Pork, cwt,.....	4,00 5,00
Barley,.....	40	44	Beef, cwt,.....	3,50 4,00
Oats,.....			Lard, lb,.....	7 8
Flour,.....	5,25	5,37	Butter, lb,.....	10 14
Beans,.....	37	1,00	Cheese, new lb.,	5 6
Apples, bushel.	25	37	Eggs, doz,.....	10
Potatoes,.....	38	50	Poultry,.....	7
Clover Seed,.....	4,00	5,25	Tallow,.....	7 8
Timothy,.....	1,75	2,50	Maple Sugar,.....	10
Hay, ton,.....	7,00	8,00	Sheep Skins,.....	33 1,00
Wood, cord,.....	2,90	3,00	Green Hides, lb	3 1/2
Salt, bbl,.....	1,06		Dry ".....	3
Hams, lb,.....	6	7	Calf Skins,.....	6 7

Rochester, March 26, 1847.

[By Magnetic Telegraph.]

NEW YORK, March, 25—7 P. M.

ASHES.—Fair business doing; sales 100 bbls. at \$4,97 1/2, and \$6,25 for Pots and Pearls.

FLOUR is in good demand. About 3000 or 4000 bbls. have been sold to-day at \$7 a 7,12 1/2 for Michigan, and \$7,12 1/2 a \$7,25 for Genesee, good brands. To arrive on opening of river, 1000 bbls. \$7,12 1/2, and to arrive in May, 1500 bbls. sold at \$6,25, which is an advance; also 500 bbls. fancy Ohio to arrive in May at \$6,50. There was considerable inquiry for the French market; 3000 bbls. Philadelphia sold at \$6,50.

MEAL is in demand at \$4,75.

RYE FLOUR \$4,62 1/2 a \$4,75. Small sales of grain. Wheat only 1500 bush. southern, for milling, at \$1,32, but there were several negotiations for lots to arrive.

Transactions in Corn continue to be very large; much the larger portion however to arrive in the summer. Sales today of all descriptions, reach 175,000 bush., to arrive at different periods, at from 70 to 94 cts.

RYE in fair demand to arrive at 90 cts.

BARLEY nominally 70 cts. to arrive.

OATS 44 a 45 for River.

BEANS and PEAS in small supply and firm.

PORK.—Old Pork was heavy and I hear of few or no transactions. Prime could be bought at \$12, and one lot was offered below that figure; of new there has been 1100 bbls. sold to arrive in June at \$12,50 a \$13 and \$15 for prime and mess.

BEEF is quiet and steady at \$3,50 a \$9,50, and \$11 a 12. Last sale, good beef hams, \$16,30.

Pickled meats are firm.

Of Lard there have been sales 400 to 500 bbls. at 9 a 10 according to quality, and 400 or 500 at 10 a 10 1/2. There has been a little movement in a small stock of cheese remaining and 600 boxes taken at 7 1/2 a 8 cts.

BUTTER is scarce and firm.

Sales 100 bbls. Pennsylvania new clover at 8 cts., and 120 do. Ohio, no price reported. Rough flax is wanted at \$11,50.

PUBLISHERS' NOTICES.

To Post Masters, Agents, &c.

We request all Post-Masters to act as Agents for the Farmer, according to our club terms. Also such other persons as feel an interest in extending the circulation of the Farmer, and thus promoting Improvement in Agriculture, Horticulture, and their kindred sciences. We shall feel truly grateful to any and all persons who will lend their assistance. Any person sending us 16 subscribers, (remitting \$6,) shall receive an extra copy gratis—or a bound volume of the Farmer for 1846.

To Clubs.—Any Post Master or other person who has sent us eight or more subscribers, will be furnished with any additional number of copies at the club price—37 1/2 cents each. We hope those who have formed clubs, will bear this in mind, and forward the subscriptions of such as may hereafter want the Farmer. Back numbers can be supplied—so that all may have the entire volume.

☞ All letters to the Publisher should be post paid or free.

☞ Back numbers promptly forwarded to new subscribers.

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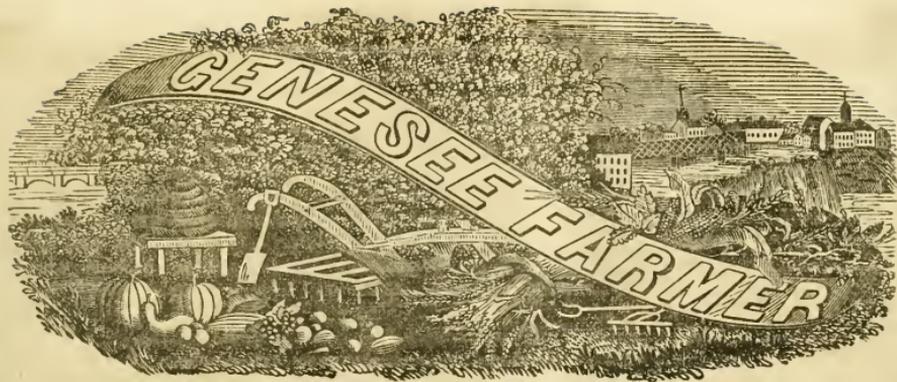
☞ Our agents and friends will please bear in mind that we offer, as a premium, (in addition to the per centage allowed to clubs,) a bound volume of the Farmer for 1846, or an extra copy of the current volume, to any person forwarding 16 subscribers, (remitting \$6, post paid or free.)

☞ We can furnish volumes 6 and 7 of the Farmer, (the only ones published uniform with the current volume,) either bound or in sheets. The previous volumes which we have on hand, (4 and 5 bound together, in boards,) are not suitable for sending by mail.

CAUTION.—Beware of pretended traveling agents for the Farmer. We have several letters from farmers who have recently been defrauded by impostors. We regret their loss, but cannot send the paper in such cases.

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THE GENESEE FARMER:

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DANIEL LEE, EDITOR.

P. BARRY, Conductor of the Horticultural Department.

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[] The Farmer is subject to newspaper postage only. []

Corn Culture.

ACCORDING to the census of 1845, there were 595,135 acres planted with corn the preceding year, in this State, which gave an aggregate of 14,722,115 bushels. The average was a fraction less than 25 bushels per acre. Small as this crop appears, it was larger by 3,636,973 bushels than that returned at the census of 1840. This is a large gain in five years, and will be taken as evidence that still greater improvement in the culture of this great American staple is attainable.

We have long entertained the opinion that New York soil can be made to yield an average of 50 bushels per acre; or twice as much as it now does, with a three-fold larger profit. How is this result to be attained?

First, by manuring well with those elements that nature uses in making a large crop of corn, so far as they are lacking in the soil to be planted. This application of fertilizers is indispensable; for no amount of hard work with the plow, hoe, and cultivator, can possibly create one particle of the ingredients that form the substance of corn plants. A soil may contain in an available form, 99 parts in 100 of all the elements necessary to produce 80 bushels of corn per acre;

yet the lacking 1 per cent. will limit the crop to one-half that amount. No one has ever seen kernels of this grain that did not contain some 45 or 50 per cent. of *phosphoric acid* in the ash left when the kernels were burnt. Suppose your cornfield possesses enough of this substance, combined with lime and other bases, and in an available shape, to form the stems, leaves, roots, and cobs, as well as the seeds of this plant, up to the limit of 40 bushels per acre? Unless nature can organize kernels of corn without the presence of *bone earth* or phosphate of lime, it is obvious that the presence of every other ingredient in never so great abundance, to form 80 bushels of grain, must all go for nothing at the harvest! In this case, without any additional plowing, hoeing, or manuring, the addition of a few pounds of bone dust would double the crop.

Suppose your soil was deficient in gypsum, as well as in the ingredients that form the bones of your domestic animals. Then bone dust alone would not answer the great purposes of nature. As no animal can elaborate its brain without plaster or *sulphur*, nature, with infinite wisdom and foresight, refuses to cheat animals by the production of cereal plants in which *sulphur* is not a constituent element. If then your soil contains enough of sulphates to give 30 bushels of corn, and no more, how much tillage will it require to create one grain of sulphur out of nothing, that nature may have all the materials necessary to form a crop of 60 bushels per acre?

Suppose that common salt, (chloride of sodium,) be lacking? Your land may furnish enough for two-thirds of a large crop. How will you supply the absent chlorine so indispensable alike in the economy of vegetables and animals? It may happen that your corn plants need five times more chlorine than your stable or barn yard manure will furnish. Will you foolishly waste four-fifths of your most valuable manure to supply what chlorine your crop requires; or will you add a little of "the salt of the earth" to your dung heap and thus give it a five-fold greater productive power?

In the *ash* of cornstalks and cobs we invariably find a good deal of potash. Suppose your soil possesses all the other ingredients required to form a crop of 80 bushels per acre except this alkali; but of that the supply is equal to the demands of 40 bushels per acre, and no more?—Barn-yard manure contains salts of potash, but the per centage is small. If you have a goodly quantity of manure and little land to plant in corn, you will need no additional potash for this crop. But suppose you have but 100 loads, to ten acres of corn ground? Ten loads will not give your plants all the potash they need.—Hence, the mixture of good wood ashes with gypsum, bone dust, and salt, in addition to a small dose of manure may give you a double crop.

The relative proportions of ashes, salt, gypsum, and bones boiled to powder in strong lye, or ground, may be left to the good sense of the corn-grower. If the bones can not be had, the ashes, salt, and gypsum should still be used, where the land is not so rich as it should be to give 60 or 70 bushels per acre. A bushel of salt and a like quantity of gypsum to two bushels of unleached ashes, would be a fair proportion under ordinary circumstances. In a soil that naturally lacks lime, or where leached ashes are used instead of unleached, we should invariably use twice as much lime to the compost as salt. If the compound is to be applied in considerable quantity—and it should be if the soil is poor, and the materials not too expensive—it may be spread broad-cast over the field just before planting.

From experience we are satisfied that it is much better to apply ashes, salt, &c., on the hill immediately on covering up the seed, than to wait till the corn is up, or weeded. A single handful should be spread over a square foot or more surface. The rains and dews will dissolve these salts and take them down within reach of the needy roots of the plants cultivated.

We advise *deep* and *fine* plowing for corn.—The roots of this plant in a mellow, pervious soil, will seek appropriate nourishment at the distance of 30 or 40 inches from the upright stem.

MR. EDITOR:—May I be indulged with troubling you with a few questions in relation to a field of about eight acres, which I purpose to plant with Corn the coming season. It has a clover sod of two years growth, on gravelly soil; about one-fourth of an acre however, and near the center of the field is a hollow of black sand, which has never produced well—worms or something else have always been in the way. The probability is, with ordinary usage the field would produce 30 bushels of corn per acre—I want more. The soil is quick—lies warm—I mean to cultivate it well. Shall I plow it more than 5 inches deep?—what time?—What kind of seed, and how shall I prepare it? What distance should it be planted, and how many kernels in the hill?—with all the after process.

Yours with esteem,

CALEB K. HOBIE.

Irondequoit, March, 1847.

REMARKS.—We should plow the field above referred to, at least seven inches deep, so soon as the ground gets settled and a little warmed by the vernal sun. If we had any well rotted ma-

nure, it should be evenly spread over the plowed surface, and well harrowed to incorporate it with the soil. And here let me suggest the importance of having long, sharp harrow teeth, drawn by a strong, quick team, in order to pulverize and mellow the ground to a considerable depth. If our manure was long and very little rotted, we should prefer to cover it with the plow in the first operation.

Yellow corn is usually worth from 3 to 7 cts. more a bushel in New York market than any variety of white, and as it yields as well, it should be preferred. We have never seen any variety of yellow corn, so decidedly superior to all others, as to warrant us in giving it our commendation. In this climate, 3 feet from hill to hill each way is about the proper distance, with 3 or 4 good stalks in a hill.

We have elsewhere endeavored to give the reader some idea of the great value of a compound of ashes, salt, and gypsum, to augment the yield of this important crop. The value of ashes and salt as fertilizers for most cultivated plants has never been duly appreciated in this country. We will state a case in point in the culture of wheat: A light loamy soil in Scotland, with a clay sub-soil, gave without any fertilizers 30 bushels of wheat per acre. An adjoining acre, similar in all respects, received a top dressing of 400 cwt. wood ashes and 200 cwt. sulphate of ammonia. This gave 39 bushels.—The sulphate of ammonia was formed on the farm, by pouring oil of vitriol into a reservoir of the urine of cattle. Gypsum mixed with the liquid excretions of all animals will form sulphate of ammonia. Thinking that perhaps his soil lacked to some extent both chlorine and soda, which neither the urine nor the ashes would supply in sufficient quantity this scientific Scotch farmer added to a third acre 200 cwt. of *common salt* to the ashes and sulphate of ammonia. The result was not a gain from 30 to 39 bushels, but a yield of 49 bushels!

What wheat grower in Western New York would not rejoice to give 200 lbs. of salt for 10 bushels of wheat?

There is more common salt (chlorine and sodium) in an acre of corn than in an acre of wheat. This mineral being extremely soluble, as every body knows, it is very likely to be leached out of the surface soil, and of course deficient in quantity to produce an extra growth of any plant that requires it.

If Mr. HOBIE wishes to increase his crop of corn from 30 to 50 or 60 bushels per acre, he must add those things to the earth which nature uses, and must have to organize this most prolific plant.

DRAINING and Deep Plowing have doubled the product of wheat, in England, within the last 25 years—and quadrupled the annual yield of manure.

The Culture of Potatoes.

POTATOES are now worth some fifty or sixty cents a bushel in this city. If one could be sure of a good crop of sound potatoes, their culture would yield a large profit. As an article of human food, it will be extremely difficult, if not impossible, to find a perfect substitute for this tuber. We are not of the number that regard this plant as likely soon to become extinct; although we confess our inability to explain the occult causes which gave rise to the wide spread potato malady. Whatever may be the pestilent agent, experience has shown that much may be done to avert its destroying powers. The most successful preventives hitherto tried, have been founded on this principle in organic life: All living beings, whether animal or vegetable, can best withstand any epidemic, or other poison that excites the morbid action, and dissolution of organized bodies, by supplying the vital principle in the animal or plant with every element in due proportion, used by nature in the constant sustenance of life. Other things being equal, a very weak, debilitated plant or animal, will sooner die and rot, through the influence of any poison common alike to all, than strong and healthy systems, wherein vitality possesses its highest powers of resistance.

If this doctrine be true to nature, it becomes a question of the highest moment to learn what are the elements and circumstances most favorable to the perfect development of the potato plant. We have devoted a good deal of time to the practice and scientific investigation of this very interesting subject.

Early planting is one of the most important preventives of the blight and rot. But early planting alone is not sufficient. Thorough tillage, the removal of all excess of moisture, and the application to the soil of any ingredients it may lack to form large, healthy tubers, stems, and leaves of plants, must not be omitted. What these lacking ingredients are, can only be rigidly determined by a critical analysis of the soil and of ripe potato plants, including every portion of the same. Different varieties of potatoes, as well as the same varieties grown in different soils, give unlike results as to the quantity of starch, water, ash, and mineral constituents of the ash of the tubers, stems, and leaves of the plant. As an animal may be very lean or fat, according to its keep—may have 25 or 50 per cent of bones in its system—so cultivated plants may be poor in starch, sugar, gum, legumen, or any other organized or earthy substance, or abound in the same. We find in 100 lbs. of rohan potatoes, 80 lbs. of water. In the same weight of Mercers, only 74.50 lbs.

In 1000 grains of perfectly dry potatoes, we usually find about 40 grains of ash, when thoroughly burnt. 100 grains of the ash of potatoes

(tubers,) yield the following constituents:—	
Carbonic acid,.....	13.4
Sulphuric acid,.....	7.1
Phosphoric acid,.....	11.3
Chlorine,.....	2.7
Lime,.....	1.3
Magnesia,.....	5.4
Potash,.....	51.5
Soda,.....	traces
Silica,.....	5.6
Oxide of Iron and Alumina,.....	0.5
Charcoal and loss,.....	0.7
	100.0

The above figures are interesting, because they show that 51½ per cent. of the ash of potatoes is pure *potash*. More than 11 per cent. is *phosphoric acid*, an element that exists largely in bones. To determine the practical value of potash in the culture of potatoes, we have planted them in an artificial soil in which that alkali was wholly left out. A healthy crop cannot thus be grown, unless perhaps soda or lime may serve as a substitute. How far soda may supply the place of potash, or potash of soda, or lime of either, in the organization of starch, oil, sugar, and of other vegetable substances, no one has tried sufficient experiments to determine. In the present state of agricultural science, the only safe course is to make and apply to the soil, a compound that contains all the elements found in the crop.

In addition to stable manure, the use of wood ashes is of great service in growing potatoes.—Manure contains the same mineral elements found in the plants on which domestic animals are fed. The ashes derived from timothy and clover hay, cornstalks, wheat and oat straw, oats and wheat bran—the usual food of domestic animals—contain a great deal less potash than the ash of potatoes. Hence, it is found by experience that stable and common barn-yard manure will go three times farther in growing potatoes, if wood ashes be used at the same time. Common salt, bone dust, lime, and gypsum, are valuable auxiliaries. We prefer to mix these fertilizers with ashes, either leached or unleached, before their application. They should be spread over each hill immediately after the seed is covered.

Running into Debt.

No farmer, who honestly intends to pay, need to fear to secure his creditor by mortgage. Some must ever be in debt, otherwise none could have money at interest—none could live on an income. Farmers can give the very best security for loans and thus allure capital to the aid of agriculture. The multitude of mortgages on farms proves that capital to a large amount has been thus allured.—*Mass. Ploughman.*

THE Editor of the Ploughman enjoys a high reputation as a man of sound judgment; but we greatly misjudge in the matter of borrowing money and mortgaging one's farm to secure principal and interest, at some future day, if the practice be not alike unsafe and unwise, as a general rule. According to our observation for the last 25 years—and we claim to have been a pretty close observer of men and things—nine-

tenths of the farmers that have borrowed money in any considerable sums and mortgaged their farms, have either lost them outright, or been compelled to sell the cream of all that their labor produced, and live on skim milk for years before they could get out of debt. In no other business is capital more useful than in agriculture. But the money should belong to the man that uses it—not to another, and drawing annual, or compound interest, at 7 per cent. Disbelieve it who will, no human being can long endure this drain on his productive energies, without some aid from the unrewarded labor of others. Instead of wishing to allure millions of borrowed money into rural operations from the John Jacob Astors of large cities, secured by mortgages on farms at half their value, we feel in duty bound to caution our readers against the consequences of this popular error.

The whole real and personal property of this great commonwealth is not far from one thousand millions of dollars. Of this Mr. Astor owns at least twenty millions; or the *fftieth* part. The most careful investigation shows the startling fact that, 1000 men own more than one half of all the wealth, both real and personal, in the State, while the balance is concentrating into few and fewer hands with fearful rapidity.—Suppose that the cultivators of New York soil were foolish enough to borrow \$100,000,000, and mortgage all the unincumbered farms in the State; and the lenders of the money should reloan their annual interest on farming lands. In 10½ years the debt would be \$200,000,000; in 21 years it would be \$400,000,000; in 31½ years, \$800,000,000! Can human beings increase eight fold in 31½ years to work and earn this money? Can they possibly meet this rapidly accumulating tax on human muscle and intellect? Examine this subject carefully, and see from what source the gain of \$700,000,000 is to be drawn.

Suppose Mr. Astor should give a grandson born in 1847, ten millions of dollars on condition that the principal and annual interest should be loaned out on farms for 42 years. What would be the value of this grandson's estate when 42 years of age? Not far from one hundred and sixty millions of dollars! How many farms and farmers will Mr. Astor's estate, if skillfully and legally managed, swallowed up in 50 years? "Allure capital into agriculture by the mortgage of farms?" It is the madness of infatuation.—How can the Ploughman rejoice at the "multitude of mortgages on farms"? Can a policy which every where operates to make the *few* exceedingly rich, and the *many* exceedingly poor, be the best system for the prosperity and happiness of the *whole*?

The Ploughman says: "Some must ever be in debt, otherwise none could have money at interest—*none could live on an income.*"

If one-tenth of the community may justly live without work—eating their daily bread in the sweat of other men's faces, not their own—may not the other nine-tenths do likewise? Tell us frankly, is the Creator of man a respecter of persons? If a rich man may rightfully compel ten poor ones to feed and clothe him in idleness—living on "income"—may not ten poor men as rightfully compel the man of wealth to support them too without labor?

The Mark Lane Express says that the Irish peasantry are forced to give five-sixths of all that their labor and the earth produce to landlords for rent. Discouraged, brutalized, and famished by this extortion, the money lenders, who thought they had what the Ploughman regards "as the best of security by mortgages on lands," now find *four millions of paupers* hopelessly saddled upon them, as an enduring tax on their encumbered estates. Well does the London Times remark "there is no escape from the retributive justice of Heaven." The four millions of paupers in Ireland have as good a right to live in idleness till they consume five-sixths of all the property of the nation, as any Irish landlord has to consume five-sixths of all that any poor family may produce. If you yield to capital the legal right to give labor 90 cents and take a dollar back, can you refuse labor the equal right to give capital 90 cents, and then legally demand a dollar in payment?

Think of these things before you run into debt. Create wealth by skilful industry, and keep it by good economy. Be no man's servant, no man's master.

Potato Disease.

PROF. FRESINIUS, now of *Wisbaden*, and long distinguished at the Giessen University, (Germany,) states in the "Nassau Agricultural Magazine," that he succeeded in producing an acre of sound potatoes last season by the use of *mineral* manure, while those in the same field and neighborhood, treated in the usual way with stable manure, all rotted. Fresenius found, (what we first published in this country some two years ago, in our Report as public lecturer for the State Agricultural Society,) that, ordinary stable manure lacks some of the essential mineral elements which enter into the composition of healthy potato plants. To remedy this, he says: "I would therefore *strongly recommend* the following method for manuring potatoes to the agriculturists in all parts of the world. Every acre [about two-thirds of our acre] requires 100 lbs. of the following manure: Mix intimately 20 lbs. of wood ashes, 15 lbs. calcined (burnt) bones well powdered, 10 lbs. of gypsum, 15 lbs. of soda, and 40 lbs. air slaked lime." This manure may be prepared by any one at a very trifling expense. It should be applied as follows: 100 lbs. contain 3,200 half ounces, which is about the number of

hills in a German acre. A little cup that will hold a half ounce is used to measure out that quantity, which is thrown into the hole dug for the potato seed, and covered with a little loose earth. On this the seed is dropped and covered.

To us, the result of the experiment of the learned Professor is extremely interesting. According to our analyses and practical experience, he recommends too little "wood ashes." Instead of 30 lbs. we should apply at least 200 lbs. to our acre in the way he directs. 50 lbs. of our common salt contain 20 lbs. of soda. This alkali will be set at liberty in the soil if mixed with lime, as Fresenius prescribes. Any body can burn bones and pound them to a powder.

We trust that many of our readers will try the remedy prescribed by Dr. F., whose life has been devoted to the investigation of the constituent elements of cultivated plants.

Carrots and Rowen.

I do not know the comparative value of white and yellow carrots. I have fed my cow during the past fall and winter pumpkins, potatoes, apples, and white carrots. I think apples are not valuable for milk. The carrots did not increase the quantity, but made the milk *white* and the butter *white*, and I fed no more of them. I then had some rowen, although some of it was of the first growth but cut young. This increased the milk and gave it a good color.

Now as grass is the very best thing to make milk, and butter, and cheese, it strikes me that that is the next best which comes the nearest to it. It may be rowen well cured and saved. If so, is it not as convenient and cheap as roots?

J. W. M.

REMARKS.—Undoubtedly, rowen and good hay are as cheap, if not cheaper than carrots for feeding cows. But where land is dear, and labor cheap, as they are in, and near to this city, roots can be grown for cows at a better profit than grass. The yellow carrot and sugar beet we prefer for that purpose. Women can be hired to weed them by the acre at a cheap rate, after a cultivator has done its work between the rows. Almost every farmer can raise an acre or two with signal advantage.

CALICO CORN.—H. W. TOWNSEND, in the Farmer's Cabinet, strongly recommends the "Calico Corn," as being "superior to any other species, especially for culinary purposes." He says:—"The bread of the corn, when mixed and prepared for baking in the same manner as *wheat flour*, will become light sooner than wheat; and for pies does not stick together as well as wheat flour. Let a person who has no knowledge of the article, make use of the bread, pudding, or pies, (which occurred at my own table,) and let him be asked of what the article was made, and he would pronounce it wheat—so near does it approach it."

Small Farms.

It is seldom that we find so much sound sense in so small a compass, as is contained in the following editorial remarks of the Massachusetts Ploughman:

It is fortunate for mankind, that the farmer of five hundred acres can never realize so much nett profit as the farmer of fifty acres. It is not possible, without remodeling the principles of Geometry, to bring the fields of a large farm so near to the home barn as the fields of a small one.

It is fortunate for republican equality, that large capitalists find it unprofitable to invest largely in farming lands.—Few of these men are able to obtain four percent. on farms that they may purchase for the purpose of leasing. This being generally understood, there is a better chance for the farmer of small capital to obtain a sufficient number of acres to secure an independent living, while he can give all the members of his family full employment at home.

So much depends on close attention to a great variety of detail, that none but the owner, on the spot, can secure all the natural advantages attending the actual possession of a snug farm. What can a distant owner of large tracts make of the eggs and of the poultry, the small fruits and vegetables, and a thousand other little matters, that are a source of profit to the man in possession?

Look to the more important products of the farm also, and note the difference between the large and the small—the distant and the home fields. The four or five hundred acre farmer must cart his manure to *distant* places—he must bring his hay, his corn, his grain, and his fruits, from distant lots to store them—his laborers must travel to a distance before they can begin—the journey must be doubled at noon—and time must be given to return at night.

But the snug farmer of a few acres may have them all near by him. If he hires laborers, he can see them *from his study windows*, should he find it necessary to be in his study while his men are out. His whole farm is seen at a glance, and his farm stock stand but little chance of enjoying themselves long, in a field of corn or oats, should they chance to break into one.

In Great Britain the lands are owned by a few people, and the number of owners is diminishing by year to year. We are told that in Ireland, thousands and thousands of acres have been lying common and unproductive, while laborers have nothing to do. This state of things cannot long exist, if there remains a spark of real patriotism in the government. A rule should be established that land owners must improve the soil or suffer others to take it who will improve it. "Those miserable husbandmen should be turned out and others should take their place."

In regard to fruit trees, it is a real shame that our farmers cannot supply themselves and have the most important fruits for their families through the year. How many families have we who have good apples for half the season!—We can live long on sweet apples and milk, should our grain crops totally fail us—*provided always that we lay up the apples in store*, and pay attention to cows.

In some seasons corn is cut off. In others, English grain. And some are unfavorable for roots and fruits. We should take care to try for a variety and not depend upon a single kind, as the masses do in Ireland. They have but one article to depend on, and when that is cut off they starve.

Undoubtedly, there is danger of running to the opposite extreme, and getting farms too small for the highest public advantage. There is no general, or fixed rule that will apply to all cases and circumstances. As much depends on the character of the farmer, as that of the soil he cultivates.

THE April number of the American Journal of Agriculture and Science, by Prof. EMMONS, contains many interesting analyses of the ashes of the apple, pear, and other fruit trees, as well as of the earthy elements found in many of our forest trees. We shall notice the subject at length in our next.

Saxon and Merino Sheep.

NUMBER TWO.

On the 8th day of June, one week after washing, I sheared my Saxon ewes—also an equal number of Merino ewes—which I selected with much care in regard to the following particulars: I intended the two breeds should not differ in age, or condition, or in wastage of their wool by cleansing. I was also careful that the wool of the Merinos should be equal in quality to an average of my Merino flock. And as the Saxons were rearing lambs, so also were the Merinos. I weighed these sheep and their fleeces immediately after they were shorn, and found that the Saxons gave me 1 pound of wool for every 18 lbs. of their live weight—and that the Merinos gave one lb. of wool for a fraction less than 19 lbs. of their weight. The average weight of the Saxons was 63 lbs.—the Merinos 72. The Saxons were rather above the medium weight of the flocks from which they were selected. The Merinos, it will be remembered, were weighed while rearing their lambs, immediately after their fleeces were taken off, and at a time when they were perhaps lighter than at any other season of the year. If it were not possible that I might have misjudged a little about the wastage of wool or some other small particulars, it might seem that the yield was in favor of the Saxons; but I think they sheared as near together as could be expected, and if, in my next experiment of the kind, the Merinos should as much exceed the Saxons, it would not (in my opinion,) reverse the rule given in my former article, viz: that the two breeds shear clean wool in proportion to their own weight.

Besides the above I weighed a number of my other Merino ewes, some of which went from 90 to 100 lbs.; but in every case I found that it took from 18 to 19 lbs. live weight to produce a pound of wool. But as some flocks are more gummy than others, there must be exceptions to this rule. I sold my Merino wool (about 1400 lbs.,) the 1st of September, to Mr. SPENCER MOWRY, of Rhode Island, for 34 cts. per lb. He was buying for a factory whose stapler was present and examined nearly every fleece. My brother, (HECTOR HIRCHCOCK,) whose flock and mine were once the same, and since divided—(the wool has often sold together and for the same price)—soon after the sale of mine, sold his for 35 cts. per lb.—which I believe mine was worth and would have brought if kept a few days longer. I mention it in order to do justice to Merino wool.

It will be more difficult to get at the true value of my Saxon wool, as there was only 22 fleeces, 5 of which were from bucks. Such a small lot will never sell in the same proportion with a lot of 1400 lbs., and the undue proportion of bucks fleeces again lessens its value. Some of these fleeces were kept till after our county fair,

consequently the wool was sold at different times and for different prices. As it was, the lot averaged 44 cts. per lb. I have been informed by a gentleman who has been a buyer of Saxon wool for a number of years, and who had examined mine, that if there had been as much as of my Merino wool, and only the same proportion of bucks fleeces, it would have sold readily at 50 cts. per lb. Mr. SWIFT's wool sold for 55 cts.—Mine was not as nice as his, when we include the fleeces of both the young and old of his flock. I am aware that there was full blood Saxon wool sold for less than 50 cts. last season, and I also know that there has been large quantities sold for a much higher price. I purchased this particular kind in order to grow an average quality of full blood Saxon wool, the profits of which I wished to compare with my Merinos.

Now if the rule laid down by some of our best wool-growers, and noticed in my former article, is correct—that these two kinds of sheep consume food and shear clean wool in proportion to their own weight—then the farmer who keeps 400 Merino sheep (the young and old of which average 65 lbs.,) could on the same feed keep 472 Saxons, of same age, averaging 55 lbs. The gross weight of each flock is 26000 lbs. Allowing 1 lb. of wool to every 18 lbs. live weight would be 1444 lbs.

If Saxon wool at 50 cts. per lb.,	.....\$722,00
If Merino at 35 cts. per lb.,	..... 505,40

Difference in favor of Saxons,.....\$216,60

I do not say that the above comparative weight of the two breeds, or the price of their wool, is exactly correct; but they are sufficiently so to show the calculation on which I base my opinion that the Saxon is the most profitable breed.

When I select a sheep, I first look for that form which denotes a good constitution; then that sheep suits me best which will shear the most superfine wool (after being cleansed,) in proportion to its own weight. It is desirable that a sheep should be equal to, and not much above, the average weight of the breed to which it belongs. For instance—suppose a flock of Merino ewes, when kept in good profitable store order, should weigh 75 lbs. each, and should yield 1 lb. of wool to every 20 lbs. live weight; the fleece would be 3½. Suppose another flock, equal in every respect, except by extraordinary keeping, their weight should be brought up to 100 lbs., which yielding wool in the same proportion, the fleece would be 5 lbs. Now a pound of wool on the latter costs the same as a pound on the former; and I appeal to manufacturers and wool buyers, if the value of the wool per lb. is not *de*-creased (on account of its being more harsh and coarse,) in the same proportion as the weight of the fleece is *in*-creased above what it would have been had the animal been kept only in good profitable store order. Late years manufacturers purchase wool for them-

selves, or by their immediate agents. They do not *now* buy dirt and gum for wool, or *coarse* wool for fine. It therefore becomes our interest to grow that description of wool for which they will best compensate our labor.

SOLOMON HITCHCOCK.

Conesus, Livingston Co., March 25, 1846.

REMARKS.—We can not let the above highly instructive communication pass without thanking the author for the same. Its important facts should be well considered.

Again we say, "*Farmers teach one another.*"

Bone Manure.

MR. EDITOR:—The use of bones as a manure, is but little known or appreciated in this country. It has become so important in Europe that even the battle fields have been ransacked for the last remnants of those human beings whose trade was war and desolation. There is nothing more fertilizing than decaying animal matter; it contains all the elements, but two or three, required in vegetable organization, and earth, air, and water supply those.

I was astounded at the loss sustained in this county alone, as set forth by the figures of our friend ROBINSON, the superintendent of the County Poor. It is certainly singular that no one in this city, where water-power, capital, and mechanical ingenuity are so abundant, does not enter into the grinding of bones, as a matter of profit and of service to the country, and giving employment to the poor in gathering the material. It could not fail of being a profitable investment.

Bones, to be serviceable, should be pulverized to a fineness, from the size of a kernel of corn to the size of a wheat kernel, and even much finer for some crops. But in the absence of the ability to grind them, they should be crushed with the hammer, and if no finer than the size of "a piece of chalk," it is an improvement over using them whole, as they are more disseminated in the soil and brought in contact with the roots of the plant. As a substitute for a mill, a cast iron block, 16 inches square and 6 inches thick, with a hole through the center 8 inches in diameter, having slats or recesses made to drop in pieces of Russia bar iron, in the form of a grate, upon which the bones are broken with a cast iron sledge and hammer. The spaces should be about half an inch, consequently no portions of the bone could pass less than that size, and many much smaller, and could be performed by very cheap labor; even the inmates of the Poor House might be profitably employed, or old persons and children. The manure would not be as immediately effective as if finer, but would be more durable and require more to the acre.

Some twenty-five years ago, I was concerned in a mercantile establishment in this city, and in

sending out articles of eastern manufacture to sell, I forwarded a dozen of the patent Dung Forks; for which act of folly, as my partner said, I was ridiculed and abused for my ignorance of the fertility of the western country. "Why it was as much as to say that they used or needed manure on their land." But I believe that idea is now obsolete, and that farmers have made up their minds that, to insure good crops, they must manure their land in some way; and it is almost frightful to think what a waste of this most valuable food for plants is submitted to. What a fountain of wealth in the bones of this city, in the horn piths of the tanneries, and in the boiling houses, where 10 to 20,000 sheep are killed annually for their hide and tallow; and which is a total loss, or worse, poisoning the Genesee River, or filling up vacant lots and disseminating poisonous and deleterious gasses!

Bones can be dissolved by sulphuric acid, (oil of vitriol,) retaining and bringing into immediate effect every valuable property they contain. About one third of the weight of the bones of acid (which is a cheap article,) is required, diluted with its own weight of rain water, to dissolve them, which may be done in a wood cask. The liquid is then mixed with soil, or wood ashes, and sown on the land as a top dressing, with great benefit. This process develops the entire quantity of the *super phosphate of lime*, in a soluble form, and in which resides one of its principal virtues. This process is, however, so out of the way to common farmers operations, that it can only be valuable to gardeners and amateurs.

Rochester, March, 1847.

L. D.

REMARKS.—Our correspondent should have said that to dissolve bones in oil of vitriol at least six parts of rain water to one of acid should be used, instead of "its own weight." The excess of acid, after the bones are dissolved, should be neutralized by lime or ashes.

We are happy to inform the public that Mr. M. F. REYNOLDS, of this city, will soon put in operation an excellent mill for grinding bones.

Farmers, collect and save all the bones you can. Don't forget that the urine of all animals, and especially of the human family, contains a good deal of phosphoric acid—the element most valuable in bones. To waste bread, milk and meat, or the things which Providence uses to form human food in our cultivated plants, is a sin—an offence against His goodness.

CONSUMPTION.—An officer in the British East India service, far gone in a consumption, is stated to have been perfectly cured by inhalations of the vapor of melted rosin—in which practice he persevered, night and morning, for several months.

THE annual consumption of bread, in the city of Paris, amounts to 850,000,000 pounds; or at the rate of 15 ounces per head, daily.

Life in the West.---Farming in Michigan.

MR. EDITOR:—In a late, I think February, number of your very valuable agricultural journal, an anonymous writer from Seneca county, N. Y., deemed it necessary in accounting for the retrograde agriculture of that county, to say that the sons of her farmers had emigrated to the west, to reap the "bare-footed blessedness of eating pork and corn bread, and becoming highly excited at log cabin raisings." I quote as nearly as I can remember his words; I am sure I am not mistaken in his sentiments. When I left my beautiful home in New York for, to me, the untried West, I bade adieu to "alluvial Seneca," for I resided within half a mile of the southern boundary of that county. I am not, therefore, a stranger to the fertility of its soil—to the intelligence, enterprise, and wealth of its population, and I would not, if I could, disturb any of its peaceful relations. If your correspondent, however, could be persuaded to leave *his pills and his flocks* during the month of June or July ensuing, and take a trip into this vestibule of the "West" for instance, his ideas would be immensely enlarged, and his future communications infinitely more charitable—and (I beg to say without offence,) infinitely more truthful.

A comparative statement of the price of land, the cost of working the same, and the value of its productions, would establish beyond controversy, to the satisfaction of the man of limited means, whether he had better invest his funds in farming lands in Seneca county, N. Y., or in Calhoun county, Mich. I regret that I have no statistical table at hand which will enable me to make the contrast. I must content myself, therefore, by making a passing remark of this county, and then invite your readers to a candid examination of an account carefully kept by one of our farmers, and one who, by the way, formerly lived in a county adjoining "alluvial Seneca."

The first white settler in Calhoun county pitched his tent at the confluence of Rice Creek and Kalamazoo River (now Marshall,) in 1830. At the last census there were 15,719 inhabitants—since which period there has been a large emigration from Ohio and New York. There was raised in that year 500,000 bushels of wheat, as returned by the marshal. Of the coarse grains, no return was made, but the quantity is known to be enormously large. There are, at the present time, between 40 and 50 pairs of burr mill stones in operation, and other flouring mills are now being built. Some conception of the amount of wool grown in this county may be had, in view of the fact that there are three woolen factories now in successful operation, and one other nearly completed, entirely stocked from the clip of this county. A large amount is also annually shipped to New York. I might append to this statement a flattering expose of machinery, of

various kinds, to a large amount, and employing a very respectable amount of capital. But my purpose is attained if I have convinced your correspondent "S. W.," and your readers, that in some portion of the West, we "are alive, and alive like to be." No where is there more or better directed enterprise.

The farmer alluded to above, lives in this town, upon a farm of 80 acres, of what is called in this county burr oak plain. The owner realized from 40 acres of wheat (first crop, and by no means the best in this country,) six hundred bushels of merchantable wheat, which he marketed within 2 miles of his barn, at five shillings the bushel—

Amounting in the aggregate to,.....	\$375.00
The charges against the crop are as follows:	
Clearing the land for the plow,	\$ 5.00
Plowing the same,	60.00
Harrowing before and after sowing,.....	24.00
Fencing,	40.00
Seed,	43.75
Harvesting, Threshing, and Marketing, ...	100.90=272.75

Nett profit on 1st crop, 40 acres wheat,.....\$103.75

A son of this farmer 15 years old, got in, tended, and harvested 13½ acres of corn, with eight days assistance of the hired man, with the following results:

800 bush. shelled corn, at 20 cts., is.....	\$160.00
Stalks estimated at.....	20.00
Pumpkins,	40.00

\$220.00

Charging against this crop for services of man and boy, oxen, pony, seed, and expense of threshing and marketing,.....

100.00

Nett profit on 13½ acres of corn,.....\$120.00

This farm was purchased, I think, at twelve dollars per acre. At any rate equally good land and as eligibly located, can be bought at that price, and even less. University lands are twelve dollars, School lands four dollars, and Internal Improvement lands one dollar and twenty-five cents. The University and School lands can be purchased upon paying twenty-five per cent. down, and annual interest thereafter. The Internal Improvement lands can be purchased at ten shillings, and payable in Internal Improvement Fund Warrants, which are now at twenty-five per cent. discount. These lands lie in various parts of the State, and are, in value, not a whit behind the average lands of the State.—Does Seneca county open her arms like this to the new beginner and the poor man?

Very respectfully, your ob't serv't,

O. C. COMSTOCK, JR.

Marshall, Calhoun Co., Mich., March. 1847.

MORAL and religious education is the one living fountain which must water every part of the social garden or its beauty withers and fades away.

EVERY school house that is built, every child that is educated, are new and additional pledges of our perpetuity.

A PATRIOT is known by the interest he takes in promoting Education and Improvement.

Stone Wall.

In the 9th number of the 7th volume of the Farmer, is an article on "Stone Walls," from the pen of Mr. E. DICKINSON. Mr. D.'s plan may, in some particulars, be better than mine; but in my opinion, some of his objections to mine are only imaginary, while his is not wholly free from objections. He objects to my plan because, if the ditch be filled with small stones, the earth will, in time, fill up the crevices, when the frost will heave the whole mass, as if there were no ditch under the wall. (I do not give his language, but his meaning.) Now this will depend upon circumstances. In a moist soil, subject to washing, such may, to some extent, be the fact. In a more compact soil, especially when out of the reach of running water, there will be little danger from this cause.

My objections to his plan are, 1st. If the large stones are put into the ditch, the small ones can hardly be used for building the wall. Hence, unless the supply of materials be abundant, what will be needed for the wall will be buried in the earth. 2d. If the bottom be so very broad, (to say nothing of such a width of land being taken for a fence,) and the wall be drawn in so fast at the sides, it will incline, especially on soft alluvial soils, to spread at the bottom and sink in the middle, and in a few years will present the appearance of a lengthened stone-heap. 3d. A wall cannot be built in the shape of his drawing so as to be permanent, unless built *single*, and of long, flat, or square stones; such as are not found on every farm. Much, therefore, must depend on the nature of the soil, and the kind and quality of the materials to be manufactured into a wall.—Let these be given, and I would attempt to solve the problem.

In regard to the width of the ditch, it may be several inches (6, or more,) wider, on each side, than the wall. This I consider a matter of less consequence, provided it be so wide that the wall shall rest wholly on the ditch. But in a country in which fencing materials, both wood and stone, are not very abundant, (and such I believe to be the case with many farms in Western New York,) I would rather build my fence anew as often as once in 15 or 20 years, if necessary, (and if it be well built at first, it will seldom require re-building sooner,) than cut myself short of materials by burying the best, and thus be under the necessity of procuring others from abroad, to be renewed, if of wood, as often, at least, as my wall would require re-building. This is my reason for putting the small stones into the ditch.—If materials are abundant, I would do otherwise.

There is now standing on my brother's farm in Montgomery county, a wall that I assisted in building twenty-three years ago. It was built in a low, wet, alluvial soil, over a ditch not more than two and a half feet wide, filled compactly,

(as every ditch filled with small stones should be,) with small stones, and made about five feet high, of boulders, or common field-stones, double about half its height with occasional binders, and finished single. When last I saw it, (about three years since,) it was in good condition, having needed very little repairing, and will doubtless stand yet many years.

Mr. D.'s plan for a low wall is good.

Fairport, March 12, 1846.

H.

Park's Niagara Patent Reversed Bee-Hive.

THE writer has been in the business of bee-keeping for many years, and has taken many bees from the forest, and like many others has suffered much loss by using hives upon the customary but erroneous principle of having the bees enter at the *bottom* of the hive; and has, at times, almost abandoned the idea of surmounting the many difficulties in bee-keeping. But by taking honey from trees in the forest, and finding the bees in almost every situation, the writer has discovered one important and never failing principle, which overcomes the many evils in bee keeping. This is, in part, to reverse the old practice of the bees entering the bottom, and let them enter at the extreme top of the hive, and no other place. The bee-hunter may discover, by close observation, that the greatest quantity and best honey, and the bees in the best condition, is in every case found upon this principle. It is evident that the body of bees will always live in their dry or brood combs, near the place of entrance: and if this be at the bottom, as in all other hives, the breath of the bees will be continually arising and congealing among their combs, and cannot be carried off by ventilating with wire gauze or by any other means as long as the bees live below their honey, and frequently destroys whole colonies and gives the honey a loathsome taste—and soon moulds their combs so as to leave some part of it unoccupied by the bees, until the moth has full possession—and diminishes the size of the bees more than brooding in old and sound combs.

The writer has invented and patented a hive upon a different principle from any other now in public use. The hive is built of boards, with a tight, square bottom, and slanting roof. The bees enter at the top; the passage is well secured from the weather, robbing bees, &c., by a slide and blinds. The hive is divided into two apartments, by placing the honey boxes near the center, leaving a passage in front from upper to lower apartments of 2 by 12 inches. The bees enter the boxes from this passage; a door is hung in the rear that opens to the boxes, and to the two apartments. The body of the bees in this hive is always found above the honey; their inlets through their combs will all be directed to the place of entrance, and the hive completely freed from the damps that arise from the bees. The robbing bees, the bee moth, or any other destroying insect, can never pass the bees to injure the contents of the hive. Their brood combs are never filled with honey as long as they have room for deposit below. Their brood is never destroyed in May, or in the famine that comes annually between the blossoms of the forest and that of the fields. It is believed by some that the moth is never found in trees of the forest; the fact is they are found in the highest trees.

Tonawanda, N. Y., 1847.

ELIAS PARKS.

DESTROYING SORREL.—W. L. V. D., of Lorain county, Ohio, (writing in answer to the inquiries of A. REYNOLDS, in our April number,) says: "A few years ago I had a piece of land on the river bottom, (so called here,) of a dark sandy loam, so completely overrun with sorrel as to entirely choke out a crop of spring wheat. I plowed the land up as soon as I saw the wheat was destroyed, and sowed it to buckwheat, which completely destroyed the sorrel. There was no more seen for quite a number of years. Hence I believe the above to be an effectual remedy."

Culture of Indian Corn.

MR. EDITOR:—I think with yourself and some others who are engaged in rural occupations, that the cultivation of Corn is entirely too much neglected by farmers in Western New York. If cultivated as it should be, there is no doubt entertained in my mind as to its value, in dollars and cents, to him who will engage in its cultivation. I am convinced, from what little experience I have had in farming, that a corn crop is quite as profitable as any other, (wheat not excepted,) from many considerations; and especially since we have a foreign market for that article, which, in all human probability, will continue as long as the population of Europe shall continue as dense as at present.

It is nevertheless true that the cost of raising corn is no inconsiderable item of expense to the producer. But when we take the value of the production into consideration, we soon find, by a careful and close calculation of the cost, that we are amply remunerated for our labor. For instance—take for example five acres of ground; let it be planted to corn. Then we will allow for interest on purchase money for an ordinary farm, say at \$60 per acre, about \$4,00 per acre.

For use of land, five acres at \$4 per acre,.....	\$20,00
“ fitting, planting, wear of tools, &c.,.....	12,50
“ seed, one bushel,.....	50
“ 3 days planting, at 50 cents per day,....	1,50
“ man and horse 2 days to plow 1st time, at \$1 per acre,.....	2,00
“ 4 days hoeing, at 62½ cts. per day,.....	2,50
“ 2 days plowing, 2d time, \$1 per day,....	2,00
“ 2 days hoeing, at 62½ cts. per day,....	1,88
“ 5 days cutting up and stacking, at 62 cts. per day,.....	3,12
“ husking, drawing, and cribbing,.....	10,00
“ hauling stalks,.....	2,00
“ shelling and marketing,.....	5,00
“ board of help,.....	8,00

Whole amount of cost,.....	\$71,00
Revenue, say 35 bush. per acre, at 50 cts. per bu.	\$87,50
Stalks, \$5 per acre,.....	25,00
Pumpkins, \$2 per acre, at least,.....	10,00

Total Revenue,.....	\$122,50
Deduct expenses,.....	71,00

Balance after paying all expenses,..... \$51,50

By the above calculation or estimate we find that the farmer clears, exclusive of all costs, after paying the interest upon purchase money, over ten dollars per acre.

Now, Mr. Editor, when we direct our attention to the revenue from other crops commonly raised in Western New York, we find that it will almost universally fall short of the above income from but an ordinary corn crop. One of the advantages of corn over a wheat crop is, that we can grow two of corn to one of wheat; another is, we can raise it upon flat or low land, whereas wheat is very uncertain, and if we get any it is generally of an inferior quality. Not so with corn. We can raise it upon any soil that will grow wheat, and upon many other kinds that will not with any certainty produce that article.

Another suggestion, and the last now, though not least, but of paramount importance, in my view of this subject is this, viz: by tilling our corn we exterminate from our soil an innumerable host of noxious weeds, thistles, grasses, and every species of foul stuff with which our lands are already too much infested—such as cockles, red-root, shepherd sprout, blue-grass, quack-grass, Johnswort, white daisy, Canada thistles, &c.

It is a lamentable fact that the use of the hoe has already been too long and too much neglected by those who profess to till the ground. Take for example farms that have been cropped for wheat principally for a term of ten or fifteen years. We will find, (in the Genesee Valley country, at least,) that they are invariably foul. I need not add that if we would effectually rid our lands from every thing but that which ought to be there, that we must apply the hoe more vigorously and thoroughly. And I am of the opinion that if wheat growers would practically investigate this subject, experience (which is the best teacher,) will convince them that their own interests require them to grow the corn crop more extensively.

Your readers, by the above estimate, which is thirty-five bushels only to the acre, will readily calculate the advantage of corn over almost every other crop of grain that is cultivated in Western New York. But suppose we can raise from 50 to 60 bushels per acre—all above 35 bushels would be nett gain or profit upon the above estimate, as the cost of growing would be but a mere trifle more than if we should have but 35.

I have, now barely hinted at some of the advantages of growing Indian Corn, and will leave the subject in the hands of those who have had more experience, and who are better versed in writing for agricultural journals than myself, to do that justice to the subject which its importance demands.

H. B. H.

Rush, N. Y., 1847.

Hedges and Fencing.

MR. EDITOR:—What is this country, in a few years, or even the next generation, to do for fencing materials—especially those regions devoid of stone? In clearing up a new country the land does not produce more than enough rail timber to fence it, and often not even that. Cultivated farms do not average over one-tenth left in wood-land, therefore what is the other nine-tenths to do in a few years for fencing? Why, says one, resort to posts and boards. But, my sapient friend, are you aware that they are too fragile and expensive for common and general use? The life of fence posts of the ordinary size, of any of our indigenous timber, is only about an average of ten years or thereabouts. Red cedar, which is the only enduring article to be depended upon, is quite expensive; beside it is about

exhausted, and in a few years will become extinct. On the Canada shore, where nearly all the cedar is procured, the whole growing timber has been cut, and they are now *mining* for them at 5 or 6 feet below the surface of the muck and masses of the swamps; the relics of antediluvian epochs for aught that can be shown, and the contemporaries of the mastodon and megatherium.

If the common woods of the country can be saturated with a cheap chemical compound, by means of a hole bored in the centre or the side, so as to render them indestructable, for which great hopes are entertained by those making the experiments, then a cheap and convenient substitute is found for the post and board fence.

In this country we shall never be able to do without enclosures, as the French and other people of the continent are obliged to do—herding their stock of all kinds, by means of shepherds and herdsmen. Labor is too dear in this country to allow that course, and I trust always may be, as an overplus population and low wages between a depressed and poverty stricken race. In the large baronial estates of England very little fencing answers their purpose; stabling and soiling disposes of the cattle and horses, and the sheep are attended by keepers on the downs and mountain. But in this country, with the whole soil cut up into an average of 100 acre individual farms, we can never dispense with that important item.

There is hardly any subject that has excited more discussion among agricultural writers than *live fences*, or hedges, and why in the older parts of the country it has not been thoroughly tried is most unaccountable. It has been pretty satisfactorily ascertained, that the *quick sets* of the English white thorn, so generally used in that country, do not succeed with us; they are attacked by a scale louse (*coccida*,) that is fatal to them; and they do not acclimate well so far as tried.

We have three or four varieties of native thorn, that I conceive possesses all the requisites for success. The process for procuring sets takes time, but is very simple. The apple of the thorn should be gathered in October, mixed with earth and thrown into a pit about one foot deep; in the course of the next summer turn them over with the shovel two or three times. The spring after, plant them out in drills or beds; the fall preceding, the ground being well cleaned and prepared, and kept clean of weeds and grass.—Some of the strongest plants will be large enough to transplant at one year old, the balance at two years. The only doubt the writer has upon the subject of its feasibility, is the danger of their being destroyed by the field mouse, which, in our cold snowy country, is a fatality to which they will be liable—as the accumulation of mulch and dead grass about their roots forms a convenient receptacle for their winter quarters.

Monroe Co., 1847.

LUCIUS B. MANLY.

The Value of Ashes and other Manures.

At a recent agricultural discussion at the Assembly Chamber in Albany, Mr. SOTHAM made the following statements as the result of his experience and observations:

Mr. SOTHAM had not seen any experiments made by burning barn yard manures, but he knew that it was valuable previous to burning. The excrement of animals, mixed with slaughter house manure, such as blood, liver, and refuse of the butcher yard, mixed together, and so far decomposed as to cut out with a shovel, is decidedly the best compost you can apply to the land. I never saw a soil yet that was not grateful for such manure when properly applied; nor do I think that such a composition can escape by evaporation when once deposited there, either on the surface or mingled in the soil. The rain may wash it off and carry it lower. He had seen many able experiments with ashes, and which have proved a very valuable manure. For instance: On many of the light soils in England, such as sand, stone-brash, gravel, and light loam, much of the *sainfoin* is sown. Manured for turneps, the turneps fed off on the land, and then sowed with barley, and the sainfoin seed sowed with the barley. This sainfoin is mown for eight, ten, or fifteen years, and not a particle of manure put upon it. It is generally grazed the last year, and then breast-plowed. A thin slice of the sod is taken off about half to three quarters of an inch thick; as soon as it is dry enough it is thrown together in small heaps and burnt. Part of the ashes are black and a part red. They are spread regularly over the soil and then plowed in very shallow, well dragged with a heavy drag cross-wise, and then thoroughly harrowed with lighter harrows, the soil is well pulverized previous to the second plowing, then it is shallowly plowed again, and the turnep seed is sown on the fresh furrow. I have never seen better crops of turneps than by this process, and the ashes have lasted as long and benefited the succeeding crops for three years, and sometimes longer, quite as long as barn yard manure. Now, if the principal substances, or organized matter, that Mr. HOWARD says are dissipated in the atmosphere by the burning, where did these turneps and the succeeding crops get them from, if it was not from the ash. I have seen two crops of turneps in one field, (at Northuck, Gloucestershire,) one part breast-plowed, the other manured with a heavy dressing of barn-yard manure, both in the same state of cultivation previous to the burning and manuring, the latter plowed three times, and in a better state of pulverization than the former, when the seed was sown; still the breast-plowed piece was far the best. How is this to be accounted for, if the principle of vegetation is dissipated? I do not believe it. Another instance. I have seen frequently and tried the experiment. Planted two rows of potatoes, the soil in the same state.—To one of the rows I have put ashes, the other none. The former grew luxuriantly, the potatoes large and a heavy crop, the latter very small and a light crop. Where did the potatoes get their sustenance from if it was not from the ashes? Both had the same resources from the atmosphere. The ashes could not have the power of attraction over the inorganic matter in the earth, as that could be nothing more than the earthy substances, or inorganic portion of plants, according to Mr. H.'s representation. This is a very important subject, and requires much consideration. He wanted no better proof than a good crop for the manure applied.

We can hardly err in too often urging upon the attention of our readers the great value of wood ashes, as well as ordinary manure for the improvement of crops.

WARTS on the udder and teats of cows may be easily removed simply by washing them in a solution of alum and water. We have known this application to result favorably, even after all other prescriptions had failed, and the disease seemed to have advanced beyond the possibility of cure. Try it, and see if the remedy does not prove effectual.—*Selected.*

Hints for May.

ARE your fences and *gates* all up, and the *bars* all down? We intend to wage a Mexican war at those *rancheros*, the devils warping bars, which on many farms have consumed more time, in letting down, putting up, and removing for tears, than would have performed a pilgrimage around the world.

Prune your orchards this month, so that the wounds will heal before the edges of the bark dry and become dead, and to give all the sap to the remaining wood and fruit buds.

Look out for the *apple tree worm*, while in its early stages, before they commence traveling, and while nested in their webs,—as at that time a slim rod like a riding whip, with a few ends of branches left, will, by twisting in their webs, completely destroy them—or at a later period, a decoction of tobacco, spirits of turpentine, any of the oils, or a small charge of powder, is effectual.

Plant some potatoes early this month. Try the Merinos, as they are said to be exempt from the rot,—and the Rohans also, if any of those humbugs are in existence.

Make your manure into heaps, to keep from leaching, and to assist fermentation and decomposition; and do not draw it on the land until wanted, and then immediately spread and plow in—and do not spread it as Paddy found the six-pence, *all in a heap*, but evenly and a thorough division of all the lumps into small particles, whereby it is more evenly disseminated in the earth and brought in contact with the roots of the plants.

Manure your corn and potato ground with fresh manure; and that part intended for the wheat fallow make into heaps, which should be turned and handled over once or more during summer, and be incorporated with plaster—not with lime in a caustic state, as instead of absorbing the gases it disengages and disperses them.

In planting corn always ridge the ground, as every one knows that it is a plant that requires a great deal of heat, which is partially gained by ridging—besides it gives all the advantages of another plowing to the young plant, and brings up the manure for its early use. A capital solution, quickening the corn plant, is equal parts of common and epsom salts—also glauber salts, or salt-petre, or coppers; the sulphate of ammonia is most effective, but not being an article of commerce it is difficult to obtain.

Top dress old meadows early this month, and if thoroughly dragged in and timothy seed sown, it will greatly improve them.

Onions, carrots, parsneps, peppers, and lettuce plant immediately. Beans, squashes, cucumbers, melons, &c., are as well out of the ground, in this climate, until the 15th or 20th. Sow cabbage seed from the middle to the last of the month, and transplant when clover hay is fit to cut, and they will be early enough for winter stock. *

Webster Agricultural Association.

PURSUANT to a adjournment, the farmers of the town of Webster met at the office of Dr. O. REYNOLDS, on Saturday, the 3d day of April inst.—JOHN PHILLIPS was called to the chair, and A. G. MELVIN chosen Secretary.

The Committee on Constitution then reported the following, which was adopted:

WE, the Farmers and others of the town of Webster, desirous of mutual improvement in the science of Agriculture, Horticulture, &c., do associate ourselves together under the following

CONSTITUTION:

ARTICLE 1. This society shall be called the "Webster Agricultural Association."

ART. 2. It shall be the object of this Association to endeavor to excite an interest on the subject of Agriculture, to diffuse mutual instruction among its members and others, and to use all suitable means to elevate the ancient and honorable calling of the Farmer.

ART. 3. The officers of this Association shall be a President, two Vice Presidents, Corresponding Secretary, Recording Secretary, Treasurer, and thirteen Managers, (one from each school district,) who shall together constitute an Executive Committee. They shall be elected annually by ballot, and shall have power to fill vacancies in their own body.

ART. 4. The President shall preside at all meetings of the Association, when present; in his absence one of the Vice Presidents shall preside; in the absence of both President and Vice Presidents, a President pro tem. shall be chosen. The Corresponding Secretary shall correspond with similar Associations, and with individuals. The Recording Secretary shall keep a record of the proceedings of the Association. The Treasurer shall take charge of the money and other property belonging to the Association, and account for the same from time to time, when called upon by the Association. The Executive Committee shall, each in his respective district, notify the farmers thereof of the object of the Association, and, if possible, induce them to become members.

ART. 5. Any person may become a member of this Association by subscribing to this Constitution, and paying to the Treasurer twenty-five cents annually for the use and benefit of the Association.

ART. 6. No funds shall be drawn from the treasury, except by the vote of a majority of the members present at any regular meeting of the Association, and then only by an order on the Treasurer, signed by the presiding officer and the Recording Secretary.

ART. 7. A regular meeting of this Association shall be held on the first Saturday of every month, except July, August, and September; and special meetings as often as the members of the Association think proper.

ART. 8. Every member of this Association shall be allowed to vote for its officers, and to take part in all the deliberations of the Association.

ART. 9. This Constitution may be altered or amended at any annual meeting of the Association, by the vote of a majority of the members present.

The following persons were then chosen officers of the Association:

GERARD DUNNING, *President*.
JOSEPH ADAMS, } *Vice Presidents*.
SAMUEL HARD, }
A. G. MELVIN, *Rec. and Cor. Secretary*.
ALFRED REYNOLDS, *Treasurer*.

Resolved, That the first Annual Meeting of this Association shall be held on the first Saturday in April, 1848.

Resolved, That the "Genesee Farmer" be requested to publish the foregoing proceedings.

A. G. MELVIN, *Sec'y*. JOHN PHILLIPS, *Ch'n*.
Webster, Monroe Co., April 3, 1847.

THE above association is a fair sample of what every town in the State should possess. A small contribution from each member, provided one half of the tillers of the earth will only join in the good work of self improvement, would secure the benefits of a good Agricultural Library. Farmers of Western New York, what say you?—Ed.

Foreign Demand for Breadstuffs.

The news brought by the Cambria shows a falling off in the price of wheat, corn, flour, and meal, in English and Irish markets. It is impossible to have any stability in prices where grain factors and the people are alike intensely excited, the former by the hope of extravagant gains, and the fear of overwhelming losses; and the latter by painful apprehensions of protracted famine.

On the 3d of April corn was worth from 50 to 55 shillings a quarter—equal to about \$1,50 per bushel. At a fair price for freight, corn should still be worth a dollar a bushel at New York to ship to England. The price however is 90 a 93 cents. Genesee flour is worth in New York \$7,87½ a 94, (on the 26th April.)

There are only two nations that have any considerable surplus of grain in the civilized world at this time. They are the United States and Russia. This surplus, so far as the U. S. are concerned, has been greatly over estimated in England. The Mark Lane Express of the 29th March, now before us, puts it down at one hundred and fifty millions bushels! This estimate is based on that annual budget of extravagant guessing, the Report of the Commissioner of Patents. Our surplus is about 30 millions, or one fourth the estimated sum. The following are our exports for 7 months beginning Sept. 1st, 1846, and ending April 1st, 1847 :

Wheat flour.....	bbls.	1,440,838
Corn meal.....	“	325,127
Wheat.....	bush.	1,400,912
Indian corn.....	“	8,605,444
Rye.....	“	1,890
Oats.....	“	158,326
Barley.....	“	130,591

The total exports to foreign ports during the same time were, of

Wheat flour.....	bbls.	2,223,139
Wheat.....	bush.	1,916,367
Indian corn.....	“	9,176,429

Of which there were from New Orleans—

	To Great Britain.	France.
Wheat flour.....	bbls.	337,362
Wheat.....	bush.	60,593
Indian corn.....	“	1,247,525
		1,916

and from New York

	To Great Britain.	France.
Wheat flour.....	bbls.	708,263
Wheat.....	bush.	1,012,714
Indian corn.....	“	3,440,955
		4,016

and of Rye to all foreign ports, 607,947 bushels.

Reduce the flour to wheat in the estimate, and we have about 21,500,000 bushels exported in 7 months of famine prices. If we export 18,500,000 by the first of September next, we venture to assert that there will remain in the country a precious little of the crops of 1846.

CORN.—A Seasonable Hint.—The Pike Co., (Ill.) Free Press, says:—“In planting, use *pure white* or entirely *yellow* corn for seed. A *mixture* will not bring as much in market, for commerce, by from three to five cents per bushel, as either kind will when entirely pure.”

To Correspondents.

COMMUNICATIONS have been received, during the past month, from Caleb K. Hobbie, Solomon Hitchcock, Lucius B. Manly, *, A. Reynolds, David Thomas, N. Goodsell, B. Hodge, J. D. C., J. W. M., D. C. B., G. C. Sprague, L. Barker, Conrad Miller, Morris Barton, Farmer Tim, *, R. D. Palmer, Duodecahedron, N. Y. State Ag. Society, E. R. Porter, A Farmer, A Subscriber, H. B. H., Lincoln Cummings, W. L. V. D., A. W., D. A. Ogden, J. M. Morrison, and D. W. Halstead.

In order to make room for important and seasonable articles from correspondents, we have deferred several illustrations intended for this number of the Farmer.

CHEESE MAKING.—Will not some one engaged in the manufacture of cheese write us a communication, stating the present most improved process for conducting the operation?

New York State Agricultural Society.

The Executive Committee have the satisfaction to announce to the agriculturists of the State, that our distinguished fellow citizen, the Hon. SILAS WRIGHT, has accepted an invitation tendered to him to deliver the annual address on the Fair ground at Saratoga, on the 16th of September next.

It will doubtless have been perceived from the published proceedings of the Executive Committee, that they have in accordance with the recommendation expressed by the Society, at the annual meeting in January, located the Cattle Show and Fair at Saratoga Springs, to be held on the 14th, 15th, and 16th of September, 1847.

A delegation of the Committee visited Saratoga, and selected a fine elevated plat of ground, within a quarter of a mile of Congress Spring, containing an area of fifteen acres or more, which will be enclosed. Spacious buildings will be erected within the enclosure, with ample accommodations for all articles presented for exhibition.

Care will also be taken that arrangements on an extensive scale appropriate to the occasion be made for the reception and exhibition of every description of stock, farm implements, articles of domestic manufacture, fruits, flowers, and articles of mechanic skill.

Arrangements will be made with the several Rail Road Companies for the gratuitous transportation of stock, as well as other articles designed for exhibition, so as to arrive a day or two previous to the first day of exhibition.

The two rail roads leading to Saratoga will be in readiness to transport without hindrance or delay, the visitors who may desire to be present on the occasion. GEO. VAIL, Pres't.

B. P. JOHNSON, Sec'y.
Agricultural Rooms, Albany, April 8, 1847.

New York State Agricultural Society.

List of Premiums for 1847.

[Continued from page 95.]

SWINE.—LARGE BREED.

Best boar, 2 years old, ..\$10	Best sow, 2 years old, ..\$10
“ “ 1 year old, .. 8	“ “ 1 year old, .. 8
“ “ 6 mos. & over, 5	“ “ 6 mos., .. 5

This includes Cheshire, Berkshire, Russia, Mackay, Leicester, and their grades.

SMALL BREED.

Best boar, 2 years old, ..\$10	Best sow, 2 years old, ..\$10
“ “ 1 year old, .. 8	“ “ 1 year old, .. 8
“ “ 6 months, .. 5	“ “ 6 months, .. 5

This class includes Neapolitan, Suffolk, Improved China, Chinese, Mucko, and their grades.

Best lot of pigs not less than 4 in number, under 10 mos. \$5
Second best “ “ “ “ “ “ “ “ “ “ “ “ “ “

In awarding premiums on hogs, reference will be had not merely to present condition, but to that proportion between bone and meat which promises the greatest value from the least amount of feed.

POULTRY.

For the best lot of Dorking Fowls, not less than 3,—1 cock and 2 hens, ..\$2 and American Poulterer's Companion.
Best lot of Black Poland, not less than three, ..\$2 and Am. P. Comp'n.
Best lot large fowls, not less than 3, 2 “ “
Best pair of ducks, .. 2 “ “
Best pair of turkeys, .. 2 “ “
Best pair of geese, .. 2 “ “
Best and greatest variety of barn-yard fowls owned by the exhibitor, ..\$5 and Am. Poulterer's Companion.

PLOWS.

Best plow possessing some new and valuable improvements, ..\$10 and Diploma.
Best subsoil plow, .. 10 “
Best se trier, .. 10 “
Best roller for general use, .. 5 “
Best clod crusher and roller, .. 5 “

WAGONS, HARROWS, &c.

Best farm wagon, \$10 & Dip.	Best corn stalk cut., \$5 Dip.
Second best, .. Col. Tour.	Second best, .. Trans.
Best harrow, ..\$3	Best threshing machine, ..\$10 and Dip.
Best cultivator, .. 3	Second best, .. Trans.
Best fanning mill, \$5 & Dip.	Second best, ..\$3 and Dip.
Second best, .. Trans.	Best straw cutter, 3 & Dip.
Best horse power, \$5 & Dip.	Second best, .. Trans.
Second best, .. Trans.	

FARM IMPLEMENTS. &c.

Best corn and cob crusher, by horse power, ..\$5 and Dip.
Second best, .. Colman's Tour.
Best clover machine, ..\$5 and Dip.
Second best, .. Colman's Tour.
Best flax and hemp dresser, ..\$5 and Dip.
Second best, .. Colman's Tour.
Best horse cart, for farm, ..\$3
“ ox cart, ..\$5
“ horse rake, ..\$2 and Dip.
“ ox yoke, .. Diploma.
“ farm harness, .. “
“ saddle, .. “
“ gain cradle .. “
“ 6 hind rakes, .. “
“ 6 hay forks, .. “
“ 6 grass scythes, .. “
“ 6 cradle do, .. “
“ 6 dung forks, .. “
“ 6 axes, .. “
“ hay rigging, .. “
“ lo. grain measures, .. “
“ lot butter tubs and firkins, .. “

For the best and most numerous collection of Agricultural Implements, ..\$10 and Dip.
Also, for the best and most numerous collection of Agricultural Implements, manufactured in the state of New York, by or under the supervision of the exhibitor, \$10 and Dip.

PLOWING MATCH.

First premium, ..\$15	Third premium, ..\$10
Second do, .. 12	Fourth do, .. Col. Tour.
Fifth, ..	Vol. Transactions.

For boys under eighteen years of age.
First premium, ..\$10 | Second premium, ..\$5
Third premium, .. Vol. Transactions.

BUTTER.

For the best lot, (quality as well as quantity considered,) made from five cows in 30 successive days,—25 lbs. of the butter to be exhibited, ..\$25
Second best, ..\$15 | Best 50 pounds made at any time, ..\$15
Third best, .. 10 | Second best, .. 10
Best 25 lbs. made in June, 10 | Second best, .. Col. Tour.
Second best, .. Col. Tour. | Third best, .. Col. Tour.
Third best, .. Vol. Trans. | Fourth best, .. Sil. Medal.
Fifth best, .. Vol. Trans. | Fifth best, .. Sil. Trans.

CHEESE.

One year old and over.
Best 100 lbs., ..\$15 | Third best, .. Sil. Medal.
Second best, .. 10 | Fourth best, .. Wash. Lett.
Fifth do., .. Vol. Trans.
Less than one year old.
Best 100 lbs., ..\$5 | Third best, .. Sil. Medal.
Second best, .. 10 | Fourth best, .. Wash. Lett.

SUGAR.

Best 25 lbs. maple sugar, \$10 | Third best, .. Col. Tour.
Second best, .. 5 | Fourth best, .. Vol. Trans.
No premium to be awarded unless the sample offered shall be deemed worthy of it.

The process of manufacture and clarifying the sugar must be particularly stated.

SILK.

Best specimen manufactured, (woven into cloth or ribbons, ..\$15	Best specimen of sewing silk, not less than 1 lb., of domestic growth, ..\$10
Second best, .. 10	Second best, .. 5
Third best, .. Col. Tour.	Third best, .. Col. Tour.
Fourth best, .. Vol. Trans.	Fourth best, .. Vol. Trans.
Best specimen not less than 1 lb. reeled silk, ..\$5	Best one-half bushel cocoons, 1847, ..\$3
Second best, .. Col. Tour.	Second best, .. Col. Tour.
Third best, .. Vol. Trans.	Third best, .. Vol. Trans.

DOMESTIC MANUFACTURES.

Best woolen blankets, \$5—2d, \$4—3d, \$3.
“ ten yards flannel, \$5—2d, \$4—3d, \$3.
“ ten yards woolen cloth, \$5—2d, \$4—3d, \$3.
“ woolen carpet, \$5—2d, \$4—3d, \$3.
“ fifteen yards tow cloth, \$5—2d, Vol. Transactions.
“ ten yards linen, \$5—2d, \$4—3d, \$3.
“ ten yards linen diaper, \$5—2d, \$4—3d, \$3.
“ hearth rug, \$5—2d, \$4—3d, \$3—4th, \$2—5th, V. Tr.
“ ten yards kersey, \$4—2d, \$2—3d, Vol. Trans.
“ rag carpet, 15 yards, \$3—2d, \$2—3d, Vol. Trans.
“ double carpet coverlet, \$4—2d, \$3—3d, \$2—4th, V. Tr.
“ pair woolen knit stockings, \$2—2d, Vol. Trans.
“ wove woolen stockings, \$2—2d, Vol. Trans.
“ cotton wove stockings, \$2—2d, Vol. Trans.
“ pound of linen sewing thread, \$2—2d, Vol. Trans.
“ linen wove stockings, \$2—2d, Vol. Trans.
“ linen knit stockings, \$2—2d, Vol. Trans.
“ knit cotton stockings, \$2—2d, Vol. Trans.

Discretionary Premiums will be awarded for other articles, deemed worthy, by the committee.

NEEDLE, SHELL, AND WAX WORK.

Best ornamental needle work, ..\$1 and Diploma.
“ ottoman covers, .. “
“ table covers, .. “
“ group flowers, .. “
“ variety of worsted work, .. “
“ fancy chair work, with needle, .. “
“ worked cushion and back, .. “
“ worked collar and handkerchief, .. “
“ woolen shawl, .. “
“ worked quilts, .. “
“ white quilts, .. “
“ silk patch-work quilt, .. “
“ fringe mittens, .. “
“ port-folio, worked, .. “
“ bonnets, silk, .. “
“ “ straw, .. “
“ lace capes, .. “
“ lamp stand mat, .. “
“ ornamental shell work, ..\$3
“ specimen of wax flowers, .. 2 “

Discretionary premiums to be awarded for other articles which are deemed entitled to commendation.

• FLOWERS.

PROFESSIONAL LIST.
 Greatest variety and quantity of flowers,\$5
Dahlias.
 Greatest variety,\$5
 Best 24 dissimilar blooms, \$3
Roses.
 Greatest variety,\$5
 Best 24 dissimilar blooms, \$3
Phloxes.
 Best 10 varieties,\$3
 Best seedling, 2
Verbenas.
 Greatest var. and number, \$3
 Best 12 varieties, 2
 Best seedling, 2
German Astors.
 Best collection,\$3
Pansys.
 Best and greatest variety, \$3
 Best 24 varieties,\$2

AMATEUR LIST.
 Greatest variety and quantity of flowers,Sil. Medal.
Dahlias.
 Greatest variety, Sil. Medal.
 Best 12 dissimilar blooms, Horticulturist.
Roses.
 Greatest variety, Sil. Medal.
 Best 12 dissimilar blooms, Horticulturist.
Phloxes.
 Best 6 var., Horticulturist.
 Best seedling, "
Verbenas.
 Greatest var., Horticulturist
 Best 12 varieties, "
 Best seedling, "
German Astors.
 Best collection, Horticulturist
Pansys.
 Best and greatest var., Hort.
 Best 12 varieties, "

GENERAL LIST, OPEN TO ALL COMPETITORS.

Best collection Green House Plants owned by one person,Silver Medal.
 Best Floral design, "
 Best Floral ornament, "
 Second best, Colman's Tour.
 Third best, Washington's Letters.
 Best hand Boquet, "flat," Horticulturist.
 Second best, Washington's Letters.
 Third best, Vol. Transactions.
 Best hand Boquet "round," Horticulturist.
 Second best, Washington's Letters.
 Third best, Vol. Transactions.

VEGETABLES.

24 best stalks celery,\$1
 6 best heads cauliflower, 1
 6 best heads broccoli, 1
 12 best white table turneps 1
 12 best carrots, 1
 12 best table beets, 1
 12 best parsnips, 1
 12 best onions, 1
 3 best heads of cabbage, 1
 12 best tomatoes, 1
 2 best purple egg plants, 1
 Discretionary premiums will be awarded on choice garden products not above enumerated.

12 best sweet potatoes, 1
 Best half peck Lima beans, 1
 Best half peck Windsor do. 1
 Best bunch double parsley 1
 Three best squashes, 1
 Largest pumpkin, 1
 12 best ears seed corn, 1
 Best half peck table potatoes, 1
 Second best, 1
 Best seedling potato, 1

MISCELLANEOUS.

Best iron gate for farm purposes,Silver Medal.
 " ornamental cast iron vase, on pedestal, "
 " sample drain tile, "
 " quarter of an acre of osier willow, and the best specimens manufactured from the product,\$5
 Best specimen wire hurdle fence, to be accompanied with an account of cost,Silver Medal.

PAINTINGS AND DRAWINGS.

Best specimen,\$10 and Diploma.
 " specimen of animal portraits, 10
 " drawing of show grounds and buildings,

STOVES.

Possessing some new and valuable improvements.
 Best cooking stove for wood fire,Diploma.
 Second best,Silver Medal.
 Best cooking stove for coal fire,Diploma.
 Second best,Silver Medal.
 Best parlor stove,Diploma.
 Second best,Silver Medal.

For improvements and machinery useful to the farmer and having valuable properties, premiums will be awarded.

Premiums on Fruit.

LEWIS F. ALLEN, Buffalo, chairman of committee.

APPLES.

For the greatest and best variety of good table apples, 3 of each variety, named and labelled, grown by exhibitor, Downing's Fruit and Fruit Trees of America, cold plates.

For the second best,\$5 and Downing's common edition.
 Third best, Vol. Transactions.
 Best 12 var. table apples, labelled,\$5 & Down. com. ed.
 Second best, 2
 Best 6 winter varieties do., labelled, 3
 Second best,\$1 and Trans.

PEARS.

For the greatest number of varieties of good pears, named and labelled, Downing's book, colored plates.
 Second greatest,\$5 and Downing's common edition.
 Third greatest, Vol. Transactions.
 For the best select collection of first rate autumn pears, named and labelled,\$5 and Downing's common edition.
 Second best, 2
 For the largest and best collection of winter pears, named and labelled,\$2 and Downing's common edition.
 Second best, "
 For the best collection of newly introduced pears, with a description, &c., as provided for new variety of seedling apples, Downing's book, colored plates.

PEACHES.

Best 12 varieties, labelled,\$5 and Downing's com'n ed.
 Second best, 2
 Best 6 varieties, labelled, 3
 Second best, 1
 Best 12 peaches, 2
 Second best, "
 Best seedling var. 6 specimens 3
 Second best, 2

PLUMS.

Best collection of plums, 6 spec. each var., \$5 and Downing's common edition.
 Second best,\$3 and Downing's common edition.
 Best 6 varieties of good plums, 6 spec. each, \$3 and Thomas' Fruit Culturist.
 Second best,\$1 and Thomas' Fruit Cult.
 Best 12 plums choice variety, 1
 Second best, "
 Best seedling plums, with descriptions, as in apples, \$5 and Downing's common edition.
 Second best,\$2 and Downing's common edition.

NECTARINES AND APRICOTS.

Best and greatest number of good varieties, 6 specimens each, labelled,\$3 and Downing's common edition.
 Second best,\$2 and Thomas' Fruit Culturist.
 Best 12 spec's of any good variety,\$1 and Down. com. ed.
 Second best,\$1 and Thomas' Fruit Culturist.

QUINCES.

Best 12 quinces of any variety,\$3 and Down. com. ed.
 Second best,\$1 and Thos. Fruit Cult.
 Third best,

GRAPES.

Best and most extensive collection of good native grapes, grown in open air,\$5 and Downing's common edition.
 Second best, 2
 Best 3 varieties of native or foreign grapes, grown under glass, 3 bunches each to be shown, \$5 & Down. com. ed.
 Second best, 2
 Best dish of native grapes, Thomas' Fruit Culturist.

WATERMELONS.

Best 6 specimens of any variety, \$3 and Bridgman's Gardener's Assistant.
 Second best,\$1 and Bridgman.

MUSKMELONS.

Best 6 specimens of any variety,\$3 and Bridgman.
 Second best, 1

CRANBERRIES.

Best peck of domestic culture,\$5
 Second best, 2
 To be accompanied with a full description of the manner of cultivation, nature of soil, &c.

Any premiums may be withheld in the discretion of the committee, if the samples exhibited are not worthy of a premium.

The fruit exhibited and for which premiums are awarded to be at the disposal of the committee.

Six volumes of Downing, common edition, and twelve of Thomas' Fruit Culturist will be awarded by the committee, in their discretion, for choice fruits not enumerated.



HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

Pruning.

“THE object of the pruner,” says Lindley’s Theory of Horticulture, “is to diminish the number of leaves and branches; whence it may be at once understood how delicate are the operations he has to practice, and how thorough a knowledge he ought to possess of all the laws which regulate the actions of the organs of vegetation. If well directed, pruning is one of the most useful, and if ill directed, it is among the most mischievous, operations that can take place upon a plant.”

Admitting that, in this country, pruning is not, nor need not be regarded of such importance as it is in many parts of Europe; yet it is more or less necessary—and as far as it may be necessary it is of the utmost importance that it be properly performed. Every man who undertakes to cultivate trees should endeavor to make himself acquainted with the *theory and practice* of pruning.

Every application of the knife, on a tree, should be made with skill and precision, and with a thorough appreciation of the results. For the benefit of those of our readers interested in these matters, we extract the following excellent suggestions and illustrations from the “London Gardeners’ Chronicle,” which we presume are from the pen of Mr. THOMPSON, the head of the fruit department of the London Horticultural Society’s Garden:

The principles that should govern the practice of pruning are sadly neglected or misunderstood; and this by gardeners as well as amateurs. At our saying this, no really skilful pruner should feel offended; for of course he is not included in the criticism. On the contrary, we doubt whether in any country can be found men so thoroughly conversant with the subject as in our own. The following remarks, indeed, are founded upon their experience and example, and can only be regarded as an exposition of the present state of English pruning. But it does not follow, because many men understand thoroughly the use of the knife, that thousands are not in want of instruction, and it is to the latter that we address ourselves.

In all branches of science it is found convenient to commence by a few definitions. We shall follow the example. Let it be understood, then, that by pruning we do not understand hacking or mutilating trees merely to reduce their bulk, nor that sort of random cutting out which is often supposed to be expressed by this name. Those operations belong to slashing and slashing, not to pruning. Pruning is

the art of removing skilfully certain branches, or parts of them, for the purpose of increasing productiveness or size, or of improving the general health of the individual operated upon. Such is its true meaning, and we doubt whether the definition can be extended.

Skilful gardeners have but one way of performing this operation. Their method may be called “the clean cut” and consists in removing a shoot by means of a sloping

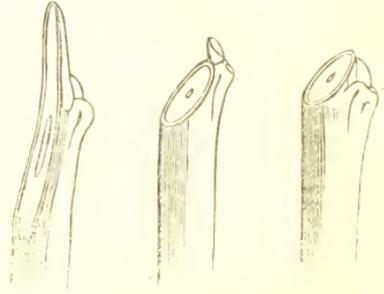


Fig. 3. Fig. 2. Fig. 1.

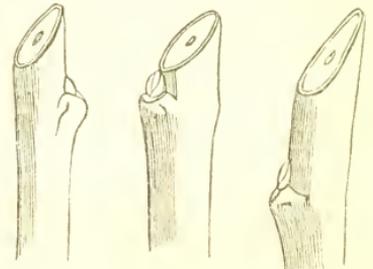


Fig. 6. Fig. 5. Fig. 4.

wound, forming an angle of about 45°, just at the back of a bud, as at fig. 1. The reason is, that as soon as the bud pushes, this wound is readily and rapidly covered with new wood. In some trees it will, in fact, heal over in a few weeks.

An awkward way of performing this, represented at Fig. 2, we shall name “the cut to the quick.” Here the wound is made too low down, and exposes to the drying action of the air the communication between the base of the bud and the interior of the stem; the consequence of which is that the bud dies, and the new shoot not only does not come where it was expected, but is surmounted by a dead joint, which will afterwards have to be removed.

In order to avoid the risk of “the cut to the quick,” some gardeners make use of “the snag cut.” (Figs. 4, 5, and 6,) in which the wound is made on the same side of the branch as that occupied by the bud, slanting downwards towards it. Of that plan we do not approve; for it involves the necessity of leaving behind a dead portion of the branch to be removed at a later pruning, so that work must be done twice over; moreover, it is an admission of a want of the skill required to make “the clean cut” skilfully.

Lastly, there is “the slivering cut,” (Fig. 3.) in which a long, ragged, unequal shave is taken off the branch, much too low in the beginning, and much too high at the end. It is the cut made by young ladies and maid servants, and mere garden laborers. It has no excuse. It is clumsy, ugly, awkward, and dangerous, for it is apt to injure the branch on which it is made, if it does not extend to the operator’s left hand. So much for detentions.

In all cases the amputation should be made by one firm-drawn cut. The clean cut can be performed by a dexterous operator to within a shaving of the right line; and the mastery of this art is no mean acquisition. We have seen expert pruners grasp a branch in their left hand, and with one sharp quick draw remove a shoot as thick as the thumb.—But for this purpose a knife must be keen. Those things which some men call pruning knives, blunt and notched, a sort of cross between a file and a handsaw, used for grub-

bing up weeds, drawing wall nails, and trimming roots, are never seen in the hands of a man who understands his business or attends to it. To a gardener his pruning knife is as much an object of solicitude as his razor. Indeed of the two he would rather hack his chin than his plants. Nor is the anxiety to keep his pruning knife in the highest order a piece of needless affectation; work is done fastest with a keen knife, and best, for the wounds that it inflicts are healed much sooner than those sprung, cottony, slivers which some people mistake for pruning.

These preliminary remarks will serve to introduce the main body of observations which we propose to offer upon the subject of pruning; not however in the form of general propositions, but of detailed instructions for each of the kinds of fruit trees usually cultivated in this country. Each has its own peculiarities of growth; each has to be treated with reference to those peculiarities; and, therefore, each must become the subject of separate consideration.

We shall continue in future numbers such of the articles alluded to as we may consider to be useful or interesting to our readers.

THE FRUITS AND FRUIT TREES OF AMERICA:

By A. J. DOWNING.

The splendid colored edition of this work, which has been long and anxiously expected, will, we are informed, be forthcoming immediately. The plates have already been received from Paris, where they have been colored, and the edition will, in all probability, appear some time this month. We are sure that this will be a welcome item of intelligence to the lovers and growers of fruit throughout the Union. The appearance of such works as these afford pleasant indications of the progress of taste and refinement. When we think of what the last 10 years has effected, we are half inclined to believe we are dreaming. "Onward" is the motto.

SUCCESSFUL PLANTING.—"A Young Farmer," *Macon, Mich.*,—whose inquiries were noticed last month—says:

"In the fall of 1845 and spring of 1846, I planted 300 fruit trees of the various kinds, and have not lost one out of that number, notwithstanding the drouth so severe here last summer. Some of the apple trees have grown 3 feet, and peaches generally 2 feet—and some 4 to 6 feet. I set them on a piece of rich, new land; dug the holes from 3½ to 4½ feet in diameter, and from 18 to 21 inches deep; filled them up with rich muck and black sand and loam. The earth that came out of the bottom was not thrown back. The roots were carefully trimmed, where bruised or broken, before I set them out."

Such careful planting as the above can hardly fail of success. We hope such results will induce similar treatment.—Ed.

RAPID GROWTH OF A PLUM GRAFT.—Allow me a small space in your valuable paper, to give the growth of a Washington Plum graft that I set in a wild plum stock, April 17th, 1846.

I supposed I had noted the growth of it oftener, but on turning to my journal I find but three dates, as follows: July 5th, it measured four feet and two inches—July 26th, five feet and eight inches—September 1st, six feet and four inches. This is one of four *shoots*—three others from two to four feet, from the two scions. I feel particularly proud of it, as it is one of my own grafting. It shows how well a few odd minutes can be occupied.—C. W. M., *Fair Place, Onon. Co.*

Transactions of the Mass. Horticultural Society.

HORTICULTURAL HALL, SCHOOL STREET, }
BOSTON, MARCH 25, 1847. }

THE Massachusetts Horticultural Society announce to the Public, that its Committee of Publication is preparing to publish the 1st number of a series of Transactions of the Society.

This publication has been for some years in contemplation, and materials have been collected for this purpose; but it has been hitherto delayed until the funds of the Society should enable it to be produced in a style of excellence which could not fail to render it both permanent, and an honor to the advanced state of the Horticulture of the present day.

It is intended that the work shall be in ROYAL OCTAVO, and the numbers shall appear as frequently as materials accumulate; each shall contain from FOUR TO SIX PLATES, chiefly of FRUITS, but occasionally of FLOWERS, DRAWN AND COLORED FROM NATURE, by the best talent the country can produce, and also the proceedings of the Society, including the reports of the weekly and annual exhibitions, to the date of publication.

The Society hopes soon to offer such premiums for able communications on Horticultural subjects, as shall secure to these Transactions papers containing information of great practical value to all interested in this pursuit.

Although the authors of papers will alone be generally responsible for their contents, yet all accounts and descriptions of Fruits will be published under the immediate supervision of the Fruit Committee, and of Flowers under that of the Flower Committee; so that the AUTHORITY OF THE SOCIETY will be attached to the most essential portions of their Transactions.

To establish a standard for all the present varieties of fruit, and to enable the public to judge of the quality of new kinds, as they shall be presented from imported trees, or from varieties originating in this country, will be one of the principal purposes of these Transactions, and will receive the particular attention, not only of the Committees of the Society but also of the most experienced of its individual members.

The price to the members of the Society will be about the cost of plates, printing, &c., and will not exceed seventy-five cents per number; to others the charge will be \$1. All communications intended for publication, may be addressed to J. E. TESCHMACHER, Esq., Corresponding Secretary of the Society, Boston.

Orders and subscriptions for these Transactions may be addressed to W. D. TICKNOR & Co., publishers, corner of Washington and School streets, Boston.

J. E. TESCHMACHER,
C. K. DILLAWAY,
EBEN'R WIGIT,
SAMUEL WALKER,
JOSEPH BRECK,
AARON D. WILLIAMS, Jr.,
E. C. R. WALKER,

} *Com. of Publication.*

WE take pleasure in publishing the above prospectus, and in recommending it to the attention of the readers of this paper. We look upon the commencement of the publication of this series as a new and important era in American Horticulture. This enterprising Institution has already done much for the advancement of the science in this country; this will greatly extend the field of its influence and usefulness.

With a fund of material, and an array of talent that no individual enterprise could command—and being beyond even the suspicion of promoting any private or personal interests—with a determination to make it a permanent and splendid work, the Society deserves the confidence and support of the public in an eminent degree. We trust that of the 50,000 readers of the Farmer, a very great proportion will gladly avail themselves of the invaluable information which these numbers will contain, on all matters pertaining to fruits and fruit culture, and gardening generally.

1 Pear Tree Blight.

MR. EDITOR:—Will you not, through the medium of your paper, which is so extensively disseminated all over this section of the Union, endeavor to obtain the knowledge of some facts in relation to the blight in Pears? The point to which I especially desire to call attention is, the kinds which are well ascertained to be entirely unaffected by it. I do not by any means despair of finding a preventive of this sad disease—but, inasmuch as it still continues to be exceedingly destructive, it is very desirable to learn the kinds which are proof against it. Perhaps you can give the world the names of various kinds, which you believe are not subject to this disease. If you can, please do so in the Farmer, and call for information—and if no one among all your subscribers knows that the kinds specified have ever been affected, that will furnish strong evidence in their favor. And if any one shall have known any of the specified kinds to be affected by the blight, no doubt the information will be communicated with pleasure—with such a description of the manner in which the trees were affected as shall enable us all to decide upon the kind of blight.

The Onondaga does not escape in the general wreck, and indeed I know of no one that does, unless it be the Seckel. *Have you ever known this to be touched by it?* It is said by Downing that the Andrews escapes, but as that is not cultivated much if any in this part of the State, I have the benefit of no experience. What other kinds can you add to these? I am confident that your long experience must be valuable on this subject, and I hope you will give us the benefit of it, even if it establishes the fact that there are very few or even no kinds which escape the general contagion. Let us know the worst of our case, and we will then set about finding a remedy if possible.

Truly,
E. W. LEAVENWORTH.

Syracuse, March 3, 1847.

In compliance with our correspondent's suggestion, we have applied to some of the most experienced cultivators of fruit in Western New York for any facts in their possession in relation to this subject, and give below the remarks of three gentlemen well known to the Horticultural world.

We have not observed the operations of this malady, on particular varieties, with that degree of minuteness that would justify us in expressing an opinion, at present. We intend, during the coming season, to give as much attention to it as possible, and we solicit the co-operation of our friends in the investigation. The *insect blight*, which occurs towards autumn, is much more prevalent here, than that designated by some as the *frozen sap blight*. In a collection of many thousand trees, we have only had two—the Madelaine and St. Ghislain, side by side—affected by the latter in a period of seven years, while numbers of pear, apple and quince are every season attacked by the former. In all investigations upon this subject, it is necessary to discriminate between the two. The insect blight first appears on the young shoots, and the other on the trunk or large branches, in black spots. Several facts have recently been communicated to us, that we will present hereafter.

DAVID THOMAS, Esq., of Aurora, says:

P. BARRY:—Thy favor of the 9th instant is before me. In regard to the great pear blight in my fruit garden, I cannot say any thing more pertinent than what I sent to the Ohio Cultivator, in the summer of 1845, while the particulars were fresh in my memory; and to save thee from the trouble of a search, I subjoin a copy:

"The severe frost on the morning of the 30th [May,] produced ten times more *fire blight* than I ever saw before,

It was not confined to the *pear* tree, though that suffered most; but the *apple* tree, and the *quince* tree, share largely in the calamity; and even the *cherry* tree which was not on the list of such as were susceptible of this malady, did not escape.

"This visitation has furnished the clearest proof that *fire blight* is not *always* the work of insects. No trace of it had been discovered of late years in the neighborhood; and now it fell on us like a shower—not slowly increasing, as if insects were extending their colony. On a branch of the *Beurre Satin*, most of the fruit perished almost immediately, and in a few days, part of the leaves and twigs gradually assumed the usual appearance of *fire blight*. It was not the most thrifty shoots, however, that suffered most, as in former cases which had come under my observation; but stunted twigs of a finger's length, were killed down to the main branch.

"The irregular manner in which this *fire blight* has appeared, destroying only a few twigs on some trees, and dozens on others under the same temperature,—might induce some to believe it the work of insects; but plants which insects never attack, present similar irregularities. I have two fine shrubs of the laurel (*Kalmia latifolia*) with shoots about three inches long of the present year's growth. Part of them were killed and part not damaged in the least; and though it might be difficult to explain such phenomena on any known principles, yet the facts are incontestable.

"We have had no frost so severe as this, and so late in the season, since the year 1817."

Doubtless, some varieties of the pear are more tender than others, and yet there is a danger of deciding too hastily.—Thus, of *Steven's Genesee*, I lost one tree entirely, while another was much injured though I entertain hopes of its recovery. The same disaster happened to a large tree of the *Madelaine*, which we cut down in consequence; but another of the same variety escaped much better, and has continued to bear good crops of fruit. Much may depend on the situation. Where grafts of different kinds, however, stand on the same tree, and some die while others flourish, the evidence seems more conclusive. Thus I had *Bon Chretien Fondante*, and the *Early D'Anjouville*, on a tree of the *Summer Bon Chretien*: the former perished, and the latter entirely escaped. On another tree of the same variety, the *Jalousie* was killed outright, while the tree itself—like all others of this sort—was but slightly damaged; and so has been the *Beurre Diez*.

No kinds, however, have escaped better than the *Seckel*, *Virgalieu*, *Washington*, (with one exception,) *Brown Beurre*, *Jargonelle*, *Doyenne gris*, *Skinless*, and *Summer Franc Real*; and none have fared worse than *Bishop's Thumb*, *Napoleon*, and *Reine Caroline*. The *Frederic de Wurtemberg*, *Flemish Beauty*, *St. Ghislain*, the *Thompson*, and *Dearbur's Seedling*, are also among the sufferers; but the main trunks on which they stood appear to be tainted; and this may perhaps account for their condition. *Passe Colmar* and *Marie Louise* have also suffered much.

Very respectfully thy friend,

DAVID THOMAS.

Greatfield, near Aurora, 3d mo. 12, 1847.

P. BARRY, ZSQ.—Yours of the 12th inst is before me, in which you request of me a description of the apple known as the "*Green Sweeting*," and my opinion of its valuable qualities. This is the same apple that was described in the *New England Farmer* as the *Green Sweeting* or *Molasses Apple*. It was then cultivated in New Hampshire, Massachusetts, and Rhode Island, and from the latter State was brought to this county about sixteen years since, by Samuel Clark, Esq., and was propagated upon the farm now occupied by Maj. Upton in Greece. It has been eagerly sought after by all who have tasted the fruit. In its growth it is strong, and upright, and the shoots covered thickly with fruit-spurs. It is a good bearer, and although the young shoots are upright, making one of the handsomest nursery trees, yet in a bearing state they bend off, forming well proportioned tops.

The fruit is of medium size, rather oblong than round, somewhat resembling the "*Golden Sweeting*," skin smooth, at first green, but as it ripens becoming a light yellow.—Flesh of a delicate sweetness, juicy, and melting. In eating from March to May, but may be kept longer.

As to the qualities of this fruit I do not hesitate to pronounce it one of the most valuable sweet apples of the season cultivated with us, not excepting the "*Sodus Sweeting*," See vol. 7, Hovey, and Thatcher's Orchardist.

You also inquire "whether I have observed any difference in the liability of different kinds of Pears to the blight. I answer, I have—so far as to liability, I think the old Autumn Bonchretien stands first. With regard to the Seckel, I have not known it to be injured at all. The first tree cultivated in this county, more than twenty-five years since, is now, or was the past season, upon what was the Jesse Hawley farm, on the east side of the river, and a little below your nursery. As many of those in this neighborhood, of the older growth, have been propagated from that, and as you are collecting facts on the subject, it may be well for you to call and examine the original tree.

The first pear tree attacked with this insect (malady) in the neighborhood of Rochester was one on the premises of Mr. West, on Washington street. I observed it, and called and requested the privilege of cutting out and burning the branch on which it appeared, but was refused. From that nucleus it spread in different directions. That tree was a Bonchretien.

I have thought that the "liability" might depend upon the shape and formation of the bud, as we know some afford a more ready shelter for insects than others; while some that are small, and lie close to the branch, do not afford any place for their secretion.

Yours respectfully,

N. GOODSELL.

Greece, March 13, 1847.

FRIEND BARRY:—In answer to your inquiries relative to the Pear tree blight, and what varieties with me have been most liable to be attacked with this disease, I reply in brief that my experience in the matter has been quite limited.—After a residence here of 40 years, and having been for many years somewhat extensively engaged in growing the pear, the sum total of all the trees in my grounds, that have been affected with the disease, is only six.

Some eight years since, early in summer, I discovered in one of the nursery rows three trees whose leaves and branches had become withered and turned quite black. I cut them down close to the ground, and burnt them. This variety was the Winter Bell, of but one year's growth from the bud, and had made a very vigorous growth the year previous. My present impression is that it was a clear case of frozen sap blight. The other cases have been among standard trees, of which I have a very large number. The Belle de Bruxelles, a tree some ten feet high was attacked, nearly one half of the upper branches turned black. I cut it down to within two feet of the ground, far below where it showed any effects of the disease. It again sprouted and flung up strong shoots, but no symptoms of the disease has since appeared.

A large tree, planted about 35 years ago, some six years since exhibited signs of this disease in the upper branches. They were cut out; but nearly every year since some of the branches have withered; the main trunk of the tree at last became affected, and the past year it was cut down to the ground.

Three years ago last autumn a very large tree of the Orange Pear suddenly began to wither and droop. The leaves did not turn black, but merely drooped as when suffering from drought. It was not very dry at the time: the tree was near 40 feet high, and the roots had spread wide and deep. During the fall the tree appeared to revive; and in the following spring it put out as fresh as ever, and, as I then supposed, healthy and vigorous. But early in June the leaves and branches suddenly turned black, and the whole tree, roots and branches, died at once. The inner bark of the trunk and branches was quite black, and very readily removed from the wood.

Without further experience and investigation, I am not disposed now to give an opinion in regard to the cause or causes producing this disease. Yet I am disposed, even now, to hazard the opinion that the last named case was not a case of frozen sap blight.

Respectfully yours,

B. HODGE.

Buffalo Nursery, March 11, 1847.

Woodpeckers.

MR. EDITOR:—On the 75th page of the current volume of the Farmer, I find an article signed "Inquirer," concerning "a small speckled bird called Woodpecker"—and beneath, your answer to inquirer. It appears to me that you

did not rightly understand him. The bird inquired about, although belonging to the "genus Picus," is more commonly known to farmers by the name of "sap-suckers"—from the circumstance that during the latter part of summer and fore part of autumn they appear to subsist entirely on the sap of certain trees, among which are the apple.

In order to be supplied with plenty of food, these birds go from tree to tree making circles of small holes through the bark of them. Into these holes the elaborated sap is forced, and the birds may be seen going from one tree to another extracting the same, without making the least search for insects. I have often killed them while thus engaged, and have examined the contents of their stomachs, but have never discovered the remains of any insects, or their larva, in them. I have known them to greatly injure trees by their perforations, and in one instance an apple tree was entirely killed.

From the known habits of this genus of birds, it is to be supposed that during three-fourths of the year, this species may subsist upon insects, but whether the benefits conferred during this time over-balance the injury done during the remainder of the year, demands a doubt. I recommend killing all that frequent orchards at the season when they commence their depredations.

Greece, March 7, 1847.

G.

REMARKS.—We are much obliged to our correspondent for his intended correction; still we believe that we understood the inquirer aright, and answered him correctly. We were aware of the opinion that existed about the "sap sucking," and of the provincial appellation given to the bird, of "sap-sucker;" but considered them both incorrect and improper, if not absurd, and therefore did not mention them. The reasons we have for such belief will be found in the following extract from *Wilson's American Ornithology*:—

In more than fifty orchards which I have myself carefully examined, those trees which were marked by the Woodpecker (for some trees they never touch, perhaps because not penetrated by insects) were uniformly the most thriving, and seemingly the most productive; many of these were upwards of sixty years old, their trunks completely covered with holes, while the branches were broad, luxuriant, and loaded with fruit. Of decayed trees, more than three-fourths were untouched by the Woodpecker. Several intelligent farmers, with whom I have conversed, candidly acknowledge the truth of these observations, and with justice look upon these birds as beneficial; but the most common opinion is, that they bore the trees to suck the sap, and so destroy its vegetation; though pine and other resinous trees, on the juices of which it is not pretended they feed, are often found equally perforated. Were the sap of the tree their object, the saccharine juice of the birch, the sugar maple, and several others, would be much more inviting, because more sweet and nourishing, than that of either the pear or apple-tree; but I have not observed one mark on the former, for ten thousand that may be seen on the latter. Besides, the early part of spring is the season when the sap flows most abundantly; whereas, it is only during the months of September, October, and November, that Woodpeckers are seen so indefatigably engaged in orchards, probing every crack and crevice, boring through the bark, and, what is worth remarking, chiefly on the south

and south-west sides of the tree, for the eggs and larvæ deposited there by the countless swarms of summer insects. These, if suffered to remain, would prey upon the very vitals, if I may so express it, of the tree, and in the succeeding summer give birth to myriads more of their race, equally destructive.

Here, then, is a whole species. I may say, genus, of birds, which Providence seems to have formed for the protection of our fruit and forest-trees from the ravages of vermin which every day destroy millions of those noxious insects that would otherwise blast the hopes of the husbandman, and which even promote the fertility of the trees; and, in return, are proscribed by those who ought to have been their protectors, and incitements and rewards held out for their destruction! Let us examine better into the operations of nature, any many of our mistaken opinions and groundless prejudices will be abandoned for more just, enlarged, and humane modes of thinking.

LADIES' DEPARTMENT.

"Farmers' Daughters"—again.

MR. EDITOR:—Noticing in your last number an article written by a farmer's wife, entitled "Farmers' Daughters," I perused it with great eagerness; but I was somewhat disappointed with the tenor of it. I agree with your correspondent in some of her statements—but in others, I can not. She inquires "if farmers' girls have ever seen, or heard of independence for the farmers' wife?" I am a farmer's daughter, and I have both seen and heard of independence for the farmers' wife, as well as for the farmer. I am acquainted with several farmers, who have been accustomed to keep individually from five to nine cows, and one hundred sheep or more, who have retired from business, with only one cow and a few sheep, (and they retain those because their wives choose to manufacture their own butter, and prepare their stocking-yarn.) Now, I ask, are not the wives of those farmers as independent as their husbands?

She says, also, "There is no class of women of whom so great an amount of care and labor is required, as among farmers, nor where the dependence of the wives is more abject." Many undoubtedly, agree with her in the foregoing policy, while others are of the same opinion that I am. It is true, I know not the condition of the farmers' wives and daughters in the community where she resides, (nor do I wish to if they are all as unpleasantly situated as she is,)—yet I think I can estimate, in some degree, the difference in the situation of the farmers' wives, and the wives of the traders and mechanics of this town, as it has been my lot to spend some time with persons who followed the above several occupations; previous to which my opinions coincided with those of your correspondent. I admit that at some seasons of the year the labor of the women among farmers is more fatiguing than it is among traders and mechanics; but I do not think, at any time, they have to endure more fatigue, or care, or anxiety of mind, than does the wife of the physician. The physician is called to visit the sick; his wife knows not when he

will come home: he may be at home in an hour or two, he is as likely to be absent a day or perhaps a week. This is what I have heard physicians' wives say many a time. And if there is any thing to be done, she is obliged, oftentimes, to do it herself, or provide some way for it to be done. The farmer is usually at home, (his farm is his home,) and if his wife wishes for his assistance, he is (or ought to be,) willing to assist her. She knows when to prepare the repasts for the day, having commonly, reason to expect they will be eaten when prepared, (and there is nothing that is more trying to a woman's patience than to be obliged to keep her victuals standing an hour, or even half, and much more a day, before they are eaten.)

What she says respecting farmers' daughters marrying persons of the same occupation of their fathers, may be true in some instances; but in this community there has been no less than fifteen girls, farmers' daughters likewise, who in the space of two or three years have married farmers; and I know of but two who have been married, who did not marry farmers.

I think they must have chosen their companions, or their parents must have preferred to have them unite their interests with those of the farmer—and it is altogether probable, the girls and their parents were satisfied with their so doing. I think the situation of your correspondent is deplorable in the extreme; by her description of it, she makes it a parallel case with that of the drunkard's wife. I hope that hers is an isolated case; and I dare to presume it will compare with the *good* chief magistrates of our government—very "few and far between."

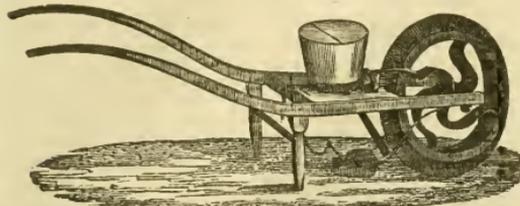
A YOUNG FARMER'S WIFE.

Perry Center, March, 1847.

WATERING HOUSE PLANTS.—There is a great deal of discretion to be used in watering plants. The regular course of giving them all a regular forenoon and afternoon *dab* is the worst possible policy. The roots of a well established plant penetrate and fill the entire earth of the pot, and by the usual process of giving a little water every day only keeps the surface wet and the bottom of the roots around dry and moulded. The true course is, to let them stand till quite dry on the surface, and then to give them a thorough watering even till it percolates through the bottom, if the pot is well drained with broken earthen or oyster shells. Occasional liquid manure, or 1 lb. of guano in 2 gallons of water, tells well on the growth and increased size and beauty of the foliage of flowers. *

A DROP or two of honey well rubbed on the hands while wet, after washing with soap, prevents chapping, and removes the roughness of the skin. It is particularly pleasant for children's hands and faces in cold weather.—*Selected.*

Pratt's Patent Corn and Seed Planter.



from the hopper, in which the seed is first placed, and at any distance apart desired by the farmer, and is properly and evenly covered by the coverer, which is raised or lowered by a chain to secure the even covering, which is sure and satisfactory. The only alteration necessary for the different kinds of seed is to change a small plate in the hopper, which can be done in two minutes. [F] Several hundred certificates can be produced of the merits of this Machine, if new—but two or three at this time is deemed sufficient.

RECOMMENDATIONS:

GENTLEMEN—Agreeable to your request I have given the Corn and Seed Planters, sent to me in the spring, a fair trial, and I have concluded to keep them, and do not know what inducement would tempt me to give them up, and resort to the old method of sowing and planting by hand. I have drilled in 3 acres of carrots with the Seed Planter, and 12 acres of corn with the Corn Planter, both in drills one foot apart, (for fodder for our cows.) The carrots are now the most beautiful looking crop I ever saw, while the corn has produced the largest amount of fodder ever raised on my farm,—much greater than adjoining lots, of the same fertility, planted by hand.

I have hesitate not to say that the saving in seed and labor, (over the usual method,) on the above twenty acres of corn and carrots, will more than pay the expense of both Machines, besides greatly adding to the crop, by being more evenly sowed and thoroughly covered. [Sept. 1, 1846.] C. B. STUART, Agent Rochester City Milk Company.

This is to certify that I have used one of Pratt's Corn and Seed Planters the past season, and I do unhesitatingly say that I consider it one of the greatest improvements of the age. I have planted some thirteen acres of beans this season with the said Planter, and it did the work to my entire satisfaction; and I would recommend it to all my who may be in want of a Planting Machine. [Brighton, July 24, 1846.] ROMANTA HART.

[F] Manufactured and for sale at the Steam Factory of TAYLOR & BROWN, No. 6 Hill street, Rochester.

ROCHESTER COMMERCIAL NURSERY,

MAIN STREET—ONE MILE EAST OF THE COURT HOUSE,
ROCHESTER, N. Y.

Office No. 1 Arcade Hall.

THE SUBSCRIBERS

offer for sale the present spring, a fine assortment of FRUIT TREES, comprising several hundred of the most desirable varieties of APPLE, PEAR, PEACH, CHERRY, PLUM, &c., &c., cultivated with great care, thrifty, and warranted correctly named. Northern Spy, Early Jo, and other choice Apples in any quantity, and Ononolaga and other new Pears at regular Catalogue prices.

[F] Many of our trees are larger than can be purchased elsewhere.

PEARS ON QUINCE FOR GARDENS.—We have some of the finest dwarf Pears ever offered for sale in this market, to which we invite the attention of those persons wishing to purchase this description of trees.

Priced catalogues furnished to all post paid applicants.

[F] An assortment of HARDY ORNAMENTAL TREES also kept for sale.

March 1, 1847.

BISSELL & HOOKER.

Seedling Apple Trees wanted.—The subscriber wishes to purchase a few thousand seedling Apple Trees. Apply personally, or by mail, to S. MOULSON, Rochester, Jan. 1, 1847.

Spring Rye.—25 bush. Spring Rye for sale at the Genesee Seed Store; it is a first rate article for sowing with oats. RAPALJE & BRIGGS,

April 1.

No. 18 Front street.

The Stud Horses Perfection and Young Alfred



Will stand the ensuing season, at my stable, three miles south west of Geneva.

TERMS—Perfection, \$10, by the season. Young Alfred, \$6, by the season. Insurance to be agreed upon. Pasturage will be provided for mares from a distance, and attention given them. Accidents and escapes at the risk of the owners.

Pedigree.—Perfection, sire imported horse Alfred; dam imported mare Blossom. Perfection was awarded at the late State Fair, a discretionary premium for the best three years old in the 1st class. Also, the 1st premium in Ontario county.

Young Alfred's dam drew the 1st premium at the State and County Fairs in 1845. GEORGE FORDON.

Geneva, N. Y., April, 1847.

Extract from the Report of the Committee on Horses—Class 1st and 2d—at the Fair at Auburn, of which the Hon. Adam Furgesson, of Woodville, C. W., was Chairman:

“The Committee having found some difficulty in bringing Colts into fair competition with Horses of mature age, respectfully recommend the following uncommonly fine animals to the society for extra premiums:

“1st. Perfection, 3 years old,—George Fordon, Geneva.

“2d. Black Prince, do.,—Reuben Tift, Chemung Co.

“3d. Golden Farmer, 2 years old,—Cyrus Breed, do. &c.

Agricultural Implements.

In order to accommodate the subscribers to the Farmer, from whom frequent inquiries and orders for implements are received, I have made arrangements to supply the following articles:

Pitts' Thrasher and Separator,	price, \$150 00
The above, including Horse-Power,	250 00
Pitts' Corn and Cob Mill,	40 00
Seymour's Sowing Machine,	45 00
Sanford's Straw-Cutter,	15 00
Burrall's Patent Corn-Sheller,	10 00

Also, most kinds of Plows, Cultivators, &c., &c., at the usual prices. As my only object is the accommodation of subscribers to the Farmer who reside at a distance, (without fee or reward,) all orders should be post paid and accompanied with the cash. The implements will be carefully selected, and shipped per order. D. D. T. MOORE.

Farmer Office, Rochester, April, 1847.

BOUND volumes of the Farmer, 1846, for sale at this Office.

Geneese Seed Store and Agricultural Warehouse.

No. 18 (OLD No. 10,) FRONT ST., ROCHESTER.

At this Establishment can be found all sorts of GARDEN and FIELD SEEDS, a large and excellent assortment of Flower Seeds—a large lot of Clover and Timothy Seed, Orchard and Lawn Grass, Red Top, Lucerne, White Dutch Clover, Millet, Hemp, Flax Seed, Spring Wheat, Spring Rye, Buckwheat, Barley, Oats, different kinds Peas and Beans, Seed Corn of different kinds, various kinds of Seed Potatoes, Potato Onions, Onion Sets, Top Onions, &c., &c.

IMPLEMENTS, MACHINES, &c., such as Pennock's Patent Wheat Drill—Broad Cast Sowing Machines—Corn Planters, Seed Sowers, Fanning Mills—10 different kinds of Straw Cutters, prices from \$3 50 to \$23—Flows as follows: Massachusetts Subsoil, various sizes, do. Sward C, do. Eagle 25, do. different sizes Side Hill, Michigan Subsoil, Delano or Diamond Plow, Burrall's Wheel Plow, Wisconsin Plow, Gang and Corn Plows, and several kinds of plow points—Cob and Corn Grinders, different kinds of Corn Shellers, one and two horse Cultivators, Langdon's Horse Hoe or Cultivator, Drags and Drag Teeth; Horse and hand rakes, various kinds of garden rakes—steel and iron shovels and spades of different kinds—cast-steel and steel plated hoes, different kinds—ladies garden spades and hoes, top spades and hoes—cast-steel and German steel manure forks and hooks—grain cradles; cradle, grass and bush scythes—bush and grass hoes; grain sickles, Hay knives; grafting, pruning and budding knives, clover and grass seed sieves, pea sieves—cheese presses, hoops and tubs—common and patent churns—cattle knobs and bull rings—curry combs and horse cards—ox yokes and bows—hedge shears, pruning saws—Canary birds and cages—hot bed plants in their season—Eglantine or Michigan running rose roots—and many other things which a limited space will not allow us to mention.

We have done business through one season, and are pleased to be able to say that we have been more liberally patronized than we anticipated when we began. We hope, and believe, that we have so dealt with those who have favored us with their custom, that they will not hesitate to give us their favors hereafter—and we hope others will try us. All favors will be duly and thankfully appreciated.

AGENTS.—The following persons are Agents for the sale of Garden, Field and Flower Seeds, put up at the above named Establishment:—

Attica, L. Doty,
Albion, Nickison & Paine,
Adams Basin, C. D. Graves,
Adrian, Mich., D. H. Underwood,
Auburn, Quick and Hall,
Aurora, H. & G. P. Morgan,
Batavia, J. P. Smith,
Buffalo, E. Rawson,
do. T. C. Peters,
do. H. O. Hayes,
Brockport, H. Lathrop,
Canandaigua, Chipman & Remington,
Cobourg, C. W., G. Boyer,
Danville, M. Halstead & Co.
Detroit, Mich., F. F. Parker & Brother,
Geneese, Bond & Walker,
Geneva, Lawrence & Barnes
Holley, H. N. Bushnell,
Havana, G. T. Hinman,
Ithaca, Schelyer & Co.,

Jackson, Mich., S. Chadwick
Le Roy, J. Annin,
Lewiston, H. F. Hotchkiss & Co.,
Lockport, Wm. Keep & Co.,
Lyndonville, E. Bowen,
Mt. Morris, L. J. Ames,
Medina, J. Nichols & Son,
Middleport, J. Craig,
Milwaukie, W. T., J. S. Mouthrop,
Niagara, C. W., Wm. Johnson & Son,
Penn Yan, F. H. Huntington
Pt. Byron, Kendrick & Yates
Scottsville, Caleb Allen, esq.
Seneca Falls, Joseph Osborn
Skanateles, C. Pardee & Co
Syracuse, E. J. Foster,
Utica, J. E. Warner & Co.,
Union Springs, W. Cozzens,
Vienna, S. E. Norton,
Youngstown, A. Emerson.

☞ Garden Seeds put up at this Establishment can be found at most of the Stores in the State of New York west of Utica, and in some parts of Canada.

RAPALJE & BRIGGS.
(4-1f)

Rochester, April, 1847.

Cash for Clover and Timothy Seed,—500 bushels Clover and Timothy Seed, wanted at the Geneese Seed Store and Agricultural Ware House, Front street, by RAPALJE & BRIGGS.

Bound Volumes of the Farmer.

A few copies of Volume VI, bound, for sale at this office. Price 50 cents. Also, bound copies of Volume VII, 1846.

Rochester Seed Store.

[Established in 1831.]

No. 4 FRONT STREET, NEAR BUFFALO STREET.

By JAMES P. FOGG.

The subscriber begs leave to say to Farmers, and others, who have for the last three years so liberally patronized the *Old Rochester Seed Store*, that he has fitted up the Store, No. 4 Front street, on the west side of Front street, where he will be happy to see all who may want any article usually to be found in a Seed Store.

The subscriber is well aware of the important relation which the seedman holds to the whole farming community, and that on his honor and veracity the crop and profit of a season in some measure depend. The greatest care has been used in selecting the seeds offered at this establishment for the ensuing year, and they can be relied upon as pure and genuine, carefully selected and raised from the very best varieties, and properly cured. Many kinds were raised in the immediate vicinity of this city, by Mr. C. F. Crossman, and under the inspection of the proprietor; others were raised by experienced seed growers, and all can be recommended as genuine and true to their kinds.

AGENTS for the sale of seeds by the package, put up at the old Rochester Seed Store:

Attica, H. D. Gladding,
Amsterdam, J. W. Sturtevant
Auburn, J. H. Hudson,
" James B. Cooper,
Albion, Charles W. Perkins,
Buffalo, W. & G. Bryan,
Batavia, F. Follett, P. M.
Canandaigua, L. C. Cheney
& Co.,
Cazenovia, Dr. A. Ford,
Castile, Halsted & May,
Elmira, Tracy Beadle,
Geneva, Hemip & Cone,
Geneese, L. Turner,
Homer, W. Sherman & Son,
Ithaca, Lewis H. Culver,
Le Roy, J. J. Thompson,
Lockport, S. H. Marks & Co
Mumford, A. O. Comstock,
Mount Morris, R. Sleeper,
Oswego, C. & E. Canfield,
" Meade & Carrington
Perry, R. H. Smith,
Paw Yan, John H. Lapham,
Palmyra, Wm. May,
Port Byron, Kendrick & Yates,
Scottsville, L. C. Andrus,
Schueneady, D. L. Powell,
Syracuse, Tallman & Williams.
Utica, J. E. Warner & Co.,
Wyoming, J. C. Farris & Son,
Cleveland, Ohio, J. W. Watson,
Garden Seeds put up at this establishment in small papers, may be found with most of the merchants in the States of New York, Ohio and Michigan, and in Canada.
Rochester, N. Y. JAMES P. FOGG.

Flower Seeds.

"The storms of winter fly,
Earth smiles with flowers renewing."

I have on hand a superior assortment of about one hundred varieties of flower seeds, raised by Messrs. Ellwanger & Barry, and Mr. Wm. King, of Rochester, W. R. Prince & Co., of Flushing, and Hovey & Co., of Boston, which can recommend to the ladies who wish to compete for the splendid premiums offered by the Horticultural Society, as being by far the best ever offered in this city. They will be put up in boxes containing 25 choice varieties, for one dollar, with a catalogue, stating the duration of the plants, the color of the flower, and the time of flowering. For sale at the Rochester Seed Store. The first Seed Store on Front street, No. 4. JAMES P. FOGG.

Seeds for Root Crops.—Orange and White Carrot, Mangel and Sugar Beets, Ruta Baga and Flat Field Turnep, for sale at the Rochester Seed Store, No. 4 Front street. JAMES P. FOGG.

Seymour's Patent Broadcast Sowing Machine.

The accompanying engraving gives a view of SEYMOUR'S SOWING MACHINE, which he has so successfully introduced among the farmers of Western New York. It sows correctly all kinds of grain and seed, from peas to grass seed; also plaster, lime, &c.

With this machine, any boy who can drive a horse with common accuracy, may ride in an easy seat and sow much better than is usually done by hand, or than most people can sow by hand,—and windy weather will seldom stop the farmer in his sowing, or prevent it from being well done.

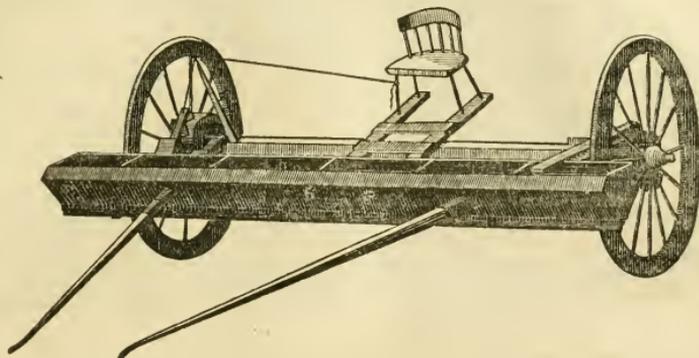
Thus he may save time, labor and seed, and be sure of better crops than he can get by uneven sowing. Many testimonials have been received in favor of this Machine, from as respectable farmers as any in the State—thus establishing, beyond a doubt, its value and efficacy. The following are among those who have given their Certificates of recommendation:—Bani Bradley, Esq., F. N. Toby, Esq., Frederick Munson, E. W. Fairchild, Hiram Steel, Calvin Pomeroy, Philo Hamlin, Wm. Carter, C. H. Chapin, Wm. Bradley, Sylvanus Emmons, F. W. Collins, Guy Collins, Josiah Porter, Esq., Myron Adams, Esq., J. H. Wheeler, of East Bloomfield; J. C. Taft, Josiah Wendell, of West Bloomfield; Azariah Bickford, Belden Seymour, of Victor, Ontario county; Augustus Stewart, of Benton, Yates county, . . . Y.

Reference may be had to the following gentlemen, viz: J. T. Rathbun, Esq., Scipio, Cayuga county; J. M. Sherwood, Esq., Auburn; J. H. Sutton, Aurelius, Wm. Scoby, Springport. John Searing, Ledyard; John Delafield, Esq., Fayette, Seneca county; Joel W. Bacon, Waterloo; Abner Barlow, Manchester; Ephraim Lacy, Caledonia; Abram Brewer, Scottsburg; Lester Bradner, Esq., Dansville; Elias Gilbert, Richmond.

⌚ This is a new Machine, patented less than two years since, and greatly improved within the last ten months, and is far superior to any before in use in the country. The Machine may be had of the Subscriber in East Bloomfield, Ontario county, N. Y., where all orders will be promptly attended to. Each Machine is accompanied with directions for using. Mechanics wish to engage in manufacturing this machine can be accommodated with rights.

East Bloomfield, Ont. Co., N. Y., April, 1847.

PIERPONT SEYMOUR, Patentee.



REMOVAL.

The Rochester Agricultural Ware House has been removed from Front-street to No. 23 Buffalo-street, Talman Block, opposite Reynolds' Arcade. See advertisement below.



Rochester Agricultural Ware-House, HARD-WARE AND SEED STORE.

(No. 23 Buffalo st., opposite Reynolds' Arcade.)

Where can be found most kinds of GARDEN and FIELD SEEDS, Hard-ware, Tin-ware, Wooden-ware, Willow-ware, House Trimmings, Kitchen Furniture, &c.

The late proprietor of this Establishment, (THOS. NOTT,) feels grateful to his many patrons for their very liberal patronage during the past year, and would solicit a continuance of the same—promising to sell them as good articles in his line, and as cheap, as can be purchased at any other establishment west of Boston or New York. He has formed a co-partnership with Mr. E. J. ELLIOTT—and the business of the establishment will hereafter be conducted under the firm of NOTT & ELLIOTT.

We shall keep constantly on hand, a full assortment of Shaker Garden and Flower Seeds, the reputation of which needs no comment.

We are continually manufacturing the celebrated Massachusetts Sward C Plow—to which has been awarded the greatest number of Premiums—which we shall sell at the low price of \$7, with an extra point. Also—shall keep on hand an assortment of the various approved Plows and Points, Cultivator Teeth, Root Cutters, Straw Cutters, and Corn Shellers—with a hundred and one other articles, too tedious to mention.

Farmers from a distance, as also those in our immediate vicinity, are respectfully solicited to call at our new establishment, and examine our assortment before purchasing elsewhere.

NOTT & ELLIOTT,

Rochester, Jan. 1, 1847. No 23 Buffalo-street.

Straw Cutters, of all the most approved kinds, used in Western N. Y., for sale cheap, by

RAPALJE & BRIGGS.

FOR SALE.

SHORT-HORN and DEVON Cattle, each thorough bred of their kind. The cattle of these stocks have been bred for many years by the Subscriber, and have been selected from the best breeds, and bred with the best and latest imported blood, with a particular view to the development of their most valuable qualities.

Also—Cotswold, (long wooled,) and South-down Sheep, of the best description, descended from the choicest and most celebrated English flocks.

They can be sent from the farm of the Subscriber, east and north by canal and rail-road, and west by steamboat, with safety and dispatch. Address

LEWIS F. ALLEN,

Black Rock, April 1, 1847.

Black Rock, N. Y.

SHAKER GARDEN SEEDS!

The Subscriber is agent for the *New Lebanon Society*, and has on hand a fresh and full supply of these truly excellent Seeds. L. B. SWAN, Druggist, Rochester, March 13, 1847. No. 13 Buffalo st.

Apple and Pear Scions.

HAVING increased my stock of scions, I hereby offer the following varieties, in addition to the "Spy" and Swaar: "Yellow Bell Flower," "Seek-no-further," Newtown Pippin, "English and Roxbury Russet," "Red Cheek Pippin," "Sweet Pearmain," and Virgulin Pear.—As my object is to propagate the best varieties, orders for small quantities shall be furnished in all cases.

For Apple scions, \$1.00 per hundred; Pear scions, \$3.00 per hundred; or small quantities, 4 cts. each. Rochester, April 1, 1847. JAMES H. WATTS.

N. B. I wish to purchase 500 bbls. of apples of the Swaar, Russet, or Spitzenberg varieties—to be in good order and in clean flour barrels—for which a liberal price will be given. Call at my office, corner Buffalo and State streets.

Clover and Timothy Seed.—500 bushels of Clover and Timothy Seed, for sale at the Genesee Seed Store, No. 13, (old No. 10,) Front street, by Rochester, April 1, 1847. RAPALJE & BRIGGS.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,.....	1,18½		Pork, bbl,	12,50	
Corn,.....	46	59	Pork, cwt,....	4,00	5,00
Barley,.....	44		Beef, cwt,....	5,00	
Oats,.....	—		Lard, lb,.....	7	8
Flour,.....	5,50		Butter, lb,....	10	14
Beans,.....	37	1,00	Cheese, old, lb,.	6	7
Apples, bushel.	25	37	Eggs, doz,....	10	
Potatoes,.....	38	50	Poultry,.....	7	
Clover Seed,....	4,90	4,50	Tallow,.....	7	8
Timothy,.....	1,50	2,90	Maple Sugar,...	8	
Hay, ton,.....	8,50		Sheep Skins,...	75	1,25
Wood, cord,....	2,50	3,50	Green Hides, lb	3½	
Salt, bbl,.....	1,06		Dry ".....	7	8
Hams, lb,.....	6	7	Calf Skins,....	8	

Rochester, April 27, 1847.

[By Magnetic Telegraph.]

NEW YORK, April 26,—7 P. M.

FLOUR AND MEAL—Not much doing, and the market not very firm. On the spot sales of Flour to the usual extent at \$7 75 a \$7 87½.—The former for Troy and Western, at which they were freely offered at the close. For lots to arrive there were some buyers, but at rather low figures: to arrive by 15th May, \$6 62½ was bid: the sales were 4000 bbls. Genesee in May at \$6 50; 2000 do. in June at \$6 a \$6 25, and 500 do. in August at \$5 75.

Sales 600 bbls Alexandria and Georgetown, \$7 44 a \$7 50. For MEAL there are more buyers than sellers at \$4 50;—5000 bbls Jersey, North River and Brooklyn at \$4 56½.

Rye Flour \$5 12½, and quiet.

GRAIN—Nothing doing in wheat; no samples in market. For Corn but little inquiry, the market is weak—about 15,000 bush yellow sold at 92 a 95 cts, and 5000 do. white mixed at 90 a 93 cts; about 30,000 bu. sold on private terms.

Sales 7000 bush Barley; at the opening of canal at 70 cts. Oats are firm, but less active; sales 6 to 8000 bushels at 49 a 50 cents.

PUBLISHERS' NOTICES.

To Post-Masters, Agents, &c.

We request all Post-Masters to act as Agents for the Farmer, according to our club terms. Also such other persons as feel an interest in extending the circulation of the Farmer, and thus promoting Improvement in Agriculture, Horticulture, and their kindred sciences. We shall feel truly grateful to any and all persons who will lend their assistance. Any person sending us 16 subscribers, (remitting \$6,) shall receive an extra copy gratis—or a bound volume of the Farmer for 1846.

To Clubs.—Any Post-Master or other person who has sent us eight or more subscribers, will be furnished with any additional number of copies at the club price—37½ cents each. We hope those who have formed clubs, will bear this in mind, and forward the subscriptions of such as may hereafter want the Farmer. Back numbers can be supplied—so that all may have the entire volume.

Our agents and friends will please bear in mind that we offer, as a premium, (in addition to the per centage allowed to clubs,) a bound volume of the Farmer for 1846, or an extra copy of the current volume, to any person forwarding 16 subscribers, (remitting \$6, post paid or free.)

We can furnish volumes 6 and 7 of the Farmer, (the only ones published uniform with the current volume,) either bound or in sheets. The previous volumes which we have on hand, (4 and 5 bound together, in boards,) are not suitable for sending by mail.

Agent at Lyons.—Mr. E. HOPKINS, Periodical Agent, is our authorized agent at Lyons, Wayne county. Mr. H. will furnish back volumes (bound,) and also receive subscriptions for the current volume.

Short Advertisements, which correspond with the Agricultural and Horticultural character of this paper, will be inserted at the rate of \$1 per square of 12 lines, or 100 words. To secure an insertion, advertisements and notices should be in hand 10 days previous to publication.

Monroe County Agricultural Society.

THE Members of the Monroe Co. Agricultural Society will please remember that the Society adjourned on the 6th December, 1846, to meet at the Office of the Genesee Farmer, [in Talman block, Buffalo street,] on the first Tuesday in June, 1847,—at which time and place said meeting will be held. By order of the President, May 1, 1847. J. H. WATTS, Rec. Sec'y.

Plows, Water Lime and Plaster for Sale!

N. T. ROCHESTER, & Co., General Agency, Commission, Storage and Forwarding Business—dealers in Scotch and American PIG IRON, Lehigh, Erie and Blossburg COAL, Sand, Clay, &c., &c., No. 69 Exchange st., [] Have for sale LAMPFORT'S IRON BEAM PLOW, a superior article, warranted. Farmers are invited to call, and examine, and try them.

Also, Chittenango Water Lime—and they will be prepared, immediately after opening of canal navigation, to furnish Farmers in this vicinity with Wheatland Plaster, from mills of PHILIP GARBUTT.

FAIRBANKS PLATFORM SCALES, of all sizes, continually on hand and for sale.

HAMES, from Messrs. Rice & Childs, of York, Livingston county.

NATH'L T. ROCHESTER,

HENRY E. ROCHESTER,

Rochester, April, 1847. JONATHAN CHILD.

Choice Pear Trees.

ELLWANGER & BARRY offer for sale, in addition to the stock of their own growth, one thousand beautiful Pear Trees for pyramids—just received from Europe—in fine condition for planting. The assortment includes the most scarce and estimable varieties. Orders should be sent in at once.

E. & B.'s new catalogue of Green House plants is just published, and will be sent gratis to all post paid applications.

Spanish Merino Sheep.

FOR SALE.—A few choice MERINO SHEEP, bucks and ewes, of undoubted purity of blood, and a quality that will give satisfaction to purchasers. They can be sent west, by canal, at the subscriber's risk. Cornwall, Vt., May 1, 1847. ROLLIN J. JONES.

PERSONS in Western New York who are entitled to, and have not received, Diplomas and Premiums in money, awarded at the last Fair of the N. Y. State Ag. Society, will please notify JOSEPH ALLEY, at the office of the City Treasurer, in Rochester, who will see that they are forwarded, &c.

Rochester Collegiate Institute.

THE SUMMER TERM of this Institution will commence on Monday, May 10th, 1847.

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STEAM PRESS OF JEROME & BROTHER.



THE GENESEE FARMER:

Issued the first of each month, in Rochester, N. Y., by

D. D. T. MOORE, PROPRIETOR.

DANIEL LEE, EDITOR.

P. BARRY, Conductor of the Horticultural Department.

Fifty Cents a Year:

FIVE copies for \$2—EIGHT copies for \$3. Subscription money, by a regulation of the Post-Master General, may be remitted by Post-Masters free of expense. [F] All subscriptions to commence with the first number of the volume.

PUBLICATION OFFICE in Talman's Block, Buffalo street, opposite Reynold's Arcade—where all subscriptions not forwarded by mail should be paid.

POST-MASTERS, and all other friends of Agricultural Journals, are requested to obtain and forward subscriptions for the FARMER. Address D. D. T. MOORE, Rochester, N. Y.

[F] The Farmer is subject to newspaper postage only. [F]

Study the Soil.

THERE are many substances in all good soils which every farmer ought to study till he fully understands their nature and properties. First among these is the abundant mineral called *silica*, or pure flint sand. This earth has many interesting and important properties. It is usually found from ten to fifteen times more abundant in all soils than any other mineral. After the organized matter is removed from a soil by burning it at a red heat, it is not uncommon to find nine-tenths of the earth that remains, nothing but pure silica; the other tenth being alumina, iron, lime, magnesia, soda, potash, manganese, and carbonic, sulphuric, phosphoric, and hydrochloric acids. Pure siliceous sand is also an *acid*, having 52 parts of oxygen united to 48 of a metallic base called *silicium* or *silicon*. When ground down to an impalpable powder, (as some of it is in all soils,) silica is sparingly soluble in water. If the water be warm like a summer shower, and especially if it contain a little potash or soda, or both in solution, silica dissolves easier and more abundantly. The quantity of dissolved flint that finds its way through the roots of wheat, corn, timothy, and other plants, into their stems, is

much larger than most grain and grass-growers are aware of. Wheat straw usually contains about 67 per cent. of this mineral in its ash.

The most interesting practical question in regard to silica or flint sand is the fact that, the alkalies potash or soda seem to be indispensable to convert it into an available food for the growth of plants. These alkalies exist more or less in the ashes or earthy portion of all plants. Being extremely soluble in sandy, pervious soils, they are apt to be leached out by tillage, and the land is rendered sterile, unless often laid down to grass, and renovated by the application of *wood ashes, salt, gypsum, and lime*, or their equivalents in stable manure.

Alumina is the next most abundant mineral usually found in all soils. Unlike silica, it has alkaline properties. Like potash, soda, lime, and magnesia, it is the *oxide* of a metal, i. e. a metal combined chemically with oxygen. The metal is called *aluminum*, of which there is about 53 parts to 47 oxygen in pure alumina. This earth combines chemically with the acid silica and forms the pure porcelain clay, from which translucent china ware is manufactured. Alum is a compound salt formed by the union of sulphuric acid (oil of vitriol) with alumina and potash. Alumina does not enter plants, and form a necessary constituent in their organization. Only traces of it have been found in their ashes. It exercises an important office, however, in all fertile soils by increasing their capacity to absorb and retain moisture and nutritive gasses about the roots of vegetables. A soil that contained no alumina would be radically defective. It gives adhesiveness and plasticity to all clays. Without it, the valuable salts of potash, soda, lime, iron, &c. would remain but a short time in the surface soil, and within the reach of plants. Phosphoric acid is often combined with alumina. Throwing the organic matter out of the account, and the eighty, or ninety specimens of soil analyzed in the laboratory of the writer within the last year, have contained on average from four to seven per cent. of this mineral.

The next most abundant substance in the soils of Western New York after silica and alumina, is *iron*. Like those just named, this metal is combined with oxygen forming the red rust of iron. This is called in the language of chemists the "*per-oxide of iron*." When a bar of iron is heated in a blacksmith's forge and hammered, the thin scales that fly off are called the *prot-oxide of iron*. The difference between these black scales and the rust of iron is that the latter contains about a third more oxygen than the former.* When the oxide of iron unites with the oil of vitriol, it forms the well known salt called *copperas*, (sulphate of iron.)

Iron is found among the incombustible elements of all, or nearly all plants and animals.— Thus iron is found in the blood of all red blooded animals, and of course must exist in their food. This metal exerts a powerful, but not very well understood function in the economy of vegetable and animal life. It is believed by Mr. DOWNING of the Horticulturist, to be a specific against the "yellows" in fruit trees. Copperas water has been thrown with a syringe over the leaves of pear and peach trees thus affected, and it is said with entire success. The application of old iron about pear and other fruit trees, is strongly recommended. We have found from two to six per cent. of the oxide of iron in the soils that we have analyzed. In low land, there is apt to be an excess of copperas, and other salts of iron. Thorough draining is the remedy for this. In dry uplands, it is possible that old and long cultivated fields may lack salts of iron. Very few experiments have been made to test the value of this mineral as a fertilizer for grain crops.

Lime is the next most abundant ingredient in the soils of this region. It is very seldom that we find more than 2½ per cent. of this alkaline earth in any soil. There are exceptions, however, where the proportion of lime increases till it amounts to a calcareous marl.

In 100 lbs. of pure common lime-stone, irrespective of water, there are within a small fraction 56 lbs. caustic lime united to 44 lbs. of carbonic acid. This acid is expelled in burning lime in kilns. On long exposure to the air, quick lime absorbs both moisture and carbonic acid, and becomes a mild carbonate, such as is found in soils.

It is an interesting fact that soils which overlie a lime-stone rock, and that pretty near the surface, are often greatly benefited for producing wheat by a top dressing of burnt lime of 50 bushels per acre. Judge PORTER, of Niagara Falls, has tried this practice on a large scale, where the lime rock was within two feet of the top of the ground. It was followed by a marked improvement in his wheat crop. On Gen. HAR-

* *Prot-oxide of iron* is formed by the union of an atom of iron with an atom of oxygen. The *per-oxide* by the union of 2 atoms of iron with 3 of oxygen.

MON's farm the application of lime seems to do little or no good. If our memory serves us rightly it contains on an average less than 2 per cent. of lime in its surface soil. Gypsum, however, (which is formed by the union of lime with oil of vitriol) is of essential service. Pure quick lime is formed by the union of 20½ parts of a metal called *calcium* with 8 parts of oxygen. The most valuable compounds of lime are gypsum and apatite, (bone earth.) The former is a compound of *sulphur* and lime, and the latter of *phosphorus*. Both of these simple elementary bodies are of vital importance in the growth of cultivated plants, and the organization of all animals. Combined with oxygen they form strong mineral acids, which are neutralized by readily uniting with iron, alumina, lime, potash, soda, and magnesia, in soils. Practical farmers have too long neglected to study the economic value of the various compounds of sulphur and phosphorus. Gypsum is the only mineral, the importance of which is at all appreciated. Its superiority over lime consists in the fact that it furnishes clover, peas, wheat, and all other plants, sulphur as well as lime. A moment's reflection is sufficient to convince any farmer that no animal can form its bones without lime. And if his soil wholly lacks this mineral, his crops can not possibly create it out of nothing. Nor could an ox or horse have a particle of bone in its system if its food contained no lime. But lime alone is not capable of forming bone. *Phosphoric acid* is indispensable for that purpose, associated with lime. Nearly all that is taken from the soil in the kernels of grain, is removed *never* to return. A great deal of the phosphorus that escapes from the bodies of animals in their liquid and solid excretions, is lost to the fields that yield the daily food of these animals. And yet pure phosphorus is so precious, that a pound of it is worth to-day three dollars in the city of Rochester!

It is not book-farmers, but practical agriculturists in Holland and Belgium that make money by giving two pounds sterling for the urine of a single cow a year. They estimate the surface by the square yard which it takes to make a pound of beef, butter, or cheese. They feed their living growing plants, as well as their living growing animals. Wheat is now worth in this city \$1,50 a bushel, and yet not one farmer in ten can afford to study, or let his sons study, the things that nature uses in forming 40 bushels of wheat on an acre! Who cares whether the straw or stems of this plant are hard, bright, strong, and glassy, little liable to rust, or crinkle, by reason of its containing a good deal of *silica* in its tissues? Science tells the wheat grower how to dissolve fine atoms of sand at the roots of his grain, and avoid the growth of coarse, open, weak, and spongy stems, which will break down with an ordinary shower and wind, and form a nidus for the seeds and rapid maturity of parasite

plants. Study the soil and learn how to dissolve flint, and form with it a covering to the stems of your wheat and other grain.

Study the soil and understand the true value of alumina, iron, lime, potash, soda, magnesia, sulphur, phosphorus, carbon, nitrogen, oxygen, and hydrogen. These are the ingredients that Providence has ordained to form the bodies of all that lives, whether vegetable or animal.

In a future number we shall resume the consideration of this subject.

Draining Lands.

THE Mark Lane Express of a late date contains a long bill now pending before the British Parliament, designed to secure the well known advantages of perfect drainage to all the tillable lands in the kingdom that need it. We allude to this subject because we happen to know that there are many thousands of acres in this State, whose productiveness would be largely increased by the removal of surplus water. We speak not of swamps, but of improved lands now in tillage. It is a curious fact in the history of British husbandry, that 100 years experience in draining has been necessary fully to impress on the public mind the necessity of removing all standing water that rises nearer than three feet to the surface of the ground, whether in pasture, meadow, or corn. It often happens in this State, and particularly in the western portion of it, as well as in England, that where streams are very level, one farmer cannot drain his low lands without deepening the channel of the stream on the lands of others below him. To attempt this, as our laws now are, and those of England are at this time, is impossible without trespass. Besides this, it is unreasonable to expect one land holder to drain two, three, or ten farms, on a common level of low land, for the sake of making his vastly more productive and healthful. To say nothing of greater fertility, the increased salubrity of the neighborhood is of itself matter of sufficient importance to require the interposition of law. The English bill before us creates a Board of Commissioners, whose office is not unlike that of our road Commissioners in laying out highways for the public convenience through improved farms. Where the natural fall is insufficient to take off the stagnant water, steam power will be used to pump it out into rivers or the ocean. Mr. COLMAN describes one large engine that effectually drains 20,000 acres of waste moor land, which now gives constant employment to 5000 laborers in its tillage.

Monroe county has 281,011 acres of improved land. More than ten thousand acres of this needs draining. The erection of a dam by the State across the Genesee river, on the very rim of the basin of the Genesee Valley, has driven the water back, not over the surface, but *too near the*

surface of several thousand acres of as good land as the sun shines upon. That this results in creating much miasma, sickness, and premature death, no one doubts.

Surely, if human life and health are worth anything, the wrong is one of fearful magnitude. To impart a free draft to the water that falls on the broad level surface above the Rapids, instead of building a dam across the river at that point, the highest edges of rocks should be blasted and dug out, that the fertile lands above might escape their present injury from standing, stagnant water.

With skillful culture, and a reasonable price for grain and other crops, these extensive bottoms would yield as much nett profit as is now realized from all the water power in this city.— Rely upon it, the amount of injury that annually accrues in this county alone, from *under-surface* water that remains too long below the soil, is not one-tenth part appreciated. This excess of moisture rises by capillary attraction, and arrests the salutary decomposition of the organic and mineral substances, on which all cultivated plants depend for their due nourishment. The constant evaporation of this water, as every body knows, consumes much sensible heat, and keeps the ground cold and unproductive. Experience, (the true test,) has demonstrated that, the grass and herbage which grows on half drained land in England, will not make so much nor so good butter and cheese, as may be obtained from the same surface, after thorough draining. An acid soil and sour plants are not the things on which to make fat beef and mutton. Many a farmer knows this. Considering how much we all depend on the prosperity of agriculture, it is a standing mystery to us that so little is done to improve the soil in New York. Think of it, in more than two-thirds of the towns in the Empire State, our rural population is *diminishing!* In no part of the world is the science of agriculture more cordially and generally despised. It is now 26 years since Judge Buel began his efforts in the Legislature to induce it to establish at least one agricultural school. These have been kept up from that day to this. A report was made a few days since by a committee in the House, *against* an application to aid a little in starting a school of this kind near the city of New York, under the charge of the American Institute. This report seems to imply that to give a few dollars for an agricultural school, is not merely a waste of money; but an intimation that both the soil and its cultivators can be improved in the State of New York! Thousands believe this a libel on their skill and intelligence.

Assuming that the laws of nature which control the production of cultivated plants are sufficiently understood by the tillers of the earth, farmers in the Legislature are ready to vote tens of thousands a year to teach young men "to speak Greek, as natural as

pigs do squeak," as the following statutes show :

By act chapt. 237, passed April 17, 1833, \$6,000 annually was appropriated to Geneva College, and the same sum to the University of New York, and \$3,000 to Hamilton College, to be paid for five years 'until otherwise provided by law,' which has been, it appears, paid to this time, amounting in 9 years to.....	\$135,000
By act chapt. 297, passed May 14, 1849, the Comptroller was directed to discharge a certain judgment obtained against the University of New York for a large quantity of cut stone furnished at the Sing Sing States Prison, for that Institution, amounting to.....	9,860
By act chapt. 231, passed May 25, 1841, \$5,000 per annum was appropriated to Geneva College for three years.....	15,000
By act chapt. 279, passed May 6, 1844, \$1,000 annually was appropriated to Geneva College, and \$3,000 annually to University of New York, for three years, 'and until otherwise provided by law,' which has been paid to this time, amounting to.....	12,000
Making actual sum received.....	\$171,860
Besides this Geneva College and the University of New York are yet entitled by law, to \$4,000 per annum for two years.....	8,000

Making the amount appropriated,.....\$179,860

The new medical school in Buffalo has received a bonus from the Treasury, of \$1,000. We do not complain of any of these appropriations. They are alluded to merely to demonstrate the fact that, the idea of gaining anything from the study of agricultural chemistry, geology, and physiology is treated as utterly preposterous.

But to return to our text, the draining of lands. We confess our anxiety to see this subject command far more attention in this country than it has ever yet received. No soil can be warm and fertile that contains too much water. Nor can it be easily worked with the plow, or other implement. The English have been constantly sinking their ditches deeper and deeper for 20 years, because drains 3½ and 4 feet deep give crops enough to pay, and more than pay the extra cost. A deep soil, pervious alike to air, water, and the roots of plants, is uniformly found to be the best land to produce, and the easiest to cultivate.

“The Distribution of the Inorganic Matter in Vegetables.”

UNDER the above heading the American Journal of Agriculture and Science for April contains a paper of 29 pages, which gives the results of a vast amount of analytical research. Prof. EMMONS has been some years in the employ of the State in connection with its voluminous and original work, embracing the whole range of the natural history of New York. That part of this very expensive undertaking which relates to agriculture and rural economy, will be of incalculable value for the many new facts developed, showing the mineral food of our fruit and forest trees, as well as annual and biennial plants. Let us first consider the ash of the Apple tree :

	Sap wood.	Heart wood.
Potash,.....	16.19	6.620
Soda,.....	3.11	7.935
Chloride of sodium,.....	0.42	0.210

Sulphate of lime,.....	0.05	0.526
Phosphate of peroxide iron,....	0.80	0.500
Phosphate of lime,.....	17.50	5.210
Phosphate of magnesia,.....	0.20	0.190
Carbonic acid,.....	29.10	36.275
Lime,.....	13.63	37.019
Magnesia,.....	3.40	6.900
Silica,.....	0.85	0.400
Soluble silica,.....	0.80	0.300
Organic matter,.....	4.60	2.450
	100.65	98.535
		<i>Bark of trunk.</i>
Potash,.....		4.930
Soda,.....		3.285
Chloride of sodium,.....		0.540
Sulphate of lime,.....		0.637
Phosphate of peroxide iron,....		0.375
Phosphate of lime,.....		2.425
Phosphate of magnesia,.....		
Carbonic acid,.....		44.830
Lime,.....		51.578
Magnesia,.....		0.150
Silica,.....		0.200
Soluble silica,.....		0.400
Organic matter,.....		2.100
		109.450

On studying the composition of the ash of the bark of the apple tree, we are forcibly struck with the fact that 109½ parts contain over 96 parts of lime and carbonic acid. In other words a very large share of the earthy elements taken from the soil, and stored in the bark of an apple tree, is nothing but common lime stone. The importance of lime in the organization of smooth healthy bark, and the vigorous growth of an orchard, can be inferred with the utmost certainty. There are other minerals in the ash of the bark of the apple tree that should not be overlooked. But as we are pressed for room, we must pass to the ingredients found in the ash of the sap and heart wood.

We ask particular attention to the facts that, the sap wood contains 17½ parts of bone earth, (phosphate of lime,) while the heart wood has only 5½ per cent. of that mineral. It has long been known that the seeds and fruit of plants and trees contain a much larger quantity of phosphates in their ash, than is found in the ash of their trunks or stems. But if we mistake not, to Prof. EMMONS belongs the honor of being the first to discover the curious law in vegetable physiology that the *sap wood*, through which all the fluids pass from the roots to the seeds and fruit in the top of the tree, contains more of the phosphates than either the heart wood or bark of a tree. If Nature is prolific in the production of seed to perpetuate the race, and exceedingly careful in protecting the germs of the next generation, she is at no less pains to store up phosphates along the surfaces of the ascending tubes or vessels, to be borne upward with the sap, when needed, to organize the embryo of each living being.

By carrying the fruit of an orchard out of it every year, is it not plain that whatever amount of bone earth, alkalies, sulphur, iron, &c., is taken away from the soil in the crop, should be restored to it again in some available form?—

How few fruit growers duly appreciate this cardinal principle.

Ash of a Fungus, (Boletus ignavus,) growing on an Apple-tree.—The inside of the fungus is soft and corky; the outside is hard and unyielding. The difference in texture led to a separation of the fungus into two parts.

	Outside.	Inside.
Potash,	21.25	15.36
Soda,	4.29	4.00
Chlorine,	1.58	0.80
Sodium,	1.04	0.52
Sulphuric acid,	2.58	2.30
Phosphate of peroxide iron, }	12.20	18.11
Phosphate of lime, }		
Phosphate of magnesia, }		
Carbonic acid,	14.39	10.80
Lime,	20.31	2.13
Magnesia,	0.60	0.20
Silica,	3.30	3.30
Soluble silica,	0.20	0.70
Organic matter,	11.20	16.50
	92.94	90.45

The injury which fruit trees sustain by fungi and lichens growing upon them, is evident from their analyses. The nutriment is all derived from the bark and wood of the tree; and besides, these parasites produce and hasten the decay of the tree.

Ash of a Lichen, (Gyrophora vellea,) growing upon gneiss, at Little-Falls.

	Lichen.
Potash,	8.850
Soda,	2.588
Chlorine,	2.938
Sulphuric acid,	2.738
Phosphate of peroxide iron,	10.937
Phosphate of lime and magnesia,	10.188
Carbonic acid,	2.667
Lime,	2.926
Magnesia,	0.380
Silica,	44.000
Soluble silica,	1.000
Organic matter,	9.250
	98.094

Several years since, seeing a lichen growing on a gneiss boulder, we tore it off, dried, pulverized, and moistened it with pure rain water, and planted timothy seed in it. The moss was placed in a coffee cup. The crop was duly watered with rain water caught in a clean vessel as it fell from the clouds. The timothy came to maturity in due time, and was dried, pulverized and added to the decaying moss, in which it grew. Two kernels of peas were planted in the compound, and made to bear seed. From these seeds human flesh could easily have been formed. Here was only three generations of plants intervening between a naked, solid, flinty rock, and a living human being.

Who will disparage the study of rocks, soils, and lichens, seeing as we do that they have a relation so intimately blended with our daily food and clothing?

The True Law of Population.

SOME new ideas on population have been broached by Mr. Doubleday, in a publication lately made by him entitled "The True Law of Population." This law of population, he endeavors to show, is connected with and depends upon the nature of the food of the people. Mr. Doubleday says "his theory is founded on the

admissions of all medical and physiological authorities of modern times, and supported by many of ancient times, and is corroborated by an appeal to living generations." He affirms that "populations are uniformly found thin in pastoral countries, where the food is animal food chiefly; denser, where it is mixed partially with vegetable element; denser still, where it is vegetable only, but with plenty; and densest of all where it is vegetable, but with scarcity super-added."

The examples which the author quotes from the history and condition of the world go far toward establishing his theory. If he be correct, the true remedy for excessive numbers, is not emigration, but plentiful and nutritious food.—He divides society into three classes—"the worst dieted, the moderately dieted, and the luxuriously dieted;" and observes "that it is upon the numerical proportion which these three states bear to each other in any society, that increase or decrease on the whole depends." Mr. Doubleday's argument derives considerable support from the decay of opulent families, and their rapid extinction. We have abundant evidence of this at various epochs, and in different countries.

Tacitus gives us one instance in the reign of the Emperor Claudius. If we turn to England we shall find that, but for comparatively new creations, both the peerage and baronetage of England would have been extinct. The number of English peers in 1837 was 350, of which 247 had been created since 1760. The decay of the baronets had been more remarkable still. So that if no new peers had been created since 1670 the present number would have been only 103, and but for perpetual new creations there would scarcely have been a baronet left. Mr. Malthus noticed a similar decay in the higher and wealthier families of Berne, in Switzerland; and Mr. Sadler cited Addison's authority to prove the extraordinary decrease of the Venetian nobility.

If Mr. Doubleday's theory be true, and it be a law of nature that the worst dieted people shall become the most numerous, then pauper relief to Ireland, in the shape of poor food, will only aggravate the evil. The effectual remedy is to give the Irish people a sufficiency of animal food; Irish produce must be consumed in Ireland instead of being exported. The standard of living must be raised; but it will not be raised by the introduction of the poor laws, and feeding the hungry crowds with poor-house food. This will only aggravate the evil through each successive generation. Mr. D.'s book is deserving the serious consideration of political economists and statesmen.

RATS.—A red herring firmly fastened by a string to any place where rats usually make their run, will make them leave the place. It is said to be a fact that a toad placed in a house cellar will have the effect of expelling the intruders.

The Farmer.---His Position, Responsibilities, and Duties.

NUMBER EIGHT.

PATIENCE and perseverance are cardinal virtues, and indispensable in enterprises of difficulty. No great good was ever yet accomplished, no important work completed without their exercise. It is the continued effort, the unceasing labor, that, in the end succeeds—it is the shovel full of earth oft repeated, that by and by removes the mountain. The principle is equally applicable in moral as in physical effects; patient investigation and persevering experiment are the great levers in the advance of science; and it is by the oft repeated and long continued presentation of truth, that men are brought to adopt and follow moral precepts as well as the truthful results of science.

In view of these general truths I would bid the farmer who is praying for the elevation of his calling, to be of good cheer. The work is progressing, the end will come, so surely as the few choice and truthful spirits who are engaged in the work faint not, nor falter in their slow but steady march. Patience and perseverance will overcome every obstacle, and triumph over all difficulties. Months nor years are not enough for the great work. The progressive movement requires a series of years; nor must we anticipate a smooth and easy march. No; the ascent must be accomplished amid storms and trials—but if amid them all we keep the eye heavenward, and if, like the poet's mountain hero, we keep upon our lips the inspiring word "excelsior," depend upon it we shall in the end reach the mountain top, and find the great and ever-growing interest, the profession which embraces the mighty mass of the people of this country—in other words, find the farmers and the farming interest elevated to its true position, at the head and above every other class or interest in this land, in point of political influence, and moral, intellectual, scientific, advancement.

In such a position ought the farmers to stand. From their bosom should emanate our statesmen, our judges, our professors, our scholars—and so it will be, in this land, before another half century. Look at the great inheritance which the God of heaven has given to this people—look at her boundless territory, her broad and cultivated fields, and her boundless forests, yet untouched in all their virgin purity and richness, and then calculate their capacity for agricultural production—their limitless power to grow food for man and beast—then turn from the broad acres to the political institutions, which spread their genial and invigorating influence over the whole of land, and lake, and river, which unite to make up the mighty Republic, and then tell me if there be not a high and glorious destiny in reserve for the

agriculturists of the United States. Ancient nor modern times afford no parallel to the position and destiny which awaits the farmers of America, as a class, if they are true to themselves—if to their natural advantages of soil, territory, and institutions, they add that higher ingredient, intellectual superiority. And how, I ask, is that to be done, but by intellectual culture, mental training and discipline? Let me here repeat the adage, "knowledge is power;" few will controvert this. But knowledge is not intuitive—it does not come unbidden—it does not bless unasked; it will be wooed if it would be won—it must be sought after if it be obtained. But how is it to be had, unless these means and advantages at hand for the attainment of the end, Education, can only be had through certain channels or agencies—and it is idle to expect the result by intellectual superiority, without a *supply and use* of the means adequate to produce it. Yet here is another and important difficulty which meets us at this point, and that is the *disposition to use* the means which, to a limited extent at least, are now open to the farmers of the country, and which may be hereafter opened to them. The first point to be aimed at, in my view, is, to convince the agriculturist that intellectual culture, scientific attainment, and mental polish, are essential to his standing individually—to the elevation of his class, and to success in his calling; and when the farmers and the sons of farmers have reached that point—when they come to see and acknowledge the importance and necessity of becoming intelligent and scientific men and farmers, they will then soon set themselves about providing the necessary facilities to reach the desired end.

There are various means of intellectual culture in the general sense. The school, the lecture, the newspaper, the debating society, and various other associations and means, are all general instrumentalities for the mental culture of the masses in this country, and these the farmers of the country may use. Give them but the desire, and these means may, by the proper direction and changes, be made beneficial to the farmers as a class; and so they will be whenever the farmers of the country demand and insist upon, and patronize agricultural schools, and lectures, and papers, etc., etc.

Patience and perseverance are required on the part of the few, to bring the great mass to appreciate the importance of the intellectual part of farming. Gradually but surely the work is being done. The last ten years has wrought a great change in the views and feelings of farmers on the points indicated, and the next ten years will witness yet greater changes. The Legislature of the State begins to feel the impulse, and this I look upon as an important fact and the beginning of better days. A bill has been reported for the establishment of an Agricultural and Me-

chanical School, upon what principle I am ignorant; but the fact itself is instructive of public sentiment, and should be hailed as a good omen. The time is at hand when the Empire State, and other agricultural States, are to have their Agricultural Schools and Colleges, and when our sons *will study and learn as a part of their education* the theory of tilling the soil—the time and correct principle for plowing, and sowing, and gathering in the productions of mother earth; and from these higher schools shall go out a wave which, in the end, will reach the remotest district school house in the Union. I think I clearly see the future; and seeing it, I can confidentially bid the farmers of America be of good cheer—the elements of progress are with them—the principle of advance has been planted in their midst, and it cannot be choked.

Next month I will continue this subject with a more particular notice of the influence of newspapers to agricultural interests.

Penn Yan, April, 1847.

D. A. OGDEN.

Winter-killed Wheat. --- Draining.

MR. EDITOR:—Foremost among the various farm crops produced in Western New York in importance to the agriculturist, man of commerce, and the consumer, stands the Wheat Crop. Whatever affects that, for evil or for good, affects the temporal well being of all in the community. Among the many calamities which cause a failure of this crop none equals what is usually denominated winter-killing. The past season, up to the present time, has been estimated by most farmers to have been one of our worst—and serious apprehensions may very justly be entertained that extensive damage will be sustained from this cause. However, in this town the last three favorable days have dispelled most of the fears of our farmers in relation to it here, as the sudden greenness it has assumed shows that it has not been much damaged.

But the cause, and the cure, of this calamity is a matter of more importance to know, than any speculations in relation to the extent of damage done to the present crop. Both, to my apprehension, are easily understood. The cause is the superabundance of surface water in the soil; and the cure, to provide means, either by a thorough system of underdraining, or some other method to draw it off so as to lay the young plants dry and warm.

It is a common remark which all practical farmers make, that the longer they plow and work their land, the heavier and more retentive of moisture it becomes; this explains the reason why, in numerous localities the land is so much more liable to heave, than when the country was new; then, the sub-soil being more permeable the water percolated through it, acting as a natural conduit; now, it stands upon the surface, or

fills the earth like a sponge, till it is evaporated by the sun and winds.

What are usually denominated timber lands, are the most liable to damage from this cause.— This description of lands have usually a retentive sub-soil, particularly where you find it to consist in alternate ridges and black ash swales; the ridges are esteemed the best wheat lands because they are dryer, but if the superabundance of moisture were drawn off the swales would be the best, as they have been enriched by receiving the fertilizing elements from the high ground for ages, and therefore must contain all the grain forming elements in the greatest abundance.— But these are the lands which are most liable to damage by winter-killing.

We have on one of our best fields for wheat growing a swale, or basin, containing about 1½ acres of this description of land, which, for one or two crops after it was brought under cultivation produced wheat well; but afterwards utterly failed, for many years not producing enough to pay the expense of harvesting. Three years ago we put in some underdrains, sowing it to wheat in the fall; the crop was much the best part of the field. We have it now in wheat, and it has gone through the winter with less apparent damage than many other parts of the field. The first crop paid all the expenses of putting in the ditches; they have not only rendered it permanently valuable wheat land, but improved it in nearly an equal degree for all other crops.

If a thorough system of draining were adopted, it would add many millions of bushels of wheat to the annual product of this State. However rich the soil in all other necessary elements, if there be a superabundance of surface water, it will be ruinous to the crop. It is this, more than all her scientific manuring, that has so immensely increased the production of wheat in Great Britain, during the last quarter of a century. By its aid many millions of bushels of wheat have been added to the annual product of that island, from lands which forty years ago were esteemed only fit for growing oats and other spring grains.

But the question will naturally be asked, Will it pay the expense? In very many cases, perhaps most, it certainly would. If our farmers could buy good wheat lands for thirty dollars an acre, they would consider it cheap; now, if they can cause that they already possess, which will not now produce wheat, to yield them from twenty to thirty bushels per acre, would it not well pay a pretty large outlay to attain so desirable an end—especially when it is remembered that it would make the land more valuable for other crops?

It is not the object of your correspondent to point out how this is to be done, but to call the attention of our farmers to this subject, which is one of very great importance to the agricultural

interest in this State. Who will make an experiment on a sufficiently large scale to test its expense and its utility? Whoever will do this, will earn the title of a benefactor to his country; and, if successful, will be sure to have abundance of followers, as our farmers are not such dolts as to refuse to do what they plainly perceive to be for their interest. W. S.

Wheatland, April 7, 1847.

On Growing Corn.

MR. EDITOR:—In looking over the pages of your valuable paper from month to month, as they are issued from the press, I am led to the conclusion that agricultural pursuits are, at the present day, assuming an honorable place among the professions of the age in which we live; and that the friends of this calling are, or should be, considered one great brotherhood, each endeavoring to contribute something to the fountain of knowledge that already exists, at least to some extent. And we believe the tiller of the soil at no very distant day is destined to stand (if not first) among the most honorable of his age, and his profession will hold a conspicuous place among an enlightened and happy "American" people.

The department of husbandry to which I shall allude, at present, is that of growing corn. This crop is now becoming a very important one to the American farmer, and particularly so to those living in the Western States—and we who live in Western New York are not a little interested in the crop, as it will yield us a fair reward for our labor, provided the labor be judiciously applied. And who does not feel an abundant assurance that a ready market is found in Ireland and in various parts of Europe, for all kinds of grain that may be converted into bread? How long this state of things may remain is yet veiled in the future; it will however remain for years unquestionably.

By adopting the following method I have been more successful in growing corn than any other that has come under my personal observation.

In preparing the ground spread on a very liberal coat of manure before plowing; that taken from the cow stable is preferable on my land, (a gravelly soil.) Deep plowing will produce a greater growth in the latter part of the season, though the corn may not start quite as soon in the early part of summer. Cultivate or drag the ground with the furrows, that the grass may remain under.

Mark the ground three feet each way. Deep marking I have not found as good as light.—Sometimes soaking seed will facilitate its growth, though generally I choose to plant my seed dry.

As soon as your corn is up so you can see the rows, start a cultivator—go through each way—take the weeds and grass from the hill, and give the corn a light earthing. When you have got

through this process, put on your plaster. The remaining team work for the season should be done with the plow, in order to bring up the soil to the rays of the sun, and also within reach of the fibres of corn that are despatched in every direction from the hill to secure nutriment for the stalk. Before hoeing the last time a liberal quantity of wood ashes should be applied to each hill. The plaster will produce a good growth of stalks—the ashes will greatly increase the number of ears and add to the length and filling out of the same.

I have tried manuring in the hill, but in dry seasons it will not do as well. I have also tried putting lime, ashes, and plaster in the hill, then dropping the seed on that and covering it in that way—but with no very good success.

Locke, March, 1847.

J. D. C.

Fences.

MR. EDITOR:—Your correspondent MR. MANLY has been treating the readers of the Farmer with an essay on the subject of the situation the country is exposed to in the want of rail timber and cheap fences—a matter which, in my opinion, requires more attention than is generally bestowed upon it. I have also something to say about fences, and, with your permission, will give my opinion and observations.

Stone fences are not to be sneezed at, especially by western farmers who have no stone to construct them with—for there is none more durable or more safe, and I hold that a good fence on a farm is better than opium to make the owner sleep at night. He feels safe that he shall not wake up and find a whole drove of horses, cattle, sheep, and hogs, holding festival in his corn and wheat fields.

There are many who would be astonished to learn with what slim and contemptible means, what mere chips and shivers of stone, a good and lasting fence can be made. Let me enlighten you, dear reader. In the first place, in the line of your fence, sink and embed all the large boulders and ugly shaped hard heads firmly in the earth; then fill up the vacancies between with the next worst ones, till you form a pretty uniform course. Then commence with the small ones, even if it takes three or four to make the width, and constantly interpose headers of white cedar, chestnut, or oak; if no larger in diameter than your two fingers, they will answer. Build it quite *buttering*, as the masons say,—30 inches to 3 feet at the bottom, and at 4½ feet high, 1 foot. Now the next requisite to make the wall stand, and it is impervious, is to save and select from your materials a sufficient quantity to cap the whole. They should be a cleverly large size, considerably larger than a piece of chalk; in short they should either be a foot long, so as to reach across, or one foot wide, and the longer

the better. If not as flat as is desirable, chink and cobble up till they lay firm and secure.

Fences built of these light materials do not answer so well to set posts and increase their height by adding a couple of narrow boards, as the winds have too much power to disturb the structure.— But in those cases where stone enough cannot be found to build the entire fence a very pretty expedient is resorted to. At about 6 inches from the ground a sill of 3 by 4 scantling or other wood is laid into the wall, projecting beyond it about 3 inches at each end—far enough to make a 2 inch augur hole at the same angle as the wall, in which are fitted two stakes or rounds, with one or more yokes of 2 inch stuff, bored and fitted on, to lay on poles or rails—or another short rail may be fitted on the top of the fence, into which the stakes enter, and into which is morticed a post to nail board to. This makes a very secure and durable fence, even when the stone work is only two feet above the surface.

In your next number, if your readers will tolerate me, I will give you another yarn about Fences, being something of an itinerant and an old pedlar—but now old

FARMER TIM.

Monroe County, 1847.

Chess---Transmutation of Oats, &c.

HAVING seen in the March number of the Farmer, a case of apparent transmutation of wheat to chess, which many suppose impossible on account of the difference of species, I would like to call attention to the fact of the change of oats to rye, as given by the author of Vestiges of Creation, on the authority of Dr. LINDLEY in the (London) Gardner's Chronicle for August, 1844:

"When oats sown at the usual time are kept cropped down during the summer and autumn, and allowed to remain over winter, a thin crop of rye is the harvest presented at the close of the ensuing summer. This experiment has been tried repeatedly with but one result; invariably the *secale cereal* (rye) is the crop reaped, where the *avena sativa* (oat,) a recognized different species was sown. Now it will not satisfy a strict inquirer to be told that the seeds of the rye were latent in the ground, and only superseded the dead product of the oats; for if any such fact were in the case, why should the usurping grain be always rye."

Again, in the "Sequel to the Vestiges," page 78-9, the following is related:

"In 1843 the Rev. Lord Arthur Hervey sowed a handful of oats, treated them in the manner recommended, by continually stopping the flowering stems, and the produce in 1844 was for the most part, ears of a very slender barley, having much the appearance of rye, with a little wheat, and some oats."

It is also stated as a certain fact that in orchaceous plants, forms just as different as wheat, rye, oats, and barley have been proved by the most rigorous evidence, to be accidental variations of one common form, brought about no one knows how, but before our eyes, and rendered permanent by equally mysterious agency. Then, says reason, if they occur in these plants, why should they not also occur in corn plants? for it is not likely that such vagaries will be confined

to one little group in the vegetable kingdom; it is more rational to believe them a part of a general system of creation. How can we be sure that wheat, rye, oats, and barley, are not all accidental offshoots from unsuspected species? And this supposition having at least some appearances in its favor, we may safely suppose chess to be in the same class, which would account for its appearance in the case cited by your correspondent.

E. S. JOHNSON.

Penfield, March, 1847.

Eagle C Plow.

SOME competent person ought to write the history of the Plow. The study of its progressive mutations and improvements from the forked limb of a tree, used by the Romans, Arabs, and Mexicans, up to the "Eagle C Plow" manufactured and sold by Messrs. NOTT & ELLIOTT of this city, would be alike interesting and instructive. The Locomotive and the Railroad furnish no stronger evidence of the development of intellect, when compared with the strength and locomotion of the ancient wagon drawn by a cow and an ass yoked together, than is exhibited in the apparently perfect construction of the most useful implement ever placed in the hands of man.

There are several millions of acres annually plowed in this State; and a saving of one-tenth of the power of traction, by an improvement in the plow, will amount to hundreds of thousands in the pockets of New York farmers. The saving of horse and ox flesh is, however, only one item in the gain that accrues from a superior plow. The mellowing of the soil, and the killing of all pernicious weeds and plants, by covering them deep in the earth, are points in a good implement, the value of which can hardly be over-estimated.

We have seen a plow of the kind manufactured by Messrs. NOTT & ELLIOTT, go a half mile or more through the soil on the Hudson river flats between Albany and Troy, and doing fair work, with no one holding it—so perfect and easy does it run. This was at a trial of several plows by a committee of the State Agricultural Society.—The inventors of this improvement are Messrs. RUGGLES, NOURSE & MASON, Boston, who have had orders from the Emperor of Russia.—*Rochester American.*

TO GROW PEAS FREE FROM BUGS.—We are indebted to Mr. JOEL CHAFFEE, of Oswego county, for the following "remedy for buggy Peas":

"Put your peas in a vessel, and pour on sufficient boiling water to cover them. Stir them as quick as possible, for nearly a minute; then turn the peas into a basket that the water may drain off. Do this every year, and your peas will not be infested with bugs."

A Plea for the Birds.

NUMBER ONE.

I HAVE often thought, that if the affairs of earth were left to the will, or taste, of some, the world would soon be converted into a desert. Not a tree would be allowed to grow whose prospective value could not be estimated in dollars and cents, nor a bird permitted to live, that could offer a mark for the sportsman. "I love trees," said one, not long since, "but I want them in the woods where they belong;" while the parching rays of the summer's sun fell upon and around his dwelling, unmitigated by the shade of a single leaf; and the chilling blasts of winter, in turn, swept by, in all their freezing majesty. "What else are they good for?" asks another heartless piece of mortality, as he picks up the mangled object of his cruel sport.

"What else are they good for?" It is difficult to reason with one who neither sees nor acknowledges any rights but his own, nor any profits but those of the purse. "What else are they good for?" Deprive the world of its shades and its animation, and who that has the soul of a man, would not feel that it was no longer a fit residence for a social being?

"What else are they good for?" To those who are disposed to listen, I will say: It will be difficult to prove that any thing "has been made in vain." But as this may seem too general, it may be remarked, that the appropriate food of birds is seeds, berries, insects, &c. It has been calculated that a single pair of sparrows, during the time of rearing their young, consume over 2000 caterpillars in a single week. Allowing each pair of little birds to consume even half that number of insects of different kinds, and we see at once that millions of bugs, worms, moths, caterpillars, &c., are daily destroyed by the various tribes of the feathered race. Hence, whoever kills them, does an injury both to himself and to society.

Should it be said, "Few birds will eat caterpillars," it may be replied, "caterpillars do not always remain such, but are soon transformed into moths, butterflies, &c., and who does not know the havoc made among these by the birds! We know the difficulty of raising some kinds of fruit, vegetables, and (I might add) grain too.—We know, too, that this difficulty is much greater in some seasons than in others, on account of the multiplicity of insects. How much greater would it be if none were destroyed by the birds! Again: many of them feed on seeds as well as insects. After all that they destroy or consume, the farmer often experiences great difficulty in keeping down troublesome weeds; and how much greater would be his task, if none of the seeds were consumed by the birds!

"But," says one, "they eat also our fruit and

grain." Well, suppose they do; do they not pay us for it, in destroying foul seeds and insects? The truth is; we overlook the good they do, because we are not in the habit of observing, and think only of the injury, which is generally more imaginary than real; and hence, over-rated. Besides, who, that has a spark of benevolence, would grudge them a few grains, if it were only to witness the happiness they seem to enjoy? I would feed them, if I received only a song in return.

"But, what shall be said of hawks, crows, and blackbirds?" Hawks, being birds of prey, will not spare even our domestic fowls. Man has the right to protect his own; hence, he may destroy hawks in defence of his rights. The appropriate food of crows and blackbirds is bugs, worms, grubs, carion, &c. Every plowman well knows that these birds, if unmolested, will follow in the new-turned furrow and pick up the very bugs, grubs, beetles, &c., which are so destructive to our corn and potatoes. These birds, then, are really the friends of man. They are moreover, his scavengers, clearing the earth of foul, pestiferous matter, as well as of destructive insects.—It is true, the crow sometimes steals an egg, or a chicken, and perhaps a few hills of corn; but the former is merely incidental, being only occasional, and not necessarily any part of his appropriate work; and the latter can easily be prevented. It has long since become a proverb, "No crows, no corn;" and who does not know that in seasons when no crows are seen, our corn is often nearly destroyed by worms! It cannot be doubted, that the crow and the black-bird save to man ten-fold more than they destroy.

But the most bitter complaint is made against the "cherry-bird." Of this bird I know little, but I believe that, if the truth were known, even this little thief does more general good than individual injury, and that if he were left to himself, and the "cherry-man's" loss were made up to him by a tax on the public, the tiller of the soil would be profited by the arrangement.

I plead, then, for the birds. If need be, I will except birds of prey, which I leave to the disposal of those whose lot brings them into more immediate contact with them. But, for the robin, the swallow, the blue-bird, and the thousand other little warblers that come into our gardens and orchards to place themselves under our protection against birds of prey; that fill the air with the music of their notes;—for these I make my plea. "What are they good for?" If they were good for nothing, I would not betray them. I would love them for their music, for their beauty. I love to witness their little sports. I love them because they are happy, and because they show forth the benevolence of their Creator.

Fairport, March 9, 1847. H.

Good fences make good neighbors.

Disease in Grasses, &c.

MR. EDITOR:—In answer to "H. H.," upon the subject of "A new Disease in Grass," I would say that, from the investigations which I have made, I have come to the conclusion that it is the effect of early springs and late frosts. After the grass has formed a joint, the center of the stalk immediately above the joint is nearly in a watery or liquid state, in which condition it is easily congealed, and the more thrifty the grass the more easily injured. By examining the stalk, two or three days after it is frozen, there will be found a small black decayed spot in the center. I have known meadows benefited by feeding the grass down in the spring, so as to keep it from forming a joint until after the heavy late frosts; but as a general thing the "cure is worse than the wound"—especially if the season comes off warm and dry. D. C. B.

Persia, N. Y., March, 1847.

MR. EDITOR:—In the March number of your valuable paper, I noticed a request that some one would state the cause why the top of herds grass dies, and also sometimes the stem. From careful investigation of this subject for a number of years, I am firmly convinced that the cause is this:—A worm eats the stem, just above the upper joint. They are plain to be seen with a good microscope.

The first that I noticed of these worms was upon bent grass, some six or seven years ago, since which time they have multiplied remarkably fast. They work upon most kinds of grass, except *clover*. Some in this section have attributed this damage to frost; but it is not so.—There is a worm that works upon *Johnswort*, and in this section have mostly destroyed that pesty weed. These build their nests in the blossom, and by closing the petals destroy the plant.

There are two other kinds of worm that work upon *Canada thistle*—one in the stem and the other in the blossom—and where they both work they utterly destroy the thistle, as far as my observation has extended, which is by no means limited. There is yet another worm that works upon dock, and I most anxiously hope they will destroy it. The potato rot has, in my opinion, been caused by insects, but I have not found any thing to prevent it, still I hope to the present year.

The best thing that I ever tried to prevent the fire blight on pear trees, was to hang rusty iron on the body of the tree, and place cinders around the roots. I should be glad if individuals would take special pains to ascertain remedies to save our grasses and trees, and for you to publish the same in your valuable paper.

To destroy aphides I bore into the body of the tree and put in sulphur, and then close the hole with a plug.

I am now, and have been for some time past,

the constant reader of three agricultural papers, and should be glad to see them in the hands of every farmer—for I find something valuable in them all.

SOLOMON HOXIE.

Leonardsville, 4th month, 1847.

Diseases in Swine. --- Inquiry.

MR. EDITOR:—As your paper, the "Farmer," is a medium for the interchange of thought, as well as experience among farmers, I will venture to relate a little of mine the past winter, in regard to raising swine. I have practiced some fattening early pigs, as they make much sweeter eating, and I think I make my pork cheaper, than when I winter them over, as they can easily be made to weigh 300, or over, at eight or nine months old.

I have a choice blooded sow, that I have kept for breeding, which on the 20th Febuary last farrowed eleven pigs. I succeeded in raising eight for a time: after they became four or five weeks old, they began to die off strangely and suddenly, their necks swelling up, and their ears turning black or purple.

I lost all but two, and these were in the same state, with their ears turned black, when I took them immediately away from the sow, cut their ears off as far down as they were black, to start the blood, and shut them up by themselves, and have thus far succeeded in raising them. I have heard of two or three instances of the same kind. What the cause may be, or what will prevent it, I have not been able to learn, either from my own experience, or from others who have lost in the same way.

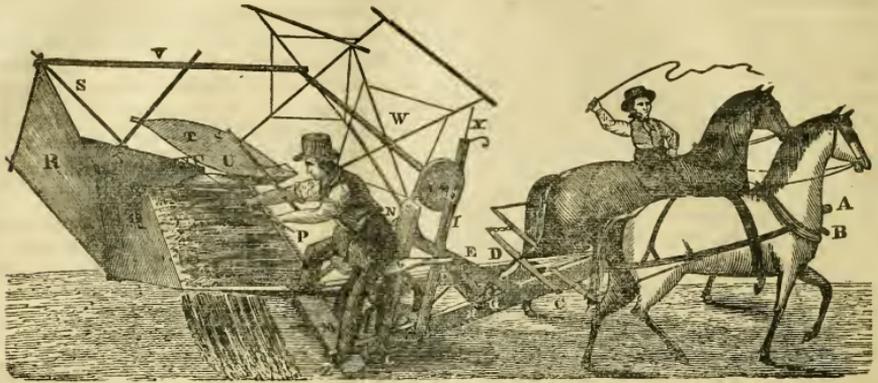
If there are any of your subscribers who can explain the cause, or give a remedy, it would oblige me, and perhaps benefit others.

Respectfully,

G. C. SPRAGUE.

Castile, April, 1847.

CULTIVATION OF CRANBERRIES ON UPLAND SOILS.—The attention of the public having been called to the culture of this delicious fruit, and Mr. Gardner, of Massachusetts, having produced three hundred and twenty bushels to the acre, on upland soil; I proceed to give his mode of cultivation as follows: "I select a piece of cold wet land that will keep moist through the year—remove the top soil to the depth of two inches; this prevents all grass or weeds from growing, and the plant will require no cultivation after they are set out. After the top was removed, I harrowed the ground smooth and marked it out in drills, eighteen inches apart. Some I set out on sods fourteen inches square, placed in holes a little below the surface. They all flourished far beyond my expectation: the first year they put forth runners three feet long, and every vine was loaded with fruit. The plants can be set out from September to December, and from April to the last of June."—*B. G. Boswell in Farmer's Cab.*



McCormick's Patent Reaper --- Improved.

HARVEST TIME is fast approaching, with a prospect of unusually high prices for grain.—This consideration (and the fact that the FARMER has now nearly double the number of readers than it had when we formerly noticed the machine,) induces us to again call attention to *McCormick's Reaper*. We are informed that Mr. McCORMICK has made such improvements in the Reaper as are found to greatly facilitate its operation—especially in the work of raking the cut grain from the platform. In a conversation with Mr. McC., a few weeks since, he informed us that he was manufacturing a large number of Reapers at Cincinnati, to supply the south-western country. He stated that the machines were being constructed in a superior manner, so that no fault should hereafter exist in that particular. The Reaper is also manufactured and sold by Messrs. SEYMOUR & Co., and BACKUS, FITCH & Co., of Brockport, in this county—and by H. E. SMITH, of Fowlersville, Livingston Co., N. Y. We are informed that it is also manufactured at Chicago, Illinois, where our western friends can probably obtain the machine—but we are unable to give name of the manufacturer at that place.

An examination of this Reaper, and the reliable testimonials we have seen from those who have thoroughly tested it, convince us that it will do good work in the hands of persons who understand ordinary machinery. We see by his advertisement, in the Cincinnati papers, that Mr. McC. offers the Reaper upon such terms that the purchaser has nothing to risk in making a trial of it. He sells it upon the condition that "it will cut one and a-half acres of wheat (or other small grain) per hour; that it will save an average of a bushel of wheat to the acre that would be lost by ordinary cradling; that it is well made, of good material, and durable, with proper care; and that the raking can be well done by a man riding upon it. If, upon a fair trial, the Reaper cannot perform as above spe-

cified," it is not to be kept or paid for. [The purchaser to pay \$20 down, and \$100 on the 1st day of November next, providing the Reaper performs as above—if not, to deliver safely when called upon, &c.]

A figure of the Reaper, as improved, is given above. Further information can be obtained from Mr. McCORMICK or either of the manufacturers. We give this notice for the information of grain-growing farmers, and in answer to inquiries recently received—without the knowledge or solicitation of any one interested in the manufacture or sale of the Reaper. M.

A GOOD CORN CULTIVATOR is considered indispensable by many farmers—and now that the demand for corn promises a good return for the expense of the crop, growers can well afford to purchase proper implements to aid in its culture. While examining, a few days since, various implements at the Plow Factory of our friend P. D. WRIGHT, (119 State st., in this city,) we noticed a Corn Cultivator of his invention and manufacture which appeared to be an excellent article. It is called the *Double-pointed spring-tooth Cultivator*, and is neat, cheap and durable.

Mr. W. exhibited the above Cultivator at our last County Fair, and was awarded the first premium. He also received the first premium on Plows, (for a Cayuga County Plow of his own manufacture.) We mention these matters for the information of farmers, and in justice to our worthy and modest friend WRIGHT. M.

AGRICULTURAL IMPLEMENTS.—It will be seen by reference to our advertising department that the Rochester Agricultural Ware-houses are well supplied with Farming Implements, Tools, &c. We observe that MESSRS. RAPALJE & BRIGGS, of the Genesee Seed Store and Ag. Ware house, have just received an extensive assortment of well made Plows, and a large variety of other seasonable implements. M.

Hints for June.

If your corn and potatoe planting is not finished, complete it immediately, as the unfavorable appearance of wheat and prospect of good prices renders it an important crop. Finish garden planting, beans, cucumbers, &c. Plant mangle wurtzels, or sugar beets for stock, the first week in this month, if not already done. Carrots should have been sown before, but will now answer if sown immediately. Ruta bagas may be sown from the 10th to 20th; if sown too early, they "neck up" and are woody.

Slather on the manure on all the hoed crops, if you have it; if not, buy of your improvident neighbor. It is the true philosopher's stone—turning all it touches to gold. Make up your compost heaps for summer fallows, with all the overplus and coarse straw and stalk manure; but use no lime, as it disinfects and disengages all the gasses of decomposition. Plaster and ashes are the thing; swamp and ditch mud, sods, urine, and water. Lime is beneficial to dry inert and over-rotted vegetable substances, used with them only.

"A bad May makes poor hay." Take care of overplus hay, as the present prospect in this region is unfavorable for even an average crop. Cut your clover hay early; and as soon as wilted in the sun, cock it and let it sweat from 2 to 4 days. Open to one hour's sun, and it is fit for the mow—the real pow-shong hyson—this is the only way to do it right.

Weed your wheat fields of cockle, and if not too abundant, of red root, &c., so that you may get the great prices that wheat will open at after harvest. Look out for about 12 shillings, or a *lITTLE* more.

Clean your orchards of every worm's nest; and, if necessary, take a missionary tour to your lax neighbor's orchard; for it is not only an act of charity, but of self defence.

Do up your high-way work honestly and faithfully, as you would your own—and don't be particular about hours and minutes. Go to election on the 7th inst., in this state; and don't let politics, printed tickets, nor the humbug of party discipline, influence your vote for judicial officers. Let the question be, "*Is he honest, is he capable; is he the best man to judge the land between rich and poor, high and low, innocent or criminal, man and man?*" Do all this, dear reader, and you can sleep o' nights, and defy the night-mare and hypocondria. *

CHOICE NEAT STOCK FOR SALE.—The reader's attention is invited to the advertisement of Mr. SHERWOOD, of Auburn, late President of the State Agricultural Society. Mr. S. has one of the largest and best collections of thorough bred Durhams in the State. The opportunity to purchase is well worthy the attention of breeders.

To Correspondents.

DURING the past month communications have been received from Alfred Marsh, Solomon Hoxie, Chas. H. Randall, Apis, A Subscriber, S. W. Jewett, J. Chaffee, Agricola, D. Lewis, A. H., J. C., Farmer Tim, Inquirer, and I. S.

ANSWERS TO CORRESPONDENTS.

WE have got so far in the rear in our attentions to obliging friends, and communications have so accumulated, that we hardly know where to begin—in fact we are all but *swamped*. B. P., J. D. C., A. R., A Farmer, L. Manly, J. L. R., W. S., O. P. Q., Cosmopolite, Plow Jogger, &c., are on file for publication. Further notices next month.

D. W. H., *Clifford, Pa.*, is referred to "*Morell's Sheep Husbandry*," a work that no wool grower should be without. The disease of grub in the head is a fatal one, and preventives are the only safety.

C. M., *Plymouth*. Your desire has been complied with. Corn ground with the cob is better food for all animals, except the fattening hog, than when ground alone. Corn meal alone is too heavy feed, and requires something besides mere nutriment to distend the stomach and render the food pervious to the gastric juice, and give irritability and action to the nervous organization.

Our opinion is that timber, for durability, should be cut at about that period when the leaf has arrived at its full size, as the gum, saccharine matter, &c., is then entirely exhausted.

Early in the spring, before the buds or sap have moved, is the best time to set the peach, cherry, &c. Apples, pears, and the hard-wooded trees, in autumn.

H. J., *Holland, N. Y.* We know of no way to kill the willow by cutting, if located in wet ground, except extirpation root and branch.—Most other wood is destroyed by cutting at that period, say August, when it is too late to start new buds for the future growth, and yet while the weather is warm enough to ferment and sour the sap, and destroy vitality.

M. B., *Romulus, N. Y.* "Youatt's Cattle Doctor" will give the information required. *

ANALYSIS OF SOIL.—The gentleman of West Bloomfield, who left with us specimens of soil from Oswego county for analysis, is informed that at the time of the making up of this number of the Farmer the analysis was not completed. We shall endeavor to give him a full account of its constituents and capabilities, either by letter or through this journal in its July number.

A GOOD word is an easy obligation; but not to speak ill, requires only our silence, and costs us nothing.

New York State Agricultural Society.

List of Premiums for 1847.

[Continued from page 119.]
Winter Meeting.

For the best new seedling variety of winter apples, of decidedly superior quality and valuable for exportation; one dozen specimens to be exhibited; together with a history of its origin; a description of the growth, character, and habits of the tree, and the growing of the fruit—such fruit to be adjudged by the committee as of the first character for orchard purposes, ... Downing's book, colored plates. For the second best do., \$5 and Down. com. edition.

The above new seedling variety to be sent to B. P. JOHNSON, Secretary, Agricultural Rooms, Albany, before the 15th of January, 1848, for examination. For the best new fall seedling apple for all purposes, conditions and descriptions as above, ... \$5 and Down. com. ed. Second best, 2 do.

These last named to be exhibited at the Annual Fair and Show of the Society in 1848.

Resolved, That a committee of — be appointed by the Executive Committee, who shall report at the next annual meeting a list of not exceeding 30 kinds of apples, which shall be in their opinion best adapted to the economical demands of the people of this state, and to be best suited to the different localities of the same, comprising their most extensive use in all seasons, for home consumption, and for exportation, the individual names of said fruits, a drawing of each separate kind, with a particular description thereof; and that in this connection they also take into consideration the several classes of fine fruits as adapted to the above purposes, and — dollars be appropriated as in the judgment of the Executive Committee shall be necessary to accomplish this object.

Committee.—Lewis F. Allen, Black Rock; A. J. Downing, Newburgh; Hon. Samuel Young, Ballston; Dr. H. Wendell, Albany; and J. W. Bissell, Rochester.

DISCRETIONARY PREMIUMS,

will be awarded for articles of merit exhibited by mechanics, in all the various branches—and it is hoped that a general exhibition will be made.

Plate will be substituted for money premiums in all cases at the option of competitor.

FIELD CROPS.—AT WINTER MEETING.

Best crop of wheat raised upon any farm, not less than two acres, to be harvested, threshed, and measured, \$15
Second best, \$10 | Third best, Vol. Trans.
Best crop of spring wheat, not less than two acres, to be harvested, &c., \$10
Second best, \$8 | Third best, Vol. Trans.
Best crop of Indian corn, not less than 2 acres, to be gathered, shelled, and weighed, between the 20th December and 5th January, \$20
Second best, \$15 | Third best, \$8
Best crop of barley, not less than 2 acres, to be harvested, &c., \$10
Second best, \$8 | Third best, Vol. Trans.
Best crop of rye, 2 acres, \$3
Second best, \$5 | Third best, Vol. Trans.
Best crop of oats, 2 acres, &c., \$10
Second best, \$8 | Third best, Vol. Trans.
Best crop of potatoes, not less than one acre, to be dug and measured, of a good table quality, \$10
Second best, \$8 | Third best, Trans.
Best crop of potatoes, as to quantity, not less than 1 acre, \$10
Second best, \$8 | Third best,
Best crop of ruta baga, not less than 1 acre, to be weighed, and 50 lbs. estimated as a bushel, \$10
Second best, \$8 | Third best, Trans.
Best crop of sugar beets, not less than half an acre, weight as above, \$8
Second best, \$5 | Third best, Trans.
Best crop carrots, half an acre, \$9
Second best, \$5 | Third best, Trans.
Best crop mangel wurtzel, half an acre, \$3
Second best, \$5 | Third best, Trans.
Best crop of peas, 1 acre, \$8
Second best, \$5 | Third best, Trans.
Best crop of beans, not less than 1 acre, \$8

Second best, \$5 | Third best, Trans.
Best acre of corn fodder, with a particular account of manner of cultivation and securing the crop, \$10
Best half acre of hops, with a full account of method of cultivating and preparing crop for market, \$10
Best half acre of flax, with like statements as above, 5
Best half acre of tobacco, do. do. 5
Best acre of broom corn, do. do. 5
Best acre of clover seed, do. do. 5
Best acre of timothy seed, do. do. 5

EXPERIMENTS.

Whereas, The Agricultural Society of the State of New York has not an experimental farm; and whereas, to some extent, satisfactory experiments can be made by intelligent farmers on their own farms, therefore

Resolved, That the undermentioned list of premiums be offered to induce public spirited individuals to lend their valuable aid in extending the boundaries of accurate rural knowledge.

Three premiums will be awarded of \$30, \$20, and \$10, in January, 1848, for the best experiment upon a herd of not less than 8 cows, to determine the relative advantages of soiling, or depasturing milch cows. The experiment to be conducted as follows:—

1st. The experiment must commence on the first day of May, and be continued until the first day of November.

2d. The cows to be divided in two lots of four each. One lot to be soiled, the other depastured. Be ore commencing the experiment, each lot must be weighed and the record of the weight returned to the committee. It is necessary that the two lots shall be as near alike in weight and milking properties as possible.

3d. The milk of each lot to be weighed separate daily.

4th. The manure made from those soiled to be ascertained in cords.

5th. An account to be kept of the expense of soiling, also detailed statements of the entire management, together with the measurement of the land occupied in soiling, and each to be returned to the committee.

6th. A description and measurement of the land occupied for pasture, also to be made.

7th. Each lot to be weighed at the conclusion of the experiment.

For the best experiment to be continued through three crops, to ascertain in bushels of grain and weight of stalks or straw, the actual value of manure to a farmer. The experiments to be conducted as follows, viz:—

1st. Three contiguous acres of ground shall be selected.

2d. One acre of which shall be manured with not more than ten cords of common barn yard manure the first year, and plowed under. The second acre to be manured with fermented or composted manure, to be applied in any manner the experimenter chooses; but a full account of the mode of making the compost, and the manner of its application, accompanied with a statement of the cost of making, and application, will be required.

3d. The three acres are to be planted with corn the first year, the second to be sowed with barley or oats; the third crop to be winter grain: an accurate account of the yield of each crop to be kept.

4th. A full account of the whole management and all the details respecting the culture and the circumstances affecting the crop.

5th. The several kinds of soil to be particularly described and specimens transmitted to the State Society for analysis before commencing the experiment—and also at the conclusion of the experiment—discriminating carefully between each acre.

For the best, .. \$40 | Second best, .. \$30 | Third best, .. \$20

N. B. The specimens of soil to be selected for analysis must be taken from the surface, in different parts of the acre. Where the acre is green sward, the sample must be taken just at the termination of the roots of the grass. Specimens should also be selected from the depth of seven or eight inches. At all events, immediately below the usual depth which the plow runs. The specimens of soil must in no case be mixed; and should consist of about 1 pound sewed in a cotton bag.

\$20 will be paid at the annual meeting of the society in 1848, to the person who will make the most satisfactory agricultural experiment, accuracy and the importance of the experiment to be taken into consideration. A full detail of the experiment and its results must accompany the application.

For the best managed entire flock of sheep of not less than 100, to be awarded at the annual meeting in 1848, ... \$30
 Second best, \$20 | Third best, \$10

The applicants for these premiums will be required to furnish the Society with the following information, viz:—

- 1st. The kind and quantity of food, and its value.
- 2d. The quantity and quality of wool—this to be determined by its being submitted to the stapling of some respectable manufacturing establishment, whose certificate shall accompany the application for the premium.
- 3d. The number of the increase.
- 4th. Kind of sheep, and the number of ewes, wethers, and bucks.
- 5th. The value of sheep when fattened, and the value of lambs for the butcher.

Competition from persons not residents of the State.

Premiums of Plate, Medals, and Diplomas, will be awarded on—

The best bull of any breed, 3 years old.

“ “ “ 2 “

On the best cow, 3 years old.

“ heifer, 2 “

“ “ 1 year old.

“ yoke of working oxen.

“ pair fat cattle.

“ stallion.

“ brood mare.

“ pair matched horses.

“ buck, long or middle woolled.

“ “ fine wool.

“ pen of Merino and Saxony ewes, not less than 5 each.

B. P. JOHNSON, Sec'y.

Any information desired by persons who intend to compete for premiums, will be furnished by the Secretary, on application, and he solicits free and full inquiries from all who are desirous of competing at the Fair, or of presenting articles for exhibition.

To Wool Growers.

NUMEROUS liberal minded persons, interested in the wool business, having placed funds at our disposal for the purpose hereinafter mentioned, we shall, on the first day of October next, award and pay the following premiums, viz :

Ten gold medals, worth ten dollars each, for the ten entire clips of most valuable fleeces for clothing purposes.

Ten gold medals, worth ten dollars each, for the ten entire clips of most valuable fleeces for combing or worsted purposes.

Ten premiums, of ten dollars each, for the ten best conditioned entire clips of Saxony wool.

Ten premiums, of same amount, for the ten best conditioned entire clips of Merino wool.

Ten premiums, of same amount, for the ten best conditioned entire clips of Merino grade wool.

Ten premiums, of same amount, for the ten best conditioned entire clips for combing fleeces.

All wool growers throughout the United States are invited to compete for them.

All bales of wool designed for our care should have the name of the owner or grower plainly written or printed on them in full, together with our address, as follows: PERKINS & BROWN, Springfield, Mass.

All lots of wool intended to compete for the premiums, should reach us by the first of August next. Growers may receive premiums, if their wool be put up and marked separately, even though their wool come through the merchant or

other wool dealer. Any farther contributions from wool growers, or other public spirited persons, will be expended in preparing the medals, publishing a report, and in additional premiums. All editors of periodicals throughout the United States, friendly to agricultural pursuits, are respectfully requested to publish.

PERKINS & BROWN.

Springfield, Mass., April, 1847.

LARGE PREMIUM FOR A SINGLE FLEECE.

To all enterprising Wool Growers throughout the United States, very respectfully:—Being desirous of improving my stock of sheep, and anxious to not diminish the quantity while improving the quality of the wool; and consequently wishing to ascertain where the really greatest producers of fine wool can be found, I cordially invite your attention to the following notice: I will deposit at the wool depot of PERKINS & BROWN, at Springfield, Massachusetts, a fleece of wool of one year's growth, to be shorn from a two year old ram, and with it fifty dollars, to be awarded as a premium to any wool grower who will send to said depot, by or before the first of ninth month (September) next, a fleece positively of one year's growth, shorn from a two year old ram, which shall equal the one deposited by myself in quality, and exceed it in quantity four ounces net wool. The amount of net wool to be ascertained by being submitted to the cleansing process by such manufacturer as the conductors of the depot shall agree with, and a list of the names of the competitors published, with the weights of their respective fleeces in net wool annexed.

W. M. H. LADD.

Richmond, Jefferson Co., O., 5th Mo., 11, '47.

P. S. The excess required should not have been more than one ounce, had not the fleece been materially diminished by cutting samples. Should there be more than one entitled to the premium, by fulfilling the foregoing provisions, the premium will be awarded to the competitor whose fleece (other things being equal) exceeds by the greatest quantity. W. H. L.

TRANSPORTATION OF CATTLE AND SHEEP ON RAILROADS.—The Railroad Journal gives the following important information derived from statistics of cattle and sheep sent to and consumed in the London market, with the former loss in driving now saved by the adoption of railway conveyance:

“It appears that the average loss of flesh in driving cattle to London market, for a distance equal to the railroad conveyance noticed, is 40 pounds each. The number conveyed was 220,000, and the consequent saving of flesh 8,800,000 lbs. The average loss of driving sheep as compared with railway conveyance, is 8 pounds each, equaling 10,000,000 lbs. of flesh, which at 8 cents per pound would amount to \$1,504,000. The time saved is more than equal to the freight.



HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

The Season---Fruit Crops, Hints, &c.

THE past winter, in this region, was unusually severe on everything tender. Raspberries and strawberries have suffered seriously, and the crops of both will consequently be comparatively small. The hardy fruits, however, look well, and promise now (May 20th) a fine crop. Up to the second week in May vegetation could hardly be said to have made any advance. All at once the weather became as warm as midsummer, and caused such a rapid development of foliage and flowers as we do not remember to have witnessed. It seems to have brought everything forward at once. Peaches, cherries, plums, apples, pears, and all other fruits, are in full blossom at the same time. So with ornamental trees and shrubs; many of them are forced out of their regular order of succession. Apricots are setting finely, and if their mortal foe, the *curculio*, is guarded off, and no untimely frost comes to blast them, there will be a fine crop.

We are just now suffering an unprecedented drouth for this season of the year. A continuance of it will we fear, injure the setting of fruits now in bloom. Newly transplanted trees will also suffer much where *mulching* has not been attended to—that is, covering the ground around the tree with two or three inches deep of litter or rough manure. In extreme cases watering should be resorted to. This is only properly done by removing a couple of inches of the soil, and giving a plentiful supply to reach the roots, and then replace it. Throwing water on the surface is more detrimental than useful.

Dahlias may be planted out from the first to the middle, or even last of the month, for a fine autumn show of flowers. They will flourish in any good soil where corn or potatoes will grow. The soil is not unfrequently made too rich for them, so that they produce leaves and stems, but few flowers. Young plants, propagated from cuttings this spring, if strong and well rooted, will produce a much better bloom than old roots. They are sold by the nurserymen in pots, and

can be turned out without breaking the balls or disturbing the roots; in six weeks or so they will be in blossom. Neat stakes should be provided to tie them to as they grow, and surplus side shoots should be shortened or cut off. The ground should be kept clean and mellow around them.

The varieties now cultivated are almost innumerable. The great point with people generally is not *novelty*, but to get free bloomers, and good colors and forms. Among those we noted last season, as particularly so, we may mention—*self colored* varieties: Anna Minerva, Andrew Hofer, Burnam Hero, Blue Bonnet, Conservative, Cleopatra, Emma Noke, Eximia, Henry Clay, Horace Binney, Lady Harland, Model Marillo, Miss Percival, Matchless, Mary, Marshal Sault, Prince of Wales (Girling & Dodds'), Queen (Widnall's,) Sphere, Topaz, Washington Irving, Sir E. Antrobis. *Fancy* or variegated, spotted and tipped varieties: Beauty of Wakefield, Charles XII, England's Defiance, Fairy Queen, Harlequin, Illuminator, Lady Sale, Marchioness of Ormonde, Madam Bavais, Madam Wallner, Madam Villaboix, Novelty, Sylph, Victor, Viscount Ressequier, Donna Antoni, Eugenia, Cinderella. All these we know to be superb. The following are very highly praised new ones, rare and rather high priced yet: Indispensible White, La Lione, Spitfire, La Vogue, Butterfly, Beeswing, Alkoeing, Oakley's Surprise, Ithurial, Isis, Keyne's Duke of York, Merveille, &c.

The Dahlia is one of the leading favorites of Florists at the present time. Thousands upon thousands of pounds are annually expended in England and the continent of Europe, for new, curious varieties—and not a little is expended for the same purpose here at home. Plain as we are in our tastes, we are not insensible to the attractions of novelty and beauty—hence the European florists find a good market here for their new and curious productions.

We have seen it stated that the Horticultural Society of Edinburgh (Scotland,) has offered a prize of £1,000 for a blue flowered Dahlia, (this has always been considered an impossibility—we do not see why,) and that the Horticultural Society of Dublin (Ireland,) has since offered double that sum—£2,000! We hope this is not so; but if it be, it need surprise no one. Although every twentieth human being in the land is on the point of starving, for *want of food*, they can pay just as well as not £2,000 for a *novelty*—a *blue Dahlia*. Ireland has for ages been an anomaly, and at the present moment is the greatest the world ever saw. How long she is destined to remain so, God knows. Only think that, in a country where Agriculture, Horticulture, and all the industrial arts are in a lower state than in any other civilized country on the earth—where, but for *charity*, the whole working population would be swept off with hunger, *because the potato crop is a failure*—in that country, 10,000 dollars are

offered as a prize for an insignificant floral novelty! *True taste, sensible zeal*, and every human feeling is outraged by such idiocy.

Insects.—Give regular attention to the destruction of the Curculio and other insects. Rub off shoots on the stocks of your recently grafted trees. Tie up weak grafts, buds, and such trees as are inclined to grow crooked.

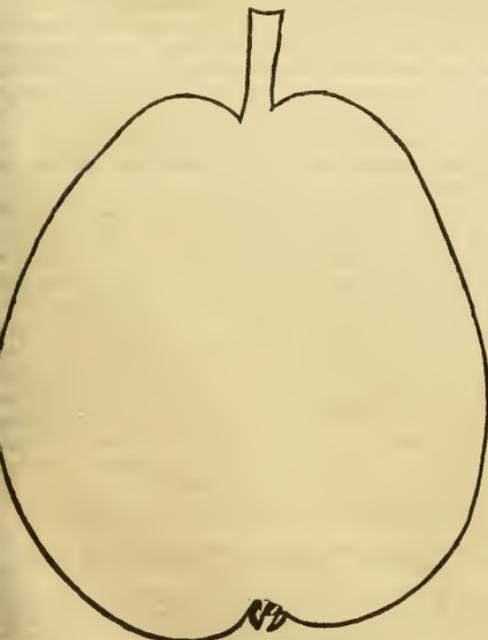
Thin the fruit on your trees that may be overloaded—particularly on dwarf pears. Shorten or remove branches where necessary to preserve, or improve the form and balance of the tree.

Keep the ground well hoed around all young trees. Never let the weeds or grass get ahead. This must be observed in every department of gardening.

Flower beds should be stirred once a week, at least, with the rake. This will save much labor in weeding and hoeing.

Box and grass edgings should be kept neat.—Lawns should be frequently mowed, and kept clear of docks, dandelions, and all other weeds. These should be cut below the crown as soon as they appear.

Don't forget successive plantings of peas, salads, and other vegetables. We have no space for detail.



The Urbaniste Pear.

This excellent pear deserves a prominent place in all choice collections; and although it has been figured and described in *Hovey's Magazine*, *Downing's Fruit and Fruit Trees*, and *Man-*

ning's Book of Fruits, yet we are sure but few of our readers have become acquainted with it. Its size, delicious flavor, and the hardness and thriftiness of the tree, are recommendations of no trifling consideration. We copy the following notice from the Gardner's Chronicle, of a recent date, by Mr. THOMPSON:

This originated in the garden of the Comte de Coloma, whence it was obtained by Dr. Van Mons in 1800, and must be ranked amongst the first-rate Belgian Pears. It is one of those cultivated in some collections as the *Beurre Spence*, the name which Dr. Van Mons gave in reply to the question, "which is the best of all Pears?" The *Beurre Diel*, *Beurre de Capiaumon*, and others of less merit, have also been received as the *Beurre Spence*; but all endeavors to find a distinct variety answering the above character have been hitherto unsuccessful. The *Urbaniste*, however, can scarcely be excelled when obtained in its highest perfection.

The flesh is white, exceedingly smooth, melting, sugary, and delicious. In perfection in October. The tree is healthy and vigorous, adapted for a standard, dwarf, or espalier, on either of which the fruit is much higher flavored than from a wall. Shoots olive-colored, with few pale grey, somewhat linear specks. Leaves middle-sized, oval, acuminate; finely serrated; petioles long and rather slender; stipules linear. Flowers scarcely middle-sized, resembling those of the *White Doyenne*; petals oval, tapering to the claw, not touching each other when fully expanded.

Grown as a standard, the shoots acquire a wavy mode of growth, somewhat like that of the *Aston Town*. A proper regularity must therefore be maintained by means of the knife. It is very distinct from the *White Doyenne*, or old *White Beurre*, and yet there are many traces of resemblance which would lead one to believe that it is a descendent from that esteemed variety. The American writers state that their old favorite the *Doyenne* is more nearly approached by the *Urbaniste*, than by any other European Pear.

Mr. DOWNING says—

The *Urbaniste* is a fruit for which we confidently predict the highest popularity in this country. In its delicious flavor it compares, perhaps, more nearly with the favorite old *Doyenne* or *Virgalieu*, than any other fruit, and adds, when in perfection, a delicate perfume, peculiarly its own. Its handsome size and appearance, and remarkably healthy habit, commend it for those districts where, from neglect or bad soil, the *Doyenne* does not flourish. The tree is a moderately vigorous grower, and though it does not begin to bear so early as some of the new varieties, it yields abundant and regular crops, and gives every indication of a long-lived, hardy variety. For the orchard or garden in the middle states, therefore, we consider it indispensable.

To Correspondents.

A. H., *Meadville, Pa.* We are much obliged for the scions and specimens of fruit sent. The names are correct.—No. 1, *Yellow Newtown Pippin*. No. 2, *Roman Stem*, an excellent apple in New Jersey, where we have seen it much. We have not had it bear in this section yet; we have a specimen tree that may bear this season. Nos. 3 and 4 are *Rhode Island Greening*—no difference but what may often be observed in specimens produced on different sides of the same tree. No. 5, the *Seek-no-father* of this section; a very fine apple, usually called the *Connecticut Seek-no-father*.

The season was too far advanced to send the scions requested, as they had not been cut previously.

J. C., *Yates, N. Y.* We shall publish, and reply to your "queries" as fully as practicable next month. Your letter was late being received, and you know what a busy month May is with us. So you will indulge a little. We hope to hear from you often.

I. S., *Fayette, N. Y.* Your apple is too dry and tasteless. In our opinion it would be worthless if it would keep for seven years.

J. H. WATTS, Esq. We are much obliged for your splendid basket of apples—*Northern Spy*, *Red Cheek Pippin*, *Cooper's Market Apple*, &c. They are the finest we have ever seen at this season of the year.

Plants for Flower Beds and Borders.

IN another article in this paper we have recommended, for small gardens, such plants as bloom all the season and are of early culture.—The chief of these are the everblooming roses, such as the Bengal, Bourbon, Noisette, Hybrid, Perpetual, Tea-scented, &c., and Verbenas and Petunias.

No flowers so amply repay the care bestowed on them as these. If planted out now, they will bloom profusely till the frosts of next autumn.—Those who may not have a stock on hand can be supplied at the nurseries, very cheap, by the dozen or half dozen, as there is generally a good supply at this season. They can be turned out of the pots, as recommended for Dahlias.—Young plants can be propagated during summer for next year—roses from cuttings and layers; verbenas and petunias from cuttings, layers or seed. In planting in masses the various colors should be so mingled that each may appear to the best advantage. The attention given to the two latter tribes of late has added to them a thousand new charms by multiplying, to an almost unlimited extent, their colors and habits of growth. No other plants endure so well our hot and dry summers. In the "dog days," when everything is parched and shrivelled, they seem to be on the very acme of perfection. Give us verbenas, petunias, portulaccas, and perpetual roses, and we will have a gay parterre throughout the season, if deprived of all else.

It makes us shudder to think of the miseries we have seen some people endure in the vain attempt to keep up a succession of flowers, with a few delicate short lived annuals, on a very dry and ill managed soil. We admire annual flowers, and wish to see them cultivated, but only when well done. This can only be where the proper requisites are at hand—a deep, rich, mellow soil, unincumbered with coarse shrubs or plants—a hot-bed to forward the finer half-hardy species—plenty of leisure, to give them all proper attention, such as tying up, training, watering, &c. Where these appliances are not at hand the culture of annuals proves but a very unsatisfactory affair, and in such cases we would direct attention to those requiring less delicate and complicated treatment. The present season threatens to be highly unfavorable for the culture of annuals in the open ground, owing to the prolonged early drouth.

Laying out and Planting Front Gardens.

WHILE on one hand we are delighted with the increased attention given to the embellishment of door-yards and grounds around dwellings in the country, we are, on the other, pained at the almost general and entire absence or exercise of correct taste or ordinary skill in conducting the operations. For instance, Miss A. wishes to

have the plot of ground, say 20, 50, or 100 feet square, in front of the house, *improved and ornamented*. (The ladies, to their credit, generally move first in these matters.) She has it all spaded up and thrown into mounds, ridges, and all sorts of fanciful embankments—some of them high enough to serve our soldiers in Mexico for a defence—many looking precisely like graves in a cemetery, and, all in all, suggestive of any thing but symmetry or beauty. These errors however are quite pardonable; and we do not speak of them to ridicule them, or find fault, but if possible to set taste and opinion against them.

A piece of good green lawn in front of, or around a dwelling, is far preferable to this—looks infinitely more tasteful and beautiful and costs less. Ornamental trees and shrubs, judiciously selected, may be planted promiscuously over it, singly or in clumps, as the situation and dimensions require.

Choice flowering plants, such as perpetual roses, verbenas, petunias, &c, that bloom most of the season, can be grown in masses or beds cut in the lawn—not raised into mounds or ridges, or, if raised at all, only in the centre, and that not over 2 or 3 inches above the level of the surrounding lawn. At our request several small places that we saw this spring, disfigured in the way we allude to, have been levelled down, and converted into lawn, and figures and beds cut out for flowering shrubs, plants, &c., and the proprietors have been well pleased with the change. We did intend to present some suggestions on this matter early in the spring, before gardening had commenced, but a press of other matters prevented us.

In our hot, dry climate, where plants require much moisture to flourish, it is a great error, even if it looked well, to plant them in narrow raised beds, surrounded by ditch like walks. All walks should be wide enough for two persons to walk abreast, and should be kept well gravelled and nearly as high as the adjacent beds. A good verdant turf is, beyond all comparison, the best to surround a flower bed. A few starved flowers, on little beds of red earth, with a bad box edging and narrow deep clay walks, is a downright slander on a flower garden, and a violation of every thing like good taste. There is no comfort to be taken in them, and we object entirely to them.

Growing Grapes and Peaches from Seed.

MR. EDITOR:—Will you please state in your next number, whether grapes raised from seed will be of the same kind as that which produced the seed. Also whether peaches will be the same raised from the stone.

Yours, &c.,

A SUBSCRIBER.

Parma, May, 1847.

REMARKS.—There is no degree of certainty that seeds of the improved varieties of either will reproduce the same. A *distinct species*, in its wild, unaltered state, will. The moment a species is removed from the natural state, by culti-

vation, it becomes a *variety*; and its seeds, if productive, will yield varieties only—some bearing a nearer, and others a more remote, resemblance to the parent. For instance, you plant seeds of an *Isabella Grape*, which is but slightly removed from the natural state, and from an hundred seedlings you will most likely not get one *identical Isabella*; and in like manner you may plant a bushel of stones of the *Early York Peach*, and the probability is you will not obtain a single tree that will produce the real Early York: and so on through the whole catalogue of our cultivated fruits—some being more and some being less disposed to vary. This fact is full of interest to the fruit grower, as it opens an immense field for interesting experiment, and vast and valuable improvements. To it we owe very many of the most delicious fruits now known.—Nearly all our American varieties, such as the *Seckel*, the *Dix*, *Dearborn's Seedling*, *Bloodgood*, *Swan's Orange*, *Oswego Beurre*, and other pears, unsurpassed by any in the world, have sprung up accidentally from seeds of other varieties in no way, perhaps, similar to them. So is it with our *Spitzemburg*, *Swaar*, *Newtown Pippin*, *Northern Spy*, and other apples—the *Washington*, *Columbia*, *Lawrence*, and other plums—that certainly are entitled to the first rank among the improved fruits of the present day.

Van Mons the great Belgian pomologist, based his whole life long efforts towards the amelioration of fruits on this tendency of seminal varieties to change. By following it up with unexampled perseverance, and the utmost scientific accuracy, he succeeded in giving to the world such a variety of delicious *Beurres* that it is no longer an easy matter, barely possible, to make a choice amongst them.

Thus we see what benefits have been and are yet to be derived from this law of vegetable life, and yet how many have blindly regretted its existence! How many *now*, even, in this enlightened day, had rather it were possible to reproduce their favorite fruits from seed, than that such an unlimited field for *progress* should be kindly left open to them by Providence.

Enormous Grape Vine.

A CORRESPONDENT of the Horticulturist gives an account of a grape vine of extraordinary size, growing at Burlington, N. J. The following are its dimensions: "At three feet from the ground it measures six feet one inch around the trunk, and at ten feet high it is positively three feet in circumference. It is a native male grape, and has been the wonder of the neighborhood as long back as the memory of man reaches. It is still healthy, and its giant folds run over and cover four trees, one of which is a full sized white oak, and the others are quite large. This vine

grows on upland near a springy soil, its roots no doubt penetrating to the water." The writer adds—"may this not teach us a lesson, to give the rootlets, wherever it is possible, access to a spring or running water."

It is a pity that Mr. BROWN had not given a history and description of this ancient, noble vine in his "Trees of America." Such an object is more worthy of being chronicled than a memorable battle field, or mouldering ruins of castles or cities.

Orchards.

I WISH to make a few brief remarks in answer to a Syracuse correspondent.

In rearing an orchard, the ground should be plowed deep and be in a high state of cultivation. Then set out the trees and keep the grass dug up in a circle about 4 feet from the trunk of each tree, for 4 or 5 years, but no manure after the 3d or 4th year. When the trees are large enough to bear, let the grass sward over under the trees, and keep the ground for mowing; for if the ground is kept rich with manure and sometimes plowed, the trees will grow rapidly and yield but little fruit. This was the mode pursued by my near neighbor, DAN BRADLEY, Esq. His trees grew rapidly and bore but little fruit. He knew not what was the cause. He resorted to the *Genesee Farmer* for information, and was told to stop manuring and digging about his trees, and turn his lot to meadow. He did so, and his trees soon began to bear fruit.

[Manuring and working the ground around fruit trees may be carried so far as to keep up a continual production of wood, without fruit. But errors of an opposite kind are more frequently committed. For one tree surfeited with aliment there are a hundred, in this country, declining and perishing for want of a proper supply. Trees inclined to an overproduction of wood, may be turned to fruiting by a shortening of the branches, during the summer.—EDITOR.]

We can see trees in poorish land that bear well. An old orchard sometimes becomes unthrifty, and the fruit small; then resort to manuring and plowing.

PLUM TREES may be raised free from black knots by keeping the ground rich and well hoed, and spreading on leached ashes; and, two or three times each summer, put salt on the ground, about a pint to each square rod. By this process mine are doing well.

PEACH TREES.—Examine your peach trees three or four times each summer, at the roots of the trees; and if the gum oozes out you will find a white worm eating the bark, and sometimes deeper, which will destroy the trees: if not extracted the tree will turn yellow and die in mid-summer.

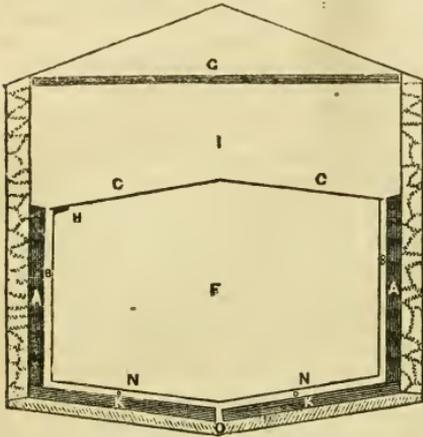
AILANTUS TREE.—I have a few Ailantus trees, or tree of Heaven. On examining them this spring I find they are winter-killed, more or less, where the stems separated from the body. The leaves grew until the frost killed them: and when they fell off, the body had not time to harden before cold weather. But I think I have in part found a remedy. Last September I commenced pruning off the leaves of several, some ten or twelve days before any frost appeared, and as far up as I pruned them they endured the winter well. I cut the leaves off about half an inch from the body, and after a few days the remaining part dried up and fell off, and the wood at the base of the leaf stalks had time to harden before the frost came.

REMOVING LARGE TREES.—I have never seen a notice upon removing large trees of any kind, but I would suggest the following method. Dig a trench in a circle around the tree from 3 to 6 feet in diameter, according to the size of the tree, and deep enough to cut off the greater part of the roots. Fill the trench again, and in the course of the summer the tree will send out a multitude of fibrous roots. In the fall open the trench again and fill it with straw, and when the ground is frozen enough take a rail and tie it to the trunk with a rope and lift it out and carry it to the place which was previously dug and filled with straw. Should there be roots running perpendicular cut them off, and in filling up, be careful to fill all the cavities. A. W.

Marcellus, N. Y., 1847.

A Valuable Invention.

WE insert the following, because we think it will prove interesting and valuable to many of our readers. The card of the proprietors would be more appropriate in our advertising department, but we can not properly separate it from the figure and description of the Preserver:



Kephart's Patent Fruit and Vegetable Preserver.

DESCRIPTION.—The outer columns in the above cut represent walls of stone, enclosing the inner construction.

The light shading at the bottom, descending to the center, represents the earth.

The dark shadings, A, A, and K, K, represent two boardings, with from six to ten inches space, and this space filled with a substance that will best exclude heat.

F is the Fruit Room, in which articles are to be placed for preservation.

C, C, a floor or cover to the fruit room, made water tight, with a coat of pitch over its surface to prevent moisture from penetrating.

I, an apartment to be filled with ice, supported by the floor, C, C, and designed to contain ice enough, when filled, to last during the whole year.

B, B, and D, D, are spaces around the fruit room, intended for the meltings of the ice on the top floor to pass off.—This ice water, as it passes down these spaces around the fruit room, and over the tight floor at bottom, in the space, D, D, serves to absorb any heat which may find its way through the non-conductor, K, K.

O, the outlet for ice water.

H, hatchway or entrance into fruit room.

The fruit room, F, is intended to be below ground, and the ice apartment, I, if desired, can be above; buildings above ground being now generally preferred for ice to those below ground.

It will be seen from the construction that the non-conducting substances, A, A, and K, K, are designed to prevent the admission of heat from the earth, at the sides and bottom, into the fruit room F; while the ice upon the floor, C, C, acts by keeping the fruit room at a constant uniform temperature, dry, and so cold as to exert a preserving influence upon articles placed therein.

A CARD.

THE undersigned having purchased the above Patent Right for the United States, (excepting the states of New Jersey, Delaware, Maryland, and the cities of New York and St. Louis,) invite the attention of the Public to an examination of the scientific principles upon which the above invention is based, as well as its practical utility, and offer for sale patent rights for the construction and use of the Preserver by States, Cities, Counties, Towns, or individu-

al rights, upon terms which will induce all interested in the growth and sale of Fruits and Vegetables, or in the curing and preservation of Meats—also dealers in Butter, Eggs, Bacon, &c.—to purchase rights and construct Preservers.

As will be seen by the above drawing, its success depends entirely upon chemical truths.

The room F, in which Fruits, &c., are placed for preservation, will remain the whole year at a constant, uniform temperature, so near the freezing point as to arrest the rotting as well as the ripening process of fruits, &c., without danger of freezing them. That the fruit room F will remain at this temperature, will be evident from the fact that the air in contact with the floor C, C, on which the ice rests, becomes nearly as cold as ice itself. This condensed air will immediately sink, while the air at the bottom of the room, if but half a degree warmer, will rise to the floor C, C, and give off its heat—thus maintaining a uniform temperature corresponding with that in contact with the floor C, C.

Articles placed in this Preserver will remain as perfectly dry and free from moisture, as if kept in the best ventilated apartments. The air descending from the floor C, C, being always about half a degree colder than the boxes or barrels of fruit, &c., cannot deposit any moisture therein—it being an established fact that no object can condense moisture, unless colder than the air coming in contact with said object.

It is a theory long maintained by Liebig and other eminent chemists, that a temperature, dry, uniform, and near 32° Fahrenheit, will arrest the process of decay that takes place in fruits, vegetables, &c.,—but never, until the above invention, could the truth of the theory be tested.

Two years of experiments has proved the truth of the theory, and established the entire utility and success of the invention—as fruits, &c., foreign and domestic, viz: oranges, lemons, apples, pears, peaches, plums, grapes, &c., as well as the most delicate fruits—also potatoes, green corn, melons, &c., can be kept as long as desired. Add to these butter, eggs, bacon, lard, &c., which can be preserved throughout the year as fresh and sweet as when first placed in the Preserver.

Fruits, &c. in common temperatures undergo saccharine fermentation, or what is known by the mellowing or ripening process, which is followed by vinous, acetous and putrefactive fermentation, which completes the rotting process. A temperature dry, and so low, arrests the first process towards decay—so that all fruits, &c., if placed in the Preserver when first plucked, will retain all their juices, freshness and flavor as when first plucked from the tree or vine.

It will readily be seen that the only way in which fruits, &c., can be kept during all seasons of the year, is by the plan offered in this invention—and one of its greatest advantages is that fruits, &c. can be preserved in all climates at a trifling cost, not only in the north where ice is produced, but in the south where it has become an article of extensive commerce. Being shipped in large cargoes, houses must be built for its reception; for this purpose the room I will be most appropriate—thus effecting the double purpose for selling ice from the top, and preserving fruits, &c. below.

All desirous of any further knowledge of the operations of this Preserver, can see one either by calling upon P. KEFHART, Baltimore, or upon the undersigned Coates St. Wharf, near Fairmount, Philadelphia.

FLACK, THOMPSON & BRO.

☞ All communications will receive prompt attention, if addressed either to PETER KEFHART, Western Hotel, Baltimore, or to

FLACK, THOMPSON & BRO.

Spring Garden P. O., Phila., Pa.

Horticultural Societies.

THE "American Ag. Association" has taken measures to sustain periodical exhibitions of Horticultural productions during the season. The first was to be held on the 19th May.

The first public exhibition of the Mass. Hort. Society was to have been held on the 15th of May, when premiums were to be awarded for Green House plants, &c.

We learn from the Horticulturist that a Hort. Society was organized at Syracuse, on the 17th April, called the Onondaga Hort. Society. The officers—E. W. LEAVENWORTH, Pres., RUFUS COSSITT, A. DOLBEAR, I. G. TRACEY, and Dr. LOOMIS, Vice Presidents; THOS. SMITH, Treasurer; D. C. LE ROY, Cor. Sec'y; and C. B. SEDGWICK, Rec. Sec'y.

The Horticultural Society of the Valley of the Genesee held its first public exhibition on the 26th May.

LADIES' DEPARTMENT.

Floriculture.

MR. EDITOR:—In a climate like ours where winter reigns four or five months, and nature is disrobed of her beautiful apparel for half the year, why is it that so few of our dwellings are ornamented with vases of flowers—so that while the wintry storm is raging around us, and the hail and sleet are rattling against our windows, the eye can be relieved from the sterility and cheerlessness without, by constant verdure and beauty within? Who can minutely examine a delicate flower, and not admire its wonderful mechanism? The cultivation of flowers, whether in the garden or the green-house, is a source of almost endless enjoyment. Ask the enthusiastic lover of flowers, who, with her own hands, cultivates them, if she is not compensated for all her labor. She watches over and nurtures her plants, as a gentle nurse doth her offspring. She discovers new beauty in every bud, and expatiates with delight upon each expanding flower. While arranging her vases, or weeding her border, she gaily sings:

I'll give thee, my flowers,
A portion of my hours;
And my hands I'll employ.
With gratitude and joy,
To rear thee;—while I live,
Ye'll unceasingly give

Vigor to my frame, happiness to my heart,
The hue of the rose to my cheek ye'll impart.

Life is a chequered scene. It has its lights and shadows—its joys and sorrows—and whatever enables us to increase our own happiness, or the happiness of those around us, should receive a due share of our attention. Human enjoyment is made up of little things. The cultivation of flowers has a tendency to soften the heart, to calm tumultuous feelings, and relieve us from the dull, monotonous, every-day cares of life. Let a person whose passions are highly excited be introduced into a well stored green-house, and its varied beauties pointed out to him, the tumult within will be calmed, and his countenance soon indicate smiles instead of frowns. I rejoice to find as I travel through the country, that there is an increasing interest taken in the cultivation of flowers in and around the house. When I see a dwelling, (I care not whether constructed of marble or of logs,) the windows of which are filled with vases of flowers, I think the hearts of the inmates of that house are made better by them. I often wonder why, in our villages, and in the country too, so few of the dwellings are ornamented with that beautiful appendage, the "GREEN HOUSE." Home should be made attractive. We should not spare reasonable time and expense to ornament our dwellings and grounds, so that our children may not spend their pastime and seek their enjoyments abroad, but find them in and around the paternal habitation.

My principal object in writing this article is to induce the fair readers of the "Farmer" to petition their husbands and fathers, to attach to their dwellings a green-house. Methinks I hear a large majority of my brother farmers, whose thoughts seem to be absorbed with fine wheat fields, luxuriant corn, handsome cattle, fat pigs, &c., exclaim, "What! expend twenty, fifty, or a hundred dollars to build a green-house, in which to raise flowers, that will not be worth any thing when they are grown?" But, my dear sirs, you forget that what contributes to the happiness of your family, friends, and neighbors—what pleases your wife and daughters, and affords them a delightful place for amusement and recreation, after going through with the dull routine of the kitchen, and the every day occurrences of household affairs, *is or ought to be* worth something.

A family green-house should be attached to the south side of the room mostly occupied in winter, and if of small dimensions, say seven by fourteen feet, or even ten by twenty feet, can be warmed without any extra apparatus for heating, simply by an open door, or windows leading from the room to the green-house. If warmed in this way, the house should be made very tight, and without an outside door, as the frequent passing through the door would allow much heat to escape. I have a green-house arranged on the above plan, and during the past winter have made no fire in the arch during the day, and but on three or four occasions when the coldest nights occurred. When the sun shines, although the weather may be cold, my dining room, which is 15 by 18 feet, is often sufficiently warmed from the green-house alone. E. R. PORTER.

Prattsburg, N. Y., April, 1847.

HARD BISCUIT.—One quart of flour, and half a tea-spoonful of salt; four great spoonfuls of butter rubbed into two-thirds of the flour; wet it up with milk till a dough; roll it out again and again, sprinkling on the reserved flour till all is used; cut into round cakes, and bake in a quick oven on buttered tins.

Dahlias, Roses, Verbenas, &c.

We have on hand a very large stock of choice Dahlias, in pots ready for turning out, that we can sell at unusually low prices, viz: 12 good varieties for \$2,00; 12 of the finest \$6,00—selected by us.

Verbenas—15 fine varieties, good, strong plants, at \$1,50 to \$2,00 per dozen.

Petunias—6 selected varieties, \$1,50 to \$2,00 per dozen.

Bourbon Roses, \$4,50 per dozen.

Chinese do. 3,00 do.

Tea-scented do. 4,00 do.

Noisettes, do. 4,00 do.

Fuschias.—a splendid collection of 30 varieties—fine, strong plants, covered with buds; 12 fine varieties for \$3,00; 12 of the best for \$5,00.

The above plants are all in fine condition for turning into the border, and will furnish a profusion of flowers from July until the autumn frosts.

Plants packed in the best manner for transportation to any part of the country. Catalogues of Dahlias, Green House plants, &c., furnished gratis to all post paid applications.

ELLWANGER & BARRY,
Mount Hope Garden and Nurseries,

Kinderhook Wool Depot.

This enterprise has been in successful operation for the past two years, and has fully met the expectations of the wool-growers, who have been its patrons and projectors. It will be continued the present year, conducted as heretofore. The subscriber will be prepared to receive wool as soon after shearing as may be convenient for the growers to deliver it. The fleeces will be thrown into sorts according to *quality and condition*. Those who desire it can have their clip kept separate, and sold when ordered. A discrimination will be made between wool in good or had condition. Sales will be made for cash, and the owners can rely on prompt returns. The charges for receiving, storing, sorting, and selling, will be one cent per lb. and insurance. Liberal advances in cash made on the usual terms. Sacks will be forwarded to those who wish, by their paying the transportation and 12½ cts. each for their use, or if furnished by the owner of the wool, will be returned, or sold at their value, as he may direct.

Reference can be had to Dr. J. P. Beekman, Kinderhook; D. S. Curtis, Canaan; C. W. Hall, New Lebanon, Col. Co.; J. B. Nott, Esq., Albany; D. Rodgers; Hoosick, Rens. Co.; C. H. Richmond, Esq., Aurora, Cayuga Co.; Col. J. Murdock, Wheatland, Monroe Co.

June 1, 1837.—3t.

H. BLANCHARD.

Turnep Seed.

We have just received from England, by last Packet,

200 pounds	White Norfolk Turnep,	
200 "	Globe	do.
400 "	Ruta Baga	do.
50 "	Scotch Yellow	do.
100 "	assorted kinds	do.

Also 200 lbs. best English Field Carrot Seed—all of which we now offer for sale cheap, and warrant the seed genuine. Farmers and dealers are respectfully requested to call at the *Genesee* (not Rochester) *Seed Store*, No. 18 Front st.

June 1, 1847.

RAPALJE & BRIGGS.

PLOWS.

We have now on hand, and offer for sale at the manufacturers prices, seven varieties of PLOWS—among which are the *Iron Beam*, *Diamond*, and *Anthony's Improved Plow*.

We would particularly invite attention to the Anthony Plow, as it has a patent index attached to the beam, by which to change it from a two to a three horse plow. Farmers are requested to call and examine our stock before purchasing elsewhere.

RAPALJE & BRIGGS,
Genesee Ag. Warehouse, 18 Front st.

Peas, Peas!—200 bushels Gold Vine Peas, just received from Canada, and free from bugs—for sale by R. & B. at the Genesee Seed Store. Those wishing a good article will please give us a call. It is not yet too late to sow them.

June 1, 1847.

Choice Pear Trees.

ELLWANGER & BARRY offer for sale, in addition to the stock of their own growth, *one thousand beautiful Pear Trees for pyramids*—just received from Europe—in fine condition for planting. The assortment includes the most scarce and estimable varieties. Orders should be sent in at once.

E. & B.'s new catalogue of Green House plants is just published, and will be sent gratis to all post paid applications.

Agricultural Implements.

In order to accommodate the subscribers to the Farmer, from whom frequent inquiries and orders for implements are received, I have made arrangements to supply the following articles:

Pitts' Thrasher and Separator,	price, \$150 00
The above, including Horse-Power,	250 00
Pitts' Corn and Cob Mill,	40 00
Seymour's Sowing Machine,	45 00
Sanford's Straw-Cutter,	15 00
Burrall's Patent Corn-Sheller,	10 00

Also, most kinds of Plows, Cultivators, &c., &c., at the usual prices. As my only object is the accommodation of subscribers to the Farmer who reside at a distance, (without fee or reward,) all orders should be post paid and accompanied with the cash. The implements will be carefully selected, and shipped per order.

D. D. T. MOORE.

Farmer Office, Rochester, April, 1847.

REMOVAL.

The Rochester Agricultural Ware House has been removed from Front-street to No. 23 Buffalo-street, Talman Block, opposite Reynolds' Arcade. See advertisement below.


Rochester Agricultural Ware-House,
HARD-WARE AND SEED STORE.

(No. 23 Buffalo st., opposite Reynolds' Arcade.)

Where can be found most kinds of GARDEN and FIELD SEEDS, Hard-ware, Tin-ware, Wooden-ware, Willow-ware, House Trimmings, Kitchen Furniture, &c.

The late proprietor of this Establishment, (THOS. NOTT,) feels grateful to his many patrons for their very liberal patronage during the past year, and would solicit a continuance of the same—promising to sell them as good articles in his line, and as cheap, as can be purchased at any other establishment west of Boston or New York. He has formed a co-partnership with Mr. E. J. ELLIOTT—and the business of the establishment will hereafter be conducted under the firm of NOTT & ELLIOTT.

We shall keep constantly on hand, a full assortment of *Shaker Garden and Flower Seeds*, the reputation of which needs no comment.

We are continually manufacturing the celebrated Massachusetts Sward C Plow—to which has been awarded the greatest number of Premiums—which we shall sell at the low price of \$7, with an extra point. Also—shall keep on hand an assortment of the various approved Plows and Points, Cultivator Teeth, Root Cutters, Straw Cutters, and Corn Shellers—with a hundred and one other articles, too tedious to mention.

Farmers from a distance, as also those in our immediate vicinity, are respectfully solicited to call at our new establishment, and examine our assortment before purchasing elsewhere.

NOTT & ELLIOTT,

Rochester, Jan. 1, 1847.

No 23 Buffalo-street.

To New York Farmers and Emigrants.**ILLINOIS LANDS FOR SALE.—115,000**

acres, in tracts of 40, 80, 120, 160, acres, or more, to suit purchasers. The lands are all first rate, and among the very best in the State, and are situated in the counties most densely settled, viz. Morgan, Scott, Cass, Mason, Menard, Green, Sangamon, Logan, Christian, Macon, McLean, Woodford, and Macoupin. To actual settlers every reasonable indulgence will be given as to time of payment. The price from \$3 to \$5 per acre.

A correspondent of one of the New York papers writes, respecting this section of Illinois, as follows;

BEARDSTOWN, Cass Co., Ill., Jan. 10, 1846.

The Riches of the West—Gothamites on the Wing.—It is now six weeks since I left the city of Gotham, during which time I have seen considerable of the Western country, and I must say the beautiful prairies of Illinois far excel what I had anticipated, and this country may truly be called the garden of the world. There is nothing to prevent farmers in this country from getting rich, as the land is the most fertile in the world, and it will produce everything grown in the vegetable kingdom.

A New England man would hardly believe me if I would tell him that some farmers here produce ten thousand bushels of corn and half as many bushels of wheat in a year, to say nothing of cattle and hogs, of which some raise as many as five hundred head. One farmer told me he had raised, the last year, 6,000 bushels of corn, and it was all produced by the labor of two men only.

Cattle and sheep feed upon the prairies all winter, as they are seldom covered with snow."

Most of the above lands may be cultivated 100 years or more without manuring, being of the richest alluvial soil. The titles are indisputable and the lands will be sold at low prices and in quantities to suit purchasers. Letters (post paid) addressed to D. B. AYRES, Esq., of Jacksonville, Ill., or to the subscriber, will receive prompt attention. As many persons out of the State have an idea that the taxes are very burdensome in Illinois, we state that they range from \$1.50 to \$2.00 per annum on 80 acres of land.

JOHN GRIGG,
No. 9 North Fourth-st. Philadelphia.

March 1, 1847.

[3t]

Geneese Seed Store and Agricultural Warehouse.

No. 13 (old No. 10,) FRONT ST., ROCHESTER.

At this Establishment can be found all sorts of GARDEN and FIELD SEEDS, a large and excellent assortment of Flower Seeds—a large lot of Clover and Timothy Seed, Orchard and Lawn Grass, Red Top, Lucerne, White Dutch Clover, Millet, Hemp, Flax Seed, Spring Wheat, Spring Rye, Buckwheat, Barley, Oats, different kinds Peas and Beans, Seed Corn of different kinds, various kinds of Seed Potatoes, Potato Onions, Onion Sets, Top Onions, &c., &c.

IMPLEMENTS, MACHINES, &c., such as Pennock's Patent Wheat Drill—Broad Cast Sowing Machines—Corn Planters, Seed Sowers, Fanning Mills—10 different kinds of Straw Cutters, prices from \$3 50 to \$23—Plows as follows: Massachusetts Subsoil, various sizes, do. Sward C, do. Eagle 25, do. different sizes Side Hill, Michigan Subsoil, Delano or Diamond Plows, Burrall's Wheel Plow, Wisconsin Plow, Gang and Corn Plows, and several kinds of plow points—Cob and Corn Grinders, different kinds of Corn Shellers, one and two horse Cultivators, Langdon's Horse Hoe or Cultivator, Drags and Drag Teeth; Horse and hand rakes, various kinds of garden rakes—steel and iron shovels and spades of different kinds—cast-steel and steel plated hoes, different kinds—ladies garden spades and hoes, toy spades and hoes—cast-steel and German steel manure forks and hooks—grain cradles; cradle, grass and bush scythes—bush and grass hooks; grain sickles; Hay knives; grafting, pruning and budding knives; clover and grass seed sieves, pea sieves—cheese presses, hoops and tubs—common and patent churns—cattle knobs and bull rings—curry combs and horse cards—ox yokes and bows—ledge shears, pruning saws—Canary birds and cages—hot bed plants in their season—Eglantine or Michigan running rose roots—and many other things which a limited space will not allow us to mention.

We have done business through one season, and are pleased to be able to say that we have been more liberally patronized than we anticipated when we began. We hope, and believe, that we have so dealt with those who have favored us with their custom, that they will not hesitate to try our favors hereafter—and we hope others will try us. All favors will be duly and thankfully appreciated.

AGENTS.—The following persons are Agents for the sale of Garden, Field and Flower Seeds, put up at the above named Establishment:—

Attica, L. Doty,	Jackson, Mich., S. Chadwick
Albion, Nickison & Paine,	Le Roy, J. Annin,
Adams Basin, C. D. Graves,	Lewiston, H. F. Hotchkiss
Adrian, Mich., D. H. Under-	& Co.,
wood,	Lockport, Wm. Keep & Co.,
Auburn, Quick and Hall,	Lyndonville, E. Bowen,
Aurora, H. & G. P. Morgan,	Mt. Morris, L. J. Ames,
Batavia, J. P. Smith,	Medina, J. Nichols & Son,
Buffalo, E. Rawson,	Middleport, J. Craig,
do. T. C. Peters,	Milwaukie, W. T., J. S.
do. H. O. Hayes,	Moulthrop,
Brockport, H. Lathrop,	Niagara, C. W., Wm. John-
Canandaigua, Chipman &	son & Son,
Remington,	Penn Yan, E. H. Huntington
Cobourg, C. W., G. Boyer,	Pt. Byron, Kendrick & Yates
Dansville, M. Halstead & Co.	Scottsville, Caleb Allen, esq.
Detroit, Mich., F. F. Parker	Seneca Falls, Joseph Osborn
& Brother,	Skaneateles, C. Pardee & Co
Geneese, Bond & Walker,	Syracuse, E. J. Foster,
Geneva, Lawrence & Barnes	Utica, J. E. Warner & Co.,
Holley, H. N. Bushnell,	Union Springs, W. Cozzens,
Havanna, G. T. Hinman,	Vienna, S. E. Norton,
Ithaca, Schyler & Co.,	Youngstown, A. Emerson.

☐ Garden Seeds put up at this Establishment can be found at most of the Stores in the State of New York west of Utica, and in some parts of Canada.

RAPALJE & BRIGGS.

(4-1f)

Seedling Apple Trees wanted.—The subscriber wishes to purchase a few thousand seedling Apple Trees. Apply personally, or by mail, to S. MOULSON, Rochester, Jan. 1, 1847.

Bound Volumes of the Farmer.

A few copies of Volume VI, bound, for sale at this office. Price 50 cents. Also, bound copies of Volume VII, 1846.

Rochester Seed Store.

[Established in 1831.]

No. 4 FRONT STREET, NEAR BUFFALO STREET.

By JAMES P. FOGG.

The subscriber begs leave to say to Farmers, and others, who have for the last three years so liberally patronized the *Old Rochester Seed Store*, that he has fitted up the Store, No. 4 Front street, on the west side of Front street, where he will be happy to see all who may want any article usually to be found in a Seed Store.

The subscriber is well aware of the important relation which the seedman holds to the whole farming community, and that on his honor and veracity the crop and profit of a season in some measure depend. The greatest care has been used in selecting the seeds offered at this establishment for the ensuing year, and they can be relied upon as pure and genuine, carefully selected and raised from the very best varieties, and properly cured. Many kinds were raised in the immediate vicinity of this city, by Mr. C. F. Crossman, and under the inspection of the proprietor; others were raised by experienced seed growers, and all can be recommended as genuine and true to their kinds.

AGENTS for the sale of seeds by the package, put up at the old Rochester Seed Store:

Attica, H. D. Gladding,	Columbus, O., John Miller
Amsterdam, J. W. Sturtevant	Mount Vernon, O., H. A.
Auburn, J. H. Hudson,	Raymond & Co.,
James B. Cooper,	Sandusky City, O., W. T.
Albion, Charles W. Perkins,	& A. K. West,
Buffalo, W. & G. Bryant,	Toledo, O., Raymond &
Batavia, F. Follett, P. M.	Co.,
Canandaigua, L. C. Cheney	Adrian, Mich., Howard,
& Co.,	Smith, & Co.,
Cazenovia, Dr. A. Ford,	Detroit, Mich., J. W. Strong
Castile, Halsted & May,	Jr.,
Elmira, Tracy Beadle,	Monroe, Mich., L. B. Wing,
Geneva, Hemiup & Cone,	Pontiac, " Rogers & Dun-
Geneese, L. Turner,	klee,
Homer, W. Sherman & Son,	Ypsilanti, Mich., Hewitt,
Ithaca, Lewis H. Culver,	Brothers & Co.,
Le Roy, J. J. J. Thompkins,	Chicago, Ill., N. Sherman
Lockport, S. H. Marks & Co	Milcaukie, W. T. Holton
Mumford, A. O. Comstock,	& Goodall,
Mount Morris, R. Sleeper,	" W. M. Cunning-
Oswego, C. & E. Canfield,	ham,
" Meade & Carrington	Brantford, C. W., Charles
Perry, R. H. Smith,	Woollett,
Peni Yan, John H. Lapham,	Brockville, C. W., Allen
Palmyra, Wm. May,	Turner,
Port Byron, Kendrick &	Chatham, C. W., Eberts &
Yates,	Robinson,
Scottsville, L. C. Andrus,	Hamilton, C. W., S. Kerr
Schenectady, D. L. Powell,	& Co.,
Syracuse, Tallman & Wil-	Kingston, C. W. C. Heath
liams,	London, " Ed. Adams,
Utica, J. E. Warner & Co.,	St. Catharines, C. W., L.
Wyoming, J. C. Farris &	S. St. Johns,
Son.	Toronto, C. W. R. Love,
Cleveland, Ohio, J. W.	Port Hope, " C. Hughes
Watson,	

Garden Seeds put up at this establishment in small papers, may be found with most of the merchants in the States of New York, Ohio and Michigan, and in Canada.

Rochester, N. Y.

JAMES P. FOGG.

Flower Seeds.

"The storms of winter fly,

Earth smiles with flowers renewing."

I have on hand a superior assortment of about one hundred varieties of flower seeds, raised by Messrs. Ellwanger & Barry, and Mr. Wm. King, of Rochester, W. R. Prince & Co., of Flushing, and Hovey & Co., of Boston, which can recommend to the ladies who wish to compete for the splendid premiums offered by the Horticultural Society, as being by far the best ever offered in this city. They will be put up in boxes containing 25 choice varieties, for one dollar, with a catalogue, stating the duration of the plants, the color of the flowers, and the time of flowering. For sale at the Rochester Seed Store. The first Seed Store on Front street, No. 4. JAMES P. FOGG.

Clover and Timothy Seed.—500 bushels of Clover and Timothy Seed, for sale at the Geneese Seed Store, No. 13, (old No. 10,) Front street, by RAPALJE & BRIGGS. Rochester, April 1, 1847.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,.....	1,62½		Pork, bbl, mess	15,00
Corn,.....	63	70	Pork, cwt,.....	5,00
Barley,.....			Beef, cwt,.....	5,00
Oats,.....	45		Lard, lb,.....	8
Flour,.....	7,50		Butter, lb,.....	10
Beans,.....	37	1,00	Cheese, old, lb,.....	7
Apples, bushel	50	75	Eggs, doz,.....	8
Potatoes,.....	50		Poultry,.....	7
Clover Seed,.....	4,00		Tallow,.....	9
Timothy,.....	1,50		Maple Sugar,.....	8
Hay, ton,.....	8,50		Sheep Skins,.....	75
Wood, cord,.....	2,50	3,50	Green Hides, lb	34
Salt, bbl,.....	1,06		Dry " ".....	7
Hams, lb,.....	7	8	Calf Skins,.....	8

Rochester, May 26, 1847.

[By Magnetic Telegraph.]

NEW YORK, May 25—7 P. M.

ASHES.—The demand for Pots is fair at \$5 a \$5,09, according to rates with sales 250 bbls. Pearls \$6,10, with sales 50 bbls.

FLOUR and WHEAT.—The inquiry has continued good for flour, but the advance has been checked and a little re-action took place. The market is perhaps 6d lower than the highest point of yesterday. The receipts of flour since Friday are 50,000 bbls. The demand to-day has taken all the receipts, say 10,000 to 12,000 bbls. at \$8,75 a \$8,81½ with occasionally a parcel of Michigan at \$8,62.

GRAIN.—There are but few samples of wheat offering, and the only sale is 2000 bu. Ohio at \$2. Corn was in moderate supply, and the market was scarcely so firm. The sales are some 25,000 bu. at \$1,10 a \$1,15 for mixed and yellow; at the else yellow would not bring over \$1,12 a 1,13.

The sales for future delivery reach 75,000 bu. at \$1,03 for June, and 95 cts. a \$1 for July and August. Rye is heavier with sales 5 or 6000 bu. at \$1,43 a \$1,47. Nothing doing in Barley. Oats remaining at 72 a 73 cts. Sales 10,000 bu. at 71 cts in one lot. The demand for beans and peas continues, and 1000 bu. sold at \$1,13¼ for field, and \$1,37¼ for Marrowfat beans.

PUBLISHERS' NOTICES.

A Liberal Offer!

We have a thousand sets of the Farmer from the commencement of the present volume—and can therefore supply that number of new subscribers. Who will lend their aid in obtaining them? At the present price, one bushel of wheat will pay for four copies, (at our club terms,) and still there are thousands of able farmers, even in Western New York, so very poor that they cannot afford to take the *Genesee Farmer*!

☞ Any person sending us \$3, free of expense, after this date, will receive eight copies of the present volume, and a copy of vol. 6 or 7, as he may prefer. Think of this, reader, and see what can be done among your agricultural friends.

To Clubs.—Any Post Master or other person who has sent us eight or more subscribers, will be furnished with any additional number of copies at the club price—37½ cents each. We hope those who have formed clubs, will bear this in mind, and forward the subscriptions of such as may hereafter want the Farmer. Back numbers can be supplied—so that al. may have the entire volume.

☞ Acknowledgment of club subscriptions next month.

A Word to Farmers.

SAGE & BROTHER have received a very fine assortment of Agricultural Works, peculiarly adapted to the intelligent cultivators of the earth, who combine science with labor, and thereby render their farms doubly productive.

The works are from the pens of Downing, Fessenden, Kendrick, Thomas, Buel, Youart, Clater, and a host of others, who have lived and written for the good of the agriculturist, and proved themselves benefactors to their race.

Call and see at No. 49 Buffalo, corner State Street. Rochester, June 1, 1847.—31.

Sale of Short Horned Cattle.

IN consequence of becoming over-stocked, I will offer for sale, at Auction, at my residence in the town of Auburn, on Wednesday, the 8th day of September next, forty head of thorough bred Short Horned Cattle—consisting of about thirty Cows and Heifers, and ten young Bulls. I shall select from my whole herd one Bull, "Symmetry," two Cows, and two Heifers, which I shall not offer for sale. The balance, being about forty, will be sold without reserve.

The original cows of this herd were selected from the best of the herds of the late PATROON VAN RENSSLAER, FRANCIS ROTCH, and L. F. ALLEN, Esqs., whose reputation as breeders of fine stock requires no eulogy from me. The younger stock were bred with much care from my Bulls Archer and Symmetry, both of which have received the prize as the best Bull at the Exhibitions of the New York State Agricultural Society. Archer was bred by FRANCIS ROTCH, Esq., out of his famous imported cow "Adaliza," and got by "Rolla," (see Coats' Herd Book, No. 4991.)—Symmetry was bred by GEO. VAIL, Esq., of Troy, out of his Cow Dutches, and got by his Duke of Wellington, (see Coat's Herd Book, No. 3654, or American Herd Book, No. 55,) both of which he imported from the herd of THOMAS BATES, Esq., of Yorkshire, England. Full pedigrees of all the Cattle will be printed and ready by the 1st of July.—They can be had by applying to A. B. ALLEN, New York; LUTHER TUCKER and B. P. JOHNSON, Albany; Office of the *Genesee Farmer*, Rochester; L. F. ALLEN, Black Rock; or at my residence.

Also, I will sell ten three-fourths and half bred Cows and Heifers.

After the sale of the above Cattle, I will sell at Auction, one hundred *Merino Rams*, ten fifteen *South Down Rams*, sixty *Merino* and thirty grade *Merino Ewes*. The Ewes will be sold in pens of three.

That gentlemen not acquainted with my flock of Sheep may form some opinion of their value, I make the following statement, viz: I have taken five clips of wool from my Sheep. The clip of 1846 averaged a fraction over four lbs. per head; this was the largest. One of the five clips I sold at thirty-nine cents, the other four I sold to one Manufacturing Company at different times, at forty cents per lb.—all at my own house.

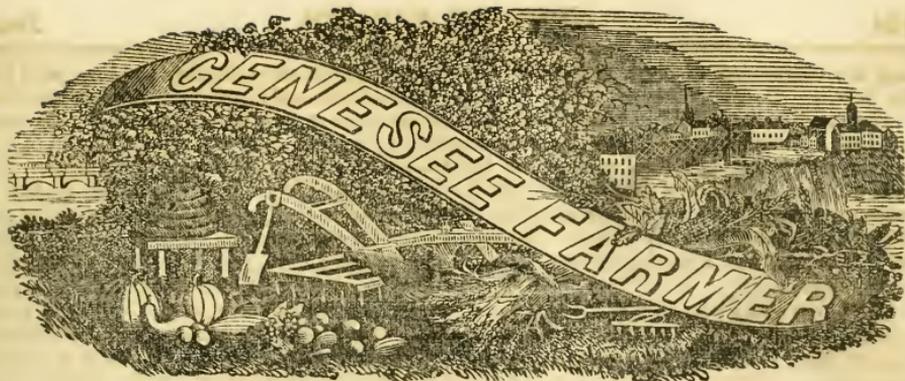
Terms of the sale, Cash or approved endorsed notes, payable at the Bank of Auburn, at three months with interest. J. M. SHERWOOD.

Auburn, Cay. Co., N. Y., June 1, 1847.

Agent at Lyons.—MR. E. HOPKINS, Periodical Agent, is our authorized agent at Lyons, Wayne county. Mr. H. will furnish back volumes (bound,) and also receive subscriptions for the current volume.

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THE GENESEE FARMER:

Issued the first of each month, in Rochester, N. Y., by

D. D. T. MOORE, PROPRIETOR.

DANIEL LEE, EDITOR.

F. BARRY, Conductor of the Horticultural Department.

Fifty Cents a Year:

FIVE copies for \$2—EIGHT copies for \$3. Subscription money, by a regulation of the Post-Master General, may be remitted by Post-Masters free of expense. [] All subscriptions to commence with the first number of the volume.

PUBLICATION OFFICE in Talman's Block, Buffalo street, opposite Reynold's Arcade—where all subscriptions not forwarded by mail should be paid.

POST-MASTERS, and all other friends of Agricultural Journals, are requested to obtain and forward subscriptions for the FARMER. Address D. D. T. MOORE, Rochester, N. Y.

To Correspondents.

COMMUNICATIONS have been received during the past month from S. W., A. H. Powers, S. Faulkner, Conrad Miller, *, William Garbutt, A. Zoller, Old Farmer Tim, Leander Wetherell, Darius, A Subscriber, M. M. Rogers, Tertullus Crosby, F. W. L., and Mechanic.

Want of space compels us to defer a number of communications placed in type for this number. Also, notices of several agricultural books, &c., recently received from authors and publishers.

Enlargement of the Farmer.

NEXT month the Farmer will be enlarged to *thirty-two pages*—making eight pages more, in each number, than at present. This is rendered necessary in order to accommodate our advertising friends, without infringing upon that portion of the paper devoted to reading matter. We already give more reading, in proportion to the price, than any other agricultural paper in the Union—and shall hereafter give a still larger amount in each number. The terms of the Farmer will remain unchanged, for the current volume at least. We can yet supply new subscribers with numbers from the commencement of the volume.—Our sets of back numbers are, however, fast diminishing, and those who wish the Farmer will do well to send in their orders as early as convenient.

[] The enlarged Farmer will be printed on *one sheet*, and subject to *newspaper postage only*.

EDITORS who receive the Farmer will oblige us by copying or noticing the above announcement.

Hints for July.

THE duties of this month are mostly devoted to Haying and Harvesting, which are important items in the farmer's avocations.

The late heavy rains and cool weather will improve the grass, and probably retard its period of ripening. Clover should be cut when in full blossom, as should June grass and meadows; it is a respectable stock hay, if cut green, but if left till ripe is little better than straw. Timothy will bear a riper stage than any other grass. As a general rule all medicinal and culinary herbs should be gathered while in blossom, and before ripening their seed, as they then contain more of the essential oils and saccharine matter than at any other time: the same reasoning applies to hay and clover.

Clover and Timothy should be cut about the first blossoming of the timothy, if the clover is of the medium kind—if of the large kind, they come into season at the same period, and should only be sown together. Fields that are three-fourths clover should only be cured by sweating in cocks. After laying in the sun till fairly wilted, make up into cocks of 75 or 100 lbs., where they may lie 3 or 4 days; then open to a few hours sun, and it is ready for the barn. A little salt, say 4 quarts to the ton, is beneficial—more than that is sometimes injurious to cattle.

The *horse rake*, on old fields, is a great saving in expedition and expenditure. No farmer with ten acres of hay should be without one. Swift's Patent, of Clarkson, in this county, is the one we prefer, containing an important principle that no other one does within our cognizance.

Wheat harvest will be late this season, and therefore exposed to rust and shrinkage. The heads of wheat will be short, in this region; the cold and drouth, at the period the embryo formed, has had the effect to defeat a full development—although it has increased in offsets, but not enough to compensate for the shortened heads.

Cut all the grains before fully ripe. You will have more pounds of berry and finer flour, and

save the distribution of chess and cockle over the field.

The English method of *shocking* is the safest and best. Commence by leaning two sheaves against each other, and then continue on both sides till there are a dozen; flatten and beat the heads together till they interweave and form the shape of a flat broom. They will not blow down, dry quick, and will withstand a long series of wet weather.

Try to get along without the use of spirits during the harvest labors. Substitute some home-brewed beer, or coffee, or cold water, ginger and molasses. Water a little soured with vinegar, and sweetened, is a great reliever of thirst.

The greater part of the *spring seeding* with clover and timothy will be lost, from the want of rain: the only remedy is to seed again early next spring; and that process none of the most sure.

Turn your sheep on to the summer fallows as soon as they look green—after which thoroughly drag or work over with a cultivator.

This month and August are thought unfavorable to making and laying down butter, and therefore many resort to cheese making, which no one should do with less than from 8 to 12 cows, as small cheese are rarely good; they dry and cure before a sufficient time has elapsed to go through the second or incipient putrid fomentation, whereby that peculiar, pungent and essential flavor and mellowness is imparted to them. Butter well worked over a second time, and laid down in brine, will keep sweet any length of time.—We have eaten butter 4 years old, as sweet as the day it was made. It whitens a little on the outside, which may be scraped off if intended for market.

Keep the weeds out of your garden, and pick up and burn all the fallen fruit to kill the future insect that destroys your plums, &c. Look every day at your potato tops, and see if you can detect the cause of the disease.

Analysis of Soils.

EVERY month's experience brings to our notice some new facts, illustrative of the great practical value of chemical researches into the properties, and capabilities of different soils. A few weeks since, Mr. P. RISOORU, of West Bloomingfield left at our office samples of the surface and sub-soil of a farm belonging to him in Oswego county, about 30 miles north of Rome. These specimens are so unlike all soils in this part of the State, that they may be studied by our readers with profit, who would be well informed on the subject of improving poor lands.

The surface earth had 3 per cent. of moisture, and 6 of organic, combustible matter in it.—These removed, 100 grains of the mineral elements gave 97 of fine silicious sand, which was insoluble in boiling hydrochloric acid. The

other 3 grains were alumina and iron, with bare traces of lime and magnesia. 3000 grains of this surface soil as it came from the field, were steeped in pure rain water as it comes from the clouds, warmed to about blood heat, for a week. The liquid was highly colored and *sour*, or had an acid re-action. It was carefully filtered (a slow process,) and evaporated to dryness. Its residuum weighed 5.60 grains. Of this dry matter 3.20 grains were humus, humic acid, or some other combustible substance; and 2.40 grains were incombustible minerals. In the latter there were 1.24 grains of alumina and iron with traces of sulphuric and phosphoric acids. Of lime there was 0.85 grains; soluble silica 0.16 grains, beside traces of magnesia and potash. All these alkaline and other minerals doubtless came from the 180 grains of vegetable mould which the 3000 grains of surface soil contained.

We had only promised to examine the surface soil of Mr. R., charging him but \$2 for a week's professional labor. But our curiosity was deeply excited to find out the source of the lime and potash in the liquid with which we had washed the surface soil. Instead of fusing the 97 per cent of silica to search for lime, potash, and soda, locked up in the shape of insoluble silicates, (where doubtless they could be found,) we thought that lime must exist somewhere in the sub-soil in a more available form. Accordingly we searched there for it. 100 grains of sub-soil gave

Water of absorption,.....	2.37
Organic matter,.....	2.55
Silica,.....	89.00
Alumina and oxide of Iron,.....	5.44
Lime,.....	.50
Magnesia and Potash,.....	traces.
Loss,.....	.14
	100.00

1000 grains of this earth gave us 5 grains of lime, 1 grain of magnesia, also half a grain of potash and soda.

The reader has now a right to ask "What important practical truths do the above facts disclose?"

We answer: First, that the surface soil is *sour*, contains an excess of sand (silicic acid,) and lacks lime, alumina, potash, and soda.

Secondly, That the application of leached ashes and stiff clay will improve the texture of the soil mechanically, as well as chemically—rendering it less liable to leach, and lose any manure or other fertilizers that may be applied to it.

Thirdly, That *deep plowing*, by bringing up the lime and alumina from the sub-soil, will, with the use of a heavy roller, improve the land.

Fourthly, That unleached ashes will be of peculiar value to correct the acidity of the soil, and increase the solubility of the sand. For the fact must not be over-looked that 3000 grains of this sandy soil gave to rain water, as it falls from the heavens, but one-sixth of a grain of soluble silica. How to dissolve silica, or a flint tumbler,

so as to supply this important element in corn stalks, and the stems of timothy, oats, and wheat, is what the reader should learn in this lesson, if he does not already understand how nature operates in this matter. The presence of the alkalies, potash, or soda, is indispensable in the soil, to aid in dissolving fine particles of silicious sand.

Fifthly, The analyses we have made show, that crops which have long roots, reaching to the sub-soil, like clover, corn, beans, parsneps, and carrots, and extracting therefrom lime and other alkaline minerals, are better adapted to this open soil than short rooted plants, which draw their nourishment from the surface soil exclusively. These crops should be fed to sheep, cows, and other domestic animals on the fields, that their treading upon the land may make it more compact, whilst their droppings will add fertilizing elements drawn alike from the sub-soil and the atmosphere.

The application of 10 bushels of unleached ashes, 6 of lime, 3 of salt, 1 of gypsum, and 1 of burnt bones, well pulverized, to an acre of this land, will greatly increase its productiveness.— It will be much better for sheep to eat clover, or any other crop, on the land, and leave the manure thereon, than to plow in green plants of any kind to ferment and *sour* without the correction of alkalies.

Clover, peas, beans, carrots, turneps, potatoes, oats, and corn, are the crops on which we should mainly rely on this farm, provided the specimens sent us are fair samples of the soil on its general surface.

If any of our readers wish to have their soils analyzed at a mere nominal price, they had better not let present opportunity pass. The writer has a call from a distant State for his professional services, which he thinks of answering. It is a curious fact that he receives twenty dollars for writing political articles for the perusal of farmers, where he gets one for investigating the composition of their soils at no inconsiderable expense for apparatus and chemicals. We do not complain of this, for it is much pleasanter to sit by a table and write, than to toil over the poisonous fumes of boiling acids, searching for the things which God has appointed to make the necessary food of all that live, whether vegetables or animals.

LARGE PIGS—BERKSHIRE BREED.—TIMOTHY BROCKWAY states in the *Boston Cultivator*, that Messrs. JOHN & SAMUEL FOOT, of Bradford, Ct., killed four pigs last fall, two of which were nine months and twenty days old, and the other two were nine months and twenty-eight days old, whose dressed weights were 401, 419, 423, 473 pounds. It is stated that they were got by Mr. Brockway's "Improved Berkshire" boar, which took the premium at the New Haven show in 1845. The pigs were all of one litter.

Barley.

THE value of barley for making pork and feeding other animals is not duly estimated by the generality of farmers in Western New York.— As a summer crop its culture can often be made quite profitable. It delights in a rich loamy soil, which is more inclined to clay than sand. 100 grains of barley meal give, on burning, 3 grains of ash. 100 grains of this ash contain, of

Silica,	29.67
Phosphoric acid,	36.80
Sulphuric acid,	0.16
Chlorine,	0.15
Per-oxide Iron,	6.53
Lime,	3.23
Magnesia,	4.30
Potash,	16.00
Soda,	8.86
	100.00

This analysis was made by PROF. THOMPSON, of Glasgow. German chemists have found something less than 3 per cent. of ash in 100 parts of dry barley. In a good soil adapted to the plant, the quantity found by Dr. T. may be regarded as an average. Supposing that all the straw was returned to the soil either directly, or in the shape of manure, 2000 lbs. of barley, after it was thoroughly dried at 212° taken from an acre, (equivalent to 49 or 50 bushels,) would remove from the earth 60 lbs. of its most valuable minerals. Among these would be 17.80 lbs. of soluble silica or flint, which exists mainly in the hull of barley. The most valuable earthy element in the seed of this grain, as in all others, is *phosphoric acid*. Of this, 2000 lbs. of barley remove from the soil 22 lbs. If barley be fed to swine, horses, or other domestic animals, and all their solid and liquid manure be carried back on the field that produced the crop, the land will be made richer for the operation. This result accrues not from the mistaken idea that *all* or nearly all the matter removed in a crop, can be carried back in the manure, which the crop will yield when fed to animals. All animals literally burn their food in their *warmed* bodies, the gases and vapor formed by the combustion escaping through the lungs in expired air. 100 lbs. of dry food will make less than 50 lbs. of dry dung and salts in urine. How, then, can the removal of 100 lbs. of barley, corn, or wheat, from a piece of ground, and the return of only 40 lbs. of the *same matter* enrich the soil? This question we greatly desire that every child, whether male or female, 14 years old, should be able to answer correctly. We are pained and mortified at our poor success in persuading those that till the earth that schools to teach the laws of nature which govern the growth of cereal and other cultivated plants, ought to be established and supported for the benefit of agriculture. But let that pass; while we ask again *why it is* that a farmer may take 1000 lbs. of barley from a field, and by restoring only *one-tenth of the same*,

have his land none the poorer by the operation ?

It will be recollected that 1000 lbs. of this grain contain at most but 30 lbs. of incombustible earthy matter. By restoring these and 70 lbs. of organized carbon, oxygen, hydrogen, and nitrogen, the skilful husbandman gives back to the soil as much as it furnished toward the 1000 lbs. of barley. But how is the land made richer when we restore not a particle more soluble flint, phosphorus, sulphur, iron, lime, magnesia, soda, potash, chlorine, carbon, and nitrogen, than was removed in the crop ?

Some knowledge of agricultural geology is indispensable to the clear understanding of this interesting subject. Consider for a moment the *source* from which all soils derive their lime, potash, phosphorus, sulphur, and other earthy elements of plants. In 100 lbs. of the ash of barley there are 37 lbs. of phosphoric acid, 24 lbs. of potash and soda, beside 7½ lbs. of lime and magnesia. No wonder that this crop requires good land to yield a large amount of seed.

It is the constant abrasion, comminution, and solution of the small particles of rocks, which lie exposed to the meteoric influences of frost, heat, light, electricity, water, oxygen, carbonic and nitric acids from the air, that renovate soils while at rest, when partially exhausted by the removal of crops. *Science* can render the practical farmer most valuable aid in hastening the natural process for bringing back virgin fertility to a worn out field. But alas, the practical man too often scorns the proffered light of science. He ridicules the idea of having his sons study the properties and source of the constituent elements, which God has appointed to make the bread, the meat, and the clothing of all rational beings.— We rejoice however in the strong faith that this deep prejudice against the study of the natural sciences which have so intimate a connection with rural industry, can not last always. Our children's children, if not our own offspring, will see the end of it.

As a bushel of barley can be grown on some soils about as easily as a bushel of oats, who would not give a trifle to know by actual experiments the relative value of 200 lbs. of barley meal and a like weight of corn meal, for making pork, beef, and mutton ? By making meal into well cooked pudding, and mixing it with boiled or steamed potatoes, a little slop from the kitchen and dairy, pork can be made at no great expense, while the dung and urine from the pig sty will make great barley next year. We are much in favor of that system of husbandry which consumes the largest amount of the products of the farm at home, and carefully saves, and uses to the best advantage the manure thus made. We have often help to harvest from 45 to 50 bushels of barley on an acre, and have seen it much used in fattening hogs. But its precise value for feeding has never been determined.

Cheese Making.

THE first thing to be looked after in a cheese dairy, is to provide a dozen or more good cows, and these with a full and regular supply of nutritious food. Upland pastures, or herbage that grows on dry land yields more cheese per gallon of milk, as well as more per week from the same cows, than grass which grows on wet, sour soils. Having secured a sufficient quantity of milk daily to make a good cheese, the next step is to separate all the curd from the whey and retain as much of the butter or cream in the former as practicable. If this is skilfully done, and the cheese properly salted with pure salt, pressed and cured, a most valuable product rewards the labor of the dairyman. Different persons have very unlike methods for saving rennets, and preparing them for use. We have nothing new or worthy of note to offer on this point. A word of caution, however, to the dairy-woman not to let incipient decomposition in the prepared entrail be such as to impart an offensive taste or odor to the cheese at any time. A defective rennet will spoil an otherwise most valuable curd, which no after treatment can remedy.

When the gastric juice, or animal substance is just what it should be, the use of too much rennet is a very common error. According to Mr. COLMAN, the rule in the best English dairies is to put into the milk no more rennet than will suffice to coagulate the same, or separate the curd in fifty minutes. Dairy women are apt to be in a hurry to get on with their work, and in their impatience throw in and incorporate with the curd too much gastric matter. If the milk is at a proper temperature, a very little will answer the purpose. Mr. COLMAN says "the temperature of the milk, when the rennet is applied, should be from 80 to 84 degrees Fahrenheit." He also remarks that "the dairy-women in some parts of England, who make a very good cheese, make their cheeses cold; that is, coagulate at a very low temperature. This cheese is said always to meet a quick demand. They likewise salt them but lightly." We regard these suggestions as of much practical value; for we have studied with some care the *art* as well as the science of cheese-making.

Various contrivances are in use for cutting or breaking the curd into fine pieces when it is fully solidified. The operation should be performed with care and by an experienced hand. It is easy to rob a cheese of much of its richness before it goes to press.

The quantity of salt to be used is one pound to 42 of cheese. The salt should be of the purest kind. The lever press is preferable to the screw, because it follows down the compression of the curd with an uniform weight, and a screw does not.

As the demand for American cheese is rapidly extending in England, the following comments

on the defects of our cheese by English dealers may be worth copying. Mr. C. says:

"In conversation with one of the largest wholesale cheese-mongers and provision dealers in the country, he suggested that there were two great faults of the American cheese, which somewhat prejudiced its sale in the English markets. He is a person in whose character and experience entire confidence may be placed.

He was pleased to say that he had had cheeses from the United States as good as any he had ever seen, and that the general character of the article was greatly improved since the first importations.

But the first fault was the softness of the rind. It often cracked, and the cheese became spoiled from that circumstance. This he considered as owing to the cheese being too rich; if so, it is a fault which may be remedied. The English cheeses soon acquire a great firmness; and I have given above the opinion of an English dairy-woman as to how this is affected. I think proper, however, to add the directions of a most experienced and successful dairy farmer in respect to this matter. He says that the rind may be made of any desired hardness, if the cheese be taken from the press, and allowed to remain in brine so strong that it will take up no more salt, for four or five hours. There must be great care, however, not to keep it too long in the brine.

The second fault is the acidness, or peculiarly smart bitter taste often found in American cheeses. He thought this might be due, in part, to some improper preparation or use of the rennet, and, in part, to some kind of feed which the cows found in the pastures. Both these matters are well worthy of investigation, and that alone can determine.

He was of opinion, likewise, that American cheese would sell better if it were colored like the English cheese. The market for it was fast becoming most extensive.

In respect to American butter, he considered that which usually came here as a most inferior article. (Much of it, I believe, is used, in the manufacturing districts, solely for greasing machinery.) Salt butter, or butter strongly salted, is not saleable in the English market; and especially the salt must not appear. I cannot doubt, however, that presently some of our best June or September butter, put up in lumps, would find a good market here,—if, in truth, we have any to export. The very best fresh butter in London market, however, does not bring so high a price as I have often paid for the best article from the county of Worcester, in Boston market; and I have frequently known the best butter to be sold in Baltimore, and even in Cincinnati market, for half a dollar, a little more than two shillings sterling per pound.

I have seen in England none of the admirable *spring-houses* which are to be found in Pennsylvania."

MEAT.—Those of our readers that have the means to make a few fat pigs, sheep, steers, or heifers early this season may reasonably expect a good price for the same. We have to pay 9 cents a pound for beef steak, 8 for veal and pork, and 6 for mutton in this market. Those that get their pork first in the market will receive the largest price.

The demand for meat to go to England will be large, and keep prices above the average in this country. The making of beef, pork, or mutton will be more profitable hereafter, than it has been for many years past. The business is deserving of careful study in all its details.—Good beef and mutton were worth at the last advices from London 9d. or 18 cents a pound and duty free. With good rail-roads to the sea-board, carrying domestic animals without tolls to the State, and a plenty of ice to pack meat in, it can be sent fresh to England at least nine months in a year from the United States. The subject is a matter of great importance to our readers, and we commend it to their earnest attention.

Making Hay.

THE time to cut grass for making hay is just when the seed begins to form. At this period the stems and leaves of all the grasses contain their maximum of nutritive matter. Delay cutting till the seed is ripe, and all the sugar and most of the starch and nitrogenous elements in the stems, or *straw* of timothy and other plants mown for hay, have been consumed in forming germs for the next generation, and providing them with food. As the chick in a new laid egg must have all the ingredients within the shell necessary to elaborate its bones, organs of respiration and digestion, its brain, flesh, and feathers, so the embryo plant must have within the shell of its seed every element required to form its woody fibre, nitrogenous tissue, circulating tubes, root, stem, and leaves, before it can begin to live on the external food that exists in the soil and atmosphere. The organization of seeds in the ear of corn, wheat, timothy, clover, or peas, has a very exhausting effect on the stems and leaves of those plants.

Grass should never be cut when the dew is on, or when it rains, if it can be well avoided.—Much judgment can be exercised in curing hay evenly, and neither too much nor too little.—Every farmer has his own notion when hay is ready to go into the barn or stack; and is governed more or less by circumstances. A little salt spread over the mow as the hay is deposited will be of essential service.

Scab in Sheep.

A CORRESPONDENT asks us to inform him what treatment he must adopt to remove the disease called "scab," which affects a number of his sheep. First separate the well ones from those that have the disease, that it may extend no farther. Then wash the surface affected by the scab with a decoction made by boiling a pound of plug tobacco in three gallons of water. Care should be taken not to apply too much of this poisonous infusion, for we have seen bad effects from its absorption through the skin of persons, when applied for medicinal purposes.

The pustules or sores on the bodies of sheep contain animalculæ called *acari*, which some suppose to be the exclusive cause of the disease called scab. Whether this be true or not, a solution of corrosive sublimate at the rate of a dram of the salt to a quart of rain water can be used to advantage to kill the parasites, and heal the sores. Blue mercurial ointment is also a good remedy. For further particulars see MORELL'S "Sheep Husbandry"—a cheap and most valuable work, which every man that keeps a score of sheep will make money to purchase at a dollar.

Don't give your boys the worst tools, and then scold because they cannot do as much as *men*.

Hop Culture. --- Drying, &c.

MR. EDITOR :—In describing the method of drying hops, so as to be understood by one wholly unacquainted with the business, I will first give a description of the kiln, which has been, heretofore, the kind used—at any rate, the kind we have used a number of years, with good success.

It is built by digging into a side-hill to the perpendicular depth of about 7 feet below a line level with the upper side—digging the space for the bottom 6 feet square, and for the top about 14 feet; laying a tier of stone, a foot thick, on the four sides, with a space for a door through the wall on the lower side. Sills are then placed on the wall, into which are fitted joists 3 feet apart, on which the floor is lain, consisting of slats 1½ inches square placed about 1 inch apart, over which is drawn a coarse linen cloth fastened to the sills on the sides. Another tier of sills is then put on, to which is fastened the roof; then the gable ends are boarded up, leaving a door in one end, and a window in each end to let off the steam. Now, after burning 5 bushels of charcoal underneath to heat the kiln, it will be ready to receive the hops, which are conveyed to the kiln in sacks, (made of 4 to 5 yards of cloth each,) and poured on to the cloth to the depth of 8 or 9 inches, spreading them evenly with a rake, taking care to move your feet close to the cloth, so as not to tread on the hops. After the hops are on and windows left open above, it will require much judgment and practice to know how much coal to use, and how often to put it on; which must be regulated by practice, as too much heat will spoil the hops; and again if the heat is not regularly kept up, after the steam has started, it will settle back on to the hops and spoil them. Yet the quantity of coal to be used, for the kiln I have described, will vary but little from three pecks at a time, put on once an hour.

Roll brimstone, or sulphur, is often used in drying hops. We prefer sulphur, and use it in the following manner: as soon as the hops are put on, close the windows above; put on some coal below, and when it becomes coals of fire, put on 5 or 6 large table spoonfuls of sulphur, that the steam of it may all take effect on the hops at once, thereby opening the pores making them look better when dried. In 5 or 10 minutes after the sulphur is put on the windows must be thrown open, and remain so till the steam all passes off; when they may be closed again, and in a short time the hops may be stirred up—those from the outer sides brought into middle—those moved to the sides and all leveled as before. To determine when they are dry enough to take off, will require some experience; yet by examining the stem of the hop and finding it tough with no juice in it, may be considered a good test. The hops, when dry, are taken into sacks by means

of a spout on the lower side of the kiln, and carried to the hop house chamber, underneath which is the press, consisting of two upright posts, with a beam across near the top, and two sills at the bottom, to support the posts and prevent them raising. There is also a screw passing through the center of the beam, under which is fitted a box made of plank, so as to be taken to pieces. The inner side of the box is 4½ feet long, 1½ feet wide, and 4 to 5 feet high. When the box is fitted for pressing a cloth is placed under it, and two men tread in hops till it is full, when another cloth is put on the top. The follower is then put on, and the screw turned down as far as desired, when the box is taken to pieces—the cloth brought together on the sides and sewed—the screw turned back—the bale of hops taken up—another piece of cloth sewed on each end, and then it is ready for market.

In the above statement I have taken only a practical view of the subject; but in building a kiln, the approved method would be to build it of wood, above the ground, being some 10 feet below the cloth—the sides perpendicular, and 3 feet above the cloth to the eaves—the inner side of the walls lathed and plastered from the ground to the eaves. Some burn wood in such kilns by making use of stoves.

After all is said and done, hop raising is not generally considered safe business, unless the price exceeds 10 cents *per pound*.

Yours, &c., LINCOLN CUMMINGS.
Augusta, Oneida Co., N. Y., 1847.

The Romance of Rural Life.

MR. EDITOR :—Your correspondent, O. C. COMSTOCK, Jr., comes down upon me with a wet sail, for saying that the farmers' sons of Western New York prefer a "barefoot life, in the wild west, to labor in their father's neglected fields at home."

It was not my intention to cross any man's interest, who has a few *quarter sections* to sell in Michigan—much less to underrate the advantages and the true poetry of life, offered to the emigrating farmer boy, by the wild flowering prairies of the west.

"I'd sooner stop the unchained dove,
When swift returning to his home of love,"

than rob the emigrant of that *prestige* of future bliss, which is to cheat sickness of its pain, and prevent labor from bringing weariness with it. I only wished to explain, as explicitly as possible, some of the causes which had contributed to decrease the population of some of New York's best alluvial domains? If my simile, "barefoot," when applied to the privations of the new settler, is offensive to any one, my excuse is, that it is neither a plagiarism nor a fiction; it was forced on me by the evidence of my own eyes. Twenty years ago I traveled two days in the north part

of Ohio, then a new country, during which time I saw more of the evidences of meagre fare, more barefoot women, and ragged children, than I had before noticed in my whole life. But I must confess that in all new settlements, there is a noble undercurrent of enthusiasm, a romance of labor, that turns toil to play, and privation to pleasure—animating the present while it gilds the future; a stimulus to action which the *ennu-ye* cannot envy, because he has not seen or enjoyed it. How often I have heard a farmer aver, in all sincerity, that he never “realized so much comfort in his life, as when he lived in his log-house, with a puncheon roof, stick chimney and floor of split logs; then, said he, our wants were few and simple, now they are legion. Then pride had not invaded our neighborhood—we all worked and saved, and were animated by the good in prospect; now that we have more than attained that fancied good, the good is only the farther from us, because our wants have increased faster than our means of indulging them. It would seem now, that pride has come among us only to make us the slave of fashion, at the expense of all our homespun comforts, and domestic peace.”

If I mistake not, the first settlers of Michigan commenced their struggle in the wilderness with more capital than is usual with new settlers generally, and that their *outward* civilization has increased in direct ratio with their means of indulging it, until the struggle between pride and poverty there is now sufficiently developed to entitle Michigan to be ranked among the more advanced states of the west. Perhaps no other state ever made a more rapid transition from the log-house simplicity to the age of brick and mortar, and paint, and upholstery, and floriculture, &c., &c., than this same peninsular Michigan. But all these *fixed* facts only go to prove the romance of labor; for what man in his senses would ever undertake, with money, to clear up, fence, and put good buildings on a *quarter section* of wild land, with any hope of ever realizing the amount of his outlay in dollars and cents? 'Tis true that hundreds of industrious families have created to themselves a fine estate by such an operation; but it is done at the expense of great economy, self denial, unceasing toil, and a privation that could hardly be borne, save under the influence of that exciting novelty and enthusiasm, which is the romance of labor.

Oh that this magic influence could be invoked, in order that the labor which is now so rarely bestowed on the smooth old alluvial fields of Seneca, may be cheated of its drudgery, so that our farmers sons may be induced to think and to feel, that with a tithe of the labor and with the same economy and self denial required to make a new farm available, will make them rich on an old one.

S. W.

Seneca county, N. Y., 1847.

Fences.

NUMBER TWO.

THE most economical, permanent, and withal, respectable looking post and board fence, for general farm purposes, is constructed thus: Let your posts be *large*, not less than eight inches square, and if ten the better. As its durability entirely depends on the life of the posts, let them be of the most lasting timber within your reach—remembering that the butt cuts are worth double to those taken high up in the tree. Set them firmly in the earth, and if you can give them a packing of 4 or 6 inches of lime ridings or leached ashes, it will wonderfully improve their durability—as will also charring a few inches above and below the surface of the soil. Four and a quarter or four and a half feet is a sufficient height, as animals seldom attempt a board or picket fence of any height. The boards should be hemlock or pine; and if of your own procuring let them be 16½ feet long, or one rod; that length allowing the posts often enough to support the fence, and what is convenient, counting the lengths gives the contents of acres in the field. Four boards should constitute the fence, of 12, 10, 8, or 6 inches in width, placed (beginning at the bottom) at 4, 6, or 7 inches apart, the last one to come to the top of the post, which is to be sawed off about 1 inch slanting, to receive the cap and carry off the water. In putting on the boards, tack them on with one or two eight-penny nails and over the joints and at each post place a six inch batten, and thoroughly nail into each board with twelve-penny nails. The caps should break joints with the boards and slope so as to carry the water from the front.

Such a fence will out last a dozen Presidential campaigns, and is comparatively a very cheap structure. There is in each rod of this fence 60 feet of boards, which, at \$5 for hemlock, and in proportion higher for pine, costs 30 cents. The posts 6 cents each, is 12 cts.; and 2 lbs. of nails 12 cts. more; in all 54 cts., and 25 cts. for putting up—say 80 cts. per rod—which is defying time and unruly animals at a very moderate rate.

I have not done making fence yet. I will in my next surround your small premises, Mr. Editor, with an oddity which I like very well, so that if I dont get a hint from you to stop fencing and attend to my own affairs, *I shall go on*, like the old minister of whom his congregation grumbled that he preached too long sermons. He at last agreed to take a short text, which was “*Nevertheless*,” and after applying it about a half an hour longer than usual, said, “Now, my brethren, I suppose you are all grumbling that your dinners are getting cold, but *nevertheless*—I shall go on to the last but two heads of my discourse.” It was equal to the balsam of wild cherry—it cured them of grumbling.

OLD FARMER TIM.

The Crops and the Season.

JUNE has been a very favorable month for the husbandman. Crops of all kinds have come forward rapidly. Wheat, the great staple of Western New York, has suffered very severely by the ravages of insects and the frosts of winter. In Livingston county it is thought the injury from these calamities is fully equal to one-third of the usual crop. In Wheatland the damage is estimated, by the most intelligent farmers, at from one-third to one-fourth of the ordinary yield.—After taking much pains to obtain valuable information, we suppose that the Hessian Fly (*cecidomyia destructor*) has destroyed about 700,000 bushels, or one-tenth of the whole product, on a fair average. An equal amount has been lost by winter-killing—making the yield fall short of the usual crop one-fifth, or 20 per cent. Many suppose that this is quite too low an estimate of the damage done by the causes named. Taking all Western New York together, we can not estimate the loss over 1,500,000 bushels. Our wheat growers have still to incur the risk of injury from rust. The weather for the last two weeks has been favorable to the attack of this blighting malady. It has been quite moist and warm, giving a large growth of stem and leaves to the plant.

Accounts from the wheat growing regions of the West represent the ravages of the Hessian fly as alarmingly destructive. The following is an extract of a letter dated

CLEVELAND, Ohio, June 16, 1847.

I have made a good deal of inquiry as to the crops in these parts, and the universal answer is, that the fly is making sad work with the wheat. Some fields will hardly return the seed sown; and the corn, in consequence of the coldness of the weather, is very backward. The best fields I have seen appear only two or three inches high, and some just coming up, whereas last season at this time it was two feet high.

The Cobourg (Canada) Star of the 23d June says:

In the Western Districts and the United States, the brown and white grub are destroying the wheat totally. In our own district numerous fields are being ruined by the same insects. The destruction of the crops appears to be progressing throughout the whole world.

We could easily fill this journal with extracts similar to the above. Although exaggerated accounts are constantly set afloat in the 1800 newspapers of the country, yet there can be no question that the crop of wheat in the United States will be very light, notwithstanding more than the usual breadth of land was sown last autumn. In our August number we shall have something to say on the best means of avoiding the attacks of the Hessian fly.

Corn and potatoes now promise an abundant yield. How far the latter crop will suffer from the rot, time alone can disclose. We shall have a large surplus of corn to send to Europe if it shall be needed.

Wool is coming into this market very freely. Our impression has been, and still is, that the

price of this staple will advance some on present rates before October. Should the crops in England come in as favorably as we have reason to expect from our foreign journals, all the woolen mills, suspended in consequence of high prices for food, and the exportation of specie, will be set at work, and create a foreign demand for American wool, not large to be sure, but enough to cause an advance on present rates in this country. For prices see market report.

Improvement of Sheep from Home Stock.

MR. EDITOR:—Amongst the numerous agricultural Improvements of the day, and the multifarious pursuits of the farmer, the breeding and improving of domestic animals is of the most importance to the cultivators of the soil, and to community at large—and none more so than the improving of Sheep, by uniting the greatest value in both carcass and fleece, which can be done to a great perfection if farmers will but be judicious and persevering in their breeding. And those enterprising gentlemen who are at the trouble and expense of introducing choice and valuable animals from abroad, deserve the highest praise, as being the promoters of the best interests of society. But yet this desire of having the name of an importer is sometimes carried too far, even at the expense of the farming interest. Every encouragement ought to be given to the farmers of our own county, and even section, to make these improvements. Farmers should always purchase near home, if they can procure as good animals as those from a distance. By doing so they will save trouble and expense, encourage a spirit of improvement at home, and promote the general interest of their own country—for the more agricultural productions of any county, or section, can be increased or improved in quality and value, in the same ratio will the prosperity of the country be increased.

In passing through the west part of Livingston and the east part of Wyoming, in May, I called upon Mr. ALEX. BOYD, in Covington, Wyoming county, to see his splendid flock of Merino sheep; and for size and symmetry of form, and hardness in appearance—for evenness, fineness, and weight of fleece—I have not seen their superior, even amongst the Vermont and Connecticut sheep which have been brought into this section from those states, and that too at great prices. I was informed that there were several other flocks in that section which were not much inferior to Mr. BOYD's, so that the farmers of Wyoming might accommodate themselves with choice sheep at much less expense and trouble than going abroad for them—and at the same time encourage the spirit of improvement at home, and increase the value of the productions of their own country.

WM. GARBUTT.

Wheatland, June, 1847.

Corn Culture.

MR. EDITOR:—In the last (June) number of the Farmer, is an article "On Growing Corn," over the signature of "J. D. C.," containing the following recommendations in regard to the after culture of this valuable plant: "When you have got through with the process of first weeding and light earthing, then put on your plaster."

We have practiced with success the mixing of plaster and ashes in equal proportions, with an addition of one peck of salt to every two bushels of the mixture, and applying as soon as the corn was sufficiently up to distinguish the rows. An early application is preferable if the grub is at all troublesome, or the corn comes up sickly and yellow. Then comes the following suggestion:

"The remaining team work should be done with the plow, in order to bring up the soil to the rays of the sun, and also within reach of the fibres of corn that are despatched in every direction of the hill to secure nutriment for the stalk."

Of this 'remaining team work with the plow,' I wish to say a few words, as the doctrine of plowing among corn does not exactly harmonize with the principles laid down in my philosophy. I have condemned the principle from theory, practice and observation, and the following are a few of the reasons for so doing: No plant, whether in its natural or cultivated state, will ever put out its fibres or roots deeper in the soil or farther from the stock than the nature of the plant requires. Corn, for instance, spreads the most of its numerous fibres within a few inches of the surface of the ground; in fact all the fibres that afford any essential nourishment to the stock lie within the depth of the original plowing for the preparation of the crop. Now nature will bring these roots just near enough the sun to be benefited by its genial influence,—and just far enough from it to protect from its scorching heat, without the use of a plow to give them an occasional airing, or sever them in twain just at the point beyond which the parent stock received the greatest portion of its nourishment.

Who would consider it beneficial to occasionally clip the roots from a tree, and expose the bleeding wound to the sun's rays, and then indulge the vain hope of adding to its growth and beauty? The result would be just the reverse. Infinitely more so is this the case when practised upon a tender plant of corn, the roots of which, in many cases, grow to a greater length than the stalk itself. More than two-thirds of the fibrous roots of corn pass the point indicated by the plow as commonly used in cultivating corn, when planted three feet in the row. This accounts for the fact of corn "standing still," as farmers generally term it, for a few days after hoeing and hilling. I have noticed some pieces in dry seasons, when deep plowing was practiced, that did not "stand still," but went *backward* so fast for a time that they never regained their former ap-

pearance—the owners all the while wondering what could be the matter; the pesky worms or some other confounded thing must be at work, when in fact it was nothing else than the pesky farmer himself!

I know not where this practice of plowing among corn was first obtained, but one thing is certain, it ought to be banished among the things that were. In plowing also, one portion of the root is laid bare, while the remaining portion is covered twice its original depth. I have never seen any thing of this kind indicated in tracing any of the fibrous roots of corn as they exist in their natural state; hence I conclude it is a violation of a natural law in the economy of corn culture, and consequently a pernicious practice.

Keep your corn free from weeds; cultivate freely without disturbing the roots, always keeping the surface as nearly level as possible; and if very dry cultivate still more freely, for it is an established fact that a well pulverized soil, frequently stirred, will retain more moisture than a compact soil left undisturbed—and if the necessary requisites were attended to in preparing the soil, the laborer will be amply rewarded for his toil.

A. ZOLLER.

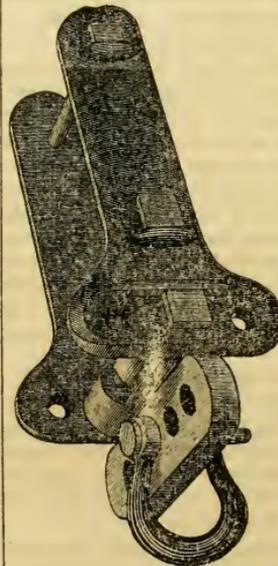
Minden, N. Y., June, 1847.

Van Brocklin's Patent Clevis.

THE annexed figure represents a *Cast-iron Double-gauged Clevis*, recently patented by Mr.

J. VAN BROCKLIN, of Middleport, Niagara county, N. Y.

This Clevis has been introduced in this section, and we learn that it is considered a valuable improvement by those who have tested its merits. The main Clevis is made of cast-iron, secured to the plow with wrought-iron bolts. With this Clevis a plow can be so gauged as to run to or from land—and also to plow deep or shallow, at the option of the holder. It is cheap and durable—and as it is



warranted, no one will be the loser by trying the article.

The above Clevis is for sale at the Implement Warehouses in this city, as will be seen by reference to our advertising department—page 173 of this number.

M.

Mutability of Wheat and other Cultivated Plants.

MR. EDITOR:—I do not desire to review that interminable subject the transmutations of the grains, but design to give some facts, as stated by some of the best authorities extant, and which are entirely antagonistical to the doctrine of the immutability of genus or species.

A learned German author, Doct. WISSENBORN, in the Magazine of Natural History for 1842, asserts, that *oats* sown in the spring and allowed to be kept down by pasturage, so as not to make seed stems, and kept over till the next spring, invariably produce *rye*, and relates it as a well known fact.

Prof. LINDLEY, than whom no man stands higher as a learned philosopher and botanical investigator, states that, "at the request of the Marquis of Bristol, the Rev. Lord ARTHUR HARVEY, in the year 1843, sowed a handful of oats and treated them in the manner recommended, by stopping the seed stems, and the produce, in the year 1844, was for the most part very slender ears of *barley*, having much the appearance of *rye*, a little *wheat*, and some *oats*, samples of which are now before me."

He also adverts to the extraordinary, but certain fact of the orchidaceous plants, that change their forms from seed, as different from the original as wheat, rye, and oats, by some mysterious agency. Indeed so well known and appreciated is this fact, that peculiar hot-houses are erected in Europe, to accommodate and multiply the remarkable family of Orchids.

Why may not wheat, rye, barley, and even oats, be derived from one common progenitor, which the mysterious laws of nature have developed, in the secret work shop of unimaginable past ages? Strange changes are within even the memory of type and paper. The cabbage was an insignificant trailing sea plant, as was also asparagus; the potato from a wild ground nut, now under its improved state its failure is threatening millions with starvation. In short, three quarters of all our culinary vegetables have been changed by feeding, crossing, and the action of climate.

It is a well ascertained fact that the *fungi*, a distinct but low order of vegetation, take their distinctive forms from the peculiar circumstances of their production, as much as from the original germ or seed; indeed so much so that Botanists have wonderfully reduced the number of species heretofore laid down as distinct.

The Algae (sea weed,) placed under favorable circumstances, change into plants of a very different structure, and much more elevated in the scale of vegetable organization. Perfectly developed and highly improved animals and vegetables, have a strong tendency to deteriorate—to go backward, on the least omission of the peculiar treatment, that the experience of ages have

taught as the requirements of improved organic being. May not the cerealic grains and grasses have one common origin—a unit of original existence?—and the production of *chess* be a relapse to, or towards its original existence?

Man, without education, would be speechless, and the second generation all but one of the quadrumani; the kind and faithful dog would become the ferocious wolf; the hog, the wild and untamable wild boar of the primeval forests. Every thing is subject to transition and change, from its original type to perfection, and for aught we know back again on the retrograde scale to primitive insignificance.

Fresh water molusks, in a marine menstruum, change their vital organization and even the structure of their outward covering, and probably a very small and gradual change in the composition of our atmosphere, from the neighborhood of cemetery influence, or other adventitious circumstances, would people this earth with a race of strangers to the ghosts of the departed, both in the animal and vegetable kingdoms.

Although the prevailing opinion among vegetable physiologists is decidedly averse to the doctrine of transmutation, yet as we are of yesterday and know nothing, every thing that is not capable of analysis and demonstration, should be received *cum grano salis*.

The writer has, in fifty years experience, observed so many cases of the wonderful quantity of chess produced from pure seeding, within his own observation and from undoubted authority from others, which can in no possible way be accounted for, or explained, except by *transmutation*, that his belief in the immutability of *species* is shaken to the foundation.

L. BARKER.

Monroe county, N. Y., April, 1847.

A Plea for the Birds.

NUMBER TWO.

I AM a lover of Nature. I love her in her playful mood; I love her even in her wildest state. I love inanimate nature much, but animated nature more. I love her for her influence on the heart. I have studied books; I have studied men; I have studied nature. If there is any thing that will humanize, civilize, socialize, and I almost said christianize, the soul of man, it is the study and contemplation of the works of nature. I have yet to find an admirer of simple, unsullied nature, a lover of birds, and trees, and animated groves, who has not a warm and benevolent heart. And I have yet to find one who looks with a cold indifference on the works of creation, whether animate or inanimate, who has not a cold and selfish heart. And I envy not the feelings and the happiness of that man who sees no value in any thing, except that which is

pecuniary; and who estimates every thing by the narrow, selfish standard of dollars and cents.

In my former communication I spoke of the policy of killing birds. I now proceed to speak of the right. I am aware that the right of man over the animal creation is, by some, considered absolute and unconditional: i. e. that he has the right to use all inferior animals according to his pleasure: to kill and to destroy without motive or object, except the qualification of his own will. This is a claim on the part of those who make it, which cannot be conceded by us, nor established by them. Now it cannot be denied that the various animal tribes were created for *wise* purposes, though we may not be able in every instance to trace them. To argue otherwise would be "to charge God foolishly." Neither can it be denied that, to have created them merely to be the sport of a class of beings calling themselves *rational*, would not be a *wise* purpose, unless it be wise for intelligent and rational beings to indulge in a course of action that is calculated, in its nature and tendency, to foster a spirit of cruelty in those who indulge in it.

What, then, is the true meaning of the permission given to man, by virtue of which he claims, and is allowed to exercise, "dominion over the beasts of the field, the fowls of the air," &c. Evidently this: that man should have the pre-eminence; that he should have the right to defend himself and his against the lower animals; the right to employ them for all proper, useful, and economical purposes. More than this cannot be reasonably claimed, or contended for, without imputing either folly or cruelty to the Creator.

To a truly benevolent mind, the idea of taking life under any circumstances is by no means agreeable. The thought of terminating, "forever," an existence, that, for aught we know, may be as capable of enjoyment as our own, is often truly painful, and should operate to damp our destructive ardor. Life should not be trifled with, nor innocent life taken, without a valid reason. We should not rashly, nor needlessly, "take away what we cannot give."

Hence I would lay down the following rules, which I believe to embody the sentiment and doctrine of the Divine permission: 1st. That it is lawful to take the life of any animal, which, if suffered to remain, would destroy either us or ours. This gives us the right over all beasts and birds of prey, venomous reptiles, &c. 2d. That it is lawful to kill, for our own use, whatever lives upon our labor. This gives us the right over our domestic animals. 3d. That it is lawful for us to kill such wild animals as we may need and use for food and other necessary purposes. This gives us the right over such wild animals as constitute what is generally called game; as deer, buffalos, pigeons, partridges, water fowl, &c. With this agrees the

sentiment so beautifully portrayed by the Poet:

"The sum is this: if man's convenience, health,
Or safety interfere, his rights and claims
Are paramount, and must extinguish theirs.
Else they are all,—the meanest things that are,
As free to live, and to enjoy that life,
As God was free to form them at the first,
Who, in his sovereign wisdom, made them all!"

The same exposition of the divine permission will direct us in regard to the manner of taking away life whenever it shall become necessary or proper. To exercise unnecessary cruelty in taking the life of an animal, is no less reprehensible, than to take it away unnecessarily. Hence, whenever life is to be taken away, it should be done in the quickest and easiest manner possible.

Fairport, March 9, 1847.

H.

Fence Posts. --- Milk and Butter.

MR. FARMER:—A question or two. Are leached ashes valuable as a top-dressing in setting fence posts? Having got the impression that such was the fact, in making a good fence the other day with red cedar posts, I was at the trouble of hauling leached ashes a mile or two to finish filling the holes; and while in the act, one of my neighbors came along, and, not much to my satisfaction for the pains I had taken, informed me that it was the sure way to make my posts rot, for he had seen it tried. I doubted this, and still do; but should like to have your opinion upon it.

How many quarts of milk, of an average quality, will it take to make a pound of butter?—Some of our villagers who keep cows are loth to sell milk at three cents per quart, because they want to make their own butter. I should like to know how much their butter costs them per lb. at this price for milk.

June, 1847.

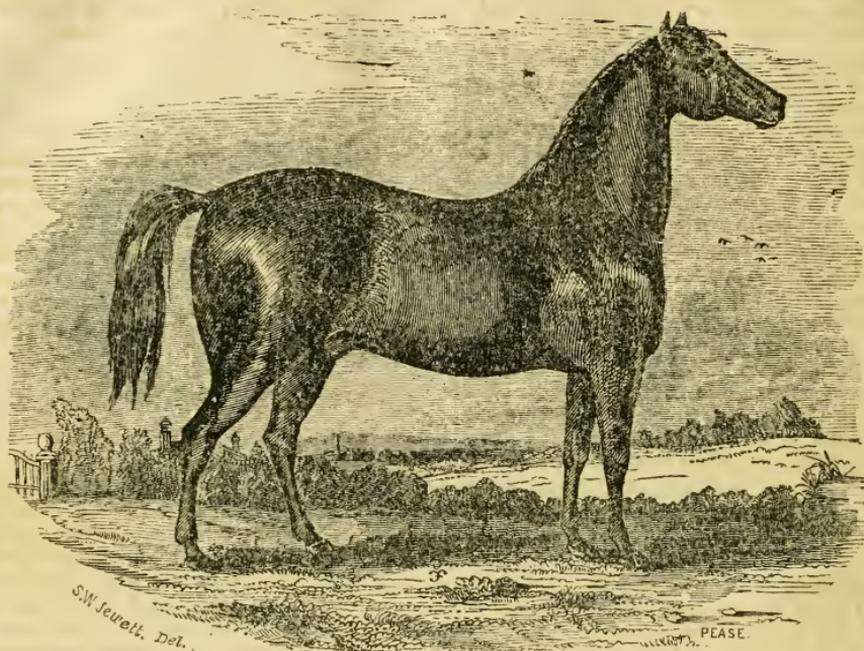
A SUBSCRIBER.

REMARKS.—Leached ashes will not hasten the rotting of fence posts. The entire cavity around the post in the ground should be filled with pounded charcoal and lime or ashes, which will protect the wood from decay for a long period. Soaking that portion of the post which is to stand in the earth in lime water is also beneficial.

It usually takes from 10 to 14 quarts of milk to make a pound of butter. For the two years preceding the last twelve months, we bought our milk in the city of Buffalo at 2 cents a quart, which was brought 22 miles into the city by railway, and purchased of farmers at *one cent a quart*. They found it better to sell milk at that price than to make butter at 11 or 12 cents a pound.

GRANT THORBURN has lately sent to the Emperor of Russia 10 pounds potato seed, at *twenty dollars per pound*.

He is happy who hath a friend at need; but he is more truly happy who hath not need of his friend.



The celebrated Sherman Morgan Horse "Black Hawk."

EDITOR GEN. FARMER:—The above figure was got up to represent the Sherman Morgan horse "Black Hawk," bred by Mr. MATTHEWS, of Dunham, N. H., and purchased a few years since of BENJ. THURSTON, of Lowell, Mass., by D. E. HILL & Co., of Bridport, Vt. He is 12 years old, perfectly sound, of a jet black color, and 15 hands and 1 inch high. Black Hawk is celebrated for symmetry, action, docility, endurance, loftiness in carriage, and great speed in trot. He is a sure foal getter—the colts generally strongly marked after the horse, showing evident signs of the Morgan blood—attaining good size—stand low for their weight—great action and spirit—move powerful, high, proud and graceful—very playful and mild, with clean sinewy legs, very free from long hair, except a small tuft on the fetlock; equal to the most thorough bred horses in this point, with heavy waving main and tails, and sell at remunerating prices.

Black Hawk for several years has been kept entirely for the improvement of the breed, and never used expressly for the turf—though in trotting matches he never has been beaten, having won several purses of from \$200 to \$500. In a match for \$1000, that came off at the Cambridge trotting course, 12th July, 1842, he won with ease (though very fat, and not in train,) against "Osceola," 5 miles and repeat. The first heat was performed in 16 minutes and 30 seconds—the second in 16 minutes. Without training he has trotted his mile in 2 minutes and

42 seconds. On the points of symmetry, action, thorough broke to the harness, and speed in trot, Messrs. HILL last month, through the Cultivator, challenge the world to produce his superior on all of these points: exhibition to come off on the N. Y. State Show ground at the time of the State Show and Fair in Sept., at Saratoga Springs.

Black Hawk has a wide, clean, sinewy leg; short from the knee to the postern; short back; high in the withers; heavy flowing main and tail; deep in the brisket; eyes bright, lively and prominent; open under the jaws; a lean head, face little dishing; open nostrils; small, delicate muzzle; teeth and countenance savage; action high, proud and graceful, moving bold in harness, and true as the spokes in a hub—combining in every respect strength and beauty, and evincing courage and power from the hind fetlock to the tip of the ear.

The Morgans are generally great roadsters, well adapted for all work, good in every spot, except for racers on the turf: in fact, to sum up their respective qualities, they may be called the perfect "Yankee harness horse." The Morgan blood prevail in Maine and New Hampshire, and are favorably known in the city of Boston.—Therefore, all in all, the "Vermont Horse" may be ranked equal, if not superior, to any of the species in any part of the world.

Black Hawk is without fault, except it be in his size. His weight is about 1050 lbs.; many of his colts are 100 lbs. heavier. I have a stallion

and filley, two years old this month, sired by Black Hawk, that measure over 15 hands and weigh over 950 lbs. in ordinary condition.

Gen. S. M. BURROUGHS, of Medina, N. Y., has made a purchase of some of this stock, and those who have seen them must acknowledge the correctness of the above remarks. I anticipate exhibiting some of the colts at your State Fair, and Black Hawk will be on the ground.

¶ Respecting the accompanying portrait:—In many points it delineates the horse. It does not rise bold enough on the shoulder; the head is too clumsy; the tail should have been longer and more waving. It would be quite impossible to

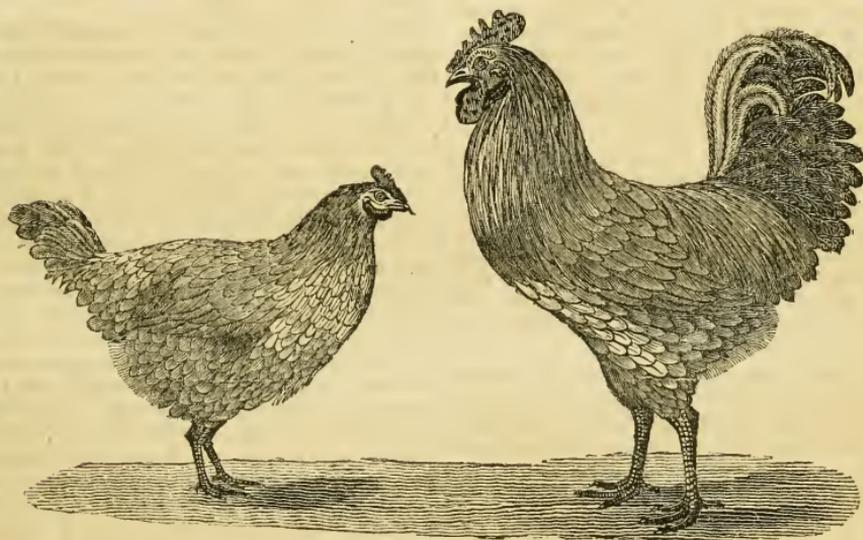
show the flat, bony, sinewy legs to perfection, which so much characterize the horse. He is represented, in harness, in the present (May) number of the Cultivator. His contour, in some respects, is there quite well represented—and in others quite deficient, some of which are the most important. Those who will compare both of the cuts will get a very good idea of the horse.

Having complied with your request, Mr. Editor, in giving a brief description of this most noble animal, allow me to close by subscribing myself

Yours truly,

S. W. JEWETT.

Weybridge, Vt., May 13, 1847.



Cochin China Fowls.

THE above are said to be very faithful portraits of the Cochin-China fowls recently introduced into Great Britain by Queen Victoria. They are the largest and most magnificent of the domestic breed known. They were supposed at first to belong to the family of Bustards, but it is now settled that they are genuine poultry. The cocks of this breed, well fattened, weigh alive from 12 to 15 lbs.; hens, from 9 to 12 lbs. Their general color, according to Richardson, is a rich, glossy brown, or deep bay; on the breast is a marking of a blackish color, and of the shape of a horse-shoe; the comb is of a medium size, serrated, but not deeply so, and the wattles are double.— Besides their gigantic size, however, these fowl possess other distinctive characteristics, among which may be enumerated the following:—the disposition of the feathers on the back of the cock's neck is *reversed*, these being turned upwards; the wing is jointed, so that the posterior half can, at pleasure, be doubled up, and brought forward between the anterior half and the body.

"I am not aware," he adds, "whether trial has, as yet, been made of the flesh; but from the white color, and delicate appearance of the skin, I feel confident that they would afford a luxurious and a princely dish. The eggs laid by the hen of this variety are said to be large, of a chocolate-color, and to possess a very delicate flavor. One of the hens, Bessy, exhibited by Her Majesty, laid 94 eggs in 103 days."

The Cochin-China cock has been crossed with the Dorking hen, and the produce is said to be superb. Pullets of this cross have been known to weigh 10 lbs. each at six months old. If the above portraits be correct, we should be afraid the cross would add too great a length of leg to the Dorking, and we very much doubt whether the best specimens could be improved by it. But there are poultry fanciers who will have size let the shape and other qualities of the birds be as they may. For our own part, we much prefer medium-sized poultry as most delicate and profitable. We are not aware that any genuine

Cochin-China fowls have been introduced into this country. A Mr. Nolan has recently imported them into Ireland, and the Queen of England has occasionally made presents of them among her noblemen. We do not know how they can be procured except direct from Cochin-China; and we must say to our friends in advance, that we cannot undertake their importation from any quarter. We here give them all the information we have upon this interesting subject.—*American Agriculturist.*

A Chapter on Hogs.

STRANGE as it may seem, in a county peculiarly adapted, both by soil and climate, to the growth of Indian corn, there is not pork enough fattened in it to feed its inhabitants. Even farm laborers have to buy pork at the villages, from harvest to killing time, for their own support.—The villages obtain their principal supply from Cayuga county, and from Buffalo.

Our farmers have so long been accustomed to consider wheat and clover seed as the only paying crops, that the growth of almost every other product has been strangely neglected; I say *strangely*, because a crop badly put in, and worse tended, is a sort of suicidal farming, which cannot be accounted for on rational principles—and that such farming is practiced, very many corn fields have borne witness.

The great fault in growing pork in Seneca county, is the neglect of the hog from his birth to the time he is shut up for fattening, say 1st Sept.; from that time to killing time, in December, he is fed on new raw corn. The quantity a lean starved animal will consume in two months and a half, is almost beyond belief. Still, so far from being fat, the hog has just commenced fattening when the season has closed, and he must be killed.

I instinctively know the character of the farmer by the quality of pork he offers for sale. When a man brings a long lank carcass, a "streak of fat and a streak of lean," he always complains of the great quantity of corn the hog has eaten.—On the other hand, when a farmer produces a load of pork all fatness, small short legs and short heads, I am certain to hear him aver, that it took only at the rate of five bushels of Indian corn each to fatten them; but it was old corn ground and scalded. The first man is behind hand, the last one is before hand, in the art of converting vegetable food into animal fat. If there is no profit in a well fed and fattened animal, there certainly must be a great loss in one that is killed in *working* order, or before it is half fattened. A hog should always be in a gaining condition when shut up to fat; if then weighed every day, it will be found that the gain in weight will much more than pay for the meal eaten, and when the animal is nearly fattened, the gain in fat begins to increase in two fold ratio to the cost of feeding.

I once bought two lean carcasses of pork of a farmer who averred that they had eaten seventy bushels of ears of corn. My curiosity was excited, and I went to see his hog pen: it was rectangular, laid up with rails. Across one corner a few rails were laid; they were covered with straw to shelter the hogs at night; the mud over the whole pen, sleeping corner and all, was belly deep. Here the animals had toiled and suffered. Put a fat hog in such a pen and he would stick fast; but nature was too great an economist to permit a hog to fat in such a place—her laws had been outraged, but the farmer's corn paid the penalty. S. W.

Salt and Ashes for Stock.

SOME years since I saw it recommended in an agricultural paper to mix salt with ashes for stock. Having tested the utility of the practice, I am now prepared to speak favorably of it, and from a firm conviction that stock, of all descriptions, are essentially benefited thereby. My cows, work horses, and young cattle, as well as sheep, have been regularly supplied with it as often as once a week, for two years, and notwithstanding the feed in the pastures, during a part of the grazing period of both seasons, was quite short in consequence of the prevalence of severe drouth, the stock generally has remained in excellent condition; much better, indeed, than I have seen them for years. Sheep, especially, are extremely fond of it, preferring it to fine salt, and partaking of it with almost the same avidity with which, when hungry, they devour their meal or grain. As to the general efficacy of the practice, and its tendency as respects the health of the stock, I will merely say in conclusion, that I am acquainted with several discriminating farmers who have made the same trial, and that in no instance with which I am familiar, or which has fallen under our direct personal observation, has it been attended with other than the best results. The proportions in which the ingredients should be given, are one part salt to seven of ashes.—The salt should be fine, and the ashes dry and free from coals. If thought necessary, the salt may be increased in quantity to two or three quarts instead of one. Try it, farmers, and see if it doth not "do good like a medicine."

In the season of pasturing I usually have several boxes or long troughs placed in a shed or out building to which the animals can at all times have free access, and which I keep constantly supplied with a *quantum sufficit* of the mixture.—This plan is necessary as an open exposure of the receptacles would subject the salt to injury in rainy weather.—*Cor. Germantown Tel.*

ISINGLASS and gin, dissolved together by slow heat, makes a good cement for glass.

ROTTEN stone and turpentine, or gin, rubbed on with a clean cloth, gives a fine polish to brass.

Farming on Thirty-five Acres of Land.

J. G. CHADSEY, of Wickford, R. I., states to the officers of the Rhode Island Society for the encouragement of Domestic Industry, that several years ago he purchased thirty-five acres of poor land, for which, it being near the village, he paid the large sum of three thousand and fifty dollars. Only twenty-five acres of it are "tillageable, including three acres of meadow not plowed. The remainder is made up of hills and holes, marsh and beach, with a small strip of wood-land." The arable land is described as uneven, with a gravelly soil, much encumbered with small stones. It had been much worn down by repeated croppings without manure. He let it on shares, but got such poor returns that he was sick of his purchase. Finding that he could neither sell nor rent it, he came to the conclusion to try farming himself, though he had "*done nothing at it for nearly forty years;*" but as a "substitute for experience," he says he took an "*agricultural paper.*" He began cultivating it himself in 1840. He divided the tillage-land into six fields, "from three to four acres each, a new one to be taken up every year, and after taking off three crops, let it lie three years in grass." About two were appropriated to root crops and garden vegetables, which are plowed every year.

His success has been such, that land, which seven years ago would not rent for four per cent., *now pays twenty per cent., after deducting all expenses.* He makes the following statement in regard to the products and profits of his farm for the year 1846 :

10 acres mowing, 19 tons hay, at \$12,	\$228 00
3 acres corn, 124½ bushels sound, at 80 cts., and 9 bushels offal, at 40 cts.,	103 20
Corn fodder, \$25, and pumpkins, \$4,50,	29 50
3½ acres rye, 77 bushels, at 80 cts., and straw sold, \$24,81,	86 41
2½ acres potatoes, 348 bushels, at 37½ cts., and 50 bushels small, at 20 cts.,	140 50
367 bushels onions, at 50 cts.,	\$183 50
836 do. carrots, nearly all sold at 19 cts.,	158 84
48 do. parsneps, do., at 33½ cts.,	16 00
6 pounds onion seed, and 3 pounds carrot seed,	8 00
Peppers and sage sold,	41,88
Produce of 1 acre and 125 square rods,	406 22
Half an acre summer vegetables, mostly used in family—sold,	7 69
Salt grass sold, standing,	24 00
Milk sold,	47 39
Rent received for two gardens,	6 50
Milk, butter, and summer vegetables used in family,	35 00
	\$1116 41
EXPENSES.—Paid for labor,	\$182 62
Board of labor,	90 00
Molasses for drink, 20 gallons, at 30 cts.,	6 00
Manure purchased, and materials for the same,	81 46
Seeds of different kinds,	28 77
Wear and tear of farming utensils,	25 00
Taxes,	11 81
Labor done by myself,	50 00
Cost of Cultivation,	475 66
Cost of land, \$:050 : profits 20¼ per cent. for use of land,	\$640 75

Mr. CHADSEY states that he hires all his help

except the "little" he does himself. He states that he made 917 pounds pork, and 560 pounds beef, which are not included in the account, as they were fattened on part of the produce before estimated. His stock, he says, consists of two cows and a horse. He buys manure from the village. With the horse he does all the "team work," except breaking up the land. His products for the year 1845, amounted to \$913 ; his expenses were \$368 ; profits \$555.—*Alb. Cul.*

YIELD OF BUTTER.—I noticed in the Cultivator for 1846, p. 157, an account of the yield of butter from a dairy of ten cows, being an average of 211½ lbs. to each cow. I kept in 1845 four native cows, which constituted my whole dairy. Three of them were of middling quality as milkers, and the fourth one was below middling. From these four cows I fattened two calves killed at four weeks old, and reared two other calves on the milk of the cows. We made during the season 1056 lbs. of butter, besides furnishing milk for a family of eight persons. This would be an average of 264 lbs. to each cow.—The cows were kept as follows : In winter they were fed upon hay, generally three times a day, in some of the coldest weather five times a day. The hay, in the coldest weather, was not always of the best quality. They ran when they pleased to a large stack of wheat straw in the yard. They were not stabled, but had an open shed for shelter, and no extra feed was given them except a slop once a day after calving, till turned to grass, of mill-shorts. My pasture was good. It consisted of about five acres ; the feed a beautiful mixture of early clover, timothy, and some of the finer grasses. It had a light top-dressing of plaster early in spring. The cows were kept in this pasture, with the exception of a few days, till late in the fall, though the drouth was such that our mowing fields produced but little after-feed. The pasture had a good running brook crossing one corner. Other stock was turned in and withdrawn as occasion required, to keep the feed about right. I would not pretend that this dairy product cannot be beat, but I think it is a good yield considering the feed, and that the cows were small, and not high bred.—*J. Wilson in Albany Cultivator.*

EXPORTATION OF APPLES.—ELIHU BURRITT urges the attention of the people of Maine to the raising of apples for foreign market, stating that apples which in Maine are made into cider, or fed to hogs, will command a dollar a bushel in England. The cost of sending them he estimates at twenty cents per bushel.

THATCH on the roofs of houses, may be rendered incombustible by a common flame, by coating it over with a mixture of white-wash and alum. One lb. of alum will suffice for 5 gallons of white-wash.

Forwardness of the Seasons.

To present the reader with a comparative view of the forwardness of the seasons for the last eleven years, I have selected the following facts: the time of the first appearance of robins; the flowering of maple, shadbrush, currant, peach, plum, cherry, and apple; the ripening of strawberries and cherries; the commencement of the wheat harvest; and the first frost in autumn.

In 1837, robins were first seen March 26th; peach and plum in blossom May 15th, and cherry May 23d.

In 1838, robins first seen March 24th.

In 1839, robins first seen April 3d; peeping frogs first heard April 2d; maple in flower April 9th, and shadbrush [*amelanchier canadensis*] in flower April 25th.

In 1840, robin first seen Feb. 29th; and shadbrush in flower April 23d; first frost in autumn Oct. 13th.

In 1841, robins first seen March 26th; frogs first heard April 17th; currants in blossom May 14th, peach May 18th, plum 15th, cherry 21st, and apple 27th; cherries ripe July 3d; wheat harvest commenced July 23th; first frost in Autumn Oct. 6th.

In 1842, robins first seen March 3d; frogs first heard March 4th; maple in blossom March 3d, shadbrush April 23d, currant April 24th, peach April 15th, plum 19th, cherry 22d, and apple May 2d; strawberries and cherries ripe June 11th; wheat harvest commenced July 19th; first frost in autumn September 25th.

In 1843, robins first heard April 5d; frogs first heard April 21st; maple in blossom April 25th, shadbrush May 8th, currant May 7th, peach 16th, plum 12th, cherry 10th, and apple 16th; strawberries ripe June 16th, cherries June 23d; wheat harvest commenced July 20th; first frost Sept. 11th.

In 1844, robins first heard March 11th; frogs first heard March 28th; maple in bloom March 9th, shadbrush April 14th, currant April 19th, peach 16th, plum 15th, cherry 16, and apple 24th; strawberries and cherries ripe May 25th; wheat harvest commenced June 29th; first frost Sept. 23d.

In 1845, robins first seen March 6th; frogs first heard March 27th; maple in blossom March 25th, shadbrush April 21st, peach, plum, and cherry all in full blossom at the same time, April 24th, apple April 29th; Strawberries ripe June 11th; cherries June 10; wheat harvest commenced July 11th; first frost Sept. 23d.

In 1846, robins first seen March 18th; frogs first heard March 25th; maple in blossom March 24th, shadbrush April 26th, peach April 29th, plum 26th, cherry 29th, apple May 5th; strawberries ripe May 25th, cherries June 1st; wheat harvest commenced June 30th; first frost October 3d.

In 1847, robins first heard March 23d; frogs first heard April 9th; maple in blossom April 9th, shadbrush May 7th, currant 13th, peach 14th, plum 13th, cherry 14th, and apple 21st; strawberries ripe June 9th, cherries June 10th.

It will be observed that the facts proposed to be given are much more full for the last seven years, than for those years prior to this period.

Prof. J. H. COFFIN was requested, by Dr. E. EMMONS, to prepare an article on the climate and temperature of this State for that part of the Natural History of State relating to the subject of Agriculture. He did so; and from that article I give the following results: From the observations made at forty-four localities over the State for fifteen years ending with 1842, it appeared that the mean date for the appearance of the robin was March 19th; the mean date for the flowering of the shadbrush, from observations made at forty-eight localities, May 1st; do. peach, from fifty-seven localities, May 2d; do. currants, 58 localities, May 4th; do. plum, 52 localities, May 6th; do. cherry, 52 localities, May 7th; do. apple, 59 localities, May 15th; strawberries ripe, 58 localities, June 12th; wheat harvest com-

menced, 45 localities, July 25th; first killing frost, 57 localities, Sept. 23d; mean annual temperature, 59 localities, 46.49 degrees.

Thus it appears that the average time over the State for the flowering of fruit trees, (including peach, plum, cherry, and apple,) for the last 15 years prior to 1843, was from May 2d to 15th.

This season, which is regarded as being very late, the peach, plum, and cherry were in full blossom May 13th and 14th; in 1837 they blossomed May 15th to 23d; in 1841, May 15th to 21st; and in 1843, May 10th to 16th. In 1842 the peach, plum, and cherry were in blossom April 15th to 22d; in 1844, April 15th and 16th. In 1842 the maple was in flower March 3d, and shadbrush April 23d; and in 1844, maple March 9th, and shadbrush, April 14th.

This comparison shows that the present season must be classed with the latest within the period named: not quite so backward as was 1843 or 1841. The reader will observe that there is a difference of more than a month between the earliest and latest seasons, as shown by the appearance of the robins and the flowering of the fruit trees. The observations presented in this article were made, for the last seven years of the eleven, by the writer, and may be relied on.—The others, what few there are, were taken from the Regent's Reports, and are supposed to be, generally, correct. LEANDER WETHERELL.

Rochester, June 24, 1847.

Preservation of Fence Posts.

MR. EDITOR:—I notice in the last number of the Farmer an inquiry, by D. of Ovid Center, relative to the best process of making durable fence or other posts set in the ground. The following I have taken from a Philadelphia paper:

PRESERVING TIMBER.—The simple method of placing timber or wood used for building purposes in a small pond or vat of lime water, is found to be of incalculable advantage. After the timber is cut to the size required, it is immersed in the lime water for two or three weeks, according to its size. Wood that is known to rot in from three to seven years, has lately been found to be perfectly sound after the lapse of more than forty years. Carpenters have found, on working such wood, that their tools quickly become dull, which is owing to the acid of the wood crystallizing by combining with the alkali of the lime.

If you consider the above worthy of a place in the Farmer, you may make such use of it as you may think best. P. G. BONESTEEL.

Victor, March, 1847.

WE give the above with the remark that lime water is worth something to preserve timber, but we doubt the existence of any "acid" in wood that will form crystals with lime. Decaying wood will yield carbonic acid, which will form an insoluble carbonate, if free from an excess of the acid.

TRANSACTIONS OF THE N. Y. STATE AGRICULTURAL SOCIETY FOR 1846.—We are indebted to the Secretary of the above Society, B. P. JOHNSON, Esq., for a copy of its volume of Transactions for 1846. Notice in our next.



HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

WE have on hand replies to several correspondents, together with several articles and notices intended for this number, but circumstances render it necessary to defer them till next month. We wished to speak of the Horticultural Exhibition somewhat in detail, but have no space for that purpose.

HORTICULTURAL EXHIBITION.—The "Horticultural Society of the Valley of the Genesee" held an Exhibition in the City Hall, Rochester, on the 23d of June. The display of Roses and other flowers was brilliant. Fine collections of strawberries were exhibited by the President and others,—and our friends, Donnellan, Mulholland, and others, exhibited some of the finest cucumbers, green peas, radishes onions, and other vegetables, that we have seen at this season. The reports of the Committees have not yet appeared.

Propagation by Layers.

IN reply to the numerous inquiries in relation to the process of *layering*, we subjoin the following extract from the "Ladies Companion to the Flower Garden," which explains and illustrates the matter in a manner that cannot fail to be understood. The season is now upon us for performing the operation, and will continue through this and next month.

Layering is a mode of propagating used both in the case of ligneous and herbaceous plants, and the operation is performed by choosing a young shoot of the current or the preceding year, bending it down to the ground, and covering a portion of it near the extremity of the shoot with an inch or more of soil, previously fixing it there with a hooked stick. In general, layers of woody plants made in autumn may be taken off about the same season the following year; but some trees and shrubs, such as Magnolias, the tree Ivy, &c., require to remain on the tree for two years. Roses layered in the summer season with shoots of the same year's growth may be taken off the following spring; but the general practice is to layer them in autumn or winter, and allow the layers to remain on the plants for a year. Layers of herbaceous plants, such as Carnations, Pinks, Double Sweet-Williams, and Chrysanthemums, made in the beginning of summer, will have made roots by the autumn; and the layers of Chrysanthemums so rooted will flower the winter of the same year. To facilitate the rooting of all layers, whether ligneous or herbaceous, a notch or slit is made in that part of the shoot which is buried in the soil; or it is twisted, and a portion of the bark taken off, or it is in some other

way wounded, bruised, or injured, so as to check the return of the sap by the bark, when the sap accumulating at the upper lip of the wound forms a callosity there of granulated matter, from which roots are soon after emitted. In layering herbaceous plants, and more especially Carnations, the slit is made on the under side of the shoot, and in the case of woody plants on the upper side.* In both cases, the knife is entered immediately below a bud or joint; roots being always more freely protruded at the joints of plants, than in the intervals between them. The cut is generally made half through the shoot, and continued up half an inch or an

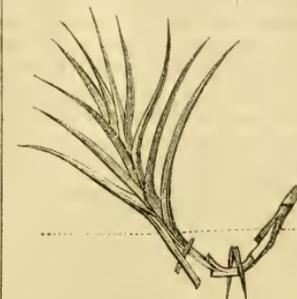


Fig. 36. *Layer of a Carnation.*

and even injurious, by lessening the powers of the leaves to elaborate the sap. The leaves are always stripped off that part of the layer which is buried in the soil; as shown

in the layer of a *Petunia*, (fig. 37.) In layering some woody plants, such as certain kinds of Roses, Tree Peonies, &c., the entire shoot is laid down, and the knife entered immediately below each eye; and the wound being kept open by splinters of wood or stones, the whole shoot is covered with earth to the depth of half an inch or an inch, according as the soil is sandy or loamy, and a shoot is afterwards sent up from each eye, so that a shoot thus laid down produces nearly as many plants as it has buds.



Fig. 37. *Layer of a Petunia.*

This practice is much more successful with some kinds of shrubs and trees than with others, and it is not at all applicable to herbaceous plants. Some shrubs, such as the Honeysuckle, Tecoma, Wistaria, &c., which produce long shoots, and continue growing throughout the summer, may be pegged down as they grow, and a slit made behind each bud, or every other bud, covering the joint so treated with soil. A great many plants are thus produced from a single shoot in one season, more especially in moist, warm summers, or in a warm situation, where water is applied artificially. Layers of every description root most freely in sandy soil, in an open airy situation; and those which are difficult to root succeed best where the soil is almost a pure sand. The layering of Carnations is an operation particularly suitable for ladies, more especially when the plants are in pots, as they can be placed on a table or bench, and there will be no occasion for stooing.

* We consider it preferable in all cases to make the slit on the under side.—Ed.

MARRIED,

IN this city, on the 24th ult., by the Rev. WM. O'RILEY, MR. PATRICK BARRY to Miss HARRIET HUESTIS.

☞ The Editor of this Department, as will be seen by the above, has recently been engaged in preparing for the press a very useful and ornamental work. We presume our numerous readers will unite with us in congratulating him upon an occasion so important and auspicious—wishing him happiness and prosperity, and beautiful and abundant FRUITS as the reward of his laudable enterprise.—PUB.

Pruning.

In the May number of the Farmer, we presented an extract from the "Gardener's Chronicle," with cuts illustrative of the practical use of the knife in pruning. We hope that those of the readers of this paper who are personally engaged, more or less, in the culture of fruit trees, will give this important subject due attention.—Not a day passes over our head that we are not questioned, again and again, on this subject of pruning. Presuming that the previous article relating to the handwork has been properly regarded, we proceed with extracts from the same source, on

THE PRINCIPLES OF PRUNING.

The general principles of pruning, as distinguished from handwork, are few in number, and among the easiest of all things to understand; but their application is manifold, often difficult, and always special. For example, it is an axiom that hard pruning produces barrenness, and that slight pruning leads to productiveness; a second well known law is that the removal of one bud or branch strengthens another; a third law teaches us, that to stop a branch by cutting away its extremity, compels what is left to produce side branches, which might not have otherwise appeared. Then again, the necessity for using the pruning-knife at all is often obviated by the employment of the finger and thumb; that is to say, a young branch may be prevented from appearing by pinching off its bud as soon as it begins to push, as well as by first allowing it to grow, and then removing it—and better. All these, and all such, facts are plain to the meanest capacity; the difficulty is how to apply them, and who, and where. The answer to such questions is only to be found in experience, and in a very careful examination of the peculiar mode of growth of each species of tree to be operated on. For no two species of tree can be found of which it is the nature to grow, and flower, and fruit, exactly in the same way, and every variation in the manner of growing, flowering, and fruiting, demands a corresponding variation in the mode of applying the principles of pruning.

We know, indeed, of but one general fact which may be, we would rather say should be, invariably attended to, and that is the universal necessity of keeping branches thin.—Light in abundance, and the freest circulation of air among leaves, are of vital importance to all plants; but these cannot be secured unless the branches are left thin. A crowd of branches implies a crowd of leaves, and in a crowd leaves can neither breathe nor perspire, nor feed; in fact they are smothered. But when they stand well apart, they breathe freely, perspire profusely, and feed incessantly; the result of which consists in fine, strong, stiff shoots, and dark green fat leaves, instead of spindling twigs and yellow wensened foliage.

It is true that this statement appears at first sight to be opposed to a common physiological axiom that the health of a plant is in proportion to the number of its leaves; because it is probable that a well thinned fruit tree will have much fewer leaves than a plant left to grow wild. But the axiom alluded to is put in inexact words; as our correspondent "W." very properly remarked in last week's paper, it is not the mere number of leaves that determines the health of most plants, but the superficial area of foliage exposed to light and air; a material difference. For example, suppose that one branch has but 10 leaves, the whole area of which shall be expressed by the number 100; and that another branch has 20 leaves, the area of which shall be equal to 120; the inference would not be that the latter would conduce to the health of a plant more than the former, unless it could also be shown that the 20 leaves were each as well lighted and aired as the 10, which in the head of a tree would be improbable. And if the 20 leaves had only an area of 90, it is clear that they would be less effective than the 10 having an area of 100, all other circumstances being equal. Of course we do not mean that a gardener is to calculate the exact superficial contents of a leaf before he can tell whether to remove it or not; we only put the argument in this form for the sake of illustration. Such being the general facts connected with the operation of pruning scientifically, we shall proceed to details, and commence with the Pear-tree, the most important of all our hardy fruit trees.

PRUNING THE PEAR TREE

May be considered under the following heads:—first, when

it is grown as a *Standard*; second, as a *Dwarf*; and third, as trained against a *Wall*, or *Espalier*.

In pruning it is always necessary to bear in mind the natural disposition of a tree, in order to foresee the probable consequences of every cut that is made. When left to its natural growth, the Pear-tree, generally speaking, grows to a height of 30 to 40 feet, or more, with a stem occasionally of considerable length; but frequently subdividing at less than 6 feet above the surface of the ground; and the lower the subdivisions take place, the greater their tendency to assume the naked character of stems to a distance of several feet from their bases. Ultimately the top is formed of a roundish, spreading, or pyramidal form, on the outside of which the fruit is for the most part produced, and hence it occupies the best position for enjoying the beneficial influences of light and air.

An example will put in a clear light the necessity of studying the natural disposition of this tree. Suppose a person were required to keep a tree within certain prescribed limits far short of its natural height, and that, regardless of its incessant tendency to attain that height, he cut annually with reference merely to the assigned limits. Year after year he would find these limits exceeded by a shoot or shoots disposed to mount as stems, and he might consume a life-time in vain attempts, by direct opposition, to subvert the natural tendencies of the tree. A skilful pruner, on the other hand, would attempt no such thing. He would not labor to waste thus the energies of his tree; but by gentle and scientific means, he would direct them towards the production of fruit, as will be hereafter explained.

These remarks serve to show that the *Standard* form being the most natural, requires the least opposition of growth by the knife, and therefore its pruning may be first detailed.

If we commence with the young tree, having one shoot or summer's growth from the graft or bud, technically called a "maiden" plant, the first object is to rear a stem of the requisite height, and of sufficient strength; 6 feet of clear stem is a usual height for orchards. It is possible to have every stem of this height or within an inch of it more or less. The shoot above alluded to, and indeed every shoot will be seen furnished with buds from bottom to top; and every one of these buds is capable of producing a shoot under favorable circumstances; but the uppermost bud generally takes the lead, whilst many of the lower do not break into shoots, and frequently none of them do so, unless induced to push by artificial means. Now, it must be especially borne in mind, that if the shoot be cut back some portion of its length at the winter pruning, the sap which otherwise would have gone to the upper portion of the shoot, is appropriated by those buds that are left; and it acts with greatest force on those immediately below the wound, three of which are almost invariably stimulated so as to produce shoots. Therefore, when the plant has attained the height of not less than 6 feet, take a six-foot rod, place it by the stem, cut above the third bud beyond the top of the rod; and thus the height of the stem will be determined. The three buds immediately above the 6 feet, being those next the cut, will seldom fail to push shoots, for which others must be made to diverge in a regular manner, forming the principal limbs of the tree.

Care should be taken to have the young stems of sufficient strength; in fact as strong and likewise as straight as possible. They are too frequently seen of almost an equal thickness, tall enough, but flexible as a Willow, and straight only when tied to a stake. Such is invariably the case when the stem, in shooting up, is divested of leaves, with the exception of a few at the top. The reverse of this barbarous practice should be followed. An abundant foliage should be encouraged. A long naked slender rod bearing only a few leaves, is not that natural mode of growth by which the wild Pear-tree forms a strong erect stem without the aid of stakes. A young stem with 50 leaves will increase in substance, at least five times as much as one with only 10 leaves, all other circumstances being the same.—Again, if these 50 leaves grow on a shoot all along from its base, that shoot will be found an elongated cone, a form of growth more substantial than would result from the same number of leaves, or even more, situated on branches at the top of an elsewhere naked stem. The same quantity of substance may be deposited by the latter arrangement, but more equally along the stem, and the stem itself may be compared to a stream which receives no tributaries in its course.

Clean stems are desirable, but in endeavoring to obtain such their strength must not be sacrificed. If laterals push from the shoot of the same summer's growth they must not

be cut clean off; they may be stopped after mid-summer where they appear insubordinate to the leader; and instead of being cut close to the stem at the winter pruning, if one or two buds are left, these buds will furnish leaves on small shoots in the following summer, which will contribute much towards strengthening the stem; these shoots ought, however, to be stopped in summer.

When the soil is good and the variety of vigorous growth, standard Pear trees may be reared without cutting back the leader till it attain the required height of stem. But under less favorable circumstances a somewhat different mode of proceeding is advisable, especially where stakes cannot be afforded. If the leading shoot is found weak, head it back to near its base: a stronger shoot will result, which must be kept as strictly upright as possible for a leader. Take care to check almost entirely the growth of the two shoots likely to proceed from the buds situated next to that which furnishes the leader. The latter may be a little shortened in the following season, and in every season, till it attain the proper height. By the time it does this the base of the stem will have acquired considerable thickness, and although great care is necessary to keep the shoots erect while young, no stakes are afterwards required. This mode of rearing stems should be exclusively adopted in all exposed situations, and in many other cases it will be found obviously advantageous.

The Chinese Wistaria.

OUR pages were adorned last month with a portrait of the *Yulan*, or Chinese White Magnolia, the pride of lawn and pleasure grounds in April.*

Another hardy twining or climbing shrub, from the same "flowery land," is the gem of the garden and shrubbery, in the month of May.

It is, indeed, one of the loveliest of all vines of a shrubby character. Its clusters of delicate pale purple (or French gray) blossoms, are so numerous and so large, each raceme being 11 or 12 inches long, that they are highly attractive. Their perfume is delicious. The plant is perfectly hardy in this latitude, and will bear a temperature of 10 or 15 degrees below zero. It grows freely in almost every soil, and, in a deep, rich loam, frequently makes shoots 20 or 30 feet long in a single season. Its foliage is abundant, and its color is a lively, pleasant hue of green. In a few words, we cannot but agree with LONDON, in thinking it "the most magnificent of all hardy deciduous climbers." †

When this plant was first introduced into Great Britain from China, about 30 years ago, it was sold for six guineas a plant, and it was considered too tender to bear the open air. It may now be had in all the large nurseries in this country, at from 30 to 50 cents each, and is found to be perfectly hardy. As it is easily propagated by layers and cuttings, and requires no further than a slight training care, when once planted, we hope

* The portrait of the *Wistaria*, intended to accompany this article, is necessarily omitted, the engraver having failed to get it ready in season.—PUB.

† The Chinese *Wistaria*, though it will grow over arbors, pillars, or in almost any shape that it may be desirable to train it, appears to thrive best when growing in a warm situation, such as the south side of a building, wall, &c.—There is a plant trained on the south side of the gardener's house, here, which has been planted about twelve years, and which now covers a large space. Every year it has increased in size, and in the number of its blossoms. While we write, (the middle of May,) it is in bloom, and there are 610 clusters of blossoms fully expanded on it.

to see it, and the *Double Michigan Roses*,—two of the finest of hardy climbers yet known, for the middle and eastern states—become the ornament of every rural cottage and country house in the land. The comparative freedom from insects, the permanency and vigor of these climbers, added to their great beauty, must soon make them universal favorites. The genus *Wistaria*, was named by *Nuttall*, in honor of Dr. CASPAR WISTAR, the celebrated Philadelphia savan.

There is also an indigenous species sometimes called the *Glycine*, *Wistaria frutescens*, a native of Virginia and the south and west. Though a pretty climber, its clusters of flowers are not more than a third of the size of the Chinese species, and it is much less ornamental, as well as hardy, in the northern states. Its flowers are produced later, or towards mid-summer.

A new variety of the Chinese *Wistaria* has lately been brought out to England, by the celebrated collector to the London Horticultural Society, Mr. FORTUNE. Its blossoms are white, and the effect of this and the purple flowered species will both be benefited, by planting and training them together. We have not learned as yet, of its introduction into this country.

We find the following interesting hints for making the Chinese *Wistaria* a *perpetual bloomer*, in *Paxton's Magazine of Botany*.

"Mr. KNIGHT, of the exotic nursery, Chelsea, has a simple method of causing this plant to flower three times a year, by the following treatment: After the first flowering is over, which will be about the end of May, he strips off all the leaves, and cuts off all the young and superfluous shoots which have been formed, to within a few eyes of the stem, which causes it to throw out fresh leaves and to flower again in July and August; and after this flowering is over, the same process is repeated of cutting off the leaves, and this causes it to flower again in the months of October and November. It may be said that this plant will naturally flower twice, and sometimes thrice, in the season; but, when it does, (which is but very seldom,) the flowers are so very weak, and there are so few of them, that it is never worth notice; whereas, by the above simple process, an abundant succession of flowers may be insured throughout the whole season. It should be remembered that these remarks will not apply to young plants, but only to those that are well established."

Sometimes we have seen plants sent out from the nurseries, which appear for a long time after to have a dwarfish, stunted habit, and do not climb freely. This is probably owing to their having been raised from downward or impoverished branches. It is necessary in such instances, to head the plants down to a single bud, as near the ground as possible, and to make the soil rich and deep, where they are planted. This will give them a vigorous start, and they will afterwards maintain a natural state of luxuriance.—*Hort.*

Horticultural Inquiries.

MR. BARRY:—As the Editor of the Hort. Department of the Farmer, you will confer a favor on me and others, who value the paper scarcely less on account of information found in the pages over which you preside, than of that issuing more directly from your talented colleague, by satisfying the following queries.—

1st. As to the most approved mode of propagating trees and shrubs, by layers, slips and seeds—especially the last.

2d. As to the Rose, in particular. How to prepare the seed—When and how to plant it—Time of germination.

3d. As to what the dwarfing process consists in—and as to what kinds of fruit trees can profitably be made the subjects of it.

4th. Can the Fig be cultivated in the open air, and wintered in this climate, and how? Also, can the pea-nut and sweet potato, or either of them, be brought to maturity in this country?

Your brief solution of these queries will, I am sure, gratify many who look to your pages as their only source of information in matters of this kind.

While asking I should be happy to give. Possibly the following may possess a trifle of interest. In your last Catalogue, in introducing the Michigan family of climbing Roses you remark, among their other virtues, upon "their rapid, vigorous growth"—adding that it measures "ten to twelve feet in a season." My single Michigan has a shoot of the last season which measures twenty-four feet. A double—the same which, I suppose, you mean by "Queen of the Prairies"—obtained at your Garden, and only put down the season before, exhibits this season a growth of sixteen feet.

J. CHAMBERLAIN.

Yates, Orleans County, 1847.

ANSWER TO THE ABOVE.

Rose seeds ripen at various seasons, from August to November, and should be gathered when fully ripe. The hips should be put away whole, in sand or light earth, and allowed to remain till the following spring, when the seeds may be taken out and planted in fine rich soil. They should be covered about half an inch deep. Some will germinate the first season, and some will not until the second. If sown in pots, in March, and placed in a gentle heat in a hot bed or green house, they will all germinate the first season. When they have appeared above the ground fairly, they may be pricked out and transplanted into rows; if tender sorts, into small pots.

Roses are increased from layers in June, July, and August; (see article on layering in this number;) also by budding during the same period; (see article on budding in July number, 1846.) The various sorts of Boursault, the common Dog Rose, and wild sweet briar, all make excellent stocks for budding upon. The strongest and most durable plants are obtained by budding near the ground. Handsome miniature trees are made by budding on strong stocks 5 to 8 feet high.

Propagation from slips or cuttings requires to be done at various seasons and in various ways adapted to the character and habit of the species to be operated on. For instance—the climbing Roses, *Prairie*, *Boursault*, &c., as well as the *Hybrid Chinas*, may be propagated from cuttings of the ripe wood, taken off in the fall and buried in the ground till spring, when they are planted out. The cuttings are usually from 6 to 10 inches long, and about two-thirds their length is put below the ground. Such as are cultivated in the house, in pots, are propagated from cuttings of

young but mature wood, taken off just after the blossom falls. The cuttings may be made of two or more joints, the leaves allowed to remain on the upper part. A great number of such cuttings may be put in one pot. The soil for cuttings should be composed of equal parts of light peat earth and sand. Cuttings made in this way, in the spring, should be placed in a hot bed with a mild heat, watered regularly and shaded well from the sun. Those made at this season (July) may be put in a cold frame and kept well shaded and close.

Pots in which cuttings are placed to root, should be filled one-third their depth with material for drainage, broken pots, in order to allow the surplus water to pass off freely; this is quite important. Small pots, say 3 inches deep and 2 across at the top, if they can be had, are the best, and a single cutting may be put in each. If larger pots are used, the cuttings should be placed around the sides.

Willows, Poplars, Currants, Gooseberries, Quinces, Altheas, Honeysuckles, &c., &c., are prepared, treated, and planted in a manner similar to that described for *Prairie*, *Boursault*, and *Hybrid China* Roses. We will treat upon these matters more fully and satisfactorily at another time.

"What does the dwarfing process consist in?" It consists mainly in propagating trees on such stocks as are calculated to reduce their natural dimensions, and induce early fruitfulness: for instance—an apple, grafted or budded on a paradise stock, may not attain over 6 or 8 feet high, and may be had bearing plentifully the third year, when not over 2 or 3 feet high. The advantages are apparent. Small gardens may contain a great variety, and an immediate return is given.

The Pear, at the present day, is cultivated as a dwarf, to a greater extent than any other fruit, and chiefly on the quince stock. To this method we have frequently alluded in the pages of the "Farmer," heretofore. The apple, pear, and cherry, all of which, on free stocks, attain a large size, may be profitably dwarfed to fit them for limited grounds and other circumstances.

We are not aware of any attempt having been made to cultivate the Fig in the open air, in this climate—nor do we think it could be done with any profitable or pleasant results. We presume it could be grown in cold houses, similar to those constructed for the culture of the grape without fire heat.

We do not think that the pea nut could be cultivated here. We can not speak positively, as we have no evidence on the subject. It is a native of South America, and is produced abundantly in the open air as far north as Maryland, and farther for aught we know. The French, around Paris, raise it in hot beds and transplant it into the open ground, where it ripens. With similar culture, it might succeed here. We have

seen excellent *sweet potatoes*, raised in this section, in the open air. They should be started in a hot bed, and transplanted to the open ground when the weather is settled and the ground warm. A light sandy soil is the best for them, with a sunny exposure, and plenty of space for their trailing stems to run on.

J. Van Brocklin's Patent Clevis.

WE, the undersigned, citizens of Niagara and Orleans counties, having used J. Van Brocklin's CAST-IRON DOUBLE-GAUGED CLEVIS, do not hesitate to pronounce it the most superior article of the kind ever offered to the public.

This Clevis is perfectly simple in its construction, and is so arranged as to gauge the furrow to the desired depth or width, in every variety of soil, and works equally well with two or three horses.

In cheapness and durability it cannot be excelled, and we cheerfully recommend its use to every farmer as a most valuable improvement.

Phillip Truman,	Solomon Richardson,
Francis B. Lane,	Oliver R. Brown,
Jerome Phillips,	Jason Sawyer,
Ezra Kittredge,	John P. Sawyer,
John Johnston,	Russell Brown,
W. S. Fenn,	Alfred Colwell,
John Kinvan,	Chas. B. Lane,
S. N. Spalding,	Linus Spalding,
	Salmon Bickford.

Middleport, June 9, 1847.

THE DOUBLE-GAUGE CLEVIS is Manufactured and sold by the undersigned, Patentee at Middleport, Niagara County, New York. J. VAN BROCKLIN.

Middleport June 19, 1847.

[P] The above Clevis is for sale, in Rochester, by RAPALJE & BRIGGS, No. 18 Front st.; P. D. WRIGHT, No. 120 State st.; NOTT & ELLIOTT, No. 23 Buffalo st.; and W. M. KIDD, No. 154, State st. [7-31-i]

Rochester Commercial Nursery.

BISSELL & HOOKER have sold an interest in this establishment to Mr. W. M. SLOANE, and the business will hereafter be conducted by and under the style of

BISSELL, HOOKER & SLOANE, who will execute with fidelity all orders addressed to them. Mr. HOOKER will visit

ENGLAND AND THE CONTINENT

during the coming winter, for the purpose of purchasing rare trees and plants, and executing any commissions that may be entrusted to him by Nurserymen and others. He will leave here about the first of December next, and on his return will sail from Liverpool as early next spring as trees can be moved. He will personally superintend the packing of all his purchases, and accompany them home, *per steamer*, unless otherwise directed.

Post paid communications promptly answered, and orders respectfully solicited. July 1, 1847. [7-11]

Short-Horn Durham Stock for Sale.

THE Subscriber has on his farm a few spring Calves, (Bulls and Heifers,) which he will dispose of when three to four months old, at from \$75 to \$100 each.

These animals were all got by his premium bull *Meteor*, a descendant of his imported bull Duke of Wellington, and heifer Duchess, both of which latter animals he imported from the celebrated herd of Short Horns of THOS. BATES, Esq., Yorkshire, England. These Calves, being out of good milking Short Horn Cows, and possessing through the bulls Duke of Wellington and Meteor, some one half, and others three quarters of the blood of the Bates Bulls, they will be valuable to such as wish to improve their herds.

Troy, N. Y., June 18, 1847. [7-21] GEO. VAIL.

A Farm Wanted,

SITUATED near Lake Erie or Ontario, in the State of New York. A letter addressed to "FARMER, Newport, Herkimer Co., N. Y.," naming terms and describing the premises, will receive attention. June 20, 1847. [7-21*]

United States Agricultural Foundry, MACHINE AND PLOW MANUFACTORY, 502 and 504 Water Street, WAREHOUSE 195 FRONT ST., NEAR FULTON ST., NEW YORK.

THE Subscribers respectfully invite the attention of merchants and dealers in Agricultural Implements to the superior assortment of goods which they manufacture, embracing Plows and Castings, of all the most approved patterns in use, and possessing all the latest improvements in style, workmanship and material. Gin Gear Segments, of various sizes; Wing Gudgeons; Mill Irons; Horse Powers and Threshing Machines, of the most approved construction; Corn Shellers; Corn Mills; Straw Cutters; Store Trucks; Road Scrapers; Plow Bolts, and Castings of every description, all of which will be sold at the lowest prices. New York, 1847. [7-6i] JOHN MAYHER & CO.

CORN MILLS.

THE Subscribers are now supplied with a newly invented Cast-Iron Mill, for grinding Corn and other Grain either by hand or horse power. It will grind from 3 to 4 bushels per hour. Price \$30.00.

Also the hand Corn-Mill, which grinds from 1 to 1½ bushels per hour. Price \$6.50.

These Mills are highly economical and convenient, and every farm and plantation ought to have them. They are simple in construction, not liable to get out of repair, and are easily operated. When one set of plates is worn out, they can be replaced by others at a trifling cost.

A. B. ALLEN & CO., 187 Water st., New York.

CHEAP PLOWS.

SINGLE-HORSE PLOWS, from \$2.00 to \$3.00 each.

Double-horse do. " \$3.00 to \$6.00 "

The woods of these Plows are made of the best of *White Oak*. The handles are *steamed* and then *bent crooked*, instead of being *sawed out*. This makes them much stronger and more durable. The castings are made from good *new pig iron*, without any admixture of *old scrap*. The wrought iron work is of excellent quality, with *extras* attached to the plows. A liberal discount to dealers. (7-21)

A. B. ALLEN & CO., 187 Water st., N. Y.

Patent Revolving Horse Rakes, manufactured at Clarkson, by L. SWIFT—the best rake now in use—for sale at the manufacturers lowest prices, at the Genesee Seed Store and Agricultural Warehouse, No. 18 Front st.—the only place in the city where they can be had.

July 1, 1847. [7-1f] RAPALJE & BRIGGS.

Farming Tools, such as Grain Cradles and Cradle Scythes, Grass Scythes and Snaths, Wire-toothed and wooden Horse Rakes and Hand Rakes, Sickles, &c., all a little cheaper than the cheapest, at the Genesee Seed Store, No. 18 Front st., by RAPALJE & BRIGGS.

July 1, 1847. [7-1f]

Subsoil Plows.—We have just received from Ruggles, Nourse & Mason, of Boston, a large supply of their superior Subsoil and Sward C Plows, which we offer for sale at the manufacturers prices—from \$7 to \$14 each.

July 1, 1847. [7-1f] RAPALJE & BRIGGS.

Bee Hives.—Rich's and Renolds' Patent Bee Hives at the Genesee Seed Store, No. 18 Front st.

July 1, 1847. [7-1f] RAPALJE & BRIGGS.

Agricultural and Horticultural Books, just received and for sale at the *Rochester Seed Store*, No. 4 Front street. Downing's Fruits, &c.; Johnston's Agricultural Chemistry; Morrell's American Shepard; The American Poulterer's Companion; The American Florist; The Florists Guide; The American Gardener, &c., &c. For sale cheap. July 1, 1847.

Turnep Seed.—Those wanting a first rate article, and warranted, will please be particular to call at the Rochester (not Genesee) Seed Store, No. 4 Front st. Also, 500 lbs. Ruta Baga Seed, just received from England.

July 1. JAMES P. FOGG.

50 Bushels Buckwheat for sale at the Rochester Seed Store, No. 4 Front st. JAMES P. FOGG.

Sale of Short Horned Cattle.

IN consequence of becoming over-stocked, I will offer for sale, at Auction, at my residence in the town of Auburn, on Wednesday, the 8th day of September next, forty head of thorough bred Short Horned Cattle—consisting of about thirty Cows and Heifers, and ten young Bulls. I shall select from my whole herd one Bull, "Symmetry," two Cows, and two Heifers, which I shall not offer for sale. The balance, being about forty, will be sold without reserve.

The original cows of this herd were selected from the best of the herds of the late PATROON VAN RENSSELAER, FRANCIS ROTCH, and L. F. ALLEN, Esqs., whose reputation as breeders of fine stock requires no eulogy from me. The younger stock were bred with much care from my Bulls Archer and Symmetry, both of which have received the prize as the best Bull at the Exhibitions of the New York State Agricultural Society. Archer was bred by FRANCIS ROTCH, Esq., out of his famous imported cow "Adaliza," and got by "Rolla," (see Coats' Herd Book, No. 4991.)—Symmetry was bred by GEO. VAIL, Esq., of Troy, out of his Cow Dutches, and got by his Duke of Wellington, (see Coats' Herd Book, No. 3654, or American Herd Book, No. 55,) both of which he imported from the herd of THOMAS BATES, Esq., of Yorkshire, England. Full pedigrees of all the Cattle will be printed and ready by the 1st of July.—They can be had by applying to A. B. ALLEN, New York; LUTHER TUCKER and B. P. JOHNSON, Albany; Office of the Genesee Farmer, Rochester; L. F. ALLEN, Black Rock; or at my residence

Also, I will sell ten three-fourths and half bred Cows and Heifers.

After the sale of the above Cattle, I will sell at Auction, one hundred Merino Rams, ten to fifteen South Down Rams, sixty Merino and thirty grade Merino Ewes. The Ewes will be sold in pens of three.

That gentlemen not acquainted with my flock of Sheep may form some opinion of their value, I make the following statement, viz: I have taken five clips of wool from my Sheep. The clip of 1846 averaged a fraction over four lbs. per head; this was the largest. One of the five clips I sold at thirty-nine cents, the other four I sold to one Manufacturing Company at different times, at forty cents per lb.—all at my own house.

Terms of the sale, Cash or approved endorsed notes, payable at the Bank of Auburn, at three months with interest. J. M. SHERWOOD.

Auburn, Cay. Co., N. Y., June 1, 1847.

Kinderhook Wool Depot.

THIS enterprise has been in successful operation for the past two years, and has fully met the expectations of the wool-growers, who have been its patrons and projectors. It will be continued the present year, conducted as heretofore. The subscriber will be prepared to receive wool as soon after shearing as may be convenient for the growers to deliver it. The fleeces will be thrown into sorts according to quality and condition. Those who desire it can have their clip kept separate, and sold when ordered. A discrimination will be made between wool in good or bad condition. Sales will be made for cash, and the owners can rely on prompt returns. The charges for receiving, storing, sorting, and selling, will be one cent per lb. and insurance. Liberal advances in cash made on the usual terms. Sacks will be forwarded to those who wish, by their paying the transportation and 12½ cts. each for their use, or if furnished by the owner of the wool, will be returned, or sold at their value, as he may direct.

Reference can be had to Dr. J. P. Beekman, Kinderhook; D. S. Curtis, Canaan; C. W. Hall, New Lebanon, Col. Co.; J. B. Nott, Esq., Albany; D. Rodgers; Hoosick, Ren. Co.; C. H. Richmond, Esq., Aurora, Cayuga Co.; Col. J. Murdock, Wheatland, Monroe Co.

June 1, 1837.—3t.

H. BLANCHARD.

PLOWS.

We have now on hand, and offer for sale at the manufacturers prices, seven varieties of PLOWS—among which are the Iron Beam, Diamond, and Anthony's Improved Plow.

We would particularly invite attention to the Anthony Plow, as it has a patent index attached to the beam, by which to change it from a two to a three horse plow. Farmers are requested to call and examine our stock before purchasing elsewhere. RAPALJE & BRIGGS,

Genesee Ag. Warehouse, 18 Front st.

REMOVAL.

The Rochester Agricultural Ware House has been removed from Front-street to No. 23 Buffalo-street, Talman Block, opposite Reynolds' Arcade. See advertisement below.

Rochester Agricultural Ware-House, HARD-WARE AND SEED STORE.

(No. 23 Buffalo st., opposite Reynolds' Arcade.)

Where can be found most kinds of GARDEN and FIELD SEEDS, Hard-ware, Tin-ware, Wooden-ware, Willow-ware, House Trimmings, Kitchen Furniture, &c.

The late proprietor of this Establishment, (THOS. NOTT,) feels grateful to his many patrons for their very liberal patronage during the past year, and would solicit a continuance of the same—promising to sell them as good articles in his line, and as cheap, as can be purchased at any other establishment west of Boston or New York. He has formed a co-partnership with Mr. E. J. ELLIOTT—and the business of the establishment will hereafter be conducted under the firm of NOTT & ELLIOTT.

We shall keep constantly on hand, a full assortment of Shaker Garden and Flower Seeds, the reputation of which needs no comment.

We are continually manufacturing the celebrated Massachusetts Sward C Plow—to which has been awarded the greatest number of Premiums—which we shall sell at the low price of \$7, with an extra point. Also—shall keep on hand an assortment of the various approved Plows and Points. Cultivator Teeth, Root Cutters, Straw Cutters, and Corn Shellers—with a hundred and one other articles, too tedious to mention.

Farmers from a distance, as also those in our immediate vicinity, are respectfully solicited to call at our new establishment, and examine our assortment before purchasing elsewhere.

NOTT & ELLIOTT,
Rochester, Jan. 1, 1847. No. 23 Buffalo-street.

To New York Farmers and Emigrants.

 ILLINOIS LANDS FOR SALE.—115,000 acres, in tracts of 40, 80, 120, 160, acres, or more, to suit purchasers. The lands are all first rate, and among the very best in the State, and are situated in the counties most densely settled, viz. Morgan, Scott, Cass, Mason, Menard, Green, Sangamon, Logan, Christian, Macon, McLean, Woodford, and Macoupin. To actual settlers every reasonable indulgence will be given as to time of payment. The price from \$3 to \$5 per acre.

A correspondent of one the New York papers writes, respecting this section of Illinois, as follows;

BEARDSTOWN, Cass Co., Ill., Jan. 10, 1846.

The Riches of the West—Gothamites on the Wing.—It is now six weeks since I left the city of Gotham, during which time I have seen considerable of the Western country, and I must say the beautiful prairies of Illinois far excel what I had anticipated, and this country may truly be called the garden of the world. There is nothing to prevent farmers in this country from getting rich, as the land is the most fertile in the world, and it will produce everything grown in the vegetable kingdom.

A New England man would hardly believe me if I would tell him that some farmers here produce ten thousand bushels of corn and half as many bushels of wheat in a year, to say nothing of cattle and hogs, of which some raise as many as five hundred head. One farmer told me he had raised, the last year, 6,000 bushels of corn, and it was all produced by the labor of two men only.

Cattle and sheep feed upon the prairies all winter, as they are seldom covered with snow."

Most of the above lands may be cultivated 100 years or more without manuring, being of the richest alluvial soil. The titles are indisputable and the lands will be sold at low prices and in quantities to suit purchasers. Letters (post paid) addressed to D. B. AYRES, Esq., of Jacksonville, Ill., or to the subscriber, will receive prompt attention. As many persons out of the State have an idea that the taxes are very burdensome in Illinois, we state that they range from \$1.50 to \$2.00 per annum on 80 acres of land.

JOHN GRIGG,

No. 9 North Fourth-st. Philadelphia.

March 1, 1847.

[3t]

Genesee Seed Store and Agricultural Warehouse.

No. 18 (OLD No. 10,) FRONT ST., ROCHESTER.

At this Establishment can be found all sorts of GARDEN and FIELD SEEDS, a large and excellent assortment of Flower Seeds—a large lot of Clover and Timothy Seed, Orchard and Lawn Grass, Red Top, Lucerne, White Dutch Clover, Millet, Hemp, Flax Seed, Spring Wheat, Spring Rye, Buckwheat, Barley, Oats, different kinds Peas and Beans, Seed Corn of different kinds, various kinds of Seed Potatoes, Potato Onions, Onion Sets, Top Onions, &c., &c.

IMPLEMENTS, MACHINES, &c., such as Pennock's Patent Wheat Drill—Broad Cast Sowing Machines—Corn Planters, Seed Sowers, Fanning Mills—10 different kinds of Straw Cutters, prices from \$3 50 to \$28—Plows as follows: Massachusetts Subsoil, various sizes, do. Sward C, do. Eagle 25, do. different sizes Side Hill, Michigan Subsoil, Delano or Diamond Plows, Burrall's Wheel Plow, Wisconsin Plow, Gang and Corn Plows, and several kinds of plow points—Cob and Corn Grinders, different kinds of Corn Shellers, one and two horse Cultivators, Langdon's Horse Hoe or Cultivator, Drags and Drag Teeth; Horse and hand rakes, various kinds of garden rakes—steel and iron shovels and spades of different kinds—cast-steel and steel plated hoes, different kinds—ladies garden spades and hoes, toy spades and hoes—cast-steel and German steel manure forks and hooks—grain cradles; cradle, grass and bush scythes—bush and grass hooks; grain sickles; Hay knives; grafting, pruning and budding knives; clover and grass seed sieves, pea sieves—cheese presses, hoops and tubs—common and patent churns—cattle knobs and bull rings—curry combs and horse cards—ox yokes and bows—hedge shears, pruning saws—Canary birds and cages—hot bed plants in their season—Eglantine or Michigan running rose roots—and many other things which a limited space will not allow us to mention.

We have done business through one season, and are pleased to be able to say that we have been more liberally patronized than we anticipated when we began. We hope, and believe, that we have so dealt with those who have favored us with their custom, that they will not hesitate to give us their favors hereafter—and we hope others will try us. All favors will be duly and thankfully appreciated.

AGENTS.—The following persons are Agents for the sale of Garden, Field and Flower Seeds, put up at the above named Establishment:—

Attica, L. Doty,
Albion, Nickison & Paine,
Adams Basin, C. D. Graves,
Adrian, Mich., D. H. Underwood,
Auburn, Quick and Hall,
Aurora, H. & G. P. Morgan,
Batavia, J. P. Smith,
Buffalo, E. Rawson,
do. T. C. Peters,
do. H. O. Hayes,
Brookport, H. Lathrop,
Canandaigua, Chipman & Remington,
Cobourg, C. W., G. Boyer,
Dansville, M. Halstead & Co.
Detroit, Mich., F. F. Parker & Brother,
Genesee, Bond & Walker,
Geneva, Lawrence & Barnes
Holley, H. N. Bushnell,
Havana, G. T. Hinman,
Iliaca, Schyler & Co.,

Jackson, Mich., S. Chadwick
Le Roy, J. Annin,
Lewiston, H. F. Hotchkiss
& Co.,
Lockport, Wm. Keep & Co.,
Lyndonville, E. Bowen,
Mt. Morris, L. J. Ames,
Medina, J. Nichols & Son,
Middleport, J. Craig,
Milwaukee, W. T., J. S.
Moulthrop,
Niagara, C. W., Wm. Johnson
& Son,
Penn Yan, E. H. Huntington
Pt. Byron, Kendrick & Yates
Scottsville, Caleb Allen, esq.
Seneca Falls, Joseph Osborn
Skaneateles, C. Pardee & Co
Syracuse, E. J. Foster,
Utica, J. E. Warner & Co.,
Union Springs, W. Cozzens,
Vienna, S. E. Norton,
Youngstown, A. Emerson.

☐ Garden Seeds put up at this Establishment can be found at most of the Stores in the State of New York west of Utica, and in some parts of Canada.

RAPALJE & BRIGGS.

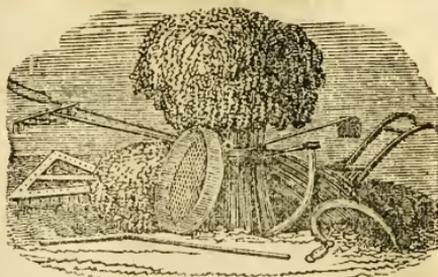
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Rochester, April, 1847.

Seedling Apple Trees wanted.—The subscriber wishes to purchase a few thousand seedling Apple Trees. Apply personally, or by mail, to S. MOULSON, Rochester, Jan. 1, 1847.

Bound Volumes of the Farmer.

A few copies of Volume VI, bound, for sale at this office. Price 50 cents. Also, bound copies of Volume VII, 1846.



Rochester Seed Store.

[Established in 1831.]

No. 4 FRONT STREET, NEAR BUFFALO STREET.

By JAMES P. FOGG.

The subscriber begs leave to say to Farmers, and others, who have for the last three years so liberally patronized the *Old Rochester Seed Store*, that he has fitted up the Store, No. 4 Front street, on the west side of Front street, where he will be happy to see all who may want any article usually to be found in a Seed Store.

The subscriber is well aware of the important relation which the seedman holds to the whole farming community, and that on his honor and veracity the crop and profit of a season in some measure depend. The greatest care has been used in selecting the seeds offered at this establishment for the ensuing year, and they can be relied upon as pure and genuine, carefully selected and raised from the very best varieties, and properly cured. Many kinds were raised in the immediate vicinity of this city, by Mr. C. F. Crossan, and under the inspection of the proprietor; others were raised by experienced seed growers, and all can be recommended as genuine and true to their kinds.

Garden Seeds put up at this establishment in small papers, may be found with most of the merchants in the States of New York, Ohio and Michigan, and in Canada.

Rochester, N. Y.

JAMES P. FOGG.

Choice Pear Trees.

ELLWANGER & BARRY offer for sale, in addition to the stock of their own growth, *one thousand beautiful Pear Trees for pyramids*—just received from Europe—in fine condition for planting. The assortment includes the most scarce and estimable varieties. Orders should be sent in at once.

E. & B.'s new catalogue of Green House plants is just published, and will be sent gratis to all post paid applications.

Spanish Merino Sheep.

FOR SALE.—A few choice MERINO SHEEP, bucks and ewes, of undoubted purity of blood, and a quality that will give satisfaction to purchasers. They can be sent west, by canal, at the subscriber's risk.

Cornwall, Vt., May 1, 1847.

ROLLIN J. JONES.

Turnep Seed.

We have just received from Geneseeville, by last Packet

200 pounds	White Norfolk Turnep,
200 "	Globe do.
400 "	Ruta Baga do.
50 "	Scotch Yellow do.
100 "	assorted kinds do.

Also 200 lbs. best English Field Carrot Seed—all of which we now offer for sale cheap, and warrant the seed genuine.

Farmers and dealers are respectfully requested to call at the *Genesee* (not Rochester) *Seed Store*, No. 18 Front st. June 1, 1847.

RAPALJE & BRIGGS.

PEAS, PEAS!—200 bushels Gold Vine Peas, just received from Canada, and free from bugs—for sale by R. & B. at the Genesee Seed Store. Those wishing a good article will please give us a call. It is not yet too late to sow them. June 1, 1847.

Clover and Timothy Seed.—500 bushels of Clover and Timothy Seed, for sale at the Genesee Seed Store, No. 18, (old No. 10,) Front street, by RAPALJE & BRIGGS. Rochester, April 1, 1847.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,.....	1,38	1,50	Pork bbl, mess	15,00
Corn,.....	63	—	Pork, cwt,.....	5,00
Barley,.....	50	—	Beef, cwt,.....	5,00
Oats,.....	50	—	Lard, lb,.....	8
Flour,.....	6,50	6,75	Butter, lb,.....	10
Beans,.....	75	87	Cheese, old, lb,.....	7
Apples, bushel	50	75	Eggs, doz,.....	9
Potatoes,.....	50	—	Poultry,.....	7
Clover Seed,.....	4,00	4,50	Tallow,.....	9
Timothy,.....	1,50	—	Maple Sugar,.....	8
Hay, ton,.....	3,00	—	Lamb Skins,.....	10
Wood, cord,.....	2,50	3,50	Green Hides, lb	3½
Salt, bbl,.....	1,06	—	Dry ".....	7
Hams, lb,.....	7	8	Calf Skins,.....	8

Wool Market.

A large business has been done in wool during the past week—probably 50,000 lbs. have been sold in this market. The general range of prices is from 25 to 35 cents. A very few large lots of fine wool, in excellent condition, have brought 37 cts., and some lots 37½ cents. Dealers inform us that wool is brought to market in better condition this year than formerly—greater pains being taken to cleanse it. Farmers will find it greatly for their interest to see that their wool is brought to market in good condition.

It is difficult to give the prices according to blood, as buyers look to condition, cleanness, &c., in making purchases. We however subjoin the general range:

Full blood Saxony fleeces,.....	31	a 35
do. Merino do,.....	28	a 31
Half-blood do. do,.....	25	a 28
Quarter-blood to common,.....	20	a 25
Coarse English and bad conditioned wool,.....	13	a 20

Rochester, June 23, 1847.

NEW YORK, June 26—7 P. M.

FLOUR to-day was in good demand, and considerable sales were made at \$7 for Mich., and \$7,12½ for Genesee. Some irregular lots Ohio and Michigan were procured at \$6,75 a \$6,87½. On 'change the market was stiffer, and Genesee in demand at \$7,12½ and steady; Michigan \$7. Some 3000 bbls. of the latter sold at \$7,12½, and there was one buyer for Genesee at \$7.13.

WHEAT is very heavy, and 5 to 10 cts. cheaper than yesterday. The sales are some 5000 bu. at \$1,57 a \$1,60 for Ohio.

NEW YORK WOOL MARKET—June 26.—The stock of fleece is extremely light, and our quotations are nearly nominal. In Foreign, sales have been made of 200 bales Odessa, on private terms, and 35 bales Mexican at about 10 cents, 6 months.

Saxony fleeces,.....	40	a 45	Com. ¼ blood Merino	25	a 27
Full blood Merino,.....	35	a 38	Superfine pulled,...	30	a 31
3-4 blood do ..	28	—	No. 1 do.....	26	a 27
1-2 blood do ..	32	—			

Exhibition of the N. Y. State Ag. Society at Saratoga.

Those who intend to compete for premiums should remember that all animals and articles must be ready for examination on the first day of the Exhibition—that is, on Tuesday, the fourteenth of September. The first day will be devoted exclusively to the examination by the judges of the animals and articles exhibited, and no persons will be admitted within the enclosure on that day, except the officers of the society, judges and exhibitors.

Kephart's Fruit and Vegetable Preserver,

By which Fruits, Vegetables, Butter, Eggs, Bacon, &c., can be preserved throughout the year—a full description of which will be found in the 6th No. (vol. 3) Genesee Farmer.

The undersigned having purchased the above Patent Right for the United States, excepting the States of N. J., Del., Md., and the cities of New York and St. Louis, offer for sale Patent Rights for the construction and use of the Preserver, by States, Cities, Counties, Towns, or individual rights, upon satisfactory terms.

All communications will receive prompt attention if addressed either to PETER KEPHART, Western Hotel, Baltimore, Md., or FLACK, THOMPSON & Co.

Spring Garden P. O., Phila., Pa.

PUBLISHERS' NOTICES.

To Advertisers.

THE GENESEE FARMER is by far the best medium for advertising in this section of the country. In addition to a very large circulation in Western New York, it has thousands of readers in the Western and South-western States, New England and the Canadas. It has subscribers in every State and Territory (except Oregon) in the Union. The farmer is received by several thousand country merchants, post-masters, &c., and is therefore a very desirable medium for the advertisements and business cards of wholesale dealers of all kinds.

The enlargement of the Farmer next month, will enable us to give a variety of short advertisements. Manufacturers and dealers in Agricultural Implements, owners of valuable Patent Rights, breeders of choice Cattle and Sheep, Nurserymen, &c., &c., will find that the Farmer is a better and cheaper medium (taking terms and circulation into the account,) than any other agricultural journal.

We make this announcement, because we have heretofore been compelled to decline the publication of many advertisements for the want of space.

TERMS.—Short advertisements will be inserted at the rate of \$1 per square for the first insertion, and 75 cents for each subsequent insertion, (25 per cent. less than our present terms.) Contracts at a less rate will be made with those who wish a column or page, by the year.

Advertisements for our August number should be in hand previous to the 20th of July. All communications addressed to the Publisher, post paid, will receive prompt attention. July 1, 1847.

To Clubs.—Any Post Master or other person who has sent us eight or more subscribers, will be furnished with any additional number of copies at the club price—37 cents each. We hope those who have formed clubs, will bear this in mind, and forward the subscriptions of such as may hereafter want the Farmer. Back numbers can be supplied—so that all may have the entire volume.

List of acknowledgments necessarily deferred.

A Word to Farmers.

SAGE & BROTHER have received a very fine assortment of Agricultural Works, peculiarly adapted to the intelligent cultivators of the earth, who combine science with labor, and thereby render their farms doubly productive.

The works are from the pens of Downing, Fessenden, Kendrick, Thomas, Buel, Youatt, Clater, and a host of others, who have lived and written for the good of the agriculturist, and proved themselves benefactors to their race.

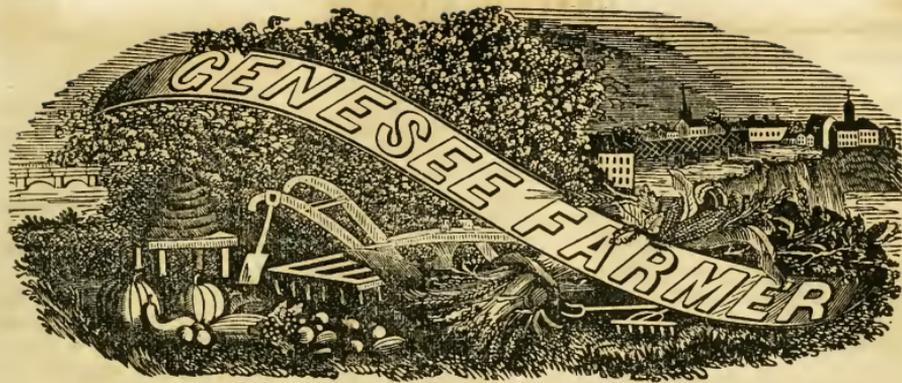
Call and see at No. 40 Buffalo, corner State Street. Rochester, June 1, 1847.—31.

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THE GENESEE FARMER:

Issued the first of each month, in Rochester, N. Y., by

D. D. T. MOORE, PROPRIETOR.

DANIEL LEE, EDITOR.

P. BARRY, Conductor of the Horticultural Department.

To Correspondents.

DURING the past month communications have been received from C. N. Bement, D. A. Ogden, W. D. Dickinson, B. Densmore, H. S. C. L. Buswell, A. Lockite, J. W. Falley, S. W., S. Davison, C. Robinson, Wm. Jenkinson, T. R. Stackhouse, R. B. Warren, and A. Willson.

Notices of Agricultural Books, &c.

A DICTIONARY OF MODERN GARDENING, by GEO. WILLIAM JOHNSON, Esq., &c., &c., with 180 wood cuts. Edited by D. LANDRETH, of Philadelphia. Lea and Blanchard.

The above is the title of a handsome volume of 635 pages on Gardening, giving all recent improvements in this most useful and delightful art, as now practiced in the vicinity of London and Philadelphia, with such additional information as may be obtained from books on the subject. It greatly facilitates reference to any peculiar plant, or other matter discussed in the book, to have all its contents arranged in the alphabetical order of a dictionary.

Mr. JOHNSON, of London, has enjoyed the best opportunities to be well informed on horticultural subjects, and has evidently brought to his task a large fund of practical knowledge. The directions which he gives for destroying insects injurious to vegetables and fruits are worth more than the price of a copy of the work. It should be in the hands of every one that has a garden, or land on which to make one.

THE PIG: A Treatise on the Breeds, Management, Feeding, and Medical treatment of swine, with directions for salting Pork, and curing Bacon and Hams, by WILLIAM YOUNG, V. T., &c., &c., illustrated with engravings drawn from life, by WILLIAM HARVEY, Esq. Lea and Blanchard.

AMONG all breeders of domestic animals, the reputation of YOUNG is sufficient commendation for any work from his pen, relating to this department of rural affairs. The rearing of swine and the making of pork are very important branches of American husbandry. Messrs. Lea and Blanchard have done the farming community an essential service in republishing this standard English work.

Both of the above works can be had at S. HAMILTON'S Bookstore, State street, Rochester.

FARMER'S LIBRARY.—The July number of this monthly, edited by the veteran agricultural writer, JOHN B. SKINNER, commences the third year of its existence. It is profusely illustrated, abounds in useful matter, and deserves a place in any farmer's library—giving two volumes of 600 pages each per annum, for five dollars.

TRANSACTIONS OF THE N. Y. STATE AGRICULTURAL SOCIETY, for 1846.

We had designed to give an extended notice of this volume in the August number of the Farmer; but the claims of our numerous and valuable correspondents upon our columns prevent.

There is much in the Transactions that deserves commendation, and several errors of fact, and blunders in proof reading, which ought to be pointed out, that the like may be avoided in succeeding volumes.

The sentiments advanced by the late President of the Society, in the annual address expected from that officer, in favor of educating farmers in the most thorough manner, meet our hearty concurrence. The Report of the committee on Agriculture in the House is open to just criticism. Had the author taken the trouble to examine the Comptroller's reports each year since 1841, he would have found that instead of the State annually giving \$8,000 for the benefit of Agriculture, as he informs the public, the sum will average only a little over two-thirds that amount since the passage of the law. We tried two or three winters to induce the Legislature to bestow the balance in the Treasury that rightfully belongs to the farming interest in some way that would promote the objects of the law—but in vain.

On page 303 Mr. R. L. PELL is made to say: "By analysis it is found, if a horse be fed on 1000 parts of the common bean, he obtains from it 570 parts of soluble nutritive matter, 426 parts mucilage or starch, and 103 parts of gluten." That is, he gets 1099 parts from 1000. "From 1000 parts of oats he obtains 743 parts of soluble nutritive matter, 641 of starch or mucilage, 15 of saccharine matter or sugar, and 87 parts of gluten or albumen," &c. Here 1000 lbs. of oats give 1486 lbs. of matter, making of course 486 out of nothing! No one can make the necessary corrections to these, and a host of similar blunders, without the copy.

The Legislature pays almost as much for printing this annual volume as all the agricultural societies, including the \$700 given to the State Society besides, receive from the public treasury. The State has paid for the binding as well as printing of the present volume of 716 pages, which, judging from past bills of this character, has cost some \$6,000. Of course we do not object to the appropriation; but we submit that, more attention and time should be devoted in making the volume free from glaring defects. While the Legislature generously foots the printer's and binder's bills, and the Society is investing its thousands in stocks, its annual volume of Transactions should not be what it is.

FARMERS' SOUVENIR.—This is the appropriate title given by Mr. FRANKLIN KNIGHT to a beautiful quarto edition of the Agricultural Correspondence of the illustrious Farmer of Mount Vernon. The volume contains 200 pages, printed and bound in a style worthy of its great subject—Agriculture—and of the immortal name—WASHINGTON.

As an illustration of the accurate manner in which the "Father of his Country" kept his farm accounts, independently of the system and wisdom displayed in his writings, the book deserves to be in the hands of every agriculturist in the Union. It is admirably adapted to be offered as premiums in lieu of money by all agricultural societies, for which purpose we recommend it.

Cheese Dairies.

The best paper in the volume of Transactions of the N. Y. State Agricultural Society for 1846, (lately published,) is one from the pen of B. P. JOHNSON, Esq., on "Cheese Dairies," together with the answers called forth by the dairymen and women who took the liberal premiums of \$50 and \$30 offered by the Society.

Had we room, we should gladly copy these communications entire; as it is, we shall attempt a faithful summary, and give the statement of Mr. BRONSON of Wyoming, who took the first premium.

The whole number of cows in the State in 1845 was 999,400 which were milked. Of these Mr. J. estimates that one-third are employed in making cheese, or 333,163; producing about 110 lbs. each or an aggregate of 36,744,956 lbs. He says:

In the county of Herkimer, where cheese is more extensively manufactured than in any other in the State, and where the cheese is of superior excellence, much of it commanding in the English market as high prices as the best Cheshire cheese, the amount per cow is 226 lbs. In the town of Fairfield, in that county, 350 lbs. per cow; and in some dairies in that county, as high as 630 lbs. The annual average in one dairy, Mr. Alonzo L. Fish's, for three successive years, was 650 lbs. per cow, and in one of these years 714 lbs. was obtained. (Vide Trans. N. Y. S. Ag. Soc., 1844, pp. 227-3, 9.)

The Cheshire dairies in England average 336 lbs. per cow, and from selected cows 560 pounds.

Did we not know Mr. FISH and have reason to credit what he says, we should doubt whether a cow ever made 714 lbs. of cheese in one year; or that a large dairy averaged 680 lbs. to each cow. We think that the Secretary of the State Society does not exceed the bounds of reason when he says that, all the cows in the State kept for making cheese can easily be brought up to an average of 400 lbs. each per annum. This would augment the product of cheese in New York from 36,744,956 lbs. to 133,265,200 lbs. from the same number of cows. The annual gain would be equal to five millions of dollars. From Mr. and Mrs. OTTLEY's statement it appears:

That they manufactured from the milk of eight cows, in the months of June and July, 1248 lbs. of cheese from 10,400 lbs. of milk; 100 lbs. of milk averaging 9 lbs. of cheese. The average pounds of milk from each cow daily, is a little over 21 lbs. The highest yield being 23 lbs., and the lowest 15.

The cows are fed hay and grass only, and the calves are reared and swine are kept from the dairy. His farm lies in the town of Phelps, Ontario county; elevation above tide water estimated 450 feet. It is generally level, with some small ridges. He has two hundred acres under cultivation. Fifty acres in pasture and fifty in meadow, the residue under the plow.

The soil is mostly gravel; one-third sandy loam, subsoil gravel, and a small part clay.

The meadows are timothy and clover. The flat land in meadow is red top, which Mr. Ottley states produces the best hay for cows. He plows up his meadows every third year. The pasture land is mostly clover, which is plowed once in two years, if the yield is not equal to two tons per acre.

To the following remarks of Mr. BRONSON we ask particular attention. It is a curious and interesting fact, that 100 lbs. of milk in June, when

grass contains comparatively little nitrogenous, or cheese-forming elements, gave only 9 lbs. 4 oz. of green cheese; whilst in September, when herbage is rich in nitrogen, an equal weight of milk gave 12 lbs. 7 oz. of green cheese.

Without any knowledge of what Mr. BRONSON would say or do, Mr. and Mrs. OTTLEY remark, "That when the cows were in clover pasture, then the cheese was larger and richer than when in other pastures."

When every branch of rural industry shall be studied as a science, keeping steadily in view the fact that it always takes something to make each product of the farm, whether vegetable or animal, and that that something admits of no substitute, but must be the precise thing which God has appointed in the certainty of His unerring laws, then agricultural labor will be most bountifully rewarded. The transformation of cultivated plants into beef, pork, mutton, wool, butter, and cheese; and the cheap production of the crops best adapted to these several objects should command more of the attention of our County and State Agricultural Societies than they have hitherto received.

STATEMENT OF MR. BRONSON.

To the Committee of the New York State Agricultural Society, on Cheese and Dairies.

GENTS:—In answer to the several questions submitted in your printed circular, dated Feb. 14, 1846, relating to Cheese dairies, I, Newbury Bronson, of Warsaw, in the county of Wyoming, and State of New York, do state as follows:

Question 1. What is the locality of your farm, its elevation and latitude?

Answer. My farm is located in the town of Warsaw, about 1½ miles south west from the village of Warsaw, on the hill west of the valley of Allen's creek, from 300 to 400 feet above the creek; gradually descends towards the east.—The hill rises west of my farm, in about four miles, some 500 to 600 feet above the elevation of my farm.

My farm is about 30 minutes (of a degree) south of Rochester, and about 15 minutes west of that place.

Ques. 2. How much land under cultivation; how much in pasture and in meadow?

Ans. About 20 acres under cultivation; 110 acres in pasture, and 50 acres in meadow.

Ques. 3. What is the nature of your soil and subsoil?

Ans. The soil of my present meadows is a deep black muck, with a clay hard pan subsoil. The soil of my present pastures is mostly a coarse gravel, with a sandy loam. Subsoil the same. The underlying rock is Shale.

Ques. 4. What plants or grasses do you use for pastures; what for hay. How are your meadows treated; how much hay do they yield per acre?

Ans. White clover and timothy, with a mixture of red top, but the clover predominating for pasture. My meadows are timothy and red clover, with a small mixture of red top, and are highly manured from the barn, and no other dressing used. They yield 1½ tons per acre.

Ques. 5. How many pounds of milk from each cow?—How many from the whole herd?

Ans. I have taken some pains, since receiving your circular, in April last, to ascertain, and think the following correct:

My cows in June last, consisting of 44 in number, gave, on an average, in that month, each, 16 quarts per day, which weighed 8 lbs. 6 oz. per gallon, making the daily yield of each cow in June 33 lbs. 8 oz. The whole herd of course gave 176 gallons each day, weighing 1474 lbs.

During the latter part of the season I had only 37 cows.

Ques. 6. How many pounds of cheese to 100 lbs. of milk? The quantity of milk during the season? The quantity of cheese during the season; the quantity of cheese to each cow?

Ans. The quantity of cheese obtained from 100 lbs. of milk, will vary at different periods in the season. I have taken pains to ascertain the difference in this respect, between the months of June and September. In June, 100 lbs. of milk made 2 lbs. 4 oz. of green cheese. In September, 100 lbs. milk made 12 lbs. 7 oz. green cheese.

Again, there is a difference in the quality of the milk, which will greatly effect the amount of cheese obtained from 100 lbs. of milk.

I have selected my best milk and made curd from it separately. I have done the same with my poorest milk, taking an equal quantity of each. The poorest milk yields 17 per cent. less curd than the best, as I get it from my cows. I have heretofore had doubt on this subject, but my experiments have removed that doubt entirely.

The average number of cows kept through the season is 40. The whole amount of milk obtained during the whole season, computing that portion of the season now unexpired, as an ordinary season, is 170,666 pounds of milk, from which is produced eight tons of cheese including the butter, that is, I have made 500 pounds of butter, and that, according to custom, which I think correct, I call equal to half a ton of cheese.

The average quantity of cheese to each cow, including the butter, is 400 lbs.

Remark. The extreme drouth for six weeks this season, cut off the quantity of cheese I have made this year, at least one ton.

Ques. 7. At what time do you commence making cheese?

Ans. I usually begin the 15th of April, and end the 1st of December.

Ques. 8. Do you rear calves? Do you keep swine?

Ans. I do not rear calves. I keep swine. This year kept twenty-five.

Ques. 9. What feed is used besides grass and hay?

Ans. None.

Ques. 10. A particular account of the method of making cheese; the quantity of cheese, and its price in the market, and place where sold?

Ans. For a particular account of my method of making cheese, see a paper hereto annexed, on that subject.

For the quantity made see a part of my answer to the 6th question.

I sold my cheese at my dairy this year, to H. Burrell & Co., of Herkimer county, on the 18th August, at 5¢ cents per pound. The purchaser furnishing boxes, and taking, on the 1st November all the cheese then (on 1st Nov.) 25 days old—I delivering it at Cuyler, 15 miles distant—and no allowance made for its greenness; delivering five tons 1st Oct. and the balance 1st Nov.

My last year's dairy I sold in Rochester, in May last, after the market had sensibly declined, at 8 cents per pound.

Ques. 11. The number of cows milked; the breed of the cows and their ages?

Ans. The average number of cows milked this season is 40. Nearly all of the native breed. Their ages are nearly all between 5 and 10 years—a few older, and one or two younger.

Ques. 12. What difference, if any has been observed, in the quantity of cheese yielded from the same quantity of milk given by different cows?

Ans. My answer to this question appears in my answer given to the 6th question, to which I beg leave to refer the committee.

Ques. 13. Has any particular kind of herbage been noticed to have an influence in increasing the proportion of cheesy matter in a given quantity of milk?

Ans. I have made no precise experiments on which I would rely in answering this question, but my observation for years has led me to give a decided preference to white clover for a pasture.

My answer to question 14 will be found interspersed in some of my previous answers, and in the annexed paper on my method of cheese making.

Respectfully submitted. NEWBURT BRONSON.
Warsaw, Nov. 11, 1846.

THE Wheat Crop of Ohio, Michigan, &c., (according to statements in letters and papers recently received,) proves much better than was anticipated a few weeks ago. We have similar information from other sections of the country.

Ammonia.

"AMMONIA, Liebig maintains, is a body not indebted to organism for its being; that it is to be classed with iron and potash, soda and oxygen, whose quantity within the organism of plants and animals, and without, is, in general terms, constant. He holds that when the required physical properties have been given to a soil, and the necessary inorganic ingredients, in suitable solubility, the ammonia and carbonic acid, with healthful falls of rain, will provide themselves."—*Prof. Horsford.*

The plain English of the above theory is, that the organized carbon and nitrogen in manures of a vegetable and animal origin, are of little or no account in the growth of good crops of grain, grass, and roots. Rains and dews will yield to cultivated plants all the ammonia and carbonic acid that they need; leaving the farmer no greater task than to pulverize his soil, and give it "the required physical properties, and necessary inorganic ingredients." We are not prepared to assert that this view of the growth and nourishment of vegetables is not true; but we can say that its soundness lacks evidence to an extent which should make one hesitate before he adopts the theory for the purpose of making it the basis of a system of practical agriculture.

Does Prof. HORSFORD find abundant evidence that Ammonia exists in the atmosphere independent of the quantity given it by decaying organized bodies, which ammonia falls in rain, snow, and dew to the earth in larger quantity than plants and animals furnish to the air? Is this excess of available azote (nitrogen) adequate, not merely to feed all vegetables growing spontaneously on the earth, but to supply the much larger demands of a wheat crop equal to 60 bushels per acre? Unless every acre on a whole continent possesses this excess of ammonia, equal to twice or three times the quantity furnished by forests and natural meadows, and required by them in their organization, how can one acre receive a larger supply, except by human agency?

It is much to be regretted that our State Agricultural Society does not use a small portion of the thousands of dollars which it annually receives from the public, to determine the practical value of Ammonia, both with and without the addition of the phosphates, sulphates, and chlorides found in the ashes of wheat and other crops. For the last thousand dollars paid in premiums for corn crops, in this State, by its several Agricultural Societies, we can not see wherein one new fact of the least value has been brought to light.—Such would not be the case if premiums were offered to gain information in the little explored fields of the organism of cultivated plants and domestic animals. Not a single dollar has ever been given to encourage investigations in vegetable and animal physiology. Men that devote their money to the importation of expensive apparatus, and their time to making researches into these subjects, must work for nothing and find themselves, if they live in the State of New York. Is this wise? Is it just? Pure science,

unmingled with private speculation—science that looks only to the public good—can find neither land nor buildings in the Empire State which it can occupy without paying a ruinous rent.

One word more on the subject of Ammonia. Before Mr. HORSFORD went to Europe, if we mistake not, he was present at an Agricultural Meeting in the Geological Rooms of the old State Hall, Albany, at which Mr. HUMPHREY, then Mayor of the city, stated that, on two acres of the naturally sterile sand plains near that city he had raised 120 bushels of shelled corn, simply by putting a handful of the scrapings of horns obtained at a comb factory, in each hill at planting. On another acre hard by, of equal quality, on which no horn shavings were applied, the yield was less than 15 bushels. Did the large amount of ammonia, furnished on the decay of this highly nitrogenous substance, do no good in the way of augmenting the crop four fold? We should like to hear something farther on this important subject, from our friend Prof. H.

Action of Lime on Soils.

It would be amusing to publish, in one volume, all the reasons that have been given why lime is so beneficial in agriculture (!) were it not for the recollection of the mischief that the writers have done in leading farmers astray, and causing them to throw away their money.

All may remember the various reasons that philosophers assigned to show why a pail of water would not weigh more with a fish in it than without the fish. At length one of them suggested a doubt as to the fact! This led them to weighing, and weighing to laughing at each other.

If this question could be settled at once by the steelyard, some would laugh, but more would have reason to cry.—Our New England and our New York papers have had less and less to say in favor of the action of lime on soils in general, for a number of years past. But occasionally an anonymous writer puts forth the old pluff in favor of lime, assuming the position that it is beneficial on all kinds of land.

A writer in the *Maine Farmer*, under the signature W. came out last week with the following explication in the name of Von Thaeer:—

“ACTION OF LIME.—‘Both the chemical action of lime, and the effect which it produces as a manure,’ says Von Thaeer, ‘appear to be of two kinds. On one hand, it acts on the *humus* by accelerating its decomposition, and rendering it soluble, and thus fit to enter the minuter fibres of the roots of plants. This is the reason that an amelioration, composed of lime, is the more efficacious the richer the soil is in *humus*, and that its action is the more sensible the more this *humus* is of an insoluble nature. Lime deprives *humus* of its acidity, and renders it fertilizing. But, on the other hand, there is every probability that by means of its carbonic acid, lime also produces some other effect, and furnishes the plant with some nutritive matter. The roots of some vegetables, in a particular manner, appear to have the faculty of depriving lime of its carbonic acid, which it immediately re-absorbs in equal proportion from the atmosphere, with which it comes in contact.’ These hints are important. W.”

☞ It will be recollected by many of our readers that more than one correspondent of the *Ploughman* after trying the experiment, *denies the fact* that lime is useful on sorrelly soils—one of them says it rather promoted the growth of sorrel, than otherwise.

In regard to another operation of lime, in the article now quoted, we undertake to dispute the *fact* stated. We say *lime does not accelerate the decomposition of humus, or of any vegetable matter.* And any one may satisfy himself of this by trial.

We have long suspected, as our readers know, that lime is of no service unless it be to correct the acid occasioned

by the prevalence of iron ore in the soil. This ore gives it a red color; it is often found in clayey soils, but not in what we call sandy, the prevalent soil of Massachusetts. When this is generally known, the papers will have it. Till then the old saw will go the rounds; and lime will be numbered by copyists among the excellent things to be applied to all kinds of soil.—*Massachusetts Ploughman.*

WITHOUT endorsing what is said by the writer in the *Maine Farmer*, we must express our surprise that the action of lime is a matter of so much dispute in New England; and to hear the editor of an agricultural journal question its value “unless it be to correct the acid occasioned by the prevalence of iron ore in the soil.”

At the risk of being placed among the “copyists” and dealers in “old saws,” on the books of the *Ploughman*, we must call attention to the fact that, no other single element found in all cultivated plants, has been so generally, and so successfully used as a fertilizer both in Europe and in this country, as this same mineral called *lime*. As CALEB CUSHING would say, this is “a fixed fact.”

It would be no easy task to make a sound healthy bone in the body of any animal, unless there was a little lime in the food on which such animal subsisted. And if the soil was quite devoid of this mineral, how could the plants raised upon it, to feed man and his domestic animals, extract lime therefrom?

Will the *Ploughman* assert that all soils contain a supply of available lime, fully equal to the utmost demand of wheat and all other crops? If so, how does it happen that the limestone lands of Western New York have yielded for the last 30 years so fine crops of this bread-bearing plant, while all the counties in this State and New England, where lime exists in its minimum quantity, wheat culture is almost unknown? Facts like these can hardly be put down by a sneer at “copyists and old saws.” It is confessedly by the use of lime mainly, that hundreds of farmers in Maryland are renovating their worn out fields, and harvesting good crops of wheat and grass. The same is true in Virginia and portions of Pennsylvania. But it is no less true that, lime *alone* will not suffice on the granite soils of New England, nor elsewhere to bring forth abundant crops. No one mineral can perform the office in the vegetable economy which God has assigned to the joint agency of some eight or ten earthy substances. You might as well expect to increase the human race on a remote island in the Pacific, whose every inhabitant is an old bachelor. No such caustic single blessedness as lime alone, by neutralizing acid, will impart fertility to the earth.

If the Massachusetts farmers will mix with their lime all the other ingredients that nature uses in organizing the crop cultivated, we venture to assert that lime will do its share in giving fecundity to the soil. Don’t say that both blades of a pair of shears are worthless, because neither half can cut alone.

Plant More Trees!

UNDER the above head the Farmer's Monthly Visitor has a capital article, from which we learn several interesting facts. Gov. HILL, the editor, says that "Valuable pine timber lots are now grown, whose origin was in the seed less than fifty years ago." The opinion has pretty generally prevailed that pines grown by artificial culture are nearly worthless for timber. We see no reason why this should be so, any more than oak, chestnut, or ash. Mr. H. remarks that "Nature does every thing to make up for man's neglect in the planting and growth of trees; nor is she slow in her operations. She has made every acre of waste land in New Hampshire valuable. The beautiful chestnut timber so much used in the New England railroads grows spontaneously in all our poorest rocky lands which have been considered too hard for cultivation: the railway chestnut cross timbers are worth, standing, on the average, sixteen cents apiece; trees of the suitable size making sometimes three and four cuttings. It is said these chestnut trees will grow to the suitable size of posts in the years that these posts rot in the ground. A remarkable feature in the chestnut is, that where a main tree is cut, sprouts the same year shoot forth from the roots growing up a clump of trees, some three to six of which soon grow into sizes to be used for timber."

We have had some little experience in attempting to raise a small forest of chestnut timber from the seed, but with poor success. We have been told that the seeds should never get dry after they ripen in the fall, before they are planted, either in pots or a nursery. Such is the demand for fence posts and railroad ties, that the culture of chestnut timber, we are confident, can be made profitable. Every farmer has a wood lot, and as he thins it out, or cuts it off, he should set the ground full of small chestnuts.—Under favorable circumstances they grow rapidly.

It is safe to calculate on the growth of a cord of wood on an acre per annum in Western New York. This, at \$2, is much better than no income—while the annual burden of leaves that fall to the earth enrich the land.

Shade trees are equally an ornament and luxury during the intense heat of our summer months. Speaking of these the Visitor says:—"We boast in the southerly part of the Concord Main street as beautiful elms as can be shown in any part of the world. There are many charming villas in the country range about Boston; but we must say of these that their cleaned path avenues shaded and covered over by trees high before reaching the limb, or surrounded by the shrubbery which entirely shuts out access of foot or of eye, do not compare with the unadorned beauty of the row of elms opposite on the street to the place of our writing. There is a remark-

able similarity in the spread of the isolated elm, which is a native of our intervals and stands either on that or the first upland of the river bank. The men who sat out our stately elms seventy-five and a hundred years ago, Hall, Shute, and others, have passed away: at this season, when hundreds of birds come there and build their nests, the elegant gold-robin, the gay blue-bird, the chattering wren, and even the shy crow, black-bird, the snarling cat and scolding thrush both sing so beautifully and so alike when undisturbed as to be mistaken each for the other—there is a charm in these venerable trees which bids us remember those who planted them there, and to present them as proof that planting trees is one of those "good deeds" of men which live after them."

Deep and Thorough Tillage.

WE have noticed with pleasure that most farmers in this section have become converts to the system of deep plowing and fine tith. Instead of making their soil mellow only four or five inches deep, as is still practiced by a few, the general custom is to plow from seven to ten inches, and thoroughly pulverize the earth to an equal depth with the harrow and cultivator. Experience has taught them that a deep mellow soil is vastly more productive, other things being equal, than a hard shallow one. We expect soon to see a few enterprising men driving a second plow in the furrow of the one that breaks the surface, and thus secure to their crops a double amount of pervious soil, in which a double quantity of soluble mineral elements may feed and bring to maturity a double harvest. Very few fields in Western New York lack vegetable mold. So far as the atmosphere supplies nutritive elements, these are mainly dependent on the large developement of roots. A root of corn or other plant which is one-fourth of an inch in circumference and five inches long presents to the soil, the rains, dews, and air of heaven, only *one-third* the surface for imbibing nutrition that it would if ten inches long and three-eighths of an inch in circumference. In a deep mellow soil and a large growth of roots, the husbandman is sure to have a corresponding growth of green stems and leaves above ground, to imbibe gaseous food from every passing breeze. The atmosphere can only fulfil its whole great office in support of vegetation on deep pervious soils like river bottoms.

If the earth lacks any essential ingredient used by nature in the organization of the cultivated plant, no amount of tillage can create the absent element out of nothing. This fact should never be lost sight of.

We have a parsnip in our office $3\frac{1}{2}$ feet long; and have pulled beans in a field, whose roots ran 30 inches into the ground. To give plants a fair chance in a poor soil, it should be very deep that roots may travel a good way to get their aliment.

Hydraulics for Farmers.

BY C. N. BEMENT.

Nothing adds more to the comfort of a farm house, or to the cleanliness of its inmates, than the luxurious flowing of a pure stream of water at the door.

Few persons are aware of the great importance of a supply of running water, at the dwellings and stock yards, where cattle and other stock are confined in winter, unless they have enjoyed that privilege and afterwards been deprived of it.

I have often observed the want of this necessary element around the houses and yards of our farmers, while a stream was flowing, in the richest profusion, within a short distance, but unfortunately on a lower level; and as often have I wished to see some cheap and effective engine at work, making the babbling idle brook work to some good account, and pour the necessary share at the door—a libation to neatness and economy. Numberless instances, where incalculable inconvenience and privation have been endured, and the most prodigal waste of labor committed from generation to generation, from that physical and moral lathargy of character which too often leads us to drag on through life, neglecting expedients that the least thought would suggest, and the slightest exertion bring to our relief.

For years and years have we known large families to be supplied with all the water used, but not a hundredth part of what was actually needed, by keeping a person continually on the trot to a distant, and perhaps an unclean spring, bringing pails full at a time, when a constant supply of water from streams of the smallest volume, might with a very simple hydraulic contrivance be made to afford a constant flow at the door of the kitchen, the dairy and stock-yard.—For this purpose, the Hydraulic Ram, appears the most simple and economical contrivance yet discovered. A simple calculation of the remuneration to be derived from the saving of labor, and the money value, to say nothing of the luxury of a full supply of water, would convince them that a single year, some even less, would reimburse them. Then again it is to be considered, for example, as to the use of it for domestic animals, not only the time that is saved through the whole winter, especially in sending them to a distance to drink, but that they often suffer from not having a supply when nature demands. The saving of manure, too, is not to be overlooked.

Among all the devices or contrivances for conveying water from a lower to an upper level, nothing as yet has been discovered equal to the Hydraulic Ram. It is a very ingenious and effective machine for raising water by its own impulse, and comes nearer to a *perpetual motion* than any other machine that has ever fallen under my notice.

If a column or body of water, moving rapidly under a head, through a pipe, is suddenly checked, its tendency is to burst the pipe.

This is well known in all places where there are water works, from the bursting of the leaden supply pipes where these are not strong enough, on the sudden shutting off the hydrant cocks.—If a small hole is made in the pipe, just above the cock, the water will escape from it in a very high jet, much higher than the head, whenever the cock is shut. It is this principle which is brought into action in the Hydraulic Ram. If a small straight upright pipe is attached to the hole, just mentioned, in the main pipe, having a valve shutting downwards, which will permit the water to pass upwards, but not to return, each opening and shutting of the cock will force up into the smaller pipe a quantity of water in proportion to the head upon the main pipe until the weight of the water in the smaller pipe is greater than can be moved by the *momentum* of the water in the main pipe, when the latter is suddenly closed.

Every person accustomed to draw water from pipes that are supplied from very elevated sources must have observed, when suddenly closed, a jar or tremor communicated to the pipes, and a snapping sound, like that from small blows of a hammer. These effects are produced by blows which the ends of the pipes receive from the water—the liquid particles in contact with the plug of a cock, when it is turned to stop the discharge, being forcibly driven up against it by those constituting the moving mass behind.

Waves of the sea act as water-rams against rocks or other barriers that impede their progress; and when their force is increased by storms of wind, the most solid structures give way before them.

The increased force water acquires when its motion is accelerated, might be shown by a thousand examples. A bank or trough that easily retains it when at rest, or when slightly moved, is often insufficient when its velocity is greatly increased. When a deep lock of a canal is opened to transfer a boat or vessel to a lower level, the water is permitted to ascend by slow degrees. Were the gates opened at once, the rushing mass would sweep the gates before it, or the greater portion would be carried in the surge quite over them, and perhaps the vessel also. A sluggish stream drops almost perpendicularly over a precipice; but the momentum of a rapid one shoots it over, and leaves a wide space between. It is so with a stream issuing from a horizontal tube. If the liquid pass slowly through, it falls inertly at the orifice; but if its velocity be considerable the jet is carried to a distance ere it touches the ground.

That the force which a running stream thus acquired may be made to drive a portion of the liquid far above the source whence it flows, is obvious from several operations in nature.—

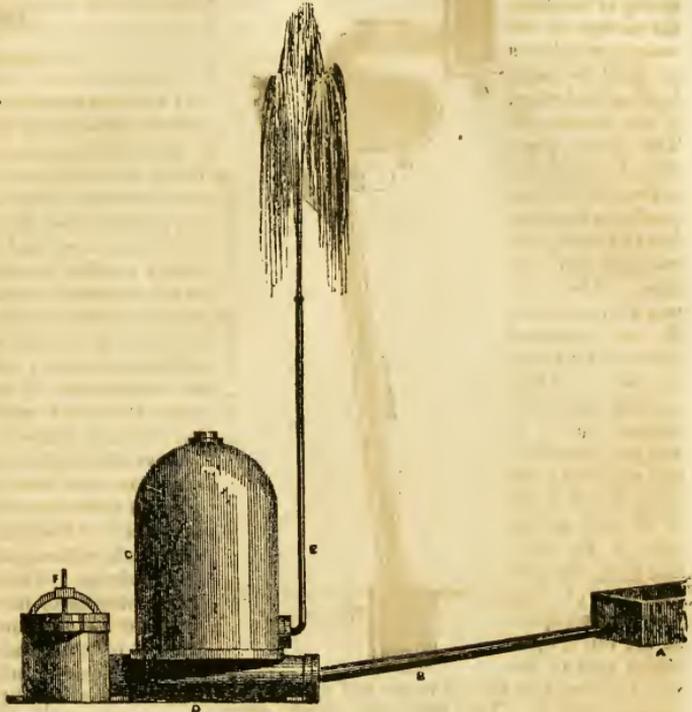
During a storm of wind, long swelling waves in the open sea alternately rise and fall, without the crests or tops of any being elevated much above those of the rest; but when they meet from opposite directions, or when their progress is suddenly arrested by the bow of a ship, by rocks, or other obstacles, part of the water is driven to great elevations.

The Hydraulic Ram raises water on precisely the same principles; a quantity of the liquid is set in motion through an inclined tube, and its escape from the lower orifice is made suddenly to cease, when the momentum of the moving mass drives up, like the waves, a portion of its own volume, to an elevation much higher than that from which it descended. This may be illustrated by an experiment familiar to most people.

Suppose the lower orifice of a tube (where the upper one is connected to a reservoir of water) be closed with the finger, and a very minute stream be allowed to escape from it in an upward direction, the tiny jet would rise nearly to the surface of the reservoir. It could not of course ascend higher. But if the finger was then moved to one side, so as to allow a free escape, until the whole contents of the tube were rapidly moving to the exit, and the orifice then at once contracted or closed as before, the jet would dart far above the reservoir; for, in addition to the hydrostatic pressure which drove it up in the first instance, there would be a new force acting upon it, derived from the *momentum* of the water. As in the case of a hammer of a few pounds weight, when at rest on an anvil, it exerts a pressure on the latter with a force due to its weight only; but when in motion by the hand of the smith, it descends with a force that is equivalent to the pressure of perhaps a ton.

At a hospital in Bristol, England, a plumber was employed to convey water through a leaden tube, from a cistern in one of the upper stories, to the kitchen below; and it happened that the lower end of the tube was burst nearly every time the cock was used. After several attempts to remedy the evil, it was determined to solder one end of the smaller pipe immediately behind the cock, and to carry the other end to as high a

APPARATUS FOR RAISING WATER. — No. 1.



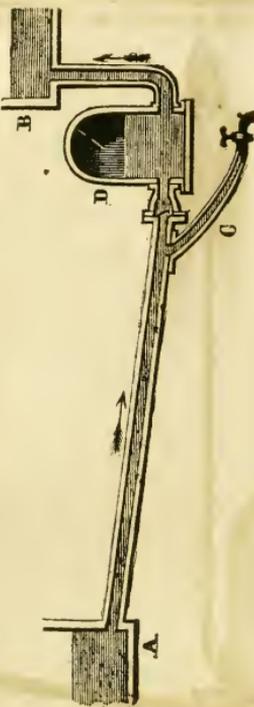
Birkinbine's Ram — (Fig. 1.)

level as the water in the cistern. And now it was found that on shutting the cock, the pipe did not burst as before, but a jet of considerable height was forced from the upper end of this new pipe. It therefore became necessary to increase its height, to prevent water escaping from it; upon which it was continued to the top of the hospital, being twice the height of the supplying cistern; but then, to the great surprise of those who constructed the work, some water still issued. A cistern was therefore placed to receive this water which was found very convenient, since it was thus raised to the highest floors of the building, without any extra labor. Here circumstances led the workman to the construction of a water ram, without knowing that such a machine had been previously devised.

It is now more than fifty years since the first discovery was made known, and it has, until within a few years, been regarded more as a scientific toy, than of practical utility. It is a matter of surprise, too, that so beautiful a contrivance should have laid dormant and neglected, and scarcely known, except to the scientific.

The first person who is now known to have raised water by a ram, designed for the purpose, was Mr. Whitehurst, a watch-maker of Derby, in England. He erected a machine similar to the one represented by the next figure, in 1772.

A represents the spring or fountain, the surface of the water in which was of about the same level as the bottom of the cistern, B. The main pipe, from A to the cock at the end of C was nearly six hundred feet in length, and one anda half inch bore. The cock was 16 feet below A, and furnished water for the kitchen, &c. When opened, the liquid column in A C was put in motion, and acquired a velocity due to a fall of 16 feet, and as soon as the cock was shut, the momentum of this long column opened the valve, upon which part of the water rushed into the air vessel and up the vertical pipe into B. This effect took place every time the cock was used; and as water was drawn from it at short intervals, for household purposes, "from morning till night, all the days in the year," an abundance was raised into B, without any exertion or expense.



Whitehurst's Ram.—(Fig. 2.)

Such was the first water ram. As an original device, it is highly honorable to the sagacity and ingenuity of its author; and the introduction of an air-vessel, without which an apparatus of the kind could never be made durable, strengthens his claims to our regard. In this machine he has shown that the mere act of drawing water from long tubes, for ordinary purposes, may serve to raise a portion of their contents to a higher level; an object that does not appear to have been previously attempted, or even thought of. Notwithstanding the advantages derived from such an apparatus, under circumstances familiar to those indicated by the figure, it does not appear to have elicited the attention of engineers; nor does Whitehurst himself seem to have been aware of its adaptation as a substitute for forcing pumps, in locations where the water drawn from the cock was not required, or could not be used.

[To be continued.]

TAXES for the support of schools are like vapors, which rise only to descend again to beautify and fertilize the earth.

The Farmer.—His Position, Responsibilities, and Duties.

NUMBER NINE.

I PROMISED in this article to speak of *the Press and its influence in the elevation of Agriculture.*

It is difficult to comprehend the power of the Press, and still more difficult to determine what the condition of the world would have been at the present time, had the art of printing never been discovered and perfected. It would seem hardly possible for the present advance in any of the industrial or liberal arts, without it—and sure I am that it is an indispensable ingredient or power in advancing and perfecting any interest in a country where the masses require to be enlightened. I grant that the earth would yield her fruits without books or newspapers; but while I concede that grain would grow, however destitute of learning or intelligence, he who plows and sows might be. I cannot for a moment admit that it is possible for any calling or interest to flourish or advance to any great extent where the operative is without the means of knowledge. The slave may toil, like the ox, at the bidding of his master, but all experience in this and every land proves that such labor is after all most expensive and least productive,—and it is of course not to be tolerated in a state of society where equality is aimed at, and caste and class repudiated. The intelligent, well-informed man, be he proprietor or laborer, can never be made a slave nor a serf. With the spread of intelligence is the advance of personal independence, and with knowledge comes manly pride, which will not brook or submit to slavish bondage or degrading servitude. Hence the importance, to a free people, of the Press, and of its freedom.

A moment's recurrence to the past is the best commentary which we can make on the power and importance of the art of printing. Since its invention and general application to the printing of books and newspapers, the advance of man in civilization has been truly wonderful. More has been accomplished within a century than for ages on ages before—greater advances in sciences and in all the arts, and greater improvements in every branch of trade and every department of life since the printing of books, newspapers, &c., than in all time before. And there is little doubt that type, with their impress on paper, has been one of the chief agents and instruments in this rapid march onward towards perfection.

But this art, like nearly every other, shed its light upon almost every other calling and profession before reaching that of Agriculture.—The sun's rays first strike the barren mountain top, before it reaches the rich and fertile valleys, and first glimmer amid the foliage of the trees

and shrubs ere it reaches and warms the earth—and so with knowledge; it seems generally to fasten first and thrive best in its dawn upon professions and interests less substantial and useful. But the sunshine must warm the vallies, and its light and heat fertilize the earth, ere it will yield its riches; and so intelligence and knowledge must reach the farmer, and spread among the laborers of the country, before the full advantage of their blessings can be realized, and their mighty influence felt in their length and breadth.

That farmer little values his calling, and is ignorant of the chief element for its improvement and progress, who treats lightly the Agricultural Publications of the Country. They are doing, to-day, more to elevate and advance his interest and secure him respect and influence than any one agent. They tread noiselessly over the land—they silently visit the firesides of the people—they speak words of wisdom to them in their hours of retirement, and whisper the results of experience to the tired husbandman in his moments of refreshment and rest. They are companions which the laborer can carry with him to the field and the forest, and they will speak to his heart and understanding when far away from society; they have a word for all seasons, and rules for all circumstances; they are good school-masters for children, as well as sage councillors for grown men; and no farmer should be without one or more in his family, and no laborer fail to read and study them.

Men may say they can learn nothing from Agricultural papers, and many doubtless honestly imagine it is time and money thrown away to take and read them; but how little do such men comprehend their own nature and character. It is a moral impossibility for a thinking, reasoning man—one who has a mind with memory attached to it—to read the *GENESEE FARMER* one year without advantage; that person must be low in the scale of intelligence, who would not be wiser and better fitted for his business from such a practice. Books are valuable, nay indispensable; but they are of little worth without the newspaper. The one is to be studied, and is invaluable in the library of the man of leisure, the scholar, the writer, and in the professor's laboratory; the other is for the millions to read, little by little—they are printed in a form and at intervals, just adapted for the masses, and they can be taken up at the dinner table and at the fireside, in the workshop or the barn, and read and reflected upon—and no truth is more sure than that they exercise a mighty influence on the public mind. Politics has been the great field for newspapers in this country, and the subject, as well as the Press, has been most foully abused in the course political discussions has too often taken. But there is a broader and better field where the printing Press

may exert its power, without fear of evil, and where it may scatter broad-cast its seeds of knowledge, with a perfect assurance that they shall vegetate and produce fruit.

It is a cheering fact that Agriculture has, in almost every State, its distinct organ—while scarce a village paper but has its page or its column devoted to that noble calling. The last ten years has produced a wonderful change in this particular. There are ten Agricultural papers now published, where, fifteen years ago, one was issued; and what is more, each now printed has ten times more readers than the one did then.—I speak on this subject from personal knowledge. The Post Offices of the state will show a wider circulation of Agricultural papers than of any other class, with the exception of a few city weeklies. And this circulation of newspapers devoted to the subject of farming is rapidly increasing. Nothing more clearly evidences an increasing intelligence among farmers, than this fact. No enlightened farmer will be without his paper, and many men who ten years ago ridiculed the idea of "book farming," and Agricultural publications, now do not plow or sow or build without consulting that truest and best friend, his Agricultural paper. Prejudice is wearing away—intelligence is spreading far and wide—and slowly but surely the great interest upon which all others are based is rising up to its real dignity and importance.

The Press is the great agent in this progressive movement, and every farmer who loves his calling, and who respects his interests, should encourage and sustain the Agricultural publications of the State and Nation. He who will not do it is recreant to his truest interest, or has but a limited view of his duty to himself and his fellows. No man can plead poverty. In this land of health and plenty none can say "I am not able." The *GENESEE FARMER* costs, postage and all, but *four shillings a year*, and none are so poor as to be unable to raise that sum. But some may say, "I do not wish to read it; I can farm without a newspaper." That man must be very wise who cannot learn more than one, ten times over, who will not—who lacks not the ability, but the disposition. Well, my wise and unimprovable farmer, go on, and till your soil your own way. But you have a family—children who are growing up, and for their sakes subscribe for some approved Agricultural paper.—Do not shut them out from the means of improvement; do not dwarf their minds, by denying them light and knowledge. The cost is nothing; it may, it *will* do good, either to yourself or family. Let no householder be without a newspaper, and no farmer without one devoted exclusively to Agriculture.

Penn Yan, July, 1847.

D. A. OGDEN.

WARM.—The Thermometer, to-day, (July 19,) at 2 P. M., stood at 96 degrees, in the shade.

FENCES.

NUMBER THREE.

MR. EDITOR:—I think I hear some of your readers exclaim, "Well, here comes the old pedlar again, astride the fence." Not so fast, my old covey—I am not straddle of the Fence any way you can fix it, either in Politics or Religion; on those two subjects I know where I sleep; but if I can get astride of some of the *miserable excuses* for good fences that I observe about the country, and can ride them down, I am content to be "straddle of the fence."

Now for a new variety, and a very clever and not very costly one. Procure posts of almost any kind, of the most desirable wood within your power—say chestnut, pine, white cedar, tamarac, &c., from 10 to 12 inches in diameter; mortice into the two opposite sides, five or six holes, 2 by 5 inches, at the proper distances; the rails should be 12 feet long and split as nigh like bars, or the old post and rail fence, as possible. Dress the ends to fit the mortice, and you are ready to commence putting up, which is done by setting one post and then fitting in the bars and standing up the next one till adjusted and firmly set, and so proceed till finished.

If sawed stuff is used, make the mortice of its width. The great advantage of this fence over the old post and rail, which it somewhat resembles, is the much greater sized posts that can be used, (size and durability are nearly concomitants,) and the cheapness with which they are prepared—as they are used in a state of nature as they come from the forest.

Another. Plant some fast growing tree, (I would prefer locust, were it not that it is liable to be destroyed by the borer, or Lombardy Poplar, Chestnut, Abeel or Silver Maple, &c.) in every other corner of a worm fence on east and west roads, and on the south side of such roads to avoid shades; and when of about 6 inches in diameter, mortice into the tree as in the other fence, and spring in the bars. The annual growth will soon fasten them, and heal over faster than the ends of the bars will decay. When the trees are becoming unnecessarily tall, top and trim them to your fancy. These posts never ask "if salt petre will explode," and laugh to scorn salt, lime, and ashes, and other preventives of rot and dissolution, and may be used with great advantage in peculiar locations.

The only strong objection that I see to this "live hoosier" fence being used is, that whoever commences it must feel convinced that he will be the owner of the land eight or ten years.—Now, in this country, where the laws of primogeniture do not prevail, and property cannot be entailed, it is rare to find a farmer who is not ready and anxious to sell and start for the "big west;" in fact he has all but got his axe on his shoulder, ready to start for "Nova Zembla, or

the Lord knows where," or some other *terra incognita*. We are such an uneasy, go a head, roving, unattached set of geniuses, that we know nothing of the feeling of attachment to family homesteads. We talk of the hardship of driving the poor Indian from the graves and bones of his fathers, but such kind of sentimental logic is all heathen Greek to the true Universal Yankee Nation.

Do we lack sympathy and that feeling of home and local attachment to the land that gave us birth; and family pride that distinguishes man from the lower migratory races? Oh that "almighty dollar," whose shining disc flashes on our diseased imaginations, and rolling on just ahead, puts quicksilver in our heels, to follow it almost to the very verge of space!

What a homily for a fence-maker!

OLD FARMER TIM.

"Hedges and Fencing."

MR. EDITOR:—I noticed in the May number of the Farmer, an article by Mr. MANLY, entitled "Hedges and Fencing." With his opinions respecting the present and prospective scarcity of fencing material I fully coincide; and arguments might be adduced to prove that the agricultural products of many sections, *already* but half fenced, might be greatly augmented if fencing materials were sufficiently cheap, or plentiful, to enable farmers to divide their land in the best manner, to derive the advantages of a system of rotation. Want of fences produces want of system in farming—and, as in other business, where no system is practised, little success can be expected.

His remarks concerning hedges are also valuable, as being one more effort to call the attention of farmers to the importance of this mode of fencing, the only mode which man has ever invented which will bear practising on through an indefinite period of time. He is mistaken, however, in supposing that our indigenous thorns have never been tested to ascertain their fitness for fencing purposes. There are four species of native Hawthorn, (*Crataegus*), which abound principally in Western New-York. They are the *Crataegus crus-galli*, (known to the eastern nurserymen as the New Castle, or Cockspur thorn,) *C. latifolia*, *C. coccinea*, and *C. punctata*.

The writer of this article has seen all the above species fairly and thoroughly tried, under the most favorable circumstances. The *C. crus-galli* is the best, and indeed seems the most admirably adapted by nature to forming an utterly impassable barrier of any thing yet discovered in the vegetable kingdom. The *C. latifolia* will make a fence, but it is not so good, not growing sufficiently thick at the bottom, and being liable to spread from the root, which the *crus-galli* never does; it also requires more pruning to keep it

in shape. The *coccinea* is not equal to the *latifolia*, and the *punctata* has proved nearly worthless for fencing purposes. The *coccinea* and *punctata* are the common thorns in this part of the country, and one can hardly ride a mile in any direction without seeing more or less of them, growing along fences and the road-side. The *latifolia* is more scarce, and the *crus-galli* quite rare—its scarcity probably owing to the difficulty with which its seeds vegetate.

As many may not be familiar with the latter species I will endeavor to describe it, so that it may be identified by any one. In the first place it is very late in leaf, ten days or two weeks later than the common kinds. Its leaves when full grown are from an inch to an inch and a half in length and about one-third as wide as long; obovate, or egg-shaped, with the stem attached to the narrowest end; serrated; rather a light green, smooth and shining, appearing as if varnished. Its thorns are unusually long, frequently three inches, very slim, very numerous, and extremely sharp. The berries, or haws, usually contain two seeds, but many of them contain one only, differing in this respect from any other native species. The branches of old trees frequently run along on the surface of the ground eight or ten feet, perfectly green and thrifty, and I have seen trees standing fifteen feet apart, whose branches were so interlocked down to the very ground, that no animal larger than a weasel could pass between them with a whole skin. The whole tree has a very flat and spreading appearance, old trees seldom being more than eight or ten feet high, but completely covering with their dense foliage and branches, an area of sixteen or eighteen feet in diameter.

Of all the *Cratuegus* tribe this species is the slowest to vegetate, its seeds generally remaining in the ground two and a half, and three and a half years before they will sprout. In the *Genesee Farmer* for June, 1841, are directions for managing the seed, and I would merely add that cleaning the seed from the pulp will greatly facilitate germination. Like all Hawthorns, this species is liable to be injured by mice; and the best modes of obviating the difficulty are, to plant them on a small embankment, or keep the hedge clear of all that will harbor them. A more formidable enemy is the insect known as the apple borer, which has destroyed many hedges in other sections of the country, but has never injured them here as yet, and perhaps never may. If it should, the only alternative will be to adopt some other plant, and probably the best substitute will be found in the Buckthorn, (*Rhamnus cathartium*,) for a description of which see Downing's Horticulturist, February number for the current year.

Yours, truly, A. H. POWERS.
Ontario Co., May, 1847.

In freezing water expands nearly one-17th.

Agricultural Education.

"WHAT profession are you preparing for?" This is a question often asked those who are attending academies or other institutions of learning aside from common schools,—as much as to say, "you have no business here, unless you intend to follow some of the so-called learned professions."

While attending an academy a few years since, (for the writer of this is not one of experience, but a young farmer,) I was frequently asked the above question, and was looked upon with unfeigned surprise when the reply was given "that of a Farmer." And almost invariably the following remark, or something similar, would be made in return. "Then why are you here spending your time and money in getting an education which will be useless to you amidst the toil and drudgery of the farm?" At that time a classmate and intimate friend was preparing for college, with the intention of studying law after graduating. We were equally advanced, occupied the same room, recited in the same classes, engaged in the same pastimes, and so far, were equally entitled to public patronage. After completing our academic course, he entered a college which is receiving a goodly sum from the state to aid in its support, is amply endowed with teachers, books and apparatus to enable him to prepare for the duties of his profession—while not an institution can be found that has for its object the study of the science of Agriculture. Thus, while my friend stands first in his class in college, I am compelled to obtain the little knowledge that I have of my occupation without teachers or libraries, and deprived of all public patronage whatever.

Can any one call this equal rights and no monopoly?—or shall we adhere to the old maxim, the greatest good of the greatest number, and establish and support Agricultural Schools for the benefit of the sons of farmers, whose influence shall give character to our District Schools?

June, 1847.

DARIUS.

REMARKS.—We thank "Darius" for the strong point which he has made in few words, and hope to hear from him again. The study of Agricultural Chemistry, Geology, Comparative Anatomy, and of Vegetable and Animal Physiology, will not always be denied to the sons of our farmers, except what they can teach themselves at home without a Museum, a Laboratory or instructors. Every day-laborer is furnished with tools to work with. How long shall we withhold the tools of the chemist from the hands that ache to use them?

INTERESTING CHEMICAL FACT.—Water saturated with one-third of its weight of common salt will still dissolve sugar; and if completely charged with carbonic acid, it will dissolve iron.

Description and Illustrations of a Pennsylvania Barn.

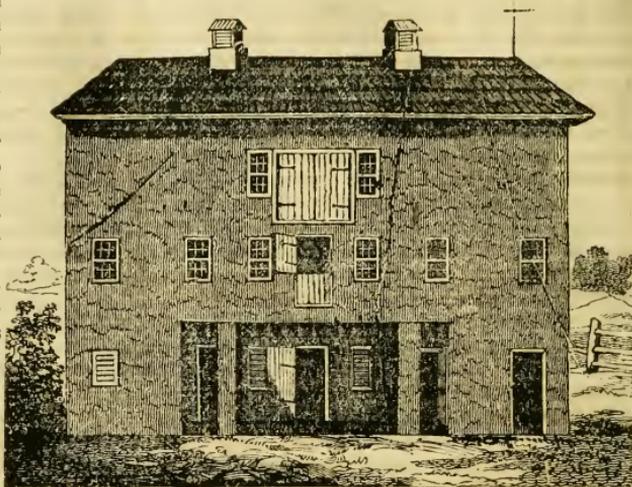
The high degree of perfection which agriculture has attained in Pennsylvania, compared with some other portions of the Union, has been commented upon by travellers from Europe as well as from every section of our country. Perhaps there is no particular feature which more distinctly indicates that perfection than the farm buildings—certainly there is nothing which more forcibly attracts the stranger's eye on entering within the bounds of that State, where he is at once assured that no niggardly regard to expenditure for useful purposes, influences a Pennsylvania farmer; though his own dwelling be of an unpretending character, the means for housing his crops and sheltering his flocks, are on an ample scale.

Poor indeed would he judge that economy to be which permitted a sheaf to suffer injury for want of adequate protection.

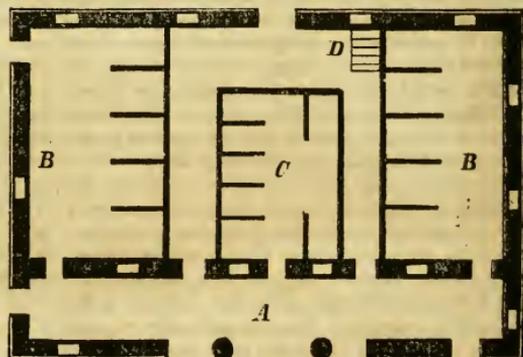
The accompanying drawings illustrate a Barn of moderate size, but judicious construction, yielding as much advantage as it is possible to possess within the same space. Its dimensions are 60 by 40 feet, with an elevation of 30 feet to the eaves. It is on the estate of James P. Hutchinson, Esq., Montgomery county, nine miles from Philadelphia. The barn-yard is supplied with water by Montgolfier's hydraulic ram, from a reservoir 900 feet distant; the supply is 800 gallons per day; the dwelling house is also supplied by the same power, (2,000 gallons per day.) The elevation from the ram to the barn is 40 feet perpendicular height; these items are stated to show the great power of this simple and comparatively cheap invention. It is prepared by Mr. H. P. M. Birkinbine, of Philadelphia, to whom those interested can address themselves.

Fig. 40 exhibits a front view of the barn, the stable doors opening into the baan-yard, in which there is a constant stream of water from the ram. The yard, which is of sufficient space for cattle to take air in winter, and for other purposes, is flanked by sheds, &c., and substantially enclosed by a stone wall.

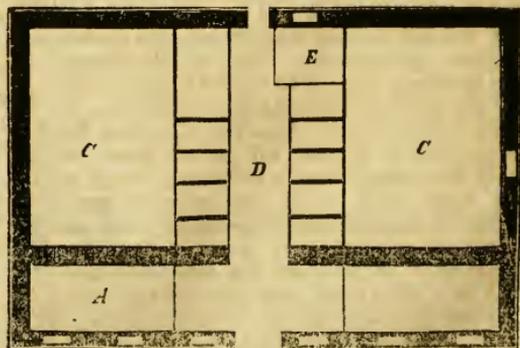
Fig. 41 represents the ground or lower floor; A, is the "overshot," 8 feet high; B, B, horse stables; C, cow stables, 7 stalls; D, stairway to upper floor. There are besides ample passages and elbow-room for feeding, &c. Figure 42 is a plan of the second floor; eight feet head-room; A, harness-room, eight by 20 feet; B, tool-room, eight by twenty feet;



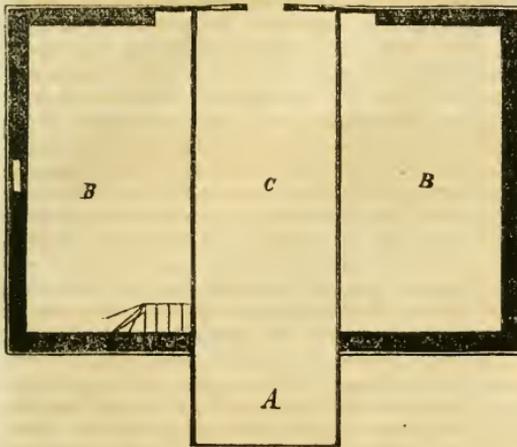
FRONT ELEVATION.—(Fig. 40.)



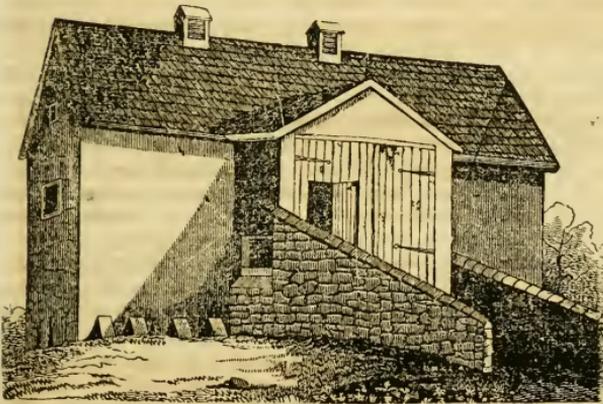
GROUND, OR LOWER FLOOR.—(Fig. 41.)



SECOND FLOOR.—(Fig. 42.)



THIRD FLOOR.—(Fig. 43.)



REAR ELEVATION.—(Fig. 44.)

C, C, hay-mows, each 20 by 26 feet; D, granary, divided into bins, with passage through the center; E, stairway.

Fig. 43 represents the third floor; A, is the wagon-way or entrance, as shown in fig. 44; B, B, upper part of the hay-mows (marked C C, on second floor; C, threshing-floor, 47 by 15 feet 8 inches.

Fig. 44 is a rear view, showing the wagon-drive and entrance to what appears as the third story or floor, when viewing the building in front; it is reached by a gradual rise in the ground from front to rear, and by an artificial elevation of the soil as is shown in the passage between the abutments, so as to form a gradual ascent, easily surmounted by a heavily laden wagon; on the apex of the roof are 2 ventilators which serve a double purpose, admitting light and permitting the escape of foul air.

The whole building is besides thoroughly ventilated by doors and windows suitably placed.— On the whole, we can safely commend this as an admirably constructed barn, and worthy of imitation. It will be perceived that by the arrangement adopted (now commonly followed,) the hay and grain, when unladen from the wagon, are cast down, rather than pitched upwards, an advantage of the greatest moment at a season when time and help are of double value. The hay and fodder reach the feeding floor by means of funnels or conductors, which carry it to convenient points. The harness-room, and tool-room, should be on the first floor, the

space occupied by them on the second, would be serviceable for other purposes. A natural inquiry presents itself, the cost? That must of course depend on the expense of materials, the price of labor, and the proportion of work by hauling, quarrying stone, hewing timber, &c., which the proprietor himself may be able to perform; also the kind of material for the superstructure, whether it be wood, stone, or brick. In view of all these circumstances, it is inexpedient to attempt a statement; the prudent farmer will obtain estimates of all particulars, carefully prepared by responsible mechanics, and any estimate of ours might tend rather to his injury than benefit. The barn of Mr. Hutchinson is of stone, rough-cast; one of less cost (and in one respect better, because dryer,) would be of frame, on a basement of stone extending to the floor of the second story.— *American Agriculturist.*

A New Term. --- Stercology.

MR. EDITOR.—I wish to propose, through your paper, a new term, which I think will supply a deficiency in agricultural language. We have no generic term which embraces in its signification, the science or art of enriching the soil. I, therefore, propose the term STERCOLOGY, which is compounded from the word *stercus*, which means manure or dung, and *logos*, a discourse. Although hardly general enough in its

strict meaning, this word may, by a little extension, be understood to embrace everything under the head of manuring, enriching, ameliorating or amending the soil. And although words are only the signs of ideas, and technical language should not be used unnecessarily,—still a systematic division of any branch of science into *parts*, embraced under generic heads, is always convenient.

Yours,

M. M. RODGERS.

Rochester, June, 1847.

Merino Sheep.

MR. EDITOR.—Blacklock tells us that there cannot be a more certain sign of rapid advances being made among a people in civilization and prosperity, than when increasing attention is paid to the raising and improvement of live stock,—and as this invaluable variety (the Merino,) is fast taking the place of the coarser, lighter fleeced, and consequently less hardy animals, and as the Mountain State, so celebrated for this variety, seems to attract the greatest attention for a supply, it may not be out of place for me to say that I have at different times visited various portions of that State, and have seen some flocks of Merino sheep that I think are truly excellent. The most that I have seen are in or near Addison County. They are valued high, especially so where they have been properly bred and where the owners can produce unquestionable evidence of their sheep being pure descendants of the early importations of the Spanish Merino. Possibly, in the absence of such evidence, a picture, or some high sounding title may be substituted sometimes; perhaps Paular, in some instances. But as the wool-grower requires the purity of the blood and the merit in the animal, I would suggest to those who wish to purchase and who think the purity of the blood essential, the propriety of getting information respecting pedigree from some very reliable source. That there are pure bred Merino sheep there, in the hands of different men, I suppose no one will doubt; but that there are very many that are not such, but are high grades, I have every reason to believe. Now I will not call names, nor do I wish to reflect upon any particular flock unfavorably, but merely state, as it may benefit others, that I have been in that vicinity at different times for the only purpose of obtaining Merino sheep that were thorough bred beyond a doubt, and I think with success. It has taken much pains, in different places, to examine flocks and converse with individuals, and am satisfied that some owners of flocks may and probably do think their flocks are purely Merino, but have no good evidence of that fact. I called on one who favored me with an examination of his sheep, and after selecting a favorite animal, for which he asked me forty dollars, I asked him if he was a pure Merino. He answered, that he was as pure as any; he said he was a certain man's kind of sheep. Of another I inquired respecting a certain flock of sheep, some of which he had himself become the owner, which he called full blooded. I told him that the purity of their blood was questioned; his reply was that when he purchased them for full bloods and received a certificate of their blood it was sufficient, and if there should happen to be anything wrong about it he was not to blame. Another said his were full blooded; but on inquiring from what

flock they descended, he said they descended from a flock his father owned; he did not know from what particular flock of Merinos they descended, but that they were full blooded, &c.

Now I think this very poor evidence of any of these sheep being pure; and as it is necessary and highly important that this most valuable variety should be kept pure and unmixed for the benefit of the country, would it not be well for those who raise sheep to be distributed throughout the country to be very careful about this matter, and look carefully back to the time of the introduction of the Saxones and see whose hands they were in then. I think the breeder of pure sheep should be in possession of a certificate from a reliable source, certifying that his sheep sprang from imported stock, and that they are known to have been bred pure ever since, and perfectly free from any mixture with any other variety; otherwise how can imposition be guarded against.

The late H. D. GROVE says, (in Morrel's American Shepherd,) that a large portion of the imported Saxon sheep were not pure blooded, but that they were all sold as pure blooded Electoral Sheep; and that thus unfortunately in the outset the pure and impure became irrevocably mixed. He also informs us of one or two cargoes being imported that were exclusively full blood Electoral Saxon sheep. I think, therefore, with all due deference, that the owner of the sheep should be in possession of unquestionable evidence of the fact. I know of no reason why sufficient evidence of the purity of the blood of animals is not as essential when sending them from one part of a country to another, as it is when sending them from one country to another. It seems by a letter written by Hon. WM. JARVIS, to the editor of the Watchman and Journal, on the subject of importing Merino sheep, that he deems it highly essential. When importing he says no sensible man would ship animals to another country for breed, without a certificate of the purity of their blood; also the port from whence exported; the name of the vessel in which exported; the captain's name; at what port in the United States they arrived; the time, and a certificate from a proper officer of that Government, officially verified by an American Consul, that they were pure blooded. And who would suppose that any man in Vermont would go to the expense of purchasing these sheep of Consul JARVIS, or any other man known to have them, without a certificate attesting their blood that cannot be questioned. If purchasers would be very particular respecting this I think it might often protect them from imposition. Let the pure blood stand on its own merits, and also the grade; let the purchaser get what he pays for, and I think he will be better pleased than when he pays for a full blood without being sure that he gets it.

It is the opinion of those with whom I have conversed on the subject, (that had the best means of getting information,) that the number of pure Merinos in the United States is small. Such I understand to be the opinion of Mr. JARVIS.—But if we take into the count all those flocks that have been improved by the use of the Merino, so as to be more like them than they are like any other, the number will be very much increased,—for Blacklock seems to think that the greatest value of the Merino consists in its giving rise to a variety equal if not superior to itself. The improvement of the sheep in Saxony has, it appears, all been brought about by the use of the Merino; and history informs us that even there the purest Merinos produced both finer fleeces and more wool those engrafted on the common stock of that country; and the same history informs us (the American Shepherd,) that when they were being sent to this country, the German newspapers teemed with advertisements of sheep for sale, good for the American market, and that they were purchased in sufficient numbers for a cargo, at prices varying from one-fourth to one-eighth the price that full blood sheep would cost, together, sometimes, with a few full bloods to make a flourish on.—Sometimes a cargo was selected altogether from grade flocks of low character, some hardly half blooded, and represented as being of most miserable character.

Thus we see imposition has been practised on the country to a great extent, and to its great injury, and it has also prejudiced the minds of some against the acknowledged foundation of all improvement of the fleece, both in the United States and in Europe. The real Merino, the fineness, compactness, length, and beauty of whose fleece, when properly bred, is rarely if ever equalled—they are also constituted hardy and well adapted to our climate. Thus we see that impositions have been practised upon the country with apparent ease; and I think, therefore, that there can be no harm in having an eye to this matter, that, whether impositions have or have not been practised in the sale of Merinos, they may not be hereafter.

Lysander, N. Y., 1847. J. L. RANDALL.

REMARKS.—The suggestions of Mr. RANDALL are worthy of attention. No one should purchase fine-wooled sheep, for the purpose of breeding, without good evidence of their purity. Proper caution ought always to be exercised in making selections and purchases.

Comparative weight of Fleece and Carcass.

MR. EDITOR:—My attention was some time since called to an article in your paper, signed by SOLOMON HITCHCOCK, in relation to Saxon and Merino Sheep. The writer contends—first, that sheep consume food in proportion to their

own weight; and, second, that they produce clean wool about in proportion of one pound to from 18 to 19 lbs. of carcass. The former is undoubtedly correct—the latter may be, as a general rule, but I think by increasing the length of wool the weight of the fleece may be increased in proportion to the weight of carcass, without decreasing the quality. I this year weighed my sheep as they were shorn, and found they varied from 1 pound of wool to 8 lbs. 5 oz. of carcass, to 1 to 28. My yearling ewes averaged 1 to 13½—yearling bucks, 1 to 16½—yearling wethers, 1 to 16½; these were about 13 months old. My 2 years old buck, 1 to 14—2 year old wethers, 1 to 17½. Fat sheep, 1 to 17½—breeding ewes, 1 to 18½. The whole flock, consisting of 176, averaged 1 pound of wool to little short of 17 pounds of carcass. This wool was well washed, free from gum, and nearly so from oil; the purchaser thought it would not waste more than 15 to 20 per cent. by scouring.

The sheep that sheared the most in proportion to its weight, was a yearling ewe weighing 40½ lbs., and yielding 4 lbs. 14 oz. of wool, about 4½ inches in length. Another weighed 50½ and sheared 4½ lbs., making 1 to about 10½—a sample of which you will find enclosed. My yearling ewes were the lightest sheep, averaging only 46 pounds, and had the finest and longest wool, except my bucks, of any that I sheared.

Victor, June, 1847. W. D. DICKINSON.

WE thank Mr. D. for his valuable communication. It is brief but to the point, and worth more than half a dozen pages of theory upon the subject.

Early Sowing of Wheat.

MR. EDITOR.—I sowed nine acres on the 5th of September last, after plowing four times.—The soil was good, and worked very fine; in consequence the wheat grew very large in the fall. The ground being wet I did not feed it off until the ground froze; then I turned on horses, cows and sheep, but it was too late—it had got into spindle and the frost killed it, so that it will not pay for harvesting.

One of my neighbors has twelve acres nearly as bad as my own. He sowed the first of September. I think farmers frequently sow too early.

If you think this worthy a place in your Journal, please insert it. A. D. MARVIN.

Cambria Centre, June, 1847.

REMARKS.—Our readers will recollect that we particularly alluded to the impropriety of sowing wheat early in September, last autumn. Mr. SHEFFER, of Wheatland, informs us that the field in which the insects worked last fall, (some account of which we gave in the Farmer,) has been wholly destroyed by them and the frost. This was an early sown piece on the Genesee flats.—ED.

Hints for August.

HAYING and harvesting now being about closed, except oats and peas, look well to your summer fallows; let them be thoroughly harrowed and plowed. Composts and well rotted manures may be sparingly applied. Plaster only benefits wheat by being plowed or dragged in before seeding.

Do not sow your wheat before the 10th nor later than the 20th September, if you can avoid it, except to follow corn and potatoes. Never sow a bushel without brining and limeing; it is infallible against smut, and beneficial to the young plant.

Cut brush and shrubs about the middle of this month, and but few species will survive the next year. Scrub oak, elders, briars, and a few others, are exceptions. Canada thistles should be cut when in full blossom. A few years' mowing, when in meadow land, extirpates them.

Set out strawberry runners early this month, for next year's bearing; water well and see that they get a good start. The soil should be deep and rich. Grapes should be now summer pruned. Cut away the vines upon which are clusters, one or two leaves beyond the fruit if they are shaded, and young suckers that are in the way may be pruned off or de-leaved to give the fruit sun and air.

The latter part of this month, and as long in September as the bark will slip, is the period for budding. Insert the bud as near the ground as possible in small trees; they are much surer to survive the winter, and make better stocks.

Look to your potatoe vines and see if the leaf curls; if so, next observe the stalk an inch or two above the soil; if it is discolored and soft you have got the *Rot*. The story of insects being the cause is all humbug; the worm in the pith of the stalk is as old as the cultivation of the potato,—and what is fatal to that theory is, that the tuber is not affected particularly in those containing the worm. *

Experiment in Making Pork.

MR. EDITOR.—Some months since I promised several gentlemen, and among them the publisher of the *Genesee Farmer*, a statement for publication of an experiment that I made last fall in making pork. But you have been so over-run with communications for the *Farmer*, from month to month, that I have felt unwilling to trouble you with it. However I will give you the statement, and you may dispose of it as you please. I do not make it thinking that there is anything extraordinary in the experiment or the end attained. There was no more done than any man can do with good hogs, good grain, and good care.

On the 31st of last October, I put into the pen

three hogs, which weighed on that day as follows:—

No. 1—18 months old,	274 lbs.
No. 2—17 " "	237 "
No. 3—16 " "	196 " —697 lbs.

They were fed on barley 48 days, and on corn 48 days—making 96 days that they were fattening. They were butchered on the 18th of January. They then weighed, alive, as follows:—

No. 1—	572 lbs.—	Gained 298 lbs.
No. 2—	464 " "	237 "
No. 3—	363 " "	167 "

Total weight 1399 " Total gain 702 "

They weighed dressed:—

No. 1—	468 lbs.
No. 2—	387 "
No. 3—	300 " —1155 lbs.

They consumed in the 96 days
and 1641 lbs. barley meal,
1630 " corn & cob meal.

Total of corn and barley 3271 "

The gain in live weight was 702 lbs., which gave a pound gain in live weight for a fraction over every 4½ lbs. of grain consumed.

There was nothing fed these hogs besides the grain mentioned, except water, and salt enough to season it well. This feed was all boiled from 6 to 12 hours; the barley was all ground, and a part of the corn. Grinding the corn I consider a dead loss, for I think it equally as good without grinding, provided it is cooked long enough, and it is no more labor to cook it whole than ground, with proper conveniences. Cooking barley without grinding I never tried, but think it would be equally as good as ground. These hogs had run in the pasture through the summer up to harvest time, and then were turned into the wheat stubbles and fed nothing else of consequence.

By turning to the 127th page of the last volume of the *Farmer*, you will find the result of two experiments in pork making; one in which they estimate the gain in live weight to be 1 lb. for every 10½ lbs. of grain consumed; in the other they estimate the gain in live weight to be 1 lb. for every 9½ lbs. of grain consumed. This I should think a small gain, even for uncooked feed.

Yours, &c.,

B. DENSMORE.

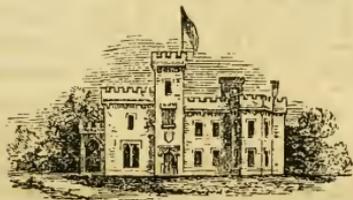
Kendall, N. Y., July, 1847.

REMARKS.—Mr. Densmore deserves the thanks of the whole farming community for his highly interesting and instructive experiment. The cases referred to in the *Farmer* were experiments made in France by M. Boussingault, and doubtless state the facts as they occurred. But no one, two or three single experiments, made with different herds of swine and under different circumstances can be safely regarded as settling the question how many pounds of corn, barley or other grain are required to make a pound of good pork. We commend the experiment of Mr. D. to the imitation of others.

Soils and Timber.

I HAVE remarked that a lime on flinty soil is most congenial for winter wheat. I wish to ask some of the correspondents of the Genesee Farmer to state the reasons why a hemlock soil will not also produce winter wheat, as well as spring grain? Or I will ask why the natural timber in some places is beech, maple and hemlock, while in others beech and maple?—and again in others, handsomely sprinkled with oak and whitewood,—again, pine and oak,—and again, all oak, even in the same town? Also, the most profitable agricultural products the farmer may cultivate on these various soils?

Yours, &c., Wm. BROWN.
East Pembroke, N. Y., 1847.



Hall at Wyoming.

THE above cut represents the front elevation of a dwelling, in the castellated style, to be erected the ensuing summer at Wyoming, near Boston. It measures 75 by 36 feet. The walls are rough stone, and the flat roof is covered with bricks, one inch thick, laid in cement. The gothic doorway opens into a hall 32 by 10 feet. On the left of the hall is a drawing-room 32 by 22 feet, 16 feet high. On the right, are a library, dining-room, and two bed rooms; above are eight spacious bed-rooms. The location of this mansion is well adapted to the style of its architecture, being on high ground, fronting a lawn of five acres in extent, and overlooking one of the most beautiful lakes in New England.

Wyoming is seven miles north of Boston, and was about a year since laid out in lots for ornamental cottages and villas. It comprehends a great variety of scenery—hill, dale, open lawn, dense forest, extensive lake, murmuring brooks, and cascades rushing down romantic glens—well deserving a name so immortalized by the poet Campbell.

The building now presented to the notice of our readers was designed by William Bailey Long, author of "Views of Highland Cottages," which work is for sale at the store of Messrs. Clark and Austin, No. 205 Broadway, New York. *Amer. Agriculturist.*

THE WHEAT CROP, in Western New York, yields much better than was anticipated. The weather, for three or four weeks past, has been very favorable for wheat.

Agricultural Fairs for 1847.

N. Y. STATE AG. SOCIETY.—The next Annual Exhibition of this Society will be held at SARATOGA SPRINGS, on the 14th, 15th, and 16th days of September next. Hon. SILAS WRIGHT is to deliver the Address. [For list of Judges, and other information, see page 194.]

Those who intend to compete for premiums should remember that all animals and articles must be ready for examination on the first day of the Exhibition—that is, on Tuesday, the fourteenth of September. The first day will be devoted exclusively to the examination by the judges of the animals and articles exhibited, and no persons will be admitted within the enclosure on that day, except the officers of the society, judges, and exhibitors.

ERIE COUNTY.—The Fair is to be held at Buffalo, on the 22d and 23d days of September. Address by O. ALLEN, Esq., President of the Society. We notice that there are seventeen classes of premiums offered by this Society, embracing all descriptions of live stock, field crops, dairy produce, implements, fruits, &c.

SENECA COUNTY.—The Annual Fair is to be held at Ovid, on the 14th and 15th of October. We are indebted to the President, J. DELAFIELD, Esq., for a pamphlet containing the list of premiums, which are numerous and liberal.

YATES COUNTY.—Annual Fair to be held in Pen Yan on the 1st of October. The list of premiums is very extensive, embracing all branches of agriculture, horticulture, &c.—The Address will be delivered by Dr. DANIEL LEE, Editor Genesee Farmer.

ONEIDA COUNTY.—The 7th Annual Fair and Show of this Society is to be held at New Hartford, on the 23d and 24th of September next. The Secretary, JAMES REES, Esq., has favored us with a pamphlet containing rules, premium list, &c. The list is extensive and liberal.

WYOMING COUNTY.—The Show and Fair is to be held at Warsaw, September 29th and 30th. We have not received the premium list.

JEFFERSON COUNTY.—The Annual Fair is to be held at Watertown, September 9th and 10th. Address by Dr. DANIEL LEE.

CAYUGA COUNTY.—The Annual Fair will be held at Auburn, on the 6th and 7th days of October next. The address is to be delivered by B. P. JOHNSON, Esq., on the first day of the exhibition.

GENESEE COUNTY.—The eighth annual Show and Fair is appointed to be held at Stafford, October 7th and 8th.—The Society has offered premiums amounting to upwards of \$500, on 250 enumerated articles.

ONTARIO COUNTY.—We are indebted to OLIVER PHELPS, Esq., for a copy of the Premium List, &c., for 1847. The Cattle Show and Fair is to be held at Canandaigua, on the 12th and 13th days of October. As usual the premiums are liberal and extensive. No speaker yet selected.

LIVINGSTON COUNTY.—The Annual Fair (and Meeting for the election of Officers,) is to be held at Genesee, on the 28th of September. The Secretary, B. F. ANGEL, Esq., has our thanks for a copy of the Premium List, &c.

ORLEANS COUNTY.—The Society is to hold its next Fair at Albion, on Thursday and Friday, Sept. 30th and Oct. 1st. ARAD THOMAS, Esq., of Albion, has been designated to deliver the annual address. For these particulars we are indebted to H. J. SICKLES, Esq., P. M. at Albion.

SARATOGA COUNTY.—Show to be held at the village of Ballston Spa, on the 8th of September next.

The Societies in Monroe, Onondaga and Wayne counties have not yet designated the time, &c., of holding their Exhibitions. From other counties we have no information. Secretaries of the Societies not mentioned above will oblige us by forwarding Premium Lists, &c., as early as practicable. M.

FAIRS IN OTHER STATES AND CANADA.

CALEDONIA COUNTY, VT.—Fair to be held at St. Johnsbury Plain, October 7th.

RUTLAND COUNTY, VT.—The Exhibition will be held at Rutland, on the 29th and 30th of September.

WORCESTER COUNTY, MASS.—This Society holds its annual Exhibition on the 23d of September next, at Worcester.

CANADA WEST.—The Provincial Agricultural Association is to hold its next Exhibition in the City of Hamilton, on the 6th and 7th days of October.

New York State Agricultural Society.

At a meeting of the Executive Committee, at the Agricultural Rooms, July 8th, 1847—present, GEO. VAIL, President; C. N. BEMENT, Vice President; A. D. MCINTYRE, Treasurer; B. P. JOHNSON, Secretary.

Letters were read from Hon. Edmund Burke, Com. Patents; P. L. Simmonds, London, corresponding member of the Society; J. B. Dill, Secretary Cayuga Agricultural Society; Aaron Clement, Sec'y Philadelphia Ag. Society; D. D. T. Moore, Publisher Genesee Farmer; Hon. Adam Ferguson, Canada West; M. B. Bateham, Editor Ohio Cultivator; James Rees, Sec'y Oneida Ag. Society; B. F. Angel, Sec'y Livingston Co. Ag. Society, with an interesting account of the annual plowing match, held on the 29th of May; J. Delafair, President Seneca Ag. Society, with an account of the systematic effort making to arouse the farmers to a more thorough course of farming; and from several gentlemen who had been appointed as judges for the approaching fair.

The PRESIDENT exhibited some very large and fine specimens of QUARTZ, taken from his farm near Troy, which were referred to Prof. Hall, for examination, &c.

Col. SHERWOOD, late president of the Society, having become overstocked, offers for sale at his residence in Auburn, on the 8th of September next, his choice herd of Short Horns. The original cows of Col. S. were selected from the herds of the late Patroon, Francis Rotch, Esq., of Butternuts, and L. F. Allen, of Black Rock. An opportunity like the present to select choice animals, it is not probable will soon occur. The sale is to be without reserve. Pedigrees of the animals can be had on application to the Secretary at the Agricultural Rooms, Albany. The committee would specially invite the attention of Breeders and Farmers to this sale of valuable stock.

The committee appointed on the removal of the remains of the late Judge Buel, reported, That they had waited upon the family of the deceased, and presented the request of the Society; and were informed that they highly appreciated this testimony of respect to their esteemed relative, but declined at present to have the remains removed to the Cemetery.

The PRESIDENT reported that he had, with the Secretary, visited Saratoga Springs during the past week, and was happy to inform the committee that the citizens of Saratoga have organized their committees as requested by the Executive Committee at their last meeting; and that they are making arrangements for the erection of buildings and enclosing the grounds. Assurances were given that every thing required would be in readiness for the approaching Fair of the Society.

The SECRETARY reported that he had, in pursuance of the directions of the Executive Committee, corresponded with the officers of the Railroad companies, and that the usual facilities would be furnished to the Society at the Fair. Articles and stock for exhibition to be transported free.—Visitors in special trains, at half the usual fare. Officers of the Society to be carried to and from the Fair in any of the trains at the same rates.

Washington's Agricultural Correspondence, edited by Franklin Knight, was presented to the committee for examination, and they esteem it a very valuable work, and one desirable to be adopted as one of the works to be awarded as premiums. They could recommend it to the favorable notice of the officers of the County Agricultural Societies for premiums.

DONATIONS

For the library of the Society have been received—

From the Philadelphia Society for the promotion of Agriculture, 5 volumes of their Transactions.

From W. H. Starr, proprietor N. Y. Farmer and Mechanic, 4 bound volumes, and the volume of 1847, as far as published.

From Hon. E. Burke, commissioner of patents, 4 copies of the Patent Office Report for 1846.

From S. H. Terry, secretary of Rensselaer Ag. Society, several copies of the Transactions of the society for 1846.

From James Rees, secretary Oneida Ag. Society, pamphlet containing constitution, regulations, premiums, and committees for 1847.

From Franklin Knight, New York, Washington's Agricultural Correspondence.

Thanks were tendered to the respective donors.

JUDGES FOR THE FAIR.

The vacancies in the list, which was made at the last meeting of the board, were supplied, and the secretary directed to prepare the same with directions, &c., in pamphlet form. The Judges are as follows:

On Durham Cattle.—Edtingham Lawrence, Flushing, Long Island; Henry Holmes, Washington; Thomas Hollis, Otsego.

On Herdreds, Devons, and Ayrshires.—Lemuel Hurbert, Winchester, Conn.; Fred. Ingersoll, Oneida; Thos. Bell, Westchester.

Cross-improved and Native.—Richard Griswold, Lyme, Conn.; Wm. Culler, Skaneateles; John Budd, Greene co.

Working Oxen.—Sanford Howard, Albany; Joseph Bennett, Otsego; Hiram Clift, Oneida.

Steers.—John Boice, Homer; J. B. Dill, Auburn; Julius Curtis, Oneida.

Fat Cattle.—Hiram Slocum, Troy; Thomas Devco, New York; Lester Barker, Oneida.

Milch Cows.—Newbury Bronson, Wyoming; John Bathgate, Morrisania; Elias Cost, Ontario.

Horses, Class 1 and 2.—Hon. Adam Fergusson, Canada West; Theodore S. Faxton, Oneida; A. M. Clarke, Jefferson.

Blood Horses.—Charles Henry Hall, Harlem; John T. Cooper, Albany; Alexander O. Spencer, Wayne.

Mares and Geldings.—Silas K. Stow, Troy; W. S. Stoutenbergh, Cossack; Barent P. Statts, Albany.

Long Woold Sheep.—Edward Halleck, Ulster county; L. D. Clift, Putnam; Thomas Dunn, Albany.

Middle Woold Sheep.—Francis M. Rotch, Otsego county; S. Wait, jr., Orange; Henry Mesier, Dutchess.

Merinos.—Henry G. Tainter, Hampton, Conn.; Robert L. Rose, Ontario; J. L. Randall, Oneida.

Saxons.—James M. Ellis, Oneida; S. C. Scoville, Salisbury, Conn.; M. Y. Tilden, Columbia.

Suine.—Henry Rhodes, Oneida county; Martin Springer, Rensselaer; Wm. Howard, Cayuga.

Poultry.—H. A. Field, New York; F. C. Moses, Oneida; Mr. Potter, New York.

Pious.—John S. Gould, Columbia county; Edwin N. Hubbell, Greene; Morgan L. Brainard, Oneida.

Wagons, Harrows, &c.—W. H. McCulloch, Greenbush; Mathias P. Coons, Rensselaer; Richard Van Dyke, jr., Greene.

Farm Implements, &c.—T. A. Burrall, Ontario county; Benj. N. Huntington, Oneida; Hart Massey, Jefferson.

Plowing Match.—John McDonald, Washington county; Isaac Tallmadge, Rensselaer; Joseph Ball, Otsego; Leonard Bronk, Greene; Hiram Mills, Lewis.

Butter.—Israel Denio, Oneida county; Washington Putnam, Saratoga; John Bloom, Albany.

Cheese.—Joseph Carey, Albany; Joel Woodworth, Jefferson; Joel Root, Saratoga.

Sugar.—Robert McDonnell, Saratoga; George Tuckerman, Otsego; James M. Cook, Ballston Spa.

Silk.—Ebenezer Frouddt, Rensselaer; James Clark, Hudson; Henry Carpenter, Albany.

Domestic Manufactures.—Orville Hungorford, Jefferson; Le Grand B. Cannon, Rensselaer; W. J. Gilchrist, Saratoga; Edward Wells, Montgomery; John Van Duzen, jr., Columbia.

Needle-Work, &c.—Mrs. Libbeus Booth, Ballston; Mrs. Miles Beach, Saratoga Springs; Mrs. M. Harvey, Salem; Mrs. Henry Holmes, Union Village; Mrs. Wm. A. Beach, Saratoga Springs; Mrs. Samuel Young, Ballston. John J. Vele, Troy, sec'y to com.

Flowers.—Dr. Herman Wendell, Albany; W. R. Randall, Cortland; J. W. Bissell, Monroe; Jas. R. Westcott, Saratoga. Ladies: Mrs. E. C. Delavan, Ballston; Mrs. E. Huntington, Rome; Mrs. Huntsman, Flushing; Mrs. Dr. O'Toole, Washington, D. C.; Mrs. L. Tucker, Albany; Miss Margaret Conkling, Melrose, near Auburn.

Vegetables.—Thomas Bridgman, New York; R. Harper, Albany; David Gray, Utica.

Miscellaneous Articles.—E. F. Prentice, Albany; Joshua Atwater, Greene; Ransom Cook, Saratoga.

Fruits.—Lewis F. Allen, Erie; Samuel Young, Saratoga; Roswell Reed, Greene.

Paintings and Drawings.—J. J. Thomas, Wayne; W. W. Forsyth, Albany; O. D. Grosvenor, Oneida.

Stores, &c.—Pomeroy Jones, Oneida; Edward Fitch, Saratoga; Asa Fitch, M. D., Washington.

Discretionary.—Orville Clark, Washington; Joel Rathbone, Albany; W. L. F. Warren, Saratoga; A. L. Linn, Schenectady; George Griffing, Greene.

FOREIGN STOCK.—Horses.—James D. Wason, Albany; Ela Merriam, Lewis; Dr. Carrington, Farmington, Conn.

Cattle.—Horetio Sargeant, Springfield, Mass.; Ira S. Hitchcock, Oneida; E. Beck, Wyoming.

Sheep.—Stephen Batty, Washington county; John Murdock, Monroe; Samuel H. Church, Oneida.

COMMITTEE OF ARRANGEMENTS.

Geo. Vail, Troy; B. P. Johnson, Albany; T. J. Marvin, W. A. Beach, J. T. Blanchard, J. A. Corey, Saratoga Springs; Samuel Cheever, Bemis Heights.

COMMITTEE OF RECEPTION.

Hon. R. H. Walworth, Saratoga; Samuel Young, Ballston; John A. King, Jamaica; E. C. Delavan, Ballston; T. J. Marvin, J. A. Corey, G. M. Davison, Saratoga.

B. P. JOHNSON, Secretary.

☐ THE proprietors of the Hotels, &c., at Saratoga, have agreed to charge ONLY their usual rates for board during the State Fair—from 75 cents to \$2.50 per day.



HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

[The Editor of this Department has been absent during most of the past month, on an excursion to some of the Western States and Territories. He has forwarded us the following Notes by the way, thinking they might prove interesting in the absence of other matter.—PUB.]

Horticulture in the West.

THIRTY years seem but a day in the history of a Nation's existence, and in old countries brings about so little change on the face of things as scarcely attracts our notice; but not so in America. Here, in the West, I find large, beautiful, and populous towns and cities, with tasteful dwellings, fine gardens, and all the accompaniments of civilization and refinement, on the very spot where 30 years ago stood the FOREST. To those who have not *seen*, the fact is almost beyond belief. A glance at the Western States is what I have long desired. Their vastness, rapid settlement, great lakes and rivers—cities of almost magic growth—noble trees, and beautiful wild flowers, that we had never met in their "native haunts," have all been pictured in my imagination as long back as I can remember—and with as much anxiety have I longed to see them, as did the ancients to enter "the promised land," that flowed with milk and honey.—How many thousands of the overgrown population of the old world, and how many of the hardy sons of the older states of the new, have bid adieu to their homes and friends and directed their course thither, with such notions of the west as I have had, would be hard to tell. And never did they come faster or thicker than at present. Every boat that comes up the lakes bears a multitude of emigrants, joyously journeying to their "land of promise"—there to make for themselves new homes, and to convert, by their industry, these forests, valleys, and prairies into fields of grain, orchards, and gardens, for the sustenance of men. In other words, "to make the desert blossom as a rose." All that's wanted here is *industry, intelligently directed.*

It is unnecessary to say that, as far as I have travelled, I have been delighted—for who could fail, in such a country, and at such a season.—

But I have seen little. It is not a month but six months, nay a year, that one would require to see the West as I wish to see it. Passing along in a stage or a rail-road, as I have done, is but a mockery; just when we wish to pick a flower, explore a forest of giant trees or examine some object of interest, we are carried along with whirlwind speed; and when we have no object in stopping—nothing to interest us but a dirty, dingy tavern and its lazy inmates, we must wait for hours, and perhaps a day, for some conveyance. I have often regretted the lack of *patience*, but never more than in such cases. I hope sometime to have a range in this western world, and in a mode that will afford me an opportunity of stopping when and where I choose—to pay my respects to anything of interest I may meet.

When I left home, on the 3d of July, our cherry season was just opening with the earlier sorts; when I arrived at Cleveland, on the 5th, the earlier sorts were all gone, and but a few of the later ones remaining.

Cleveland is making great progress in Horticulture. She has a Society that holds weekly exhibitions during the season of fruits and flowers. They have a commodious Hall, erected by the Society. In the garden of the President, GEO. HOADLEY, Esq., I saw a fine collection of cherries—and while I was in his garden his man sold the produce of a single tree for \$10. Nor was it a large tree; planted some twelve years ago, but owing to the severity of that climate on the cherry, it is not larger than our seven year planted trees. I had the pleasure of visiting Dr. KIRTLAND, who is well known for his devotion to Horticulture, and natural science generally. I saw and tasted some seedling cherries which he has raised, and which promise to be of great value. He has transferred the trees to F. R. ELLIOT, Esq., who will propagate and dispose of them. Mr. E. has, he informed me, sent a description of two of them, to the Horticulturist.—In the garden of J. M. WOOLSEY, Esq., I also saw several seedling cherries, but it was too late in the season to judge whether they would be worth adopting into our list of sorts. Of course a new variety must possess some decidedly superior point to render it worthy of a name and culture.

Cleveland is delightfully situated, and will undoubtedly become a large and beautiful city. It has now a handsome public square, well planted with thrifty beautiful elms. On two or three of the finest streets there are rows of elegant villa residences, with grounds comprising from three to five acres each, laid out beautifully and planted and kept in the very best order. We visited a number of these, and were delighted with them, as well as with the taste, enthusiasm and skill of their proprietors. We doubt whether another city in the Union, of the size,

could produce so many gentlemen passionately fond of gardening, and possessing so much practical knowledge on the subject. At the time we were first there, (5th July,) there was a serious drouth that had affected vegetation much, and made the sandy street anything but pleasant;—but when we returned from southern Ohio, a week after, copious rains had fallen and everything was fresh and enlivened.

The cherry suffers much around Cleveland, Columbus and other parts of Ohio, as well as in Michigan, as far as we have been, from the effects of the sun on the trunk, both in winter and summer. We found the trunks wrapped up, in many cases, with straw and cloth. We suggest, as a remedy, that *the trees be not pruned up, as they usually are, but be allowed to branch out near the ground.* The trunk will thus be protected, which seems to be all that is wanted.—In Cincinnati, we are informed, they have almost abandoned the culture of the cherry, they are so much discouraged. We think that the trees grown as dwarfs or pyramids will suffer less, if they suffer at all. At any rate, the experiment may be tried. We consider it a great error to expose the trunks of cherry trees to the height of five, six and eight feet, in that climate.

Passing from Cleveland to Columbus, through the interior of the State, I was much disappointed with the condition of the country. It has been settled some 30 years and upwards—and this, in such a country, abounding with natural wealth and with every facility for its development, should give the country an aspect of good culture and growing refinement. But, as a general thing, there are but a few, very few, evidences of either.

The system of field culture seems to be that usually suggested by laziness and ignorance combined. The houses old and dilapidated—orchards few and poor—gardens, none beyond a patch of cabbage or onions—school-houses miserable beyond description, fit only for occupation during the summer months; and the scholars, as might be expected, wild looking, dirty, and ragged.—Poor things, I felt most for them. There are not such wretched schools in the poorest portions of the old world, that claims to be civilized at all. It is to be hoped that this state of things will not endure long. Here and there I find that new settlers are coming in, and bringing with them skill, enterprise, and taste. Their example will be felt by their neighbors, and their success will induce others of like character to follow and settle beside them. Ten years hence, if I live to travel this way, I may find gardens and fruit trees to admire and talk of.

That portion of Ohio known as the Western Reserve is said to be the most highly cultivated. There and along the rich valley of the Ohio and some of the other rivers, we would no doubt find good gardens and orchards.

Columbus, the Capital of the State, is quite a pretty place—situated on the Sciota river in the midst of a fertile valley of land well adapted to gardening. Few cities that I have seen are so fortunate in this respect, as far as I can judge. Much taste begins to be manifested in the erection of dwellings. Collections of rare plants and fine fruits, too, are rapidly forming. Nurseries are springing up. Our friend BURR says he is going to beat the world (Cincinnati included,) with his strawberries. I was too late to see them.

The supply of vegetables in the market is excellent. I have seldom seen better. This business is mainly in the hands of Germans, of whom there is a large settlement near the town. It was quite a luxury for me to stroll among their richly laden stands and wagons, between four and five o'clock in the morning.

Columbus has also an active Horticultural Society. Mr. LATHAM, the President, has one of the finest collections of Native Grapes in the country. His vines are just coming into bearing. We found our friend Mr. BATEHAM there, as kind and gentlemanly as usual—busy with his "Cultivator" and his "little farm." Success to them both. I have seen many a district in Ohio where the "Cultivator" ought to circulate. Go on, friend B. You have a boundless field to work in, and the work must be done.

I had almost forgot to mention one of the most interesting objects that I saw in Columbus, in the way of Horticulture. A small garden, but filled with every thing, and every thing in perfection. At every step I was surprised and delighted.—Choice roses of various classes were in full bloom; so were dahlias, carnations, verbenas, and many other things. Plums, apricots, peaches, and grapes were bending under their load of fruit.—No curculio was there, or the sign of one; no blight or mildew; every spot where a tree or plant could be trained up, or stand, was filled.—It looked like a fairy scene indeed. The whole secret is, the things are taken care of—not a dead leaf or decayed fruit is allowed to remain a moment after falling. The walks are kept as clean as they can be swept daily; health and vigor is maintained throughout, by skillful and careful attention. Mr. BATEHAM may direct his negligent or unskillful neighbors to visit Mrs. McCOYS. Her little garden is a perfect model of its size.

RAISING OF PEA NUTS.—A correspondent of the Genesee Farmer asks its editor whether Pea Nuts can be raised in this country? The editor says he don't know—but thinks they can not.

We can inform the editor and his correspondent that pea nuts can be raised here. The son of the editor of this paper raised a small quantity in the garden last year, which came to maturity previous to the middle of September.—They were planted at the usual time of planting in the spring, and ripened before frost without being transplanted. This spring he planted a more extensive quantity, which are doing well.—*Batavia Advocate.*

The editor of the Advocate, or his son, will oblige us by giving a detail of the process.—*Ed.*

The Cherry Plum.

THAT remarkably early, very pretty, and very distinct little fruit, the CHERRY PLUM, better known, in some gardens in the United States, as the *Early Scarlet*, and in the collections of Europe as the *Myrobolan*, is perhaps deserving of a few remarks from us, and of more attention at the hands of fruit cultivators, than it has hitherto received.

The Cherry Plum is not a high flavored fruit; it is only what may safely be called one of pleasant flavor. But it is, we believe, the *earliest* of plums; it ripens at a season when fruit of every kind is exceedingly scarce; and it is quite an ornamental as well as acceptable addition to the dessert in the month of July.



The Cherry Plum. (Fig. 45.)

This variety is a rapid grower, and soon makes a neat bushy tree, remarkable for the great number of its small pointed leaves. It always blossoms most profusely, but it is considered by many as a very poor bearer, and therefore rejected as of little value. It is on this point, that we wish to offer a suggestion of some practical importance. Mr. SAMUEL REEVE, of Salem, N. J., is the most successful grower of this plum, that we know; and the method he pursues, is worthy of attention, since he finds the *Cherry Plum* the most profitable variety, as a market fruit.

MR. REEVE attributes the usual non-productiveness of the Cherry Plum, to the fact that it is inclined to too great a production of leaves and wood. He therefore *transplants* his bearing trees, every five or six years. In this way, the over-luxuriance is checked, and an abundant crop of fruit sets and ripens every year. As he is able to send this variety to the Philadelphia markets early in July, when there are no other plums to be found, he usually realizes from five to eight dollars per bushel for them. This, of course, makes a plantation of the Cherry Plum more profitable than one of any other variety, unless, perhaps, we except *Coe's Golden Drop*, or some such fine variety, equally valuable, from the usually *late* season at which it matures.

We presume *root-pruning*, performed every two or three years, would answer the same purpose, in rendering the Cherry Plum productive, as transplanting, and it would be attended with less labor and expense.—*Horticulturist*.

Culture of Sea Kale—(*Crambe Maritima*.)

[IN ANSWER TO J. W., OF LYONS.]

YOUR seeds may have been unsound. Soaking in boiling water for a few hours is better than cracking; but if the seed be fresh, neither is necessary.

The culture is quite simple. Any good, dry, rich, and mellow loam is suitable. The seeds may be planted as soon in the spring as the ground may be in good working condition, and the weather favorable for vegetation. Your seeds, by being cracked and planted while the soil was yet wet and cold, may have rotted. The seeds may be sown in a seed bed, in drills a foot apart, and allowed to remain there the first season. The second they may be transplanted into rows two feet apart, and six or eight inches in the rows. Or, the seeds may be sown in rows where the plants are intended to remain. The seeds should be covered about two inches deep, and when they have made three or four leaves may be thinned out to proper distances, leaving the best plants, of course.

Some prefer the mode of planting in clumps, three or four plants to the clump, with space enough around each clump for walking and working. Pots or boxes can in this way be easily placed over the plants in the spring, to facilitate the blanching process, which greatly improves the quality of this vegetable for the table.

In the fall, before heavy frosts set in, the beds should be covered with a good coat (six or eight inches) of rotten manure, and in the spring, as soon as the leaves begin to push through this, the pots or boxes for blanching may be placed over them. The time to cut for use is when the leaves have attained three or four inches above the covering, and it should be cut at the surface of the ground, taking care not to injure the crown of the plant.

It should not be cut till the third year. Those who can not wait for the slower process of raising from seed can always procure roots at the nurseries, that may be cut from the year after planting. Fifty roots, or thereabouts, will be found sufficient to supply an ordinary family. It is boiled, dressed, and served up like asparagus.

Exhibition of Hort. Soc'y of the Valley of the Genesee.

WE present below, in a condensed form, the Reports of the Committees on the June exhibition. The detailed Reports occupied three full columns of the daily papers. The Flower Committee, in particular, deserve great credit for the faithful and efficient performance of their duties. The names of every contributor, as well as of every article, including the splendid collections of Wild Flowers, have been presented in detail. We have now hopes for the success and usefulness of the Society.

REPORT OF COMMITTEE ON FLOWERS.

The Committee on Flowers, having carefully examined the great number of specimens presented for exhibition, would respectfully report :

That they have awarded the following premiums for the best display of Flowers comprising the greatest varieties :

Miss Francis Ward, for best Floral Ornament,.....	\$3 00
Mrs. S. O. Smith, for 2d best do.	2 00
Mrs. Alonzo Frost, for 3d best do.	Mrs. London.
Miss L. J. Whitney, greatest number and varieties of	
Boquets composed of Roses, &c.,	\$2 00
Miss E. Child, for beautiful collection,.....	Mrs. London.
Mrs. W. B. Williams, " " " " " " " "	" " " " " " " "
Miss Julia West, " " " " " " " "	" " " " " " " "
Mrs. A. Gardiner, " " " " " " " "	" " " " " " " "
Miss S. Shaw, " " " " " " " "	" " " " " " " "
Mrs. J. W. Sawyer, " " " " " " " "	" " " " " " " "
Mrs. Geo. H. Mumford, " " " " " " " "	" " " " " " " "
Mrs. D. W. Powers, " " " " " " " "	" " " " " " " "
Mrs. Fitch, of Riga, " " " " " " " "	" " " " " " " "
Mrs. C. C. Lathrop, " " " " " " " "	" " " " " " " "
Mrs. H. Billing, for fine collection of Pansies, " "	" " " " " " " "

NATIVE FLOWERS.

Miss Rogers presented 66 species,	
Mr. Wetherell " 55 "	
Dr. Clark " 45 "	

all correctly named.

Premiums on the above are to be awarded at the close of the year for the greatest number of species correctly named and tastefully arranged.

NURSERYMEN.

John Donalan—Paeonia humeii and Whitejii, and a variety of roses.

Charles Powis, Monroe Gardens—A pyramid of Paeonia, Whitejii and humeii, Amaryllis formosissima.

Ellwanger & Barry, Mt. Hope Nurseries—One splendid pyramid of 125 varieties of roses, 6 feet high, measuring at the base about 9 feet.

Four large bouquets, consisting of the finest Roses, Pelargoniums, Verbenas, Phloxes, Spiraeas, Deutzas, &c.

E. & B. also exhibited the following Roses, separately, named, in small vials : Hybrid Perpetuals, 25 varieties ; Perpetual, 5 vars. ; Provence, 5 vars. ; Hybrid China, 34 vars. ; Moss Roses, 12 vars. ; Hybrid Provence, 4 vars. ; French Roses, 5 vars. ; Damask, 4 vars. ; Prairie Roses, 3 vars. ; Ayrshire, 4 vars. ; Boursault, 3 vars. ; Scotch, 3 vars. ; besides Austrian Briars and other miscellaneous varieties. Also a handsome collection of Green House plants.

The Committee would further report :

That owing to the limited time for observation, they were unable to give a full report of all the varieties offered for exhibition. Your Committee unite in the opinion entertained by all present, that the Exhibition of Flowers, and particularly of Roses, far exceeded in quantity and variety any previous Exhibitions, and they hope that future Exhibitions will be equally deserving of the interest manifested in the present.

Mrs. J. WILLIAMS,	} Committee.
Mrs. D. SCVILLE,	
Miss S. SHAW,	
G. H. SMITH,	
S. THOMPSON, Jr.,	

REPORT OF THE FRUIT COMMITTEE.

The Fruit Committee beg leave to announce the following premiums :

Strawberries.—For the best quart, Jno. Williams,	
Esq.; variety, Hovey's Seedling.....	\$3 00

For the second best, Wm. Pitkin, Esq.,.....	2 00
For the greatest number of varieties, (13) and best grown, Isaac Hills, Esq., President of the Society, 3 00	

NURSERYMEN'S CLASS.

The only nurserymen exhibiting were Messrs. Bissell, Hooker, & Sloane, who had nine varieties and were awarded a Diploma.

The Committee having power to award discretionary premiums for articles of merit, have awarded one dollar to M. G. Warner, Esq., who exhibited three dishes of fine well grown Strawberries, and the same to E. K. Blythe, Esq., for a large and beautiful dish of well grown Strawberries.

There were a few Cherries presented just beginning to color, from Messrs. T. B. Hamilton and Ira D. Hall, and ripe Herefordshire Whites from Bissell, Hooker, & Sloane.

In addition to those above mentioned, fine specimens of Strawberries were exhibited by Mr. H. Leutweiller, and Mrs. E. N. Buell, of this city. The number of exhibitors were comparatively limited, but the specimens were perfect and beautiful.

Besides those exhibited at our former shows, there were in the collection of Isaac Hills, Esq., five specimens of Myatt's British Queen, a large and fine fruit, and Stafford's Mammoth, a very large fruit from Ohio, but hollow and coarse.

In the collection of Bissell & Co., were a few specimens of Boston Pine and Black Prince, but not enough to pass a decided opinion upon—beautiful specimens of the Pine Apple and Carolina Pine were shown by Wm. Pitkin.

The Committee regret that a large number of fine specimens and collections around the city were withheld, because it was rumored that others had larger ones. This is wrong. All friends of the society and of the progress of Horticulture should, in our stage of advancement, present all they have of even medium quality. This suggestion applies with equal force to all fruit, and the Committee beg attention to it in future.

P. BARRY,	} Committee.
A. SAWYER,	
S. MILLER,	
J. W. BISSELL,	
S. MOULSON,	

Buffalo Horticultural Society.

THE June Exhibition of this enterprising Society passed off admirably, as usual. We intended to be present on the occasion—and while reading the following glowing account, from the Commercial, we regretted more than we had done before that our engagements deprived us of such a pleasure :

The floral exhibition of the Horticultural Society last evening, was one of the most beautiful affairs we ever attended, and reflected infinite credit on the officers and ladies' committees engaged in getting it up. When it is recollected that the almost fairy scenes presented in the floral temples, alcoves, chandeliers, wreaths, festoons, and other rich and beautiful designs which ornamented the hall, were begun and completed in about five hours—our language will not be considered extravagant. The display of bouquets was rich in the extreme, both in the taste in making up, and the exquisite beauty and rarity of the flowers. In the fruit department were numerous rich and tempting plates of strawberries, cherries, currants, &c.—the strawberries in particular, were very fine. Some fine fruit and flowers were exhibited by Mr. McIntosh and Mr. Cable from Cleveland, and by Col. H. H. Coit, of Euclid, Ohio. Altogether, the June exhibition may be considered as an era in the history of our Buffalo Horticultural Society. We were pleased to observe that the attendance in the evening was large, and the bids at the sale of fruits and bouquets, both spirited and liberal. When all was so tasteful and beautiful, it were impossible to discriminate with justice. When the committee report, full justice will be done to all. How beautiful does woman appear among flowers—their white and red delicately blended on her cheeks, the former shining through the latter at every movement of her lips, their fragrance on her sigh, their purity in her heart, their delicacy in her very existence. No wonder that woman loves to breathe the atmosphere of flowers, reflecting their smiles and rivaling their beauty.

LADIES' DEPARTMENT.

☞ THE enlargement of the Farmer enables us to resume the "Ladies' Department." We shall endeavor to give at least a page, and more if possible, in each subsequent number, for the exclusive benefit of farmer's Wives and Daughters. It will afford us pleasure to receive and publish short communications upon Domestic Economy, &c., from those interested.

Making Preserves.

CURRANTS.—Strip them from the stems. Allow a pound of sugar to a pound of currants.—Boil them together ten minutes. Take them from the syrup, and let the syrup boil twenty minutes, and pour it on the fruit. Put them in small jars, or tumblers, and let them stand in the sun a few days.

CURRENT JELLY.—Pick over the currants with care. Put them in a stone jar, and set it into a kettle of boiling water. Let it boil till the fruit is very soft. Strain it through a sieve. Then run the juice through a jelly-bag. Put a pound of sugar to a pound of juice, and boil it together five minutes. Set it in the sun a few days.

BLACKBERRY JAM.—Allow three quarters of a pound of brown sugar to a pound of fruit. Boil the fruit half an hour, then add the sugar, and boil all together ten minutes.

RASPBERRY JAM.—No. 1.—Allow a pound of sugar to a pound of fruit. Press them with a spoon, in an earthen dish. Add the sugar, and boil all together fifteen minutes.

RASPBERRY JAM.—No. 2.—Allow a pound of sugar to a pound of fruit. Boil the fruit half an hour, or till the seeds are soft. Strain one quarter of the fruit, and throw away the seeds. Add the sugar, and boil the whole ten minutes. A little currant juice gives it a pleasant flavor, and when that is used, an equal quantity of sugar must be added.

PEARS.—Take out the cores, cut off the stems, and pare them. Boil the pears in water till they are tender. Watch them, that they do not break. Lay them separately on a platter as you take them out. To each pound of fruit take a pound of sugar. Make the syrup, and boil the fruit in the syrup till clear.—*Miss Beecher's Domestic Receipt Book.*

POLISHING.—The ladies are very fond of keeping the door knobs, spoons, plates, &c., in brilliant order. Now, if instead of water and chalk and such preparations, ladies will use camphene and rotten stone, a far brighter, more durable, and quicker polish can be obtained than in any other way. Camphene is the article used for producing the exquisite polish of the Daguerreotype plates; and nothing has been found to equal it.

MAKING BUTTER.—Mr. Wm. MERRIFIELD, of Guilderland, who received a premium for butter from the New York State Agricultural Society, in 1842, adopts the following mode for making butter: In winter, the milk stands in the cellar twelve hours; is then scalded over a slow fire to near boiling heat, the pans removed to the cellar; the cream only churned, which seldom requires more than five minutes to produce butter. I can testify to the superior quality of Mr. M.'s butter, having been using at my table for some days a sample made in the way described, and which is as high colored and nearly as rich as the best of June butter, though the cows were only fed with hay, and no coloring substance used.—*Alb. Cult.*

DAIRY UTENSILS.—All dairy utensils should be scalded, rinsed and dried every time they are used. Glazed pottery is not considered desirable for milk or cream, as the acid contained in them acts upon the glazing (which is generally an oxide of lead,) and converts it into an active poison. Vessels made of wood are preferred by many to any others, for this purpose; although they are liable to become tainted with the acidity of the milk, in which case they can only be thoroughly cleansed by boiling; and when this fails, a little saleratus added to the boiling water will effectually neutralize the acid. The vessels must afterwards be immersed for two or three days in water, which should occasionally be changed. Milk vessels may be made of maple, white ash, hickory, or white pine.—*Selected.*

GREEN CORN PUDDING.—The Louisville Journal says one of the very best things ever brought to the table, in the pudding line, is green corn pudding, prepared according to the following recipe. Let every wife, who would like to surprise her husband by a rare delicacy, try it.—Take of green corn twelve ears and grate it; to this add a quart of sweet milk, a quarter of a pound of fresh butter, four eggs well beaten, pepper and salt as much as sufficient; stir all well together, and bake four hours in a buttered dish. Some add to the other ingredients a quarter of a pound of sugar, and eat the pudding with sauce. It is good cold or warm, with meat or sauce; but epicures of the most exquisite taste declare for it, we believe, hot and with the first service.

"A word to the wise," &c. Try it.—*Sel.*

TO DESTROY RED ANTS.—As every house-keeper may not know how to get rid of these troublesome little intruders, I will state my experience. Place a piece of fat bacon, or a pan of grease or butter near the place where they enter the kitchen or pantry. This will soon attract them together, when they can be easily removed, or destroyed by a little hot water. Thousands may be destroyed in this way in a few days.—*Ohio Cultivator.*

HOW TO MAKE CURRANT WINE.—Break and squeeze the currants; put three pounds and a half of sugar to two quarts of juice and two quarts of water. Put in a keg or barrel. Do not close the bung tight for three or four days, that the air may escape while it is fermenting. After it is done fermenting, close it up tight. Where raspberries are plenty, it is a great improvement to use half raspberry juice, and half currant juice. Brandy is unnecessary when the above mentioned proportions are observed. It should not be used under a year or two. Age improves it.—*Mrs. Child's Frugal Housewife.*

We give the above in answer to inquiry of S.

TRAINING OF CHILDREN.—The instruction of your children cannot commence too early.—Every mother is capable of teaching her children obedience, humility, cleanliness, and propriety of behavior; and it is a delightful circumstance that the first instruction should thus be communicated by so tender a teacher. It is by combining affectionate gentleness in granting what is right, with judicious firmness in refusing what is improper, that the happiness of children is promoted, and that good and orderly habits are established. If children are early trained to be docile and obedient, the future task of guiding them aright will be comparatively easy.—*Nichols.*

SEVERAL articles from correspondent are deferred, for want of room, until next month.

Acknowledgments.

We continue, this month, our list of acknowledgments—giving the names of those persons who have forwarded 25 subscribers or over. It would afford us pleasure to add the names of numerous friends who have procured from 5 to 12 subscribers, each—but are unable to do for want of "ample room and verge enough." All, however, will please accept our hearty thanks for their substantial favors.

H. Arno, P. M.,	30	Apollus Kent,	16
Jacob Boyer,	35	J. Ladd, P. M.	14
T. Brewer,	18	John Lewis,	17
Geo. F. Barber,	16	J. L. Lewis,	16
J. L. Beebe,	15	A. Langworthy, P. M.	13
E. D. Brown,	14	J. W. Merrill,	30
I. H. Butterfield,	14	A. G. Meivin,	18
H. G. Buffum,	14	E. S. Marvin,	16
S. Booth, P. M.,	13	Wm. McGowan, P. M.	14
O. C. Comstock, Jr.,	30	D. Munger,	13
H. H. Cole, P. M.	26	C. Nye, Jr.,	15
A. Cleveland, Jr.	17	H. P. Norton,	13
D. Carpenter, P. M.	18	R. Northrop,	13
Chas. Carter, P. M.	16	D. A. Ogden, P. M.	65
W. Churchill,	14	P. M. at Oxford, N. Y.	17
W. Chapman, P. M.	18	A. Osborn, (Ohio),	16
P. K. Deyo,	17	Allen Payne,	19
L. S. Dudley, P. M.	14	R. E. Perry, (Mich.)	13
R. Davis,	14	O. Robinson, (Canada),	16
T. Donnellan, (Texas),	14	J. W. Runyan, P. M.	13
Geo. Earl, P. M. (Iowa),	17	R. Rockwood,	13
J. K. Eslieman, (Pa.),	16	W. M. Sprague, P. M.	30
R. Edwards,	25	J. A. Smith, (Ohio),	28
C. Fenton, P. M.	14	Henry Swan, P. M.,	23
T. Foster, P. M.	13	J. D. Stone, P. M.,	19
E. H. Gilbert,	50	L. Smith, P. M.	19
B. F. Gage,	13	C. G. Sutton, P. M. (Mich.)	18
Ira Green, P. M.	13	S. C. Smith, P. M.	16
O. B. Hopkins, P. M.	16	Milton Smith, P. M.	16
C. Hull, P. M.	14	G. C. Spencer, P. M.	16
C. H. Howe, P. M.	13	A. A. Stimson, (Mich.),	14
E. Jones, P. M. (Mich.),	22	A. Scott, P. M.	13
I. L. Jenkins,	22	L. R. Trembley,	13
C. Jarvis, P. M.	14	N. Wesson, P. M. (Wis.)	19
Hevey Johnson,	13	Wm. C. Ward, P. M. (Pa.)	14

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat, -----	\$1 00	1 12	Pork, bbl. mess	15 00
Corn, -----	63		Pork, cwt., ---	5 00
Barley, -----	50		Beef, cwt., ---	5 00
Oats, -----	40		Lard, lb., ----	8 9
Flour, -----	5 50		Butter, lb., ---	12
Beans, -----	75	87	Cheese, lb., --	7 7½
Apples, bush.	50		Eggs, doz., ---	9 10
Potatoes, -----	—		Poultry, -----	—
Clover Seed, ---	4 50		Tallow, -----	9
Timothy, -----	1 50	2 00	Maple Sugar, ---	—
Hay, ton, -----	9 00		Lamb Skins, ---	10 25
Wheat, cord, ---	2 00	3 00	Green Hides, lb	3½ 4
Salt, bbl., -----	1 06		Dry " " -----	7 8
Hams, lb., -----	7	8	Calf Skins, ---	8 9

☞ The Wool Market is about the same as last month. Prices range from 20 to 40 cents. Rochester, July 30, 1847.

New York Market.

[By Magnetic Telegraph.]

NEW YORK, July 30—7 P. M.

FLOUR AND MEAL.—Before steamer's news was received market firm at 5 75 for Genesee, and good demand for filling contracts. Western 5 50 for strait brands. Steady demand. After the advices per Washington were received the market became unsettled and holders generally withdrew from the market. There were some sellers of Genesee at 6 25, and Michigan at 86, and buyers offered 56 for Genesee to some extent. The only sales are 500 bbls. western at 86 next week, and another small parcel Mich. at same figure. A contract for 1000 bbls. Genesee was settled at 86 25. There was a fair inquiry, but an indisposition on the part of holders to meet buyers. Sales 400 New Orleans at 4 75. After change the market was firm and meal was held up at 4 for Jersey. A sale of 400 bbls. was made before the news at \$2,87 for western.

Wheat was in fair demand before the Washington arrived, and prices without change. A sale of 3000 bu. fair red Illinois \$1,02; 2000 do. New Orleans \$1,20, and 600 or 700 new imported Genesee, the first received this season, supposed at \$1,31½ for milling.—Corn was selling before the news at 59 a 60 for heated, 62½ for mixed, and 64 a 65 for flat yellow, but holders afterwards advanced their demand to 75 cts. for round, 70 cts. for flat yellow, and 66 a 68 cts. for mixed. The aggregate sales of the day were 30,000 bu. of which about 10,000 were sold after the steamer at 66½ to 70 cts. for flat yellow. Round could be bought at the close at 71 a 72 cts. Oats are more plenty and a cargo sold at 50 cts. in Rye nothing done. Sales 2000 bu. barley at 55 cts.

The improved feeling in Pork continues. Tendency upward.—Sales 600 bbls. at \$12,50 for prime, \$15,25 for mess. At the close \$15,25 was refused for mess. Sales 500 bbls. old at 12 and 15 for prime and mess. Beef without movement. In cut meats something doing. Sales 108 tons and 100 bbls. hams at 7½ a 7¾ cts.—63 lbs. shoulders at 6¼ cts. Butter, fair demand.

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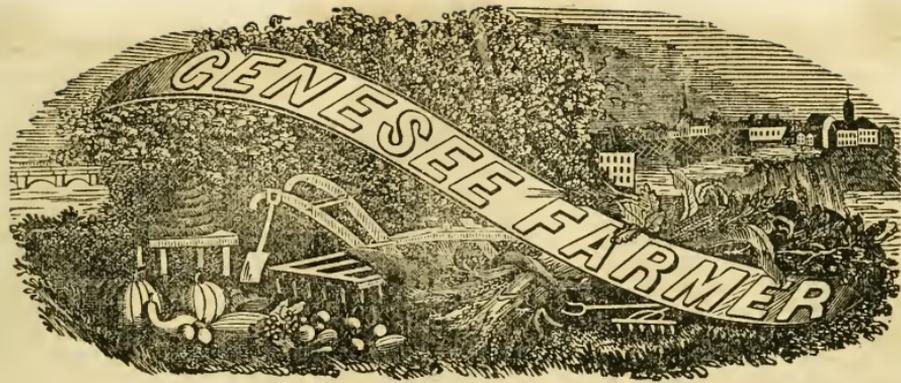
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THE GENESEE FARMER:

Issued the first of each month, in Rochester, N. Y., by

D. D. T. MOORE, PROPRIETOR.

DANIEL LEE, EDITOR.

P. BARRY, Conductor of the Horticultural Department.

To Correspondents.

COMMUNICATIONS have been received, during the past month, from S. L., Nathaniel Smith, C. N. Bement, J. Mallory, Arator, H., J. M., One who is willing to learn from the experience of others, * Geo. Vail, Young Joe, J. Carpenter, A. C., Alvin Wilcox, John, A Subscriber.

Correspondents whose communications do not appear in this number, are informed that their favors are on file for publication or notice. We have a large number of articles on hand, and are consequently compelled to defer many of them from month to month in order to give a sufficient amount of seasonable and other matter.

SILLIMAN'S CHEMISTRY.—Few men have an equal opportunity to acquire a critical knowledge of Chemistry with the author of the text book before us. A careful examination of the work enables us to speak advisedly of its merits. For the use of schools we know not its equal. The explanations of chemical phenomena are plain, the illustrations abundant, and the arrangement of questions at the margin of each page greatly facilitates the teaching and study of the text. For sale by ERASMIUS DARROW, Bookseller, corner of Main and St. Paul streets, who has a general assortment of Agricultural Books.

Notices of several Books and Periodicals deferred until next month—among others "Cole's American Veterinarian," an excellent work, published by JOHN P. JEWETT & Co., Boston, and C. M. SAXTON, New York.

Hints for September.

THIS is the month for seeding, and its preparation. In the region where the fly has prevailed do not sow too early, and in no case before the 10th. Brine and lime your seed—a process that many object to on account of the labor and trouble, but it is an effectual remedy against smut.

The following process answers every purpose, with little labor. After a thorough winnowing through the mill, put the seed in a heap and sprinkle over it fine salt, about a peck to 10 bushels, and then dash on water from a small basin or cup till the brine shows itself on the

floor. Shovel it over two or three times, and leave it over night; add as much slaked lime as will adhere to the kernel, and if not moist enough add more water. It is much sooner done than floating it in a tub of brine, and equally efficacious.

If you sow late, or on soil liable to heave, put more seed to the acre—and if you wish to lay it down as a meadow, and not for a regular rotation of grain, sow your Timothy with the grain in the fall. There is no other certain method, as a dry May or June is fatal to spring seeding with that grass. Timothy is of very little use as a fertilizer, and is a detriment to the wheat crop—and is only to be tolerated, as sown with wheat, for the hay and feed it produces. Clover is the only cheap, natural *pabulum* for wheat; it contains nearly all the elements required to produce it.

See that your fallows are well and perfectly drained. Do not trust alone to the plow; let the hoe and shovel be put in requisition to deepen and open all obstructions.

So much wheat was winter killed the past season that a great quantity of seed will be produced; many crops that we have observed, the grass seed, at ordinary prices will be worth the most money. In those cases the threshing machine, without the separator, should be used, or most of the seed will be lost.

The kinds of wheat now preferred in this west region, are the *Improved White Flint*, *Soule's*, and *Hutchinson*.—A sample of either, compared with the trash that comes from some quarters of the west, is a caution to Grahamites.

The White Turnep should now be thinned out, if sown too thick, leaving the width of a hoe blade between each plant.

If you wish thoroughly to eradicate all weeds from the Garden, now is the time to do it, as all the foul seeds have by this time vegetated—or if they again appear they have not time to ripen.

Bud young trees immediately, and use in all cases well formed and well ripened buds, from large and well ripened wood.

Dietetics.

THE philosophy of Eating is a much neglected, but very useful and interesting study. The legitimate purpose of taking food into the stomach is to supply the brain, spinal marrow, nerves, muscles, bones, lungs, liver, and other organs, with aliment appropriate to each tissue; and furnish suitable fuel to be consumed in the system and keep up a uniform temperature of the body at about ninety-eight degrees. A large portion of the diseases which now so painfully afflict civilized communities, might be prevented by never eating nor drinking too much of any thing, and always giving to the circulating blood its appropriate elements in *due proportion*, to repair the constant waste of every part of the body. Animal life can only be maintained by the consumption of organized matter, which owes its organism to vegetable vitality. If there were no plants on the earth there could be no animals. The former alone are endowed with the power of organizing crude minerals, like salts, water, and air into food for animals. The light and heat given out in burning 100 lbs. of corn, or other organized matter, were imbibed from the light and heat of the Sun, at the time the corn or other plants grew. No vegetable or animal substance, whether consumed in the furnace of an iron locomotive, or in a locomotive man, can emit a particle more of heat than was taken up and rendered latent at the time carbon, nitrogen, and the elements of water were organized in the development of the germ of some plant. In selecting the flesh of herbivorous animals, and the seeds, fruits, and tubers of plants, for human food, there is room for the exercise of much wisdom in choosing organized matter best adapted to meet the peculiar wants of the brain and nerves, the muscles and bones, as well as the breathing process, which often suffers sadly from some defect in the fuel that should keep the human locomotive in a sound condition and healthy motion. Our daily food should be carefully selected and prepared, with reference to the daily wants of each organ and tissue in the system.—It should never contain too much or too little starch, sugar, butter, or fat, nor too much or too little gluten, albumen, casein, or other substance that abounds in nitrogen, sulphur, and phosphorus. Appetite, the senses of taste and smell, and instinct are worth something as guides in selecting suitable nourishment. But these advantages do not supersede the necessity of cultivated reason, of science, in directing aright the nutrition of the human brain and nerves, which are at once the highest expression of organized matter, and the organs of feeling, thought, and conscience, the most liable to derangement. Weakness of brain and feebleness of intellect, as well as defective digestion, imperfect respiration, and muscular lassitude, often arise from the use of

improper food. Judicious exercise, or suitable manual labor, can do much toward imparting both health and strength to the physical man. But neither bodily nor mental toil can transform food which is constitutionally defective, into that which contains all the nutritive elements in due proportion. Physical labor is good for the great purpose that God designed it. It can not, however, perform the function of enlightened reason. For the investigation of the laws of health, and its preservation, that each bone, muscle, nerve, and tissue may have just what it needs, man's intellectual powers must be called into active exercise.

Grind a bushel of wheat, and use for making bread only the very white, superfine flour, and you get little beside the *starch* in the grain, losing most of the muscle and brain forming elements in the "middlings." It is in the latter that the chemist finds most of the gluten, bone earth, sulphates, and chlorides. As the stomachs of all the higher order of animals contain hydrochloric acid in some form, (one of the elements of common salt,) the separation of this in bolting makes the bread of superfine flour likely to weaken digestion and induce costiveness. A little salt may remedy this defect; but what will give to the blood the bone earth, and organized sulphur, phosphorus, and nitrogen, which are indispensable to repair the waste in the bones, muscles, tendons, membranes, nerves, and brain of the system? A very little of the coarse bran may be removed without injury, but the canal should be eaten with the white starch called superfine flour.

In making cheese, nearly all the sugar of milk is lost in the whey. We are aware of the fact that the pigs or cows get this; still we want every house keeper to know that two quarts of new milk made into a baked Indian, rice, or bread pudding, are worth a great deal more as food for man than the milk would be if made into cheese or butter.

If most families would consume a little less butter and fat, and a little more sugar, molasses, or honey, the wants of nature would be better provided for. Be careful never to overload the stomach, nor weaken it by the presence of an indigestible substance. Beware of mellons, green corn, unripe fruit, and too much meat, whether salt or fresh. Neither work too hard nor be guilty of the vice of laziness, under the pretence that you are sick; but study at least two hours each day. Beware of all quacks whether homœopathic, allopathic, Thomsonian, or what not; but trust much to temperance in all things, and daily ablution of the whole body.

BURDOCK leaves will cure a horse of the slavers in five minutes; let him eat about two leaves. I have tried it many times. My horses will always eat them when the slavers are bad.—*Ploughman.*

Thorough Draining.—Irrigation.

THE Royal Agricultural Society of England is still urging the importance, and encouraging the practice of deep and thorough draining of all moist lands. Pipes sunk two and a half feet deep were regarded as low enough a few years since; but larger experience has demonstrated the superiority of drains four feet from the surface.—With such a hydrostatic pressure above the open tube, one of two inches in diameter will carry off twice as much water as it would if a foot and a half higher up, or nearer the top of the ground. Few are fully aware of the great benefits that accrue from the removal of all stagnant water, whether above or below the surface of improved land. On all clayey soils, or those that have a hard pan subsoil, draining is found to be useful. If a farmer were able to irrigate every field when too dry, and drain it when too wet, it would add immensely to his chances of always growing most abundant crops. Our hot summer sun and quite common lack of timely rains, render irrigation of far greater importance in this country than in England. There are hundreds of small streams that might be turned from their natural beds at a trifling expense, and made to water and fertilize hundreds of acres. The government of Egypt is now expending some eight or ten millions of dollars in damming the Nile and cutting canals to use water for agricultural purposes. To carry it on to still higher levels, several enormous steam engines are making in England to be used to pump this indispensable liquid to an elevation high enough to water thousands of acres above the high water mark of the Nile.

American agriculturists are in their infancy so far as understanding the advantages of removing all excess of water by draining, and all deficiency by irrigation, is concerned. One half of the land now so poorly managed, if cultivated with all practical skill, and attainable science, would yield a nett profit twice as large as is now obtained. Instead of striving to make every rod of land yield its maximum product, the common effort is to struggle to get the biggest farm in the neighborhood or town. A broad surface is coveted above all things.

CHARCOAL.—Pounded charcoal, or the refuse of the heap, should be thickly strewed over every place where filth is allowed to accumulate. It absorbs the bad smell, and makes an excellent manure of what otherwise would not only be useless but offensive. It also prevents the larvæ of insects from becoming flies or moths. Pigs like to eat charcoal, and are thought to fatten on it; and in the course of the summer months, I frequently have a bushel or so at a time thrown over the pen. It makes the manure so much more valuable that I find it worth while to buy it for the purpose; and in doing so the pens are never offensive.—*American Agriculturist.*

Analysis of Soils. --- Agricultural School.

DR. LEE—*Dear Sir:*—I am favored with your note of the 9th inst., containing some of your views touching the establishment of an Agricultural School at Rochester.

You do not over-rate the importance to the agriculturist of having correct analyses of the soil he cultivates, as I can testify from experience. Had my different fields been analyzed for the past three years, and manured with reference to the crops to be grown thereon, supplying instead of stable manure those inorganic substances that were needed, it would have been hundreds if not thousands of dollars in my pocket.

Please to consider me a subscriber to the amount of \$100, or \$500 should the latter sum be necessary, upon the terms specified in your note, and believe me

Your ob't serv't,

J. W. BISSELL.

Rochester, July, 1847.

MR. BISSELL is the owner of a large nursery, a part of which is on land that lacks lime. He was not aware of this fact till he got the writer to analyze his soil. Of the mineral elements found in the bark of an apple tree, fifty-one and a half are pure lime united to carbonic and other acids. In the heart wood the amount of pure lime is over 36 per cent.; in the sap wood 18.63 per cent. Estimating this alkaline base with its associate acids, and more than half of the ash of this tree is lime.*

If we remember rightly, Mr. BISSELL informed us that he had lost some 17,000 small apple trees grafted, choice fruit, on the land we examined. Hence, he truly says, that it would have been hundreds, if not thousands of dollars in his pocket if he had been early informed by critical analyses just what his soil lacked, and his fruit trees must have to flourish in the same. Where lime exists in a soil in a free, available form to the extent of one part in one hundred thousand, we find no difficulty but labor to separate and weigh it.

The following is the result of the analysis of a better sample of Mr. B.'s nursery soil:

Water of absorption,.....	3.00
Organic matter,.....	5.94
Alumina,.....	4.26
Oxide of iron,.....	3.56
Silica,.....	79.00
Lime,.....	1.50
Carbonic acid,.....	.44
Sulphuric acid,.....	.27
Chlorine,.....	.19
Phosphoric acid combined with alumina, iron, and lime,.....	.17
Magnesia,.....	.52
Potash and Soda,.....	traces.
Loss,.....	1.33
	100.00

We thank Mr. BISSELL for his good opinion

* See American Journal of Agriculture, and Science, by Dr. EMMONS, Albany, for April.

and the generous offer to give from one to five hundred dollars toward establishing an Agricultural School. At first sight, there would seem to be little difficulty in raising \$6,000 to purchase 100 acres of good land, as a foundation for such an institution. One half of our subscribers giving a dollar a piece, or 600 of them contributing ten dollars each, would secure the object.— If a farm was purchased and held by trustees for a public institution, we have good reason to believe that the Legislature would give \$6,000 more to erect suitable buildings and place the school on a permanent basis. But they would hardly be justified to grant public funds to erect buildings on any man's private property; nor will individuals be likely to give money for such purpose. But the advantages of uniting the study of analytical chemistry and other sciences with practical agriculture are not appreciated. The popular mind seems not to grasp the immense benefits of giving to 100 young men the use of one acre each, to cultivate under judicious instruction at school, and thus aid them in paying for their board and tuition, by having all that their best skill can produce, while learning both the *science* and *art* of agriculture. Men will not believe that any improvement in education on the common collegiate system adopted more than a century ago, is attainable. We have long contended that an important improvement in the education of farmers and mechanics is entirely practical—but what can one man alone do in opposition to popular prejudice, without capital sufficient to found an institution? We have had no difficulty in getting pupils. The only obstacle has been to get land and suitable buildings for boarding, lodging, rooms for study, recitation, museum, cabir et and laboratory. These necessary conveniences we never had. Nor can they be hired at any reasonable rate.

The time will come when the study of the natural sciences that have a direct bearing on rural affairs, will be popular in this state. They will be taught in all our academies, colleges, and high schools, as well as at institutions established on purpose to connect their investigation with the art of tillage, fruit culture, &c. But, before academies can teach analytical chemistry in its application to agriculture, their teachers must obviously go into some Laboratory and learn the *trade*. And where can a Laboratory to teach *practically* agricultural chemistry be so cheaply maintained as on a good farm where students can work three or four hours a day at some healthful rural labor, and thus pay a portion of their expenses? Who will deny that industry and economy are important lessons to be taught to boys and young men? We are right in this matter, but shall not pursue the subject.

Don't forget to attend your County Fair, and become a competitor for the premiums.

Salt for Plum Trees.

JUDGE CHEEVER has called on us to say that he had lost three plum trees in consequence of putting salt round them. The trees were from two to three inches in diameter, and he used two quarts of salt to each. He was induced to apply the salt in consequence of having seen it recommended as a remedy for certain diseases in the plum tree, and as a promotive, also, of their growth and thrift. As to the quantity he *thought* he had seen it advised in the *Cultivator*.— In this we think he must have been mistaken, as we can find nothing of the kind. In the *Horticulturist* for December, is a communication from S. A. SHURTLEFF, M. D., of Brookline, near Boston, in which he states that in the winter of 1839-'40, he gave each of his plum trees a "dressing of about two quarts of salt." He was careful, however, not to put it nearer than a foot to the body of the tree.— The salt was that which had been used for pork, and he cautioned the gardner not to use the brine; but he, notwithstanding, did use about a gallon of it round one tree, which killed it. Dr. S. states that he used salt in the same way the next season, and, as he thinks, with beneficial results, so much so that he is "fully convinced that it is, if pro, er, y and judiciously used, a sure preventive of both the fungus [*black knot* or *wart*,] and the curculio." We should be glad to hear from others who have tried salt for plum trees, and hope results will be furnished for the benefit of the public. It is in this way only that we can ascertain with certainty the specific operation of any substance.—*Albany Cultivator*.

WE beg to assure our friend the editor of the *Cultivator*, that all "specifics" are extremely dangerous, whether administered to man, his domestic animals, or cultivated plants and trees.— A "specific," as salt for plums and quinces, a nostrum, and quackery are nearly synonymous terms. Certainly, all are not quacks that recommend "specifics," as Mr. DOWNING does iron for yellows in peach trees, and as another gentleman does common salt for quinces, in the August number of the *Horticulturist*, whom its editor endorses. We are anxious, as a matter of public good, that the conductors of the Albany agricultural and horticultural journals should take true scientific ground in regard to the feeding of all living things on the farm, whether animal or vegetable. Common salt is very useful to sheep and quince trees in very small doses; but salt alone will make poor mutton, wool, quinces, or plums. Equal care, equal study should be constantly given to supply every other constituent of the animal, or vegetable, as well as the chlorine and sodium of salt,—as well as iron to peach trees afflicted with the weakness called "yellows."

We repeat the remark that, all "specifics" are dangerous remedies. Had Judge CHEEVER been told that common salt formed less than the *twentieth part* of the small quantity of ash and minerals in a healthy plum tree, he would have been more cautious how he used this mineral for the manufacture of the wood and fruit of the trees, to which it was fatally applied. Twenty-five years study and experience have taught us the proneness of the popular mind to adopt a system of empiricism in the treatment of all diseases. The splendid fortunes made by the dealers in nostrums or specifics furnish proof positive that the people really love humbug. For

the honor of rural science, we hope neither the love of money nor of popularity will betray our Albany contemporaries, unconsciously, into the ranks of those that foster and profit by the follies of the age. It is so much easier and pleasanter to sail with the current than to grasp the laboring oar and row with might and main up stream, for no other compensation than the consciousness of doing good, that not one in ten thousand is willing to forsake the former and adopt the latter course.

Hessian Fly—(*Cecidomyia destructor*.)

GREAT complaint has been made this season of the ravages of this well known insect. As the fly lives only some ten or fifteen days during the last weeks in September or the first in October, if no wheat was up, and prepared as a nidus wherein to deposit its eggs, very few, if any, Hessian flies would be found in the spring. Until farmers shall come to some understanding, and make a common and simultaneous effort to destroy this insect, it will continue to increase. Sowing a land in a field *early*, to furnish young plants for the fly to work on, and then bury with the plow in the earth, both the wheat and the larvæ of the fly, will destroy countless millions of them.

Late seeding is indispensable unless the wheat grower desires to propagate more insects than grain. No wheat should be sown before the 20th of September. One man may raise flies enough on a 20 acre field, sown in the first week of September, to destroy half the grain in a whole township the spring and summer following.—We have been surprised at the indifference with which many farmers regard the increase of insects injurious to their field and garden crops.—The annual loss to the agricultural interest from this source alone is many millions.

The man that raises a large crop of Canada thistles, or of Hessian flies, injures a whole neighborhood by their spreading, as well as himself.

Plowing only once for Wheat.

MANY good farmers are adopting the practice of plowing both stubble and pasture lands only once before seeding with wheat. The after culture is performed with the common, or the wheeled cultivator. Mr. C. H. RANDALL, of Portage, Livingston county, put in fifty acres last autumn with once plowing, which has turned out equal to any in the town at the recent harvest. He plowed *twelve inches* deep with a stout four horse team in the first instance.

Deep and fine plowing (by fineness we mean not running too far to land,) are giving larger crops with less labor than were raised three or four years ago. Every man should lime his wheat before he sows it; and instead of wetting

the seed with simple water, it is better to use a strong brine of common salt. Those that believe in the doctrine that it always takes something from the soil to make 30 bushels of good wheat grow on an acre, will do well to try the experiment of applying 10 bushels of unleached ashes, a like quantity of slaked lime, 3 bushels of salt, 1 of gypsum, and 2 of burnt bones, to an acre of this grain. The ashes, lime, salt, gypsum, and bones, will contain all the earthy elements found in a good crop of wheat. Any time before snow goes off will answer to scatter the compost over the field. Some prefer to apply the ashes, lime, &c., at the time of seeding, covering all with the harrow, or cultivator.

Seeding with Timothy after Barley.

MR. EDITOR:—Last year I sowed a piece of ground that I was calculating to lay down for meadows, part with spring wheat and the remainder with barley, and seeded the same with clean timothy seed. This spring I began to notice that the grass on the barley stubble appeared to be all timothy—while that on the wheat ground was a mixture of timothy, small clover, and red top. When the grass came to maturity, another striking difference became apparent—the timothy on the barley ground grew thriftily, turning out a good swath and all headed out—while on the wheat stubble it was little dwarfish stuff, very little of it heading out. Indeed the difference was so apparent that one would have supposed there must have been a difference in the seed, which was not the case. I think it could not have been mere accidental, at any rate I have come to the conclusion that by seeding with timothy after barley we can again raise it and make it profitable. I submit the above statement to your consideration, and if you think it worthy of notice, you will oblige a subscriber and perhaps benefit others by giving it a place in your columns, with your opinion upon the same.

YOUNG JOE.

Groton, N. Y., August, 1847.

REMARKS.—We are always glad, to receive short communications giving new facts on rural subjects. Barley exhausts the soil of the most important elements in the formation of perfect timothy plants less than wheat. Hence this grass will head out and do much better after the former than the latter crop. Return to the land where the wheat grew, all the straw in manure, and as much night soil as the wheat would make, and timothy will grow most luxuriantly. Be careful not to let any of the fertilizers that accrue from the consumption of the barley and timothy be wasted. And never forget that ashes, lime, gypsum, salt, and burnt bones well pulverized will make either timothy, clover, or wheat grow almost anywhere if judiciously applied.

KEEP farm tools under shelter when not in use.

Blight in Timothy.

MR. EDITOR:—Within a few years past the farmers of Central New York have observed a blight in their meadows, particularly those of Timothy (*Phleum pratense*), which has during the past season become very destructive, particularly in the counties of Otsego, Madison, Chenango, Cortland, Onondaga, and some others, I believe, and is becoming truly alarming, as it threatens to work great mischief to this highly valued grass. Having my attention called to this, I set myself about ascertaining the cause of this blight. On examination, the straw was found to be decayed just above the joint, sometimes the upper one and sometimes lower down. By the naked eye no cause of this decay was perceptible; but by placing the straw under a good compound microscope a little insect magnified to the size of a honey bee made its appearance, and seemed so much at home that I did not doubt but the death of the straw was the result of his depredations.

The animal, when you know where to look for him, may be seen by the naked eye, of a whitish yellow and about as large as a grain of Indian meal. When magnified, it is a perfectly developed insect without wings, having six legs, with scattering hairs on its body, and except its color, which is a light yellow, resembles a bee with its wings removed. It is easily injured by handling and therefore needs care in searching for it.

The most natural conclusion concerning its origin, is, to my mind, that it hatched from an egg dropped down between the leaves before heading, and as the grass grew and headed, it remained between the stalk and leaf, where it in due time hatched and commenced its work of destruction. In some meadows it hatches and begins to work (for it must eat *something*) so early that the grass does not head at all. This was the case in some parts of the meadows of A. N. ANNASS, Esq., of De Ruyter, Madison Co.

The insect, to be found, must be looked for as soon as the head begins to turn white. But your next inquiry is, how can it be prevented? This question I cannot answer satisfactorily to myself; yet if it is produced as I have supposed, its ravages might be somewhat mitigated by feeding off the grass just after the egg is deposited, if this time could be ascertained. It might be well to sow clover instead of timothy, and then, if my conclusion is true, no danger of blight from this cause need be feared. I hope that future observation will put this matter beyond a doubt, and if possible devise a plan for preventing the evil.

GERDON EVANS,

De Ruyter, Aug. 5, 1847.

THE wisest man may occasionally do a weak thing—the most honest a wrong thing—and the worst of men will sometimes do a good thing.

Hydraulics for Farmers.

BY C. N. BEMENT.

NUMBER 11.

Montgolfier's Ram.—To Montgolfier, of France, we are indebted for the discovery, or rather the improvement of this useful machine—hence its name, *Montgolfier's Ram*.

The *belier hydraulique* of Montgolfier was invented in 1796. Although it is on the principle of Whitehurst's machine, its invention is believed to have been entirely independent of the latter. But if it were even admitted that Montgolfier was acquainted with what Whitehurst has done, still he has by his improvement, made the ram entirely his own. He found it a comparatively useless device, and he rendered it one of the most efficient. It was neglected or forgotten, and he not only revived it, but gave it a permanent place among hydraulic machines, and actually made it the most interesting of them all.

The device by which Montgolfier made the ram self-acting, is one of the neatest imaginable. It is unique. There never was any thing like it in practical hydraulics, or in the whole range of the arts; and its simplicity is equal to its novelty and useful effects. Perhaps it may be said that he only added a valve to Whitehurst's machine. Be it so; but that simple valve instantly changed, as by magic, the whole character of the apparatus.

Montgolfier's great improvement, which made the machine self-acting, was to substitute an outlet valve, shutting upwards in the place of the cock used by Whitehurst, which valve was weighted so as just to open when the water in the main pipe was in a state of rest. But the moment the outlet valve was opened by the weight upon it, the water then rushed out acquired a power in addition to its gravity—the power of its *momentum*—which was sufficient to close the outlet valve, when the same effect was produced that was produced by the shutting of the cock, and a jet of water was thrown upwards into the smaller pipe, which may be called the "raising main." The water in the main pipe was thus brought to a state of rest, when the weight on the outlet valve was again sufficient to open it, and the water rushing out of it created again the *momentum* necessary to close it, when a further supply was forced into the raising main and so the outlet valve kept constantly opening and shutting, or pulsating, as it may be termed, and a regular stream was made to pass up the raising main. An air-chamber was attached to the last, to produce an uniform flow of water, similar to that used in a common forcing pump. But the weight on the outlet valve was an imperfect contrivance, after all; because if the head of the water varied, the weight required to be varied also; and so long as the weight was the only method of making the ram self-acting,

the machine did not get into general use, being found oftener on the shelves of physiological cabinets than on the premises of the farmer. The late improvements of using springs and screws does away with the weights, and makes the hydraulic ram as nearly perfect as any other machine for the same purpose. A small vacuum valve supplies to the air chamber, as well as to the air vessel, which makes the flow from the raising main uniform, enough air to compensate

for that which the water absorbs, besides aiding the opening of the outlet or escape valve, by the partial vacuum consequent on the rebound or reaction.

Montgolfier positively denied having borrowed the idea from any one. He claimed the invention as wholly his own, and there is no reason whatever to question his veracity. The same discoveries have often been and still are made in the same and distant countries, independently of each other. It is a common occurrence, and from the constitution of the human mind, will always be one.

A patent was taken out in England, for self-acting rams, in 1797, by Mr. Boulton, the partner of Watt; and as no reference was made in the specification to Montgolfier, many persons imagined them to be of English origin—a circumstance that elicited some remarks from Montgolfier. The patent was granted to "Matthew Boulton, for his invention of improved apparatus and methods for raising water."

For the information of those unacquainted with the operation of the hydraulic ram, it may here be well to sketch briefly its operation.

Explanation.—The head or motive column descends from a spring or brook A, through the pipe B, near the end of which an air chamber D, and raising main F, are attached to it, as shown in the representation. At the extreme end of B, the orifice is opened and closed by a valve E, instead of the cock in Whitehurst's machine before described. This valve opens downwards, and may either be a spherical one, as in fig. 4, or a common spindle one, as in fig. 3. It is the play of this valve that renders the machine self-acting. To accomplish this, the valve is made of, or loaded with such a weight, or adjustment of the spring, as just to open when the water in B is at rest; then as in shutting the cock of Whitehurst's machine, a portion of the water will enter and rise in F, the valve in the air chamber preventing its return. Meantime the water in B has been brought to rest, and relieved

APPARATUS FOR RAISING WATER.—No. 2.

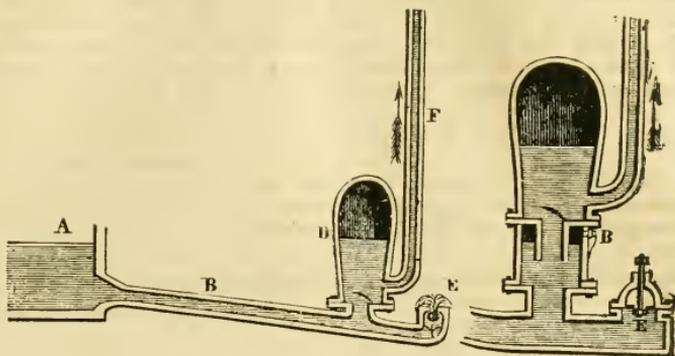


Fig. 4.)

Montgolfier's Ram.

(Fig. 3.)

for a moment of the pressure and rush of water, the pressure is insufficient to sustain the weight of the valve E, which drops, and re-opens the outlet hole at E, when the current is again put in motion, and acquires force enough to close the valve E, when another portion of the water is again forced into the air vessel C and pipe F; and thus the operation is repeated, as long as the spring or brook affords a sufficient supply, and the apparatus remains in order. This process, or pulsation, like the click of a clock, continues until accident or wear stops the working of the valves. The valves make from twenty-five to sixty strokes per minute. The machine is set in motion by pressing down the valve E, fig. 3.

The surface of water in the spring or source, should always be kept at the same elevation, so that its pressure against the valve E may always be uniform; otherwise the weight of E would have to be adjusted, as the surface of the spring rose and fell.

As the ascending column of water communicates with the air in the reservoir D, this would soon be exhausted, if a fresh supply or portion of the air were not introduced at each stroke of the ram. Thus when the flow of the water through B is suddenly stopped by valve E, a partial vacuum is produced immediately below the air chamber, by the recoil of the water, at which instant the small valve B, in fig. 3, opens, and a portion of air enters, and supplies that which the water absorbs. In small rams, a sufficient supply is found to enter at the valve E.

Air-vessels are indispensable to the permanent operation of these machines. Without them the pipes would soon be ruptured by the violent concussion consequent on the sudden stoppage of the current of the motive column. The air being elastic, breaks the force of the blows.

This beautiful machine may be adapted to numerous locations in the country. When the perpendicular from A to the valve E, is but a few feet, and the water is required to be raised to a considerable height through F, then the

length of the driving pipe B must be increased, and to such an extent that the water in it is not forced back into the spring, when the valve in E closes, which will always be the case, if the pipe B is not of sufficient length.

Fence Making.

MR. EDITOR:—I began to build fence on the following plan 17 years ago, and it answers well. It is generally approved and rapidly getting into use. I first stake out the ground where I want the fence built; then set or drive my posts about 18 inches in the ground, and then roll in all my big stones and place them so that they will not be over about two feet high. Then line the top of the posts and get the top of the fence as near level as the ground will admit, not over $4\frac{1}{2}$ feet in height. I usually put on three boards, about six, seven, or eight inches wide, beginning at the top with the narrowest and put them about seven and five inches apart. All that remains to be done is to fill up under the boards with smaller sized stones, and banking the fence up to the boards with dirt. This should be well seeded with grass seed. Boards may be used 14 feet long, with one post in the middle; or the boards may be 16 feet and two posts in the middle. When the posts are well fastened in this way, I do not think capping pays the cost.

Yours,

NATH'L SMITH.

Gorham, July, 1847.

Improvement in Hemp-Brakes.

[We copy the following description and illustrations of an improved Hemp Brake from the "Farmers Library and Monthly Journal of Agriculture." It a matter which will interest, and perhaps benefit, many of our readers in the south and west.]

JOHN S. SKINNER, ESQ.—*Dear Sir:*—I send you the description and drawings of a Hemp-Gin, invented and recently patented by my brother, FRANKLIN P. HOLCOMB, under the following circumstances: My brother, who is a civil engineer by profession, but possessing fine mechanical talents, was stopping with me at my farm, when I happened one day to be reading, from the Farmer's Encyclopædia, what Mr. CLAY says in an article he furnished to that work on the subject of Hemp-Machines, which is to the effect that no machine had ever been invented, and he feared none ever would be, to answer as a substitute for the hand-brake. I told my brother that he owed it to the fact of his having been a farmer's boy to supply, if possible, this great desideratum to the hemp-growing interest; and also expressed the opinion that we might probably grow hemp here to advantage, if the breaking and scutching could be done by machinery.

He finally went to work at it, and I sowed a small quantity of hemp, which we water-rotted. This we got out with the machine. Still he did

not think it perfect or right, and went on improving, and altering, and experimenting, for almost another twelvemonth; and meantime I grew a second crop of hemp for him. This we also got out with the machine, and had a portion of it manufactured into rope. And, finally, the great difficulty that had troubled him so much—the waste in the scutching—was overcome, and we had the satisfaction of seeing this simple little machine break and scutch, with the least possible waste, at the rate of about 1,000 lbs. of clean, merchantable hemp per day—doing the work of some twelve or fourteen men.

But meantime Mr. BILLING'S machine had made its appearance; and our friend Gen. TALLMADGE had commended it so highly in his Address before the American Institute, that my brother, supposing the final object had been attained, and never having entertained any pecuniary views in connection with it, proposed doing nothing farther with his machine. But he subsequently learned that Mr. BILLING'S machine, though no doubt an excellent one, was large, somewhat complicated, and costing four or five times the price of his, and probably intended rather for a stationary power to work in a manufactory, than for the general use of hemp-growers, to be worked by their hands, on the plantation, or in the fields. Under the circumstances he applied for a patent, which was granted, and Mr. OBED HUSSEY, of Baltimore, machinist, the ingenious inventor of the Reaping Machine, has become interested in it, and will take means to introduce it to the attention of the hemp-growers of the West.

Nothing can be more simple in its construction. The rudest and roughest hands can work it, and with little danger of its getting out of order. The cost of it will only be from \$75 to \$100, exclusive of the horse-power. It requires about a two horse power to work it. From my own experience in the use of it, I can confidently say, and assure my brother farmers of the West, that the largest crop of hemp they grow would hold out no terror, so far as the breaking and scutching of it was concerned, with the use of this machine. My clear conviction is that it will go into very general use in the hemp district, and prove an important acquisition to this branch of Agriculture; and if it does, though not having the slightest pecuniary interest in it, I shall feel myself highly rewarded for the interest I have taken in the enterprise.

Truly yours,

CHAUNCEY P. HOLCOMB.

Devondale Farm, near Newcastle, Del., 1847.

SPECIFICATION OF HOLCOMB'S HEMP-BRAKE.

To all to whom these presents shall come:

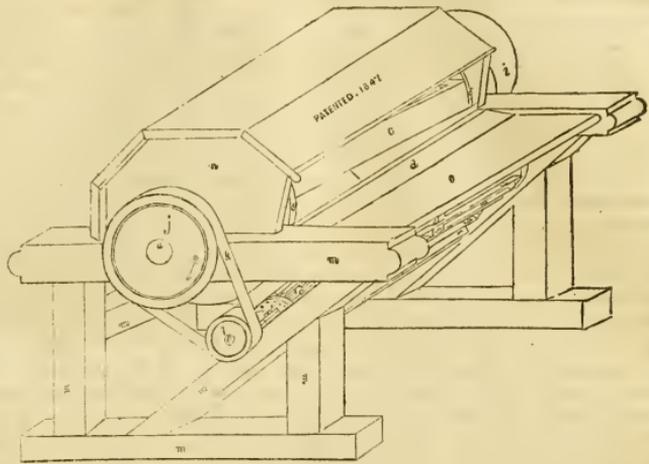
Be it known, that I, F. P. HOLCOMB, of the town and county of Newcastlle, and State of Delaware, have invented a new and useful machine for breaking and cleaning hemp at one and the same operation: and that the following is a full, clear and exact description of the principle or charac-

ter which distinguishes it from all other things before known, and of the manner of making, constructing, and using the same, reference being had to the accompanying drawings, taking part of this specification, in which fig. 43 is a perspective view, and figure 49 a vertical section of the machine. The same letters indicate like parts in all the figures.

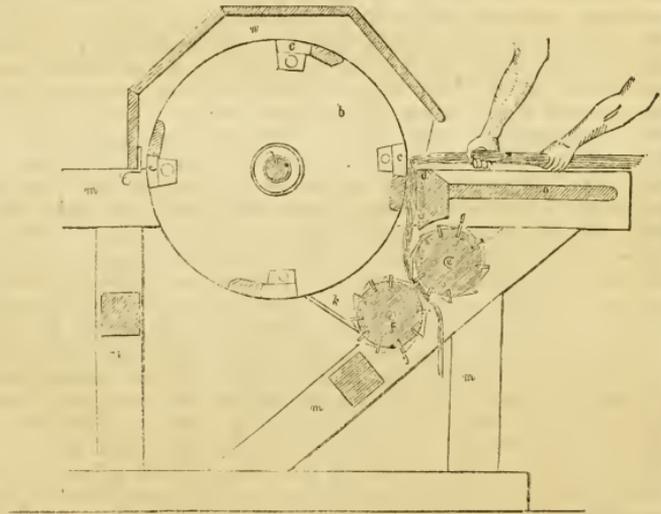
In machinery heretofore employed for breaking and cleaning hemp, &c. at one operation, by revolving brakes, the hemp has been acted on during a large portion of the circle of revolution, the hemp being broken by passing it between a pair of rollers or revolving breaks and scutchers, that mesh into each other, and break the hemp by bending it short between them. This method is highly objectionable, in consequence of the great length of the fibre over which it is scraping, which is found to wear the hemp in practice so as to render it unmerchantable; it has also been attempted to break and clean the hemp between a revolving break and a stationary concave, but this method is liable to the same objections. In fact, the hemp never can be broken and cleaned by the same roller that breaks it, without subjecting it to injurious wear. Consequently, the machines have been abandoned as useless; for if the hemp is broken by a stationary break, against which the revolving break acts, and thence passes to another wheel, placed in contact with said revolving break, to be scutched, the break scrapes over the hemp the whole distance from the bed-brake to the point where the scutcher acts, and wears the surface into tow.

My invention is for the purpose of obviating these difficulties, and is of the following nature: I employ a large revolving break, with the swords set at a tangent (this is necessary to the well working of the machine, as a small one would present the swords at too great an angle,) which acts against a stationary bed-plate, and there breaks the hemp as it is presented by the hand. The ends of the hemp, as soon as they pass down below the edge where they are broken, are thrown off by the centrifugal action of the revolving blades, and they do not come in contact with it any more, but as the hemp is fed in, the ends aforesaid pass down and are caught between the scutchers at the angle of their junction, without laying against either so as to be rubbed, and is thus cleaned. The scutchers are very small cylinders, with blades projecting from them radially, that only mesh slightly (if at all) past their pitch-lines; these only act on that part of the hemp immediately between them, or at the junction of their curves to clean it, and it passes through them without injury—which is not the case where the breaking and cleaning are done by the same wheel or roller on the different parts of its circumference.

The construction of my apparatus is as follows: On the cap-pieces of a suitable frame (m) I suspend a shaft (a) in suitable bearings, on which I affix two cylinder heads (b), to which I attach any suitable number of slats or beaters (c); these are placed diagonally, and are made to act on a straight, horizontal, stationary bed-piece (d), which is armed with iron and attached to the frame (m); back of this bed-piece, and a little below its surface, there is a feed-board (e), over which the hemp is fed into the machine; just below the bed-piece, two small scutcher cylinders (f) are so placed as to receive the hemp between them without wrapping on either, the blades (g) of which may work into each other more or less, according to the material to be acted on. The hemp is held in the hand of the workman to be cleaned, and is presented over the bed-piece (d), (as



(Fig. 43.) Perspective view of F. P. Holcomb's Hemp and Flax Gin.



(Fig. 49.) Sectional view of F. P. Holcomb's Hemp and Flax Gin.

clearly shown in figure 49,) where it is gradually broken as it is pushed in, and the ends are thrown down in between the scutchers, where the shives or burds are thrown out. The hemp in this way is fed in, cleaned half its length, and then turned and the other half finished, and the hemp comes from the machine in a perfect and merchantable state.

Having thus fully described my machine, what I claim as my invention, and desire to secure by letters patent, is the combination of the stationary bed brake and the rotary break, and small scutchers arranged in the manner described, so that the hemp can be fed in by hand, broken and cleaned with but one handling and at one operation—the breaking and cleaning being done on separate cylinders, but the parts so arranged as that they are brought close together, and so adjusted as to only allow the machine to touch that part of the fibre that is to be acted on, thereby preventing its wear in the machine.

F. P. HOLCOMB.
 (A. P. BROWN,
 Witnesses. J. J. GREENOUGH.)

Farming, &c., in the West.

"FOR what man in his senses would ever undertake, with money, to clear up, fence, and put good buildings on a quarter section of wild land with any hope of ever realizing the amount of his outlay in dollars and cents?"

MR. EDITOR:—The above query, almost in the language of an *axiom*, is found in the July number of the Farmer, over the signature of S. W. With due respect for your worthy correspondent, whom I imagine a fat old farmer seated in his easy chair, looking out upon his fine farm, with its rich fields, his elegant mansion in the lovely grove, with its sparkling fountains, singing birds, and soothing zephyrs, just about in the center of the world with all creation jogging on its monotonous course around him, I must beg leave to take exceptions to the above query. As he takes another long pull from his "best Virginia fine cut," see what benevolence and pity fill his mind. Ah! he is thinking of the poor, deluded pioneer; the children of the west—sons of the forest, &c., who have left the "rich alluvial" of New York for a "barefoot living," and ague to boot, in the western wilderness.

We of "the west" are often amused by such like sentiments and boy descriptions of our country, people, and "et cetera," in the eastern papers, from the pens of gentlemen who have traveled *all over* the west. Some of their descriptions approximate the truth; but many are only impressions left upon a mind already biased, or filled with dreams of "sweet home." Some of the writers have left business that occupies their mind; dear families, that bind their affections to their homes, or the raven tresses of some loved Delila, whose parting kiss is still warm on his lips, are always floating before his eyes, and he sees nothing aright. Or like friend S. W., he "visited Ohio twenty years ago." Then Ohio was the "Far West," no means were afforded to market its produce—wheat was worth (in western Ohio) about 25 cts.; corn, 12½ cts.; pork, the powder and ball to shoot it; while salt cost \$9 per bbl., and other imported articles in proportion. And although S. W. must know that Ohio is one of the richest States in the Union, with its hundred steam boats, its ships, and canal boats, its cars flying in all directions, carrying its surplus wealth to all parts of the world; yet so strong is the force of first impressions, when he thinks of Ohio, it is Ohio twenty years ago.

Seven years ago I first visited this place, (southern part of Michigan.) It was indeed a new country. Few and far between were the cabins of the first settlers. If a sleigh-ride was to go off, the young man in his jumper, with auger and ax to fix-up in case of break down, started off the day before some ten or fifteen miles through a *cut out* road or over the openings, to gather up the gals—and let me tell you, Mr. Editor, some of the same gals would not dishonor the best parlor in old Seneca.

But how changed the scene now. In the west, improvements scarcely wait for time. Comfortable dwellings to a great extent have taken the place of the log cabin, surrounded by from fifty to two hundred acres of improved land, and all the comforts one can ask. Beautiful villages, with all the bustle, the anxiety, the busy din, the school, the church going bell, and all the paraphernalia of an eastern village of half a century's growth, have sprung up from the forest as by the touch of some magic hand. And where not ten years ago the Indian trailed his weary way, or sat unmolested in his wigwam, four locomotives daily shake the earth as they fly along, bearing the rich and rapidly increasing produce of our beautiful country.

S. W. evidently has a wrong opinion of the character of our first settlers. If many of your young men have emigrated from old Seneca, let him look about and he will see that they are generally the most industrious and enterprising—drones never leave the hive till they are compelled to do so.

I would be glad to say much more about the west and western society, &c., but I do not like to occupy so much space in your valuable paper. But one case in answer to the query of S. W., with which I commenced. Two years last spring a friend of mine purchased a large tract of wild land about nine miles from here, in what we call the "south woods." He built him a neat log house, sent for the "Farmer," and left the village for the woods. That season he cleared off and got in forty acres of wheat which he told me turned out about thirty bushels per acre. Now to the query. Wild land there is worth about \$4 per acre. \$12 per acre will clear and fence into convenient fields the heaviest timber land we have. Cost of getting in about 50 cents per acre, (only harrow in;) cost of seed, say \$1: harvesting and threshing, say \$3 per acre—\$20,50 cost of land, clearing, and first crop. I think the sale averaged about 87½ cts. per bushel—\$26,25 per acre, or \$6,25 net profit per acre, besides a lusty yield of straw. Last fall the stubble was burned off and another crop harrowed in, (together with another good bit of new land,) which now with little cost promises a good crop. Now the land should be stocked in grass about three years, when the roots will be well rotted and to all practicable purposes he will have an old farm. This is not an isolated case. In the immediate vicinity are half a dozen such farms, only a little older, beside a number smaller. Our openings require a greater outlay in team or to break, but when once broke and rotten they are like old farms.

If a young man, or old man is well settled on a good farm in "old Seneca," with S. W. I would advise him to there abide. But if his patrimony is small, or he has a large family whom he wishes to settle, he may turn a small farm there into lands

at the west, where in ten years, by industry and the rise of property, he may have a valuable estate. Others there are who have with difficulty saved enough to move to the west, yet by industry and hard work, a few years have seen them comfortably settled on a forty or an eighty of their own; whereas, had they stayed east where land is high, they would never have thought to do more than support their families. Others again, who have failed east, have emigrated, and in a few years with a new community and new circumstances, have retrieved their broken fortunes. Finally, the number who have lost property by moving west I think comparatively few.

With high esteem,

J. W. FALLEY.

Hillsdale, Mich., July 11, 1847.

Deep Plowing.

MR. EDITOR:—The term deep plowing, or plow deep, is frequently used in your practical paper. The thought often occurs to me how various it is understood by different farmers. One that has practised plowing four inches deep understands it to mean five inches; another that has plowed five, understands it to be six inches, and so on. I understand deep plowing to be ten inches—very deep, twelve. All farmers, with few exceptions, say they plow deep.

Now would it not be well, when speaking of deep plowing, for the writer to say six, eight, or ten inches, as the case may be, so that all may understand alike. Different soils require to be plowed various depths, but they may be classed so that the common farmer may readily understand the kind of soil indicated by the timber they have last produced, as a general thing. So far as my observation has extended, in Western New York, white oak, black oak, and hickory belong to one class of soils; beach and maple to another; pine another, and hemlock another. There is a marked difference in soils of land differently timbered. If all farmers would be to the little trouble of measuring the depth they plow, much to them would be gained. I say it not by way of satire when I state that but few know the depth they plow; it takes much practice to guess with accuracy the depth they plow.

I hold it to be of as much importance to give the precise depth in plowing in giving a description of an experiment on an account of a crop offered for a premium as any one thing. Let all remember that the deeper we plow the larger our farms are, without any additional taxes.

Penn Yan, 1847.

I. MALMORY.

MEDICINE FOR HOGS.—The American Farmer furnishes the following: "When your hogs get sick, you know not of what, give them ears of corn, first dipped in tar, and then rolled in sulphur. 'Tis ten to one that it arrests the disease and restores the pig to health."

Soaking Seed Wheat.—The "Farmer."

I HAVE observed that it has been quite an object with the farmers, as far as my acquaintance extends, (and I have had some practical knowledge in the business heretofore,) to prevent smut in wheat. This may easily be done, and at trifling cost, by soaking the seed from 24 to 36 hours in a solution of *blue vitriol*.

Dissolve blue vitriol in the proportion of 1½ oz. to the bushel of seed in warm water sufficient to dissolve; pour this into cold water sufficient to cover the wheat in a tub or other vessel, into which put the seed wheat; let it stand (stirring it occasionally to prevent fermentation,) for 24 or 36 hours—then drain off the liquor and sow it, and in no case, if properly prepared, will there be any smut found in the crop. It is practiced in this country by many, and I have tried it myself, and am sure it is a preventive.

I do not know but all farmers are acquainted with some way of preventing smut in wheat; but there is no way within my knowledge so simple and easy as *vitriol*.

The agricultural interests of this whole farming community might be very much improved, could the farmers be induced to subscribe for and attentively read the "Farmer;" and why they will not do so generally, is what I cannot understand. They have funds enough if they wish a political paper, and do not neglect their sons and daughters personal appearance as to expensive clothing or fashionable ornaments.—Better store their minds with a thorough practical knowledge of agriculture, and ornament their dwellings with useful and convenient appendages at less expense.

I have written much more than I intended when I commenced. I only meant to say a word of encouragement because I wish you success in your labors. I believe there is no subject of more importance than agriculture, and endeavors ought not and I believe will not be unassisted to improve it throughout our entire country.—Every principle of philanthropy and benevolence is, or should be, engaged to exalt agriculture as a calling, in the score of intelligence, to where its importance seems to indicate it ought to stand, viz: at the head of the most honorable employments in our free and happy country.

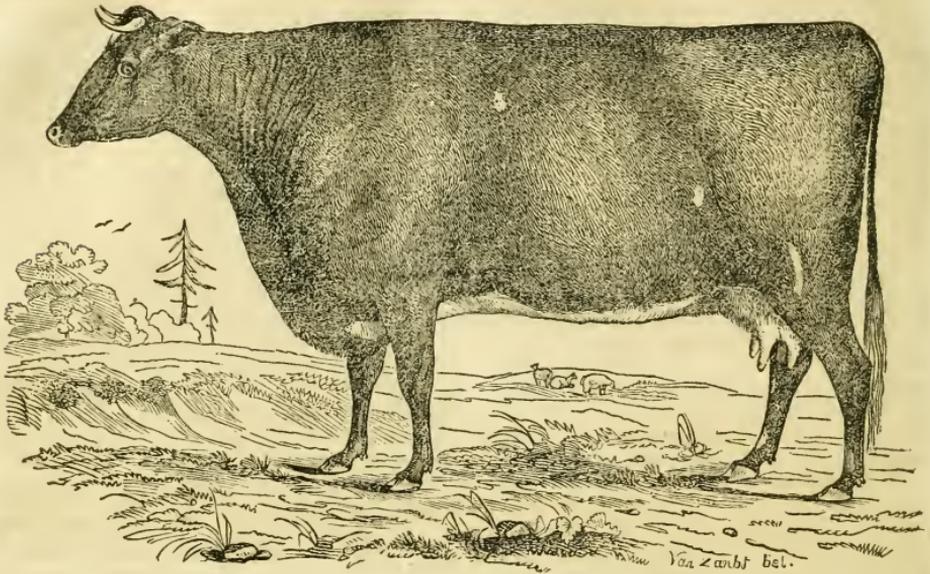
You will pardon my tediousness.

Respectfully yours,

IRA F. GLEASON, P. M.

Clymer, Chau. Co., N. Y., 1847.

BLACK AND WHITE PAINTS.—Tools, wagons, &c., painted black, absorb the sun's rays, become hot, and warp and crack. Painted white, they reflect, and do not absorb the rays, and consequently do not become hot, and they remain uninjured by warping. Hence all wooden articles should be painted of some light color.



MR VAIL'S "LADY BARRINGTON III."

D. D. T. MOORE, Esq.—As you are about giving to the public through the medium of the *Genesee Farmer*, a portrait of my imported Durham Cow "Lady Barrington 3d," to which animal was awarded the first premium for the best Durham cow in the first class, at the New York State Agricultural Society's Show, held at Auburn, in September last, I have thought it might be of some interest to accompany the portrait with her pedigree, and an extract of a letter I received from THOMAS BATES Esq., of Yorkshire, England, her breeder, and from whom I purchased her. The following is the pedigree, as given by Mr. Bates:—

"Lady Barrington, 3d, bred by Mr. Thomas Bates, of Yorkshire, England, calved 22d February, 1830. Got by Cleveland Lad, (3407;) dam, Lady Barrington, 2d, got by Belvidere: (1706;) g. dam, Lady Barrington, 1st, got by a son of Mr. Mason's Herdsman, (304;) g. g. dam, Young Alicia, by Wonderful, (700;) g. g. g. dam, Old Alicia, by Alfred, (23;) g. g. g. g. dam, by Young Favorite, by son of Favorite, (252;) Cleveland Lad, (3407;) the sire of Lady Barrington, 3d, was awarded the highest premium at the Royal English Agricultural Society show, at Liverpool, in 1841, and also the same year the highest premium at the Yorkshire Agricultural Society's show, at Hull, and he is now in the possession of Lord Feversham, at Duncomb Park; his grandsire, Belvidere, (1706,) was sire and grandsire of the Duke of Northumberland, (1940,) Lady Barrington, 1st, was bred by Lord Barrington, and this was his favorite tribe of cows from 1794, and I bought my first Lady Barrington in 1831, after his death. This tribe of cows generally breeds females, and will breed well to your Wellington Bull."

I will add that this cow was awarded the first premium at our Rensselaer Co. show last au-

turn, and is a good milker. She gave 22 quarts of milk a day, previous to sending her to the Auburn Show, and is the dam of the bull calf (got by my Wellington bull,) which I sold about a year ago, to Col. HAMPTON, of South Carolina, when about four months old, for three hundred dollars.

I also send you a paper containing a short description of the stock of THOMAS BATES, Esq., of Yorkshire, England, from whom you will perceive I make my importations. In addition to the first two animals I had from Mr. BATE's Bull Duke of Wellington, purchased when about 4 months old, and a two year old heifer (Duchess,) both of which cost me \$1400 delivered on my farm. For the last three years I have imported annually one cow sent by Mr. BATES—the last one a red and white heifer (Arabella,) which I received six or eight weeks ago.

These animals possess the superior combinations of fine prominent briskets, handling qualities, good compact form, and good milking qualities. Many think a cross of this blood will improve almost any Short Horns. I have no difficulty in selling the Bull calves from my Bates bulls and cows, when quite young, at \$300 each. I have an order ahead for the first one I can spare, at that price.

Yours very respectfully,

GEO. VAIL.

Troy, N. Y., August, 1847.

Fair of the State Agricultural Society.

Our friends will bear in mind that the Fair is to be held on the 14th, 15th and 16th of this month, at Saratoga Springs. Notwithstanding the location, we hope Western New York will be well represented. We annex such information relative to the arrangements as we have obtained since last month:—

☞ The Railroad Companies between Buffalo and Saratoga will convey passengers to and from Saratoga at ONE HALF THE USUAL FARE. Stock, Implements, &c., will be forwarded free of charge. Persons wishing to send stock, &c., from this section should apply to Wm. WILEY, Esq., at the Railroad Office in Rochester. A freight train for the transportation of Stock and Implements will leave Rochester at 5 o'clock, A. M., Sept. 11th. Every thing intended for this train must be at the Depot as early as 3 P. M. of the previous day—Friday, the 10th.

☞ The Rail Roads from Saratoga to Schenectady and Troy, are undergoing a thorough repair, and the board have assurances that they will afford every facility which can be expected from them in the transportation of stock as well as visitors to the Fair.

☞ Persons intending to send stock and articles for Exhibition by the Albany & Schenectady Rail Road are desired to communicate with C. L. Lynde Esq. Superintendent at the office of the company Albany. Articles should be directed to his care, with plain and full directions. Those intending to send by way of Troy, will direct to the care of Jonathan Edwards, Esq., President Troy & Greenbush Rail Road. Greenbush, and with full directions. All articles left to the care of either of the gentlemen above named, will be forwarded without delay.

☞ Those who intend to compete for premiums should remember that all animals and articles must be ready for examination on the first day of the Exhibition—that is, on Tuesday, the fourteenth of September. The first day will be devoted exclusively to the examination by the judges of the animals and articles exhibited, and no persons will be admitted within the enclosure on that day, except the officers of the society, judges, and exhibitors.

☞ Judges appointed for the Fair are desired to be present at Saratoga on Monday the 13th.

☞ The proprietors of the Hotels, &c., at Saratoga, have agreed to charge ONLY their usual rates for board during the State Fair—from 75 cents to \$2 00 per day.

Agricultural Fairs for 1847.

AGRICULTURAL FAIRS are to be held, this Fall, as follows. From other Societies we have not received information.

New York State,	Saratoga Springs,	Sept. 14, 15, 16.
Cayuga County,	Auburn,	Oct. 6, 7.
Erie "	Buffalo,	Sept. 22, 23.
Genesee "	Stafford,	Oct. 7, 8.
Jefferson "	Watertown,	Sept. 9, 10.
Livingston "	Genesee,	Sept. 23.
Monroe "	Rochester,	Sept. 22, 23.
Ontario "	Canandaigua,	Oct. 12, 13.
Oneida "	New Hartford,	Sept. 23, 24.
Orleans "	Albion,	Sept. 30, Oct. 1.
Seneca "	Ovid,	Oct. 14, 15.
Saratoga "	Ballston Spa,	Sept. 3.
Wayne "	Lyons,	Oct. 6, 7.
Wyoming "	Warsaw,	Sept. 29, 30.
Yates "	Penn Yan,	Oct. 1.
Vernon Center,	Vernon Center,	Oct. 6.

FAIRS IN OTHER STATES AND CANADA.

Caledonia County, Vt.,	St. Johnsbury Plain,	Oct. 7.
Rutland "	Rutland,	Sept. 29, 30.
Worcester "	Mass. Worcester,	Sept. 23.
Provincial Ag. Assoc'n,	Hamilton, C. W.,	Oct. 6, 7.

Winter-killed Wheat, &c.

MR. EDITOR:—As this is a subject of great importance, suffer me to give you a few thoughts on it, in addition to those offered by "W. S." in the June number of the Farmer.

In all parts of the country which I have visited, this calamity has befallen the farmer and his crop. In some places I have seen acres with scarcely a root alive, and what few have stood the frost are so blighted and stunted by the heaving of the main roots out of the ground, as to look sickly, and stand a fine chance for receiving the seeds of parasitic plants, [rust and mildew.] As far as my observation extends, one-fourth of the present year's crop has been destroyed, or greatly injured, by this cause. I agree with your correspondent that "if a thorough system of draining was adopted, and all the superabundant water drawn off, very little winter-killed wheat would be seen." But a method which I have practiced to some extent nearly eradicates the evil: this is to plow the ground deep, and put it into small lands, leaving the dead furrows deep, and then cleaning them out thoroughly with a shovel and plow.

This, at first thought, would seem to be an immense deal of work; but it is not. Let the furrows run towards the main ditch, or natural water course, then the loose earth plowed out, and lastly go through with a long crooked handled shovel, and clean them thoroughly out. A man can clean from four to six acres in a day, and do his work well. Many farmers have tried landing up for wheat, and have not paid any attention to cleaning out the water courses, and have failed, and had their wheat killed as bad as ever.

I have raised excellent wheat on land that was naturally covered with water three-fourths of the year. I think that it is of great importance on such lands that wheat should be sown very early in the season—as soon as the last week in August or first of September, so that it may get a good root, and grow deep in the soil. I suppose, too, that if wheat gets up thick and covers the ground, it will protect the soil sufficient to keep it from heaving with the frosts of spring. If this method of putting in wheat be adopted, together with feeding the crop with manures adapted to it, —such as gypsum, lime, ashes, and other ingredients of the crop—we shall hear much less of our wheat being winter-killed.

Yours, as ever, F. W. L.
Greece, Monroe Co., 1847.

MONROE COUNTY FAIR.—Our friends in this section will not forget that they are expected to attend the Fair, on the 22d and 23d of this month, and to bring whatever they may have that will add interest to the exhibition. The Cattle Show will be on the 22d. The exhibition of Fruits, Vegetables, Butter and Cheese, together with all articles under the head of "Ladies' Department," will be held in connection with the Horticultural Society, in MINERVA HALL, on the 23d. [For Premium Lists, &c., see Rochester weekly papers, and show bills.]

Interesting Extracts of Letters from Chautauque.

AGRICULTURAL GEOLOGY, &c.

WERE our soil not of that class denominated acid soils, we might be much benefited by the use of gypsum. Having no marl in our vicinity, we have to use the more tedious and slow process of a clover ley; and (in most cases,) barn-yard manure that has been leached by the snows and rains of winter and spring. Such farmers I think cannot get a very great dividend on their bank (I mean manure bank) stock. I am aware that there exists much perplexity as to the correct treatment of soils here, for they are of several different kinds, on the same farm.— They seem to be the disintegration of different strata of rock, and at different epochs. There is also the very marked appearance of the two first tables as you recede from Lake Erie, being once the beach of the lake, from the similar manner of the position of the large stone under the surface, and also the vast amount of washed pebble-stones intermixed with coarse sand and dirt.— The second flat is, as I before stated, an acid soil, gypsum giving no known results either on grass, grain, or clover.

The third flat is a deposit made by the many streams that flow into the lake from the hill, which is from two to five miles from the lake.— Here is a fine chance for the geologist to display himself agriculturally. I should be delighted to see Dr. LEE, in this section during some of his vacations, to take a peep at our country and soils, and say to us what we need to walk up by the side of old Monroe and Genesee.

I have bought me a farm of fifty acres, lying on the third, and running up to the hill nearly. It is in rather a low state. I shall drop the handsaw and plane for the hoe and plow. Any advice relative to our soils and their management will be gladly received. I shall write still more on the soils and what grains seem best adapted.

Yours respectfully,

B. S. E.

MR. EDITOR:—Again I will trespass on your time for a few moments, while I renew my engagement in my previous letter. As I stated, the lake level has three distinct, different soils, unlike in their general features. The first, commencing at the shore of the lake, is a sand intermixed with yellow dirt, or a species of loam, varying from ten to twenty feet in thickness, lying directly upon strata of black slate, strongly impregnated with carbureted hydrogen gas.— This strata of rock is underlain with a thin layer of hard, grey stone, much used for building purposes, lying at and under the surface of the water. Immediately under this is the Lockport fossiliferous limestone, of a thickness not here ascertained. Mr. HALL, state geologist, visited here, but I did not get the depth.

The stratum of rock as presented at the shore

of the lake, exhibits various contortions, evidently the action of volcanic force, which force the surface presents; the soil, lying in layers of the same shape of rock, underlying. This soil is also impregnated with the above mentioned gas; and, also held in solution by water, are alumina and sulphate of iron, which is often found crystallized by evaporation of the water as it exudes and drips down the edge of the rocks. This soil is well supplied with moisture, it being excellent grass land, and excellent for spring grains, and in some places for winter, giving a larger yield than either of the others. The timber growing upon it is the same generally found in this latitude and climate. The beech, linden or bass, sugar maple, iron wood, hemlock, and some ash and whitewood, &c. This range varies from a half to one mile in width. Between this and the gravel range, as it is termed, is a strip of spouty land, varying in width, termed swail, filled with durable springs of excellent water, some of which are sufficient to carry machinery.

The gravel, or second range, generally rises from ten to fifty feet above the first, and gradually rises until it strikes the third range. It is denominated the gravel ridge from the fact that it is formed entirely of small round washed pebbles, as found on the present beach of the lake, intermixed with soil formed by the abrasion of the different kinds of stone of which the ridge is composed. In digging for wells and other purposes, the gravel is found in layers of coarse and fine gravel alternating; in some of the layers of both is found a substance, white and sometimes of a yellowish cast, which unites the pebbles so that it is almost impossible to break it up with a pick. There are occasionally large flat stones interspersed, as they would naturally be thrown upon the beach of as large a body of water as Lake Erie. The soil is loose, having a deep loose sub-soil, so that the superabundant water passes freely off; in summers too dry many times.

You discover that whatever we apply as manure does not remain long, consequently a constant application is necessary for the increase of the elements necessary to the increased productiveness of the soil. The general custom is to apply the manure before plowing—in my opinion incorrect for a loose soil, preparing top dressing after plowing, *well mixed* by the use of the *harrow*; not merely once or twice passed over, but a continuation until both soil and manure become finely cut and united; then apply the seed and well harrow in. The rains will then decompose the manure, and carry the elements to the roots of plants; while, on the other hand, the manure is at once placed deep below the roots of most plants while growing, and by the time that they are matured sufficient to reach the manure, most of it has been carried down, by rains, to enrich the sub-soil, and by discount the farmer suffers a loss of more than one-half of his

bank stock. No wonder they think they must have large farms to get rich on, or migrate towards the "setting sun."

This soil is what I denominate an acid soil, from this one fact—it produces sorrel of an excellent growth. The cereals do not give a very great yield until much labor has been expended for its improvement in humus, by a prolific application of stable manure and clover ley, yet the acid seems to be too prominent for a satisfactory return for the toil of the farmer. As lime is quite expensive here, how would leached ashes do to counteract the bad effects of the acid? Fruits cannot be grown to perfection on it, as a general thing; drouth affects them too much, and also it affords a fine harbor for the curculio, and other insects. B. S. E.

Portland, Chau. Co., 1847.

REMARKS.—The fact that a soil produces sorrel is not conclusive that it contains an excess of acid, although it furnishes a strong presumption that such is the case. Place a pound or two of the soil in a large bowl, add a pint of pure rain water and let it stand thirty-six hours, and strain through several thicknesses of clean cotton cloth. If the liquid be sour or acid, it will change vegetable blues to red. This is tested by a strip of paper colored blue by cabbage juice, litmus, or any other organic substance of the right color.

On the open gravelly ridges in Portland and elsewhere, leached ashes will be of essential service both mechanically and chemically. But in all sections where lime is expensive, *unleached* ashes should be husbanded and applied to cultivated fields with the utmost care. Our Chautauque friends will do well to act on this hint.—They have a good deal of land that needs *drain-ing*. This will remove that excess of alum, cop-peras, and other salts which exist in portions of several towns with which we are acquainted.

Expensive as it is, our correspondent and others in Chautauque should give each fruit tree a half bushel of lime spread over all the roots, and well incorporated with the soil. To this, a bushel of good ashes will be a valuable addition. As a barrel of choice American apples are usually worth more in London than a barrel of Genesee flour, we expect to see the time when the lake towns of Chautauque will ship cargoes of this fruit to England and other foreign markets.—Good railways from Westfield to Boston and New York, and a free navigation from Dunkirk to the gulf of St. Lawrence, will greatly benefit the farmers of Chautauque county, as well as many others.

Those that sell cheese, hay, or grain, must never forget the fact that they are constantly robbing their farms of *bone earth*.

CORN.—Papers from Ohio, Indiana, Kentucky, Tennessee, and Georgia, all speak of the excellence of the corn crop.

Saxon and Merino Sheep.

MR. EDITOR:—Much has been said of late relative to fine woolled sheep, which are the most profitable, the Saxony or Merino. Some of our most respectable wool growers seem to be most in favor of the Saxony sheep. Very well—so be it—as many wish to wear a finer coat than can be made of Merino wool, it is necessary that some should raise the Saxony; but I find the Merino much more profitable for me, as I have given both a fair trial.

When I kept the Saxony, 2½ lbs. per head was all that I could get with good keeping; and in rearing lambs I would lose at least 15 per cent., and nearly the same in wintering old ones; and I think that there is not as much difference in their size, nor in the quantity of food they eat, as some have intimated. To be sure the Merinos are larger than the Saxony, but the difference is not great. I think that a fat sheep will not eat as much as a lean one, and certainly my Merinos keep in much better order, on the same fare, than my Saxons did, and I seldom lose one in wintering; and in rearing lambs we seldom lose 5 per cent.; and I find it fully as easy to shear 4 lbs. per head as 2½ from my Saxons—and indeed my ewes this year averaged near 4½ lbs. per head, counting lambs and all. My lightest fleece was 3 lbs. 6 oz., and two with lambs by their sides gave 5½ lbs. each, and one barren ewe gave 7 lbs. 14 oz. My sheep were thoroughly washed. The man who bought my wool was much pleased with it, and gave me the top of the market, 37½ cts. per lb., cash for my entire clip. My flock consists of about 200, about half of which are pure bred Merinos of the Paular kind, which I have bred from about 40 ewes and two bucks that I purchased from the most approved flocks in Vermont. The other half of my flock is a high cross of the common Merino on the native and Saxony, which makes their wool about as fine as my full blood Paulars, but do not give near as heavy fleeces. Now I say let every one make his own calculations, and keep the kind of sheep he pleases.

Very respectfully yours,

REED BURRITT.

Burdett, Tompkins Co., N. Y. July, 1847.

STONE ROPE.—A rope, nearly three miles long, now lies at Gateshead, England, which was the other day a stone in the bowels of the earth! Smelted, the stone yielded iron. The iron was converted into wire. The wire was brought to the wire-rope manufactory near Gateshead, and there twisted into a line 4,660 yards long. It is the stoutest rope of the kind ever made.

It weighs 20 tons 5 cwt. and will cost the purchasers \$5,508. It is intended for the incline on the Edinburgh and Glasgow Railway near the latter City. A rope of hemp, of equal strength, would weigh 33½ tons and cost \$1,400 more.

Items from S. W., of Seneca County.

THE WEATHER, CROPS, CHEESE, CORN, &c.

DEAR DOCTOR:—Our farmers are in the midst of their wheat harvest; crop is hardly an average. If you would believe the croakers, it has been more than half winter killed. The tropical regions might envy us our long hot days, and dry, calm, stifling, warm, short nights, during the last three weeks; corn can't grow in their 12 hour cool nights as it does here in our 8 hour hot ones. Now and then I hear an ignorant lazy farmer say that his corn is suffering for water—while all those who planted early and put fresh manure at the root, boast how fast it grows.

I never saw the good effect of artificial water, made by the union of the hydrogen of stable manure with the air's oxygen, as during this hot dry weather. Had Pætzholdt lived in our hot dry climate, he would have said less about burning vegetable matter for the benefit of its salts alone. As our seasons are, it seems to be indispensable to a good garden to spade in long manure every spring for its water forming agency alone. I believe that one half the benefit fruit trees in our climate receive from artificial manure, is from the water it forms during our summer drouths.

Why is it that of all the trades and callings pursued by man in this country, farming is the one doomed to traditinary error, and the vagaries of the crazy moon? It is precisely the reverse of this in China, for there the earth is improved to its utmost capacity, in the productions thereof; while the unwieldy Junk, now exhibiting at New-York, shows that their naval architecture is the same it was before the Christian era. Many a man has lost his labor, and a crop with it, waiting to plant in the *new* or the *old* of the moon. Three farmers out of five, will tell you that Indian corn will yield more with suckers on than off; yet actual experiment, at the same time, in the same row, proves that with the suckers off the ears form earlier, and that both ears and stalk are much larger.

I have heard one farmer of long practice say that sandy land should never be plowed deep, while another farmer whose farm is a very light sandy loam, says that his wheat failed entirely, until he commenced deep plowing, and that this alone has restored the former yield to his land. But if the economy of farming was committed to farmers' wives, I cannot but feel that there would be less stolid prejudice, and more of modern progress in it—if I may judge from the adroitness with which some of them contrive to sell salt and buttermilk for butter, and the quantity of cream others abstract from their cheese. I defy organic chemistry with its alkali's and acids to bleach a cheese so thoroughly of its oily coloring matter, as some good farmer's wife has done to a heavy, well bandaged indt-

vidual of the *casine* family, lately imported here from Buffalo. I fear such frauds will be as long as our naughty, though thriftless country merchants continue to offer their tempting merchandise in exchange for poor butter and worse cheese.

I believe there are twice as many acres of corn in Seneca county this season as usual; with the aid of the present rain the crop is certain to be good. Prices of breadstuffs and provisions must be very low the coming season, unless there is another short crop in Europe. 'Tis true that the keeping open of the English ports until February, will induce larger shipments from this country as soon as freights fall to correspond with the fall in produce; but what market can maintain even moderately low prices, in the face of such an avalanche of produce as our great west is now growing to send forward. S. W.

Waterloo, Sen. Co., July, 1847.

"Slobbers" in Horses.

I was not a little surprised on reading, in vol. VI of the "Farmer," that the cause of this troublesome malady, (or whatever it may be called,) is unknown to farmers. I had supposed, and I still think, that the "Slobbers" were caused by the plant called by Botanists, "*Lobelia inflata*," generally known by the name of "Wild Tobacco," "Indian Tobacco," &c. It grows, according to the quality of the soil, from 6 to 18 inches high. It is branching, hirsute; has a pale blue, irregular corol; capsule, or seed-vessel, bladder-like, i. e. inflated, whence its name "inflata;" has a sharp, biting taste, and if eaten causes temporary sickness at the stomach, and generally a flow of water from the mouth. It is used by some physicians as an emetic. It generally grows in thin grass, particularly on poor soils, and appears in flower in July, about the time when horses begin to be troubled with the "Slobbers." H.

Fairport, July, 1847.

NEW ERA IN NAVIGATION.—On the 20th May, a three masted schooner anchored outside Chicago harbor, loaded with 10,000 bushels of wheat, with which she had cleared for Liverpool. She goes by the way of the Welland Canal and St. Lawrence. This is the first clearance of the kind ever made from the inland waters of the great lakes for a European port, and constitutes a new era in the history of navigation.

TO RELIEVE COLIC IN HORSES.—Rub spirits of turpentine on the breast of the horse, and if he be drenched with it, also, he will be relieved. Horses should never be put to severe work on an empty stomach; but more horses are hurt by hard driving after a full feed, than by a full feed after hard driving.

How to use Straw as Manure.

MR. EDITOR:—I wish to inquire of the wheat growing readers of the Genesee Farmer what, in their opinion, is the best and most economical mode of converting straw into manure. When we have large quantities of straw, I conceive it to be quite an object to the wheat grower to endeavor to return it again to the soil in the shortest possible time, and in that way in which it will be likely to be most beneficial to the growing crops. I have observed that some farmers allow their straw to remain for years, in stacks or heaps about the barn, or other place when it was threshed, allowing their cattle to run to it at pleasure. Others perhaps will draw it out early in the spring, and throw it in heaps upon the ground which they intend for a fallow, letting it lay until they are about to break up the ground, and then spread the straw. Others again, as soon as the ground is sufficiently settled in the spring, draw their straw on to their fallow ground, and spread it as even as possible over the surface in order that the clover and other grass may sprout up through it, and before time for breaking up it will probably be so far rotted that it will not interfere with the plow. And again, there have been others so anxious to dispose of their straw in a summary manner, that they have even applied the torch to it; but I trust that in this day of agricultural improvement there are few farmers but what know how to make a better use of it.

I will here state the mode I have practiced for the last two or three years, not because I conceive it to be the best that may be adopted, but because I hope by so doing to get the experience of others through the Genesee Farmer, as I am comparatively a new beginner. At the time of threshing I make a pen sufficiently large to contain my straw, and keep the fence up until the straw is all taken out, as I consider this to be a much better plan than to let the cattle run to it at pleasure, as in that case perhaps not more than two or three of the most able ones will get any or but little if any; besides there have been instances of cattle having been killed in that way, by having pulled out so much from one side as to cause it to fall upon them. As soon as winter sets in, I commence cutting down my straw stack and throw it out profusely into the yard, once or twice each day. My object is two-fold—first, to let the cattle and sheep pick out of it what they choose, which is no inconsiderable item towards wintering them; and secondly, while so doing they are trampling the straw to pieces and manufacturing it into manure. But, by the way, for the past winter I have stabled my cattle every night, giving them plenty of straw for litter, and I would just say to any who are not satisfied that the superior condition of their cattle in the spring will pay for the extra trouble of stabling them—why, then, try it, that's all.

But to return. By the time winter is fairly through my straw is pretty much all under foot in the yard, and having become thoroughly saturated with the rain and snow, is in process of decomposition. There I let it remain until after breaking up my fallow, and just before cross plowing I haul out all my barn yard manure, including straw; spread it as even as possible, and plow it in. Now I should like to know if, after the straw is in the condition described above, it will pay the extra expense of money and labor to purchase lime and leached ashes in order to make it into compost heaps—lime to cost ten cents per bushel, and leached ashes twenty-five cents per load; the ashes to be hauled one mile, the lime four or five miles.

By giving the above an insertion in the Genesee Farmer, you will much oblige,
Yours, &c.
Webster, April, 1847. A. REYNOLDS.

Our correspondent's views in relation to the best methods of returning straw back to the land as manure, are generally correct. All that the barn-yard and stables will carry, should be thus used. Top dressing pasture and meadow lands in the fall with an evenly distributed and not too heavy a coating, is also one of the best methods of disposing of the over plus; and a top dressing to wheat immediately after sowing, and especially knolls, that are liable to blow bare of snow, and low places liable to winter-killing, are wonderfully protected and benefited. Such a pro-

cess will in all cases add one-quarter to the crop. So important is it considered in England that the process is dignified by the appellation of "Gurneyism," (see Colman's Tour.) Its distribution on meadows is objectionable when performed in the spring, as it will not become sufficiently packed and rotten but what it will rake up with the hay. Burning is decidedly injudicious and wasteful. *

GATES.—Every field on the farm should be entered by a good self-shutting and self-fastening gate. How long does it require to take down and put up a set of bars? At least two minutes, which, if repeated three times a day for a year, amounts to thirty hours, or three days of working time—which would nearly pay for a good gate. Or, examine it in another point of view—three times a day is eighteen hundred times a year; now is there any man between Halifax and California who would take down and replace a set of bars eighteen hundred times in succession in payment for a farm gate? Hardly—yet this is the price yearly paid by those who use bars that are constantly passed and the gate is not obtained by it. Again—how much better is a well hung gate, than one half hung?—or one with a good self-fastening latch, than one with a pin crowded into an auger hole? Try it by dragging a badly hung gate over the ground, eighteen hundred times in succession, securing at each time with a pin, and see if you do not think this labor would pay for good hinges and latch.

TO PREVENT OXEN HAULING APART.—Some oxen have a very vexatious trick of hauling apart when in the yoke. Mr. FRANCIS WINGATE, an experienced farmer at Hallowell, informs us that he prevented this in a yoke of oxen, by placing a small rope or line, a cod line for instance, across from the horn of one ox to the horn of the other, thus bringing their heads in some degree together. The line should be tied round the tips, which, if they have balls on, may be kept there very easily, and should be proportioned in length to the length of the yoke.

If this simple remedy will obviate the trouble in all oxen addicted to this trick, it is worth knowing. If the rope be tied around the tips instead of around the roots of the horns, they will have less purchase upon it, and smaller cord will answer the purpose.—*Me. Farmer.*

RECIPE FOR MAKING BLACK INK.—"Two quarts of rain water, one half lb. nutgalls, three ounces gum Senegal (arabic,) three ounces sulphate of iron; soak the nutgalls in three quarters of the water; the gum arabic in one half of the remaining water, warmed; the sulphate of iron in the other half; let them stand in the several vessels 48 hours, then mix them, and the ink is made. This recipe was received from Dr. Webster, Prof. of Chemistry in Harvard University."



HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

THE "Insect Blight" on trees is, in many sections of the country, prevailing to an alarming and quite unusual extent. Up to the present moment it has dealt out more destruction, this season, than in the whole course of the last seven years put together. We have watched the manner and progress of its attack, and battled with it from day to day for nearly two months past, and yet feel utterly unable to say a word more satisfactory in relation to it than what has already been said in the Farmer and elsewhere.

The apple, pear, quince, crab, and even the walnut and hickory in the forest, have all suffered. We have seen several orchards that seemed as though they had been scathed by lightning, and some persons have attributed it to that cause. We first noticed it here in the latter part of May, just when the apple was passing out of bloom, and when the fruit were just formed. And now (July 26,) it seems not to have abated a whit.—It has followed up its attacks on some trees, particularly the pear, which is most susceptible, until they are cut nearly to the ground, and not a few are entirely killed. This is what is generally known in this section of the country as the "Fire Blight," and there is no doubt on our mind but that it is solely produced by some minute venomous insect, the sting of which is as poisonous to the juices of the pear tree as the bite of a rattle snake is to the human body.

On its first appearance with us this season, the fruit spurs on both apples and pears were first affected. Suddenly we observed them turn black, as if killed by a severe frost, and on cutting them away we found the branches bearing the spurs to be black and dying for several inches, in some cases a foot, below the first point of attack. Immediately afterwards the attack was began on the extremities of the young, newly formed wood. If these were instantly cut away, perfectly clean, below the affected part, its progress was arrested; but if not cut, it proceeds down the branch into the old wood. In the apple, quince, and crab it usually stops after it has proceeded a foot or so below the first point affected; but in

the pear it seems to pass downward with great rapidity, until the whole tree is dead—producing as it goes along nearly all the symptoms and indications attributed to the *frozen sap blight*, of which much has been said at the west. The sap becomes brown and thick, the bark cracks and blackens, and in spots appears burnt and hard as iron.

We have just examined trees, to-day, dying in this way, despite all efforts to save them.—One limb after another was attacked and cut away, until it finally reached the trunk, and then all is lost: the destruction is complete. These trees we know were not affected by frost. In the month of June they were as healthy as trees could be, standing on *hard dry land, with well ripened firm wood*. Among them were a Seckel, a Passe Colmar, a Steven's Genesee, a Pound, and a St. Ghislain. It is worthy of remark that here, this plague has operated mainly on large bearing trees. In close proximity to these trees we have mentioned as seriously affected, stood thousands of young nursery trees, pears, apples, quinces, &c., from one to three months old, and so far not one is affected, more or less. It is further remarkable that it prevails in certain sections of the country, in certain neighborhoods, and in particular spots in the same orchard, to a much greater extent than in others. We have seen some orchards and gardens where not a tree escaped—others at hand of these that escaped entirely in certain sections. Syracuse, for instance, it has been remarkably destructive in—others it has not even appeared. The insect we believe to be gregarious, like the locust, and that it operates mainly in the night.

We are led to this opinion from having noticed one morning, quite early, part of a row of very thrifty young quinces that had apparently just been operated upon. The evening before, there was not a symptom of any blight to be seen on them, nor in a large 25 acre lot where they grew. Now some 30 or 40, all standing in the same row, were attacked *at once*; the ends of the shoots were drooping, and the leaves and wood of the affected ones were sprinkled with large drops and globules, from the size of a pea to a pin's head, of a whitish, thick, viscid fluid, which we found soon dried up in the sun, to a small brown globule. The affected branches, too, in a few hours became black as though burnt, as is usual with the blight. We have watched closely, by day and night, for the insect, but have not, so far, found the one which we believe commits the mischief. We can not for a moment believe that it is caused by the *Scolytus Pyri* spoken of in Harris' "Treatise on Insects." We have had branches examined by a powerful microscope and no trace of an insect on the pith or interior could be found.

We have thus given a few facts as we have found them, for the purpose of directing attention

to the subject. We hope that persons possessing the requisite leisure and ability will spare no effort in the endeavor to trace out the true cause of this monstrous plague of fruit trees.

Since writing the above we have reason to believe that we have made some approach to finding out the true cause of the "blight,"—but have not room for further remarks this month.

Double Crimson Currant.

THIS new and beautiful hardy Shrub was noticed in the Horticulturist a short time ago. We now copy the following description and figure from that journal, as it will be interesting to those of our readers who are forming collections of really choice and rare ornamental things:

"This new and charming variety of the Crimson Flowering Currant, is a seedling, raised in Scotland, from *R. sanguineum*, by Mr. David Dick, gardener to the Earl of Selkirk. It is but just introduced into this country, but since, like all the Currant genus, it is very easily propagated by cuttings, we hope speedily to see it in every good collection of shrubs.

The blossoms are larger than those of the single variety, the racemes from three to six inches in length, and the effect of the shrub, when laden, in spring, with these fine pendant blossoms, is very rich and striking. Its flowers open, according to *Paxton's Magazine*, about three weeks later than those of the parent species.

Ribes sanguineum, north of New York, should be planted in a somewhat shaded situation—on the north side of walls or buildings, or in places where it is partially shaded by evergreens. In such sites, it is perfectly hardy. It is quite likely that this double variety, being a Scotch seedling, will prove perfectly hardy with us in any situation."

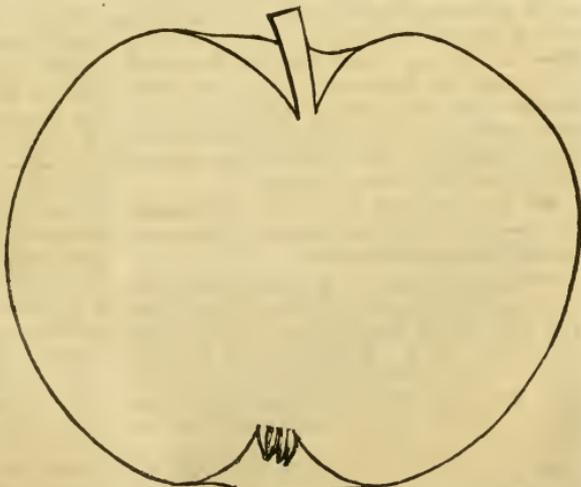


(Fig. 50.) *The Double Crimson Currant.*

The Red Astrachan Apple

THIS is an early fruit, of unsurpassed beauty and excellence. It is said to have originated at or near the city of *Astra Khan*, or at least in the Province of that name, in Russia.—It has for many years been cultivated in European and American collections to a limited extent, but remains at this day unknown to three-fourths of our fruit growers.

The tree is remarkably vigorous, with firm upright habit—foliage very large, doubly serrated, and whitish beneath, with long foot-stalks, tinged with red at the bottom. It is distinct in its appearance, and the eye soon becomes able to distinguish the tree from all others. The fruit is at once known by its rich crimson color, spread over with a delicate white



(Fig. 51.) *The Red Astrachan Apple.*

THE FRUITS OF AMERICA: Containing a selection of the choicest varieties cultivated in the United States.—

By C. M. HOVEY. Published by Little & Brown, Boston, in 8 vo. numbers every alternate month, at \$1 per number.

The first number of this beautiful new work made its appearance some time ago, and would have been noticed in the August number of the Farmer, but for our absence from home. We are well pleased, delighted with it. In style and execution, nothing ever before attempted in this country can compare with it. It contains portraits of the *Beurre d'Arenberg*, *Glout Morceau*, and *Van Mon's Leon le Clerc* pears, and the *Baldwin* apple. That of the *Leon le Clerc* alone is worth the cost of a number to any ardent lover of fine fruit. The descriptions are given with great precision and accuracy. The habits of the trees are well delineated by engravings, and the color of the wood and form of the leaf accompanies the fruit. Thus the fullest information that can be desired is given, respecting the merits and peculiarities of each variety.

There are some slight defects observable, we think, in the coloring. These are, we presume, inseparable from the mode in which it is executed. They are more apparent in the *Baldwin* apple. The color of the fruit, leaves, and wood, seems to us unnaturally light throughout.

Mr. HOVEY thus points out the chief difference between the *Beurre d'Arenberg* and *Glout Morceau* pears, which varieties have for years been confounded:—"The habit of growth of the *Beurre d'Arenberg* is erect and regular; that of the *Glout Morceau* spreading and irregular. The wood of the *Beurre d'Arenberg* is slender, long jointed, with short roundish buds, and of a clear yellowish brown; that of the *Glout Morceau* stout, short jointed, with very prominent, pointed, diverging buds, and of a dark olive. The leaves of the former are narrowly folded, with scarcely any serrature; those of the latter, broad, wavy, and deeply serrated." These, it will be seen, are prominent and important distinctions.

We have hardly a doubt but that, now, when such a spirit of inquiry is abroad throughout the whole country on the subject of fruits, this splendid work will receive sufficient patronage to amply remunerate its enterprising author. The price may be called high, but it is not—only 25 cents for a full and accurate description and elegant colored portrait of a fine fruit—one dollar for four, and \$6 for a book containing 24. It is cheap. Number two will be out in August, and will, we understand, contain the "NORTHERN SPY." We shall be mistaken if a good many copies are not sold in *Western New York*. D. M. DEWEY, No. 1 Arcade Hall, Rochester, is the agent.

The Paradise Apple Stock.

MR. BARRY—Sir:—In the July number of the *Genesee Farmer* you speak of apples being grafted or budded on a *Paradise stock*. Will you please explain more fully what a *Paradise stock* is, and if there is more than one kind of *paradise stock*? My object of inquiry is, that I may understand this matter, as I desire to try some experiments in grafting, budding, &c. Yours with respect,
Leonardsville, July, 1847. G. W. HINKLEY, P. M.

THERE is but one species of apple called the *Paradise*. It reproduces itself from seed. The fruit is small and slightly acid. It is the kind chiefly used for dwarfing the apple, but there is another kind called by the French *Doucain*, of larger growth and *sweet* fruit, (which also reproduces itself from seed,) that is much used for stocks. The trees grafted or budded on this attain a larger size than those on the *Paradise*.—The two species are frequently confounded by cultivators, but as both answer the purpose it is of little importance.—Ed.

To TRIM fruit trees excessively, is to consume their lungs, and destroy the vitality of the whole organized system.

Acknowledgments.

WE are indebted to Mr. LINCOLN FAY, of Portland, Chautauque county, N. Y., for specimens of "Fay's Seedling" and "Summer Bergamot" pears, and "William's Favorite," apple, all in eating August 10th. Mr. FAY is an extensive and skillful orchardist. He is now and has been for many years engaged in making a collection of the best market varieties of the apple, pear, peach, &c. He informs us that he has succeeded in raising a nutmeg peach superior to the "White Nutmeg," and full as early.

The seedling pear is a handsome, medium sized fruit; in form somewhat similar to the "English Jargouelle," of a pale lemon yellow, one side tinged with red. Judging from the specimens before us, which may have been picked too soon, it is in quality barely second rate. It is sweet and buttery, but rather deficient in juice, and inclined to an unpleasant toughness. It is a safe rule to act upon in dealing with new fruits, and one that we wish to see rigidly adhered to, not to admit or recommend any to general cultivation, that do not possess some positive superiority to any other. This seedling of Mr. FAY's we do not consider equal to *Madelaine*, *Bloodgood*, *Osband's Summer*, or *Dearborn's Seedling*.

—To BENJAMIN HODGE, Esq., of the Buffalo Nursery, for a copy of his Descriptive Catalogue of Fruit and Ornamental Trees, &c., for 1847 & 1848. It is a handsome pamphlet of 60 pages, containing lists of upwards of 160 varieties of apple, 120 of pear, 50 of plum, 40 of cherry, and so on, through both fruit and ornamental department—showing a *great variety*. It contains remarks on transplanting, with brief notes on the character of fruits and trees, and is embellished with figures of the Black Tartarian cherry, Fastolf Raspberry, Swainstone Seedling Strawberry, and Bartlett Pear.

On our journey westward we made a hasty visit to Mr. HODGE's establishment. It was just in "cherry time," and we had the pleasure of seeing and tasting a great number of the finest varieties. We saw also that his nursery was in good condition. He has now one of the finest lots of seedling pears and other stocks that we have seen this season. We regretted that Mr. H. was absent.

THE PEACH SEASON has now fairly commenced—the last two or three golden days having transferred their glories to the veins of the blushing and ripening fruit, which now palpitates to its very heart with the richness of its existence. At the landing, in the market, at the stands, in the streets, on the table every where, there is nothing but peaches, peaches! And yet the blessing is so welcome, so piquant, so fragrant, that millions of them would not create a monotony.—*Phil. American*, Aug, 12.

GOOD ADVICE.—The Editor of the *Tribune*, who has rambled extensively through the Far Western States, closes one of his interesting letters with advice which every young farmer, who has only his hands to rely on, should lose no time in taking:

"O ye who dwell in the gorges and on the slopes of granite hills! who are often inclined to murmur at the hardship of your lot in being compelled to do a fortnight's hard labor in wrestling twenty bushels of corn from the acre of niggard and stony soil, while in fertile Illinois less labor produces a hundred bushels—you have not yet learned to thank Heaven as you ought for that hard granite soil—for the glorious woods which so readily cover it, and the blessed crystal waters which gush from its flinty bosom! If you own a farm there, keep it, and by cheerful labor, guided by productive Science, render it each year more fruitful than the last; but if you have no land, and a young family forbids the hope of earning any at the East, strike boldly for the West at once, get hold of 80 or 160 acres, as well located for health or timber as you can find, and resolve, in spite of all obstacles, to make it the foundation of a competence for yourself and an outfit for your children."

Protection of Fruit Trees against late Frosts.

WHEREVER we have been in the Western States—in Ohio, Michigan, Illinois, and Wisconsin—we have listened to very general complaints about the fruit crops being so often destroyed by late spring frosts. It is the *great difficulty* there. B. HUBBARD, Esq., of Detroit, says, in the August number of the Cultivator, that this calamity occurs in Michigan about once in every four years. In a large portion of this State the same difficulty is encountered, but not so frequently nor so fatally as in the west. The following article from the July number of the Horticulturist presents a remedy that we have before heard of being resorted to, on a small scale, with entire success. It strikes us now more favorably than ever, and we recommend a trial of it to the fruit grower of every section visited by late spring frosts :

One of the most vexatious impediments to the successful cultivation of fruit that the cultivator has to contend against in many districts of our country, is the liability to partial or complete ruin to the blossoms or young fruit by the late spring frost. This disaster may be prevented by smoke, as is known to many; but the ease and safety of the application is not appreciated as it should be; and to call attention to it is the object of this communication. In the winter or spring previous to the season of fruit blossoms, I procure a wagon load of sawdust or refuse tan bark from the tannery, a part of which I place under cover that it may become dry, and the rest I leave exposed to the weather. At the season of exposure, if the weather gives indications of danger, and the temperature is nearly or quite down to the freezing point, at one or two o'clock in the morning, I take two or three shovelfuls of the dry bark or sawdust, and lay it on the ground; into this I put a coal of fire; then, on this place half a bushel or more of the wet bark or sawdust, and a smoke will quickly rise that will prevent the accumulation of frost for some distance around. Two men will make twenty or thirty of these fires in nearly as many minutes, which will be sufficient to protect a fruit garden of an acre in extent. If there is a slight current of air, I place the fires on the windward side of the garden, if not, they are so arranged as to give security to those trees which have blossomed most fully. At the season when fruit trees are in flower, frost rarely condenses on vegetation until late in the night, and if the fires are going by two o'clock in the morning, it will be soon enough, and more fuel will not be needed, as it would be, should they be set at an earlier part of the night.

Smoke, however annoying and vexatious under certain circumstances, may be turned to good account in the matter referred to. Artificial means are often resorted to, to retard the blossoming of fruit trees until a late period in the season, in order that the danger from the frost may be lessened. The latter method affords but partial safety at certain and considerable expense, which is worse than lost should no frost occur; because at such time as the flowers are kept back, the fruit will be delayed in ripening, and many of the best varieties cannot, in northern latitudes, mature, unless they have every day of the short summer. Smoke, of course, would be much more available in the fruit garden than in the orchard. But even in the latter, one hundredth part of the loss occasioned by a severe late frost would be more than sufficient to defray all the expense of protection by warm vapor or smoke in the way I have pointed out, and which I have thoroughly tested here.

REMEMBER that *Labor* is necessary to excellence. This is an eternal truth, although vanity cannot be brought to believe, or indolence to heed it.—*John Randolph.*

THE ANNUAL Exhibition of the Columbus (O.) Hort. Society is to be held on 7th and 8th Sept.

Experiment in Budding.

MR. EDITOR:—Allow me to say a few words on the subject of an experiment in budding, in which I am now engaged. Last summer I neglected budding till late, and consequently many of my buds failed. In order to be on the safe side this year, I commenced the operation early in July, (5th,) and found I succeeded much better. Having removed the bandage from my trees, one of them, in which I had set three buds, was broken off by the wind, just above the upper bud, (in consequence of the cross cut and the indentation caused by the tightness of the bandage.) Having watched the tree for a few days, I perceived that the buds began to swell, and in about a week they opened and put forth leaves. This induced me to try the experiment on others, and now I have a dozen or more, enough to test the value of the discovery, (accidental like most others,) of peach, plum, apricot, and nectarine, that have commenced growing. (The peach and the nectarine start more readily than the plum and the apricot.) There may be one objection to the starting of a bud on the same year that it is set, arising from the fact, that the greater portion of the growing season is past. Hence the new bud, being limited in the time of its first season's growth, may not become sufficiently united to the stock, or its wood not sufficiently hardened, to enable it to endure the severities of the coming winter.

In my experiments on this subject, I have not, at first, cut close to the bud when I have removed the top; and besides, I have generally managed so as to allow some half dozen leaves, (more or less,) to remain on the stem. I also watered freely during the drouth.

NOTE.—It may be thought that my practice in the above experiments is at variance with my theory of summer pruning as I have given it in some of my former communications. In answer, I reply, 1st. That subsequent experiments have satisfied me, that young trees will bear a much closer summer pruning without apparent injury than I had supposed, and closer, I believe, than older ones will bear. 2d. That my former objections were rather against the practice of keeping trees with a small head, or top, closely trimmed of all their young shoots, than against an occasional removal of them. And in addition to the reasons I then gave, I might also add, that if all lateral shoots or branches be kept off the body of the tree, it will not acquire sufficient strength to sustain the top. H.

Fairport, Aug., 1847.

HUMAN KNOWLEDGE is a proud pillar, but it is built in the midst of a desert of ignorance, and those who have ascended the highest, have gained a more extended view of the *waste*.

SEVERAL articles deferred till next month.

LADIES' DEPARTMENT.

Cheese Making.

MR. EDITOR:—Having just read an article on Cheese Making in your valuable journal, I take the liberty to make a few remarks upon that subject, having been an experienced practical English dairy-woman for 20 years. Since my residence in this country, I have often observed the difference of management in making cheese and butter—likewise in preparing rennet, and have, without egotism, always considered the English mode the plainest, safest, and best. Shall I intrude by making a few observations?

The rennet I used was prepared by myself.—Having washed most thoroughly the stomach of the calf in nine or ten pails of spring water, I used to fill it with salt and lay it in a jar with a thick layer of salt at the bottom, covering it also with a thick layer, and closing the jar at the top with brown paper doubled, until the next spring, at which time I filled the jar with strong brine, and in a day or two made use of the rennet, which was sweet and good, besides being very strong. As we kept a large dairy I had generally three or four Rennets in one jar. A very small quantity of this strong rennet would answer the purpose, viz: one tea-cup full for four pails of milk; the milk to be heated blood-warm, and the rennet applied briskly and in a circular manner around the cheese-tub; the coloring, formed of anatto, rubbed upon a piece of broken ware in a bowl of warm milk, and completely mixed with the rennet in the tub; within 20 minutes the curd will be fit to break, which must be done with both hands in a complete manner, and then left to settle. In three quarters of an hour the whey may be poured gently away through a range into another tub, and then pressed well with the hands, and even cut with a knife, and removed from side to side to extract every drop of the whey as much as possible. Then leave it a quarter of an hour to settle into firm curd; after which it may be broken very small into the vat, piled up in a conical form with the cheese-cloth tightly closed in at the sides. It will now be time to place it in the press, (a heavy one,) and in an hour's time take it out, turn it, and having well rinsed out the cheese-cloth in cold water, the cheese may be replaced. At 4 o'clock in the afternoon it must be taken out again, and a dry cheese-cloth exchanged for the wet one; replace it in the press, and the next morning having taken off the cheese-cloth, salt the vat at the bottom and rub a little into the cheese at the top and sides, (*if well closed*,) replacing it without any cloth; turn again and salt the same at 4 o'clock P. M., also the next day, and if a thick cheese, the day after. It is convenient to have two presses; and the brine which runs from what I call the dry press, will be useful to keep fresh

for rennet in the autumn. Thick cheese should always remain *three days in the dry press*, salted twice a day. There would not be any occasion of binding fillets around them if this was attended to, besides making the rind very hard.

When taken out of the press the cheese should be turned every day upon the shelf and washed in whey, in a fortnight or three week's time.—The English plan is to soak the cheese about 10 minutes, and then scrape the rind upon a table, wiping it very dry, and replacing it on the shelf with a dock leaf or two spread upon the top; and if changed every other day it will soon be coated with a beautiful bloom, and there would be no occasion of rubbing butter on the outside; for if *well made*, cheese will not crack open—will bear transportation to England *well*, and keep for 2 years. Butter also would be much better transported in small barrels, with first a layer of butter, then of salt alternately. The brine would keep it good, if, when placed and pressed down in the barrel, it had been properly made and the butter-milk well washed out.

Dairy work requires a great deal of care, cleanliness, and time, without which it does not answer, and the trouble and fatigue are completely lost—and the dairy, which would by vigilant attention prove such a constant source of pleasure to the farmer's wife, becomes a source of remorse, disappointment, and continual mortification. Dairies in England are always paved with stone or brick, and in warm weather *kept constantly wet*, so that they are equal (when underground, as our own Wiltshire dairy-house was built,) to the spring houses in Ohio and Pennsylvania; the milk likewise being kept in large leaden coolers, preserved the cream, and rendered it very thick and good.

With a thousand apologies for occupying so much space in your highly interesting journal, I remain, sir, with great respect,

Your much obliged friend, S. L.
Ogden, N. Y., July, 1847.

THE writer of the above is entitled to our thanks for her valuable communication.

RECIPE FOR MAKING YEAST.—To two middling sized potatoes add a pint of boiling water, and two table spoonfuls of brown sugar. One pint of hot water should be applied to every half pint of the compound. Hot water is better in warm weather. The yeast being made without flour, will keep longer in hot weather, and is said to be much better than any in previous use. Try it.—*Maine Farmer*.

BAKED FISH.—Cod, bass, and shad, are good for baking. Stuff them with a seasoning made of bread crumbs or crackers, butter, salt, pepper, and, if you like, spices. Put the fish in a bakepan, with a tea-cup of water, and a bit of butter, and bake from forty-five to sixty minutes.

SHEEP AND WOOL IN WYOMING COUNTY.—A late number of the Western New-Yorker, published at Warsaw, says:—"The whole number of sheep in our county two years since was about *one hundred and ninety-three thousand six hundred and four*. The amount is now probably 10 per cent. more. The town of Middlebury then had 21,560; Perry 19,784; Covington 15,988; Attica 15,777; Pike 18,538; Warsaw 15,735; &c. All the remaining towns a less number. The whole number of yards of woollen goods made at the different factories is set down at 65,518; value of manufactured articles \$51,353; value of raw material used \$23,880. The factory of Utter, Day & Co., located in this town, manufactured nearly 26,000 yds. of cloth, and used about \$9,000 worth of raw material.—Our markets for wool have been many this season. Attica, Wyoming, Warsaw, Gainsville, Pike, Perry, &c.; besides much of the wool, in the eastern part of the county has found a market at Geneseo; and north of us some have sold to buyers from Elba, Geneseo county. There has been at the lowest estimate, (and it probably exceeds this,) 500,000 lbs. of wool sold this season by the farmers of our county. Admitting the sales to average 28 cents per lb. which will not vary much, if any, from that, the amount of money paid out for wool will be *one hundred and forty thousand dollars*. A nice little sum to be scattered broadcast over our county."

A NEW MODE OF PREPARING CREAM FOR CHURNING.—When cream is being collected for churning, as soon as the first skimming is put into the vessel, add at the rate of half a pint of vinegar to each gallon of cream. Suppose you churn six gallons at a time, and collect only one gallon per day, put six half pints of vinegar in the vessel, at once, to the first day's cream, and so in proportion to any other quantity. Let all the vinegar for the whole churning be added to the first collected cream. I had this from a friend who supplies a large quantity of butter of the best quality to one of the crack shops at the west end.—*Gardeners' Cronicle*.

MINCE PIES.—Boil a beef heart gently in water till very tender; then take it out, and chop it very fine; add to it enough common molasses to moisten it; plenty of spice, cinnamon, nutmeg, allspice and cloves. Put it in a stone pot, and keep it in a cold place. It will keep all winter, and make richer pies than when first prepared. Other pieces of beef will do instead.

TO CURE WARTS OR CORNS.—Take the yolk of an egg, thicken it with fine salt, which apply as a poultice at night, leaving it off in the morning. Thus continue for two or three nights, until the part affected bears a whitish appearance, then leave it off entirely, and the wart or corn, it is said, will come out, *root and branch*.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,.....	\$1 06 1 09	Pork, bbl. mess	15 00
Corn,.....	50 53	Pork, cwt.,...	4 50 5 00
Barley,.....	44	Beef, cwt.,...	3 00 4 00
Oats,.....	31 33	Lard, lb.,...	9 10
Flour,.....	5 25	Butter, lb.,...	12 14
Beans,.....	75 87	Cheese, lb.,...	5 1/2 6
Apples, bush.	12 37	Eggs, doz.,...	8
Potatoes,....	31 37	Poultry,.....	6
Clover Seed,...	4 50	Tallow,.....	9
Timothy,....	1 50 2 00	Maple Sugar,...	—
Hay, ton,....	3 00 10 00	Lamb Skins,...	25 31
Wood, cord,...	2 00 3 00	Green Hides,lb	4
Salt, bbl.,....	1 19	Dry ".....	7 8
Hams, lb.,...	8 10	Calf Skins,...	9

Rochester, Aug. 23, 1847.

New York Market.

[By Magnetic Telegraph.]

NEW YORK, August 27—7 P. M.

FLOUR AND MEAL.—The demand has been good—the market steady. Fresh Genesee is selling at \$5 75 a 5 87½; Oswego 5 69, according to brand. Mich. \$5 50 a 5 62½. Round hoop in less demand, steady at \$5 50 a 5 87½. Receipts about 1200 bbls. Sales are 6 to 6500, including 3000 Oswego at \$5 62½; 2500 Genesee at 5 75; 800 brls sour flour at 4 37 a 4 56. Meal steady at \$2 62½ a 2 87½. Rye flour 4 a 4 25.

GRAIN.—Inquiry continues good for wheat. Quotations steady. Sales 2000 bu. Genesee at \$1 30; good do mixed Ohio at 1 20; 4000 do fair red western at 1 15, and 4000 do inferior at 1 05 a 1 07, all for milling. Corn not very active, but the tendency of the market is upward. Sales 25,000 at 73 a 74 for mixed, 75 a 76 for nearly yellow and flat yellow, and 77 for round yellow. Bye demand good. Sales 7 or 8000 bu at 50c. for new to arrive, and 92 a 95c for old on the spot.

A small sale of barley at 56c. Oats are lower, New Northern 48 a 50. Old 53 a 55. Sales 1600 lbs mess beef for government purposes, about \$13. 500 lbs good lard 10½ a 10¾—400 packages Ohio butter 11½ a 13c. Pork heavy. English Linseed Oil sold at 65c. 50 lbs clover 7½, timothy 16 a 18.—Flax seed 1 40½. 5000 lbs Ginseng 32 a 33. 4000 lbs beeswax 24c. 2500 lbs Whiskey 28½ a 28¾. Market dull. Sugar ¼ to ½ of a cent lower, on low grades, and ½c on sugar grades.—Low qualities of molasses 2c cheaper. Higher grades steady. Coffee steady. Sterling firm, 6½ a 7. Freights 18d and 7d to Liverpool.

ASHES—Market is steady; \$5.5 25 for pots.

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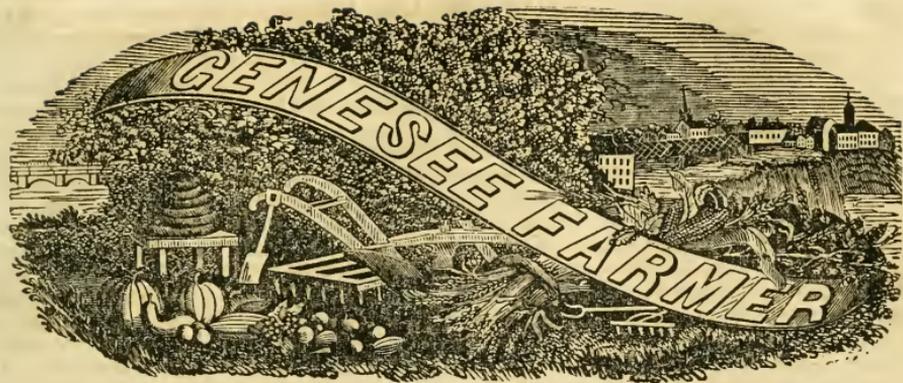
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THE GENESEE FARMER:

Issued the first of each month, in Rochester, N. Y., by

D. D. T. MOORE, PROPRIETOR.

DANIEL LEE, EDITOR.

P. BARRY, Conductor of the Horticultural Department.

Study the Soil. --- Magnesia.

In former articles under the heading "Study the Soil," we have noticed silica, (pure flint sand,) alumina, iron, and lime. We now ask attention to a few remarks on the alkaline earth called magnesia.

This mineral is found in the ashes of all, or nearly all, cultivated plants; and exists in the blood and lean meat of animals as well as in their bones, in the form of a phosphate, but in a much smaller quantity than phosphate of lime. The magnesia found in soils is mostly derived from a rock, technically called *dolomite*, which is a magnesian lime stone. Where the proportion of magnesia is large, and the rock near the surface, the soil is apt to be wet, and very sterile. This is particularly the case in some places in England and Germany. The free use of burnt lime has often proved injurious, from the circumstance of its containing more magnesia than can be safely applied to soils and crops at once. All the salts of this mineral, unlike those of lime, are extremely soluble, except the carbonate. — It is in this form that all sedimentary magnesian rocks are found. Rocks of an igneous origin, i. e., those that have been melted in volcanic fire, or something of the kind, which contain magnesia, present it to the chemist, not in the form of a carbonate, but a *silicate* of that base. Serpentine and talc (minerals of a volcanic origin,) are nearly pure silicates of magnesia. In hornblende and augite, (minerals of a plutonic or granitic origin,) we find a considerable amount of the same compound.

The student (and are we not all students?) who desires to learn something more of agricultural geology, will not take exceptions to the

introduction of such terms as hornblende, augite, serpentine, and talc, when he is informed that it is from the slow decomposition of these crystalline rocks, through the agency of carbonic acid in the atmosphere, aided by frost, rain, and electricity, that all stratified rocks of *carbonate* of magnesia and of lime are produced. The silicates of lime, potash, and soda, are decomposed by the same atmospheric agents which decompose the silicate of magnesia. Hence, almost all limestone rocks contain more or less carbonate of magnesia. Stratified sandstone is the silica with more impurities, separated from the alkalies and alkaline bases in granitic rocks.

Both Liebig and Boussingault suggest that magnesia will perform the function of lime in the economy of plants; and hence, if a soil is found to possess a fair supply of either alkaline earth, the other need not be applied. With due deference to these distinguished names, we must say that this idea of the isomeric* character of lime and magnesia in building up the organized tissues of vegetables and animals, is not well founded. Those excellent chemists have failed duly to consider the important fact in animal physiology, that the *phosphate of magnesia* never serves as a substitute for *bone earth*. Hence, if cultivated plants could grow and perfect their seeds without lime, using magnesia in its stead, all such plants and their seeds would be worse than useless as food for man and his domestic animals. The truth is that, Nature furnishes and uses both phosphates, but more of the salt of lime than of magnesia.

When we study rocks, soils, and plants, with reference to their agricultural value, we must never omit to consider the various elementary bodies which Providence has appointed to form the whole system of a healthy human being. — All authors with whom we are acquainted, that have written on agricultural geology and chemistry, have failed in this respect. Dr. SPRENGEL, whose analyses of plants are the frame work of

* *Isomeric*.—In chemistry it is one substance that can exactly fill the place and office of another.

Prof. JOHNSTON'S excellent Lectures on Agricultural Chemistry, found that the sulphate of magnesia and the sulphate of lime had precisely the same effect on a variety of crops; and inferred that the one salt might be used in all cases as a substitute for the other. Had Dr. S. stopped to consider how different must be the operation of an ounce of epsom salts (sulphate of magnesia) from a like weight of gypsum in the stomach and bowels of a man, he would have discovered the error of his opinion in regard to organising food for man. The sulphur in epsom salts is quite as good for peas or clover as the sulphur in gypsum. But the magnesia of the former can not do the work of the lime of the latter.

In the September number of the Albany Cultivator, Mr. HOWARD, its editor, notices the soil of a farm belonging to Mr. JOHNSTON near Geneva, which effervesces with acids, and is supposed to abound in lime, and yet it is much benefited by the use of burnt lime. It is not improbable that this soil, on analysis, will be found to contain more carbonate of magnesia than lime; and that the foaming on the application of a strong acid, is owing rather to the decomposition of the former than the latter mineral. Caustic lime possesses properties and exerts influences which do not belong to the natural mild carbonate. We should like to examine that portion of Mr. J.'s field to which no lime was applied, in his interesting experiment. The circumstance that wood ashes produce little or no good effect on this farm, seems to indicate that the soil is either quite clayey and wet, or that it abounds in all the mineral elements of maple, oak, and hickory, as well as of clover, wheat, corn, and potatoes. We have helped to clear a good deal of land, and have seen thousands of acres of virgin soil yield their first harvest; and do not now recollect ever to have found the place where a log heap was burnt, and more or less ashes left on the ground, that did not give a little larger wheat, rye, corn, oats, clover, or timothy, than grew elsewhere in the field.

There are exceptions to all, or nearly all, general rules. But, as wood ashes contain about the same amount of the salts of magnesia which ordinary crops require, we do not hesitate to recommend their application to meadows, pastures, and tillage lands, to supply the magnesia taken off in hay, grain, milk, and the urine and dung of animals, which are foolishly wasted.—Being very soluble, the salts of magnesia are extremely liable to dissolve in the water that falls in rain and snow, and pass with it into the Atlantic ocean. Prof. JOHNSTON says that 100 parts of its water contain $3\frac{1}{2}$ of epsom salts (sulphate of magnesia.)

So soon as we get our canals and railroads completed, and all the boys that read the GENESEE FARMER grow up to be men, and know just what is required to form every crop, old Ocean

will be called on to give back the cream of continents and islands, which a thousand rivers for indefinite ages have never for a moment ceased to pour into her bosom. A few fish, oyster and clam shells, a little guano, and other fertilizers, will not meet the wants of the rapidly augmenting millions of our race. The water of the ocean must be evaporated and its salts carried back to the cultivated fields from which the rains of heaven wash so many millions of tons in the course of time. How much magnesia and other elements of wheat, think you, kind reader, the Genesee River has poured into the basin of Lake Ontario, to flow thence into the Gulf of St. Lawrence, within the last ten thousand years? Every gallon of the water of this river contains an appreciable quantity of magnesia. The whole Onondaga Salt Group abounds in this mineral. Some of the wells in this county furnish epsom and glauber salts enough to physic strangers not accustomed to the use of their saline liquids.

By irrigating his meadows with the water of the river Sauer, M. Boussingault was able to take off in hay annually, without injury, the following minerals:

Phosphoric acid,	1254 lbs.
Sulphuric acid,	627 "
Chlorine,	602 "
Lime,	4155 "
Magnesia,	1672 "
Potash and Soda,	5456 "
Silica,	7312 "

The hay was fed to beasts fattening for beef, and the above minerals were carefully saved in the shape of manure, and made into wheat and other grain, which were sent annually to market. Without the salts from the Sauer the system could not work ten years. Most of the salts of magnesia contained in the food of animals escape from their systems by the urinary passage.

"Lime Mania."

THE attentive reader of this journal will recollect that we commented, in the August number of the Farmer, on some remarks in the Massachusetts Ploughman on the action of lime, and asserting its small value as a fertilizer. That journal copies what we said and makes the following reply under the heading—"Lime Mania:—"

Such are the arguments that are relied on to prove that lime is the most important article which a farmer can procure for his fields!

It will be seen that the writer does not attempt to prove that lime hastens the decomposition of other materials (a position which most of the advocates of lime assume) but asserts that "no other element, &c., has been so generally and so successfully used as a fertilizer, both in this country and in Europe, as this same mineral called lime."

This we utterly deny, and should like to have some evidence of it before the writer proceeds any farther. Can the Genesee Farmer pretend that lime has been more generally applied and with more success to enrich lands than the excrements of horned cattle, horses, sheep, and hogs? Can he make us all believe that lime is more enriching than the putrid flesh of land animals or fish? Or that it has longer been in use?

Oh, no, but "bones cannot be formed without lime,"

therefore the food of animals must contain lime in order to make bone, and therefore lime must be procured and spread on to lands or the plants on which animals feed will find no lime, and cattle will have no bones!

Our Genessee friend seems to forget our admission that lime is beneficial on certain soils. We admit its usefulness where iron ore abounds, and has he shown that it is useful any where else?

He supposes that the adding of lime to all soils has improved them. He ought to recollect that in England many farmers deny that lime has been of the least service when applied to their lands.

But "lime is found in all plants." So is sand, or what is called *silex*—but it does not exactly follow that sand would always prove a very useful adjunct to our New England soils. Lime is found in all the varieties of soil, and plants have lime in them. What then? It was found by Dr. Jackson, on analyzing the soils of Maine, that soils containing the greatest quantity of lime did not produce the largest crops of wheat.

It is a singular fact, admitted by all the lime advocates, that lime, spread on the surface of soils that are based on limestone rock, *does more service than on soils without such basis.* It may be inferred from this that the more lime there is the better is the soil. Is this the theory of our friend?

We have lands here that would be improved by spreading 100 casks of sand on an acre. We have peat bogs that are more benefited by one load of common gravel than by 100 loads of lime. Mixtures of different kinds of soil are generally useful; and we much incline to think that many who have been so much delighted with the advantages they have derived, from spreading a hundred casks of lime on an acre of their land, will find that 100 casks of sand, well spread, well mixed, and well tended, with a view to a premium crop, will help them as much as the 100 casks of lime.

It is pretty evident that the writer of the above thinks very little of lime, either as a constituent of cultivated plants, or as a hastener of vegetable decomposition. We do not regard (as he intimates) "lime as the most important article which a farmer can procure for his fields;" but as one of several equally indispensable elements in all cultivated crops.

There are instances in which humic and other organic acids so abound as to arrest decomposition in swamp muck, and peat bogs. Draining and liming these hasten the rotting of the organic matter. We shall not dwell on this property in lime, for we understand the Ploughman as admitting that lime is useful in the way of correcting all acidity in soils.

When we say that "no other element has been so generally and successfully used as a fertilizer, both in this country and Europe, as lime," we do not intend to offset it, or one element, against fertilizers that contain from ten to fourteen elements, like "the excrements of horned cattle, horses, sheep, and hogs." We took especial pains to guard against such a mistake, by comparing lime "to the half of a pair of shears"—worthless without the other essential elements of plants. We know not how to express ourself in plainer terms.

What we said about the formation of bones in domestic animals without lime, is not met at all by the Ploughman. No animal can know whether grass, hay, or grain, contains bone earth or not; and if Providence permitted vegetables to grow without the elements out of which animals form their solid frames, it is obvious that a calf could have no more bones than a naked snail,—

To prevent a catastrophe that would be alike fatal to all birds and mammalia, Nature will not organize the seeds of plants like wheat, corn, and flax, no farther than the soil contains phosphates in an available form. Neither can timothy, clover, or red top be grown to perfect maturity without some lime, as well as other minerals.

Nothing is more common than for drift overlying lime rock to lack available lime. The loose earthy matter drifted on to rock, is made up of the debris of sand stone, and other rocks which contained little or no lime. Beside this cause of deficiency, this mineral readily sinks down into the sub-soil on tilled land; and hence is often deficient in surface soils that abound in lime stones which are hard and yield slowly to the action of the elements. If they are soft, as are most of the Onondaga limestones, (which are remarkable for yielding great crops of wheat,) there will be no lack of available lime in the earth.

As to using "100 casks of sand on peat bogs," we have seen both sand and gravel applied to such land with signal benefit. Nevertheless, after peat meadows are well drained, as they should be, our personal observation, as well as reading, lead us to believe that lime with sand is much better than to apply the latter alone.

Our friend observes truly "mixtures of different kinds of soils are generally useful;" and why? Because a wheat, corn, timothy, or potato plant, when ripe and perfect in all its parts, is a most admirable mixture; and by mixing different kinds of soil together, the chances are greatly in favor of getting in the last compound, of several compounds, all the elements used in organizing the crop. Feed the latter to cows, sheep, pigs, horses, and men, and save all their excretions, and then you will have the raw material for making a second harvest.

TO CURE HOVEN IN CATTLE.—Among the numerous recipes for curing hoven in Cattle, I have never seen published the following easy and simple method:—Melt an half pint of hogslard and an half pint of molasses together, and drench the animal with it. We have used it several times with invariable success; it is as speedy as sure. If you think the recipe worth publishing, it is at your service.

Yours truly, E. S. B.

Romulus, N. Y., 1847.

POTATO ROT.—A farmer of this (Monroe) county has called to say to us, that the rot has attacked his potatoes which grow on new land that has borne but one crop (wheat.) The circumstance most worthy of record in this case is the fact that the potatoes near the woods are much more affected than those remote from the forest. The ground is quite moist generally over the field.

Hints for October.

It is of great importance to those who intend to follow corn with wheat, to do it early. It is quite a labor to remove a large field of corn preparatory to plowing, and we plant so close that it is impossible to sow between the rows as they do at the west on the prairies; therefore cut your corn by the roots, and make it into *stouts*, in straight and parallel rows; plow all but the three feet occupied by the *stouts*, and if you please, *snake* plow between them. Sow your wheat, and drag both ways, and the loss is but trifling. Remove the corn with a team at your leisure.

Dig Potatoes early. The rot is abroad. The first symptoms are rusty-colored rough spots, which only affect the skin, and soon corrodes the pulp, particularly in wet weather. If dug early and kept dry—entirely dry—it will extend no farther. Moisture and heat are the very elements of *eremacausis*, or vegetable decomposition. Dig in *dry weather*, and house or bury them in a *dry state*. If you have a dry sandy knoll, dig a hole 2 or 3 feet deep, run a pole over the center, and cover with boards and straw and a sufficiency of earth to prevent freezing. Cover the ends of the boards to prevent mice getting in.

Gather winter apples before any severe frosts, to prevent premature ripening in the barrels or bins. Apples that are intended for market, or for long keeping, must be carefully *hand picked*, and put into good tight barrels, well headed, and laid on their sides. Apples carefully picked and put into water-tight casks, and allowed to stand over winter, in any building sheltered from sun and rains, will open in May as fair as when barreled, notwithstanding freezing and thawing.

Cider is very much improved by putting a pint of mustard seed into each barrel; it fines beautifully and never gets hard.

Save your own seeds—cucumber, melons, lettuce, &c., &c. It will save a great deal of grumbling at seed men.

Fall plowing for spring crops is a very important item; but if your land is in June or other foul grasses, or if you have reason to apprehend the wire-worm, or grub, don't do it till the last minute before freezing up. In the first instance, if you plow too early, the grasses come up to see the state of things above ground and get a bit of fresh air, and never dream of going back again—and before winter your field is as green as before you plowed it. Secondly, the *larvæ* of all the troublesome insects descend to the roots and are perfectly at home again; but if plowed late, in cold weather, the insect is paralyzed and frozen, and makes its exit.

Keep cattle off from new meadows, as soon as the ground becomes wet and soft.

Begin to increase the feed of your hogs intended for fattening; shut them up in all of this

month. Fallen apples, cooked with a little mill feed, or barley or corn meal, will push them ahead finely—and one week now, with good feed, good shelter, and dry beds, is worth a month in cold weather, particularly if they have a six rail fence for a pen, and the sky for a covering. *

Wagon Shelvins.

THE following kind of wagon shelvins I have used for 23 years, and believe them to be handier and better than any others I ever saw, and they are not a few.

I take two sills or side pieces 12 or 14 feet long, and $3\frac{1}{2}$ inches thick by $6\frac{1}{2}$ wide; I put three mortices through each of these sills, 6 inches wide and $1\frac{1}{2}$ thick. Two of these mortices are about one foot from the end of each sill, the other in the middle; these should be near the bottom of the sills as they lay on the wagon bolster. Into these mortices in the sills are framed three cross pieces, and mortices through them slanting close to the sills, into which arms or upright pieces are fitted, resting on the sills to support them. These arms are raised or lowered just high enough to keep all the loading clear from the wheels. On these arms put two or three boards, and fasten them with nails or screws, so that in removing the shelvins from the wagon these sides are taken off separate from the bottom or sills.

Put one mortice, 3 or 4 inches wide, in the forward end of each sill. Into these mortices fit two upright pieces about 7 feet high, with two or three cross bars of a suitable length. This answers for a ladder for building a load against, for fastening lines, and for putting the fore end of the boom when binding is necessary.

NATH'L SMITH.

Gorham, N. Y., 1847.

VERMONT FARMING.—The largest farm in Vermont is said to be that of Judge Meech, at Shelburn, eight miles south of Burlington. A correspondent who has been over it, says this year he will mow over 500 acres and cut 1000 tons of hay. He keeps 300 sheep, and has now 400 head of neat cattle. A few days ago he sold fat oxen enough to amount to the sum of \$2460. He has also sold this season 1000 bushels of rye.

CROPS IN WISCONSIN.—The Buffalo Commercial Advertiser says: "The Brig Giddings arrived here on Saturday with a cargo of 10,000 bushels of Wisconsin wheat of this year's crop, which for plumpness of berry and general appearance, exceeds anything ever before received from that quarter."

RECIPES.—For drunkenness, drink cold water; for health, rise early; to be happy, be honest; to please all, mind your own business.

Nutrition of Corn Cobs.

MR. EDITOR:—Allow me to inquire if there is any nourishment in the *cobs* of corn? It is a question too important to remain unsettled. For, on the one hand, many farmers, supposing that there must be some nutriment in the *cobs*, have their corn intended for feeding horses and neat cattle, ground in the *ear*. On the other hand, many, believing that the article possesses no nutritive property, throw away, or burn their *cobs*.

If then, you will please to bring a portion of *cobs* to the test of your *chemical laboratory*, and give to the public the result of your experiment, whatever that result may be, you will in doing so, perform the service of a benefactor.

Canandaigua, 1847. A SUBSCRIBER.

REMARKS.—A good analysis of *cobs* cannot be made at less than fifteen or twenty dollars. They contain however very little nutritive matter. It is because corn meal is very concentrated food and lacks due bulk to fill the stomach, that *cob meal* can be advantageously combined with it. An equal bulk of well cured and pulverised cornstalks would doubtless contain more nourishment than clear *cobs*.

PREPARATION OF SEED WHEAT.—By sieves of suitable size, the largest and best grain may be separated. By washing in water, light seeds of various kinds, and the lightest grain will swim, and may be skimmed off. By adding salt to the water, which will increase its specific gravity, old imperfect grains, and barley and oats will rise to the surface. Then it will be well to steep the seed a day or two in salt and water; after which add half a peck of fresh slaked lime to a bushel of grain, mix thoroughly, that every kernel may become coated with lime. Let it remain half a day, or night, after liming, and then sow.—*Ex. paper.*

HEAVY WOOL OPERATION.—William McKie, a heavy wool operator of Salem, N. Y., has very recently effected a cash sale of upwards of three hundred thousand pounds of crossed and pure Saxon wools, to the Middlesex company at Lowell, Mass., all of which was grown in the counties of Washington and Rensselaer. In addition to this, the company have purchased from other individuals, over a million and a half pounds of very superior wools, all of the present clip.

AGRICULTURE, says Socrates, is an employment the most worthy the application of man, the most ancient and the most suitable to his nature; it is the common nurse of all persons, in every age and condition of life; it is a source of health, strength, plenty and riches; and of a thousand sober delights and honest pleasures. It is the mistress and school of sobriety, temperance, justice, religion, and in short, of all virtue, civil and military.

Hydraulics for Farmers.

BY C. N. BEMENT.

NUMBER III.

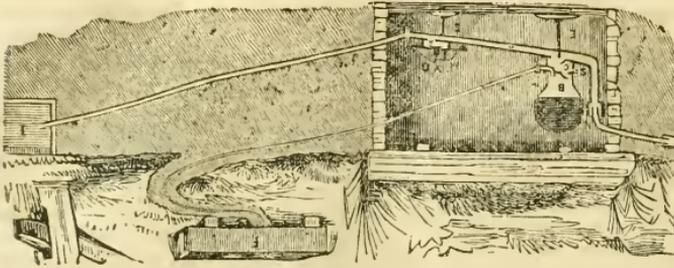
Benson's Ram.—The first water ram erected in this country was imported a few years since from England, at an expense of one hundred dollars; and put in successful operation at Fairy-Knowe, the residence of J. H. Latrobe, Esq., near Baltimore, Maryland.

Within a few years, some of our ingenious mechanics have taken hold of the subject, and they are now made for a trifling expense in comparison to the one imported by Mr. Latrobe. Among the earliest to improve the machine, I would name B. S. Benson, near Baltimore, Md., by which pure spring water may be forced up by a stream or brook of impure water.

The following is a representation of Benson's Patent Water-ram, for raising spring or other water for supplying farms, towns or villages. By means of this ram, persons having a small branch or spring, that will afford one gallon per minute, with a small stream of impure water, can have a portion of the spring or any other water, raised to his house or barn, through a small leaden tube. This ram, says the inventor, will raise twice the water that any forcing pump will with the same water power, there being only three valves to keep it in motion, in place of the heavy water-wheel and piston. This ram can be driven by branch water, and raise spring or branch water to the house at pleasure, by simply turning a cock, without any derangement of the ram, and is very simple, and easy to keep in order—the valves being faced with leather, and easy of access, can be replaced by any person, there being no other part that can wear.

This ram differs from most others, in having three valves, and a passage for spring water at the head.

Description.—V is an impetus-valve in chamber A, opening inwards; when open, permits the spring water to flow from reservoir N, through valve C, and driving the branch water out of the end of the pipe D, that having acted as a piston in the last stroke; also permitting the branch water to flow from reservoir I, through the pipe J, and passing through the opening of the impetus-valve V, with increasing velocity, closes the valve; thus suddenly shutting off the escape of water. The ram pipe J, being fifty feet long, and six feet fall, filled with water, being nearly an uncompressed fluid, exerts its force against the columns of spring water in pipe D, as a piston, forcing it into chamber B, and closing valve C, driving it up through the air chamber valve B—the air chamber being supplied with air for a spring, receives the water, and gradually presses it up through pipe P, to the required height. When the water in the long ram



Benson's Ram. (Figure 5.)

pipe has spent its power, the superior height of water in pipe P causes the water in pipe J to recoil, and a small portion to repress the valve, and drive the water back in pipe J, though in a rising position, continues to flow a short time after the air chamber valve has closed and opened, and shut by the ordinary action of the machine. Thus, when the flow of the water through D is suddenly stopped by the valve E, a perfect vacuum is produced immediately below the air-chamber, by the recoil of the water, at which instant the small valve opens, and a portion of air enters and supplies that which the water absorbs.

Strode's Pneumatic Hydraulic Engine.— Since the foregoing was written, I have received the following description of an improvement on the hydraulic ram. It is the invention of Mr. Joseph C. Strode, of East Bradford, Chester co., Penn.

"I have as yet," says Mr. Strode, "made only three different sized machines, excepting the model which I left in the Patent office, which is of glass, and a brass one of the same size, which is now in the Franklin Institute, Philadelphia. The latter is an operating model: its linear dimensions have a ratio to this cut, fig. 6, of about 32 to 7. This model, under a head of 5½ feet, with a driving pipe about 15 feet long, ¾ inch calibre, forced through a ¼ inch pipe 1.8 lbs. of water, 40 feet high, in one minute, which is about 324 gallons, or 10 2-7 barrels in 24 hours. The three sizes above mentioned have a ratio to the aforesaid model of 3, 2½, and 2, in their linear dimensions. The largest of these is calculated to work with a 2 inch driving pipe, but will work very well with 1½ inch. These machines will work under all heads, where they have yet been tried with driving pipes of various lengths. I have not yet made a sufficient number of experiments to determine what the length of driving pipes of given calibre, under a given head, to force water to a given elevation, should be so as to produce a maximum percentage, nor what the length should be to force up a maximum amount, without regard to percentage; but I am well satisfied that they do not exist contemporaneously. The quantity of water used, and of that forced up may be varied by

giving the outlet valve a longer or shorter stroke, by which the number of strokes in a given time is diminished or increased; and in each individual case there will be found to be a certain number of strokes, that will cause the machine to raise the most water of which it is capable, without regard to the quantity it uses to produce this effect;

but when it is desirable that the quantity of water used shall raise the most water possible, then the number of strokes must be regulated to produce this effect."

"I give you one solitary experiment that was made with my largest machine, to produce the former of these effects. It worked under a head of 12 feet; the driving pipe was 1½ inch calibre, 40 feet long. By using 135 pounds of water per minute, 20 pounds, (which is 114 2-7 barrels in 24 hours,) were forced through a ½ inch pipe 60 feet high in the same time. The machine during this time made about 32 strokes, which was the right number, with this length of driving pipe and the attending circumstances, to force up the most water, without economising the water used. It is altogether likely, as the length of this pipe was taken at hazard, that some other length, in the same situation would have forced up more in its maximum operation. You will perceive that the above experiment gives for the machine a little above 74 per cent. By increasing the number of strokes to 40, about 75 per cent was obtained; but the quantity raised was diminished a little, and the quantity used was diminished in a little greater ratio."

The following specification is taken from the Journal of the Franklin Institute:

"The nature of my invention and improvement consists in making use of a column of condensed air between the propelling fluid and the fluid that is to be raised; said air being condensed in a pyramidal chamber, by means of the momentum of a descending column of water—the chamber having a communication, by a small opening at its top, with another chamber, into which the spring water or fluid to be raised is introduced, called the spring water chambers, and upon which the condensed air in the first named chamber is made to act, causing said fluid to rise through a tube placed in the spring water chamber, (open at its lower end, and closed alternately at its upper end, by means of a valve,) into a large air vessel or receiver, of the usual form and construction, being conducted thence to its place of destination by pipes, or hose, in the usual manner.

Fig. 6 is a longitudinal section. Fig. 7 is a transverse section. Fig. 8 is a perspective view.

Similar letters in the several figures refer to corresponding parts.

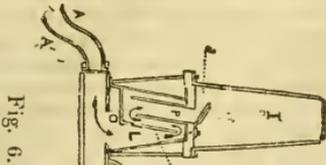


Fig. 6.

Stroud's Pneumatic Engine.

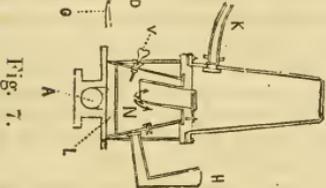


Fig. 7.

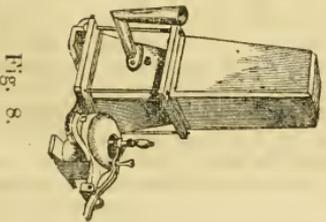


Fig. 8.

A is the main pipe for conducting the propelling water from the head, or reservoir, to the pyramidal air-chamber. The pipe descends below the level of that portion of it which connects with the air chamber just before it reaches the said chamber, and then ascends in a curved line to it, forming a curved bend in the pipe, as at A', for the purpose of preventing the air received at the valve B, during the time in which the vacuum is produced in the air and water chamber, as hereafter described from filling the pipe A, as the air will not descend at said bend in the tube, so that the surplus of said air, after having filled the condensing chamber L, may be carried off by the current of water through the valve B.

The pipe A is enlarged below the air chamber L, as at A2, and has an opening O into the air chamber L, through which the water passes when the valve B is closed.

B is a valve attached to a curved, vibrating lever C, turning on gudgeons D, in boxes, as its fulcrum, having a set screw E, for regulating the descent of the valve, and a counter balance F, for adjusting the valve. When this valve B is down, as shown in fig. 7, the water from the head flows through the opening, which it closes; when it is up, as shown in fig. 6, the water rises into the pyramidal chamber L, through the opening O, and condenses the air therein.

H is a pipe for conveying the spring water to

the spring water chamber. I is an air chamber into which the water is forced. J is the valve for holding it. K is a pipe, or hose, for conveying the water to its place of destination. The above named parts, lettered from A to K, inclusive, are made and operated in the usual manner. The improvements are as follows:

L is a pyramidal chamber, into which air is admitted through the valve B, when it descends by the pressure of the external air, to supply the partial vacuum created in the pipe A, and chambers L and N.

This pyramidal chamber has a communication, by a small opening M, at the top, with another chamber, N, called the spring or pure water chamber; through which opening M, the air, so condensed, is forced, and presses on the spring or other water, introduced into the same through the pipe H, by which pressure the water in said spring water chamber is forced upward through a tube P, reaching to near the bottom of said chamber N, through the valve J, into the air chamber I; said valve being represented as open in fig. 6, and as closed in fig. 7.

To raise water with this machine, open the valve B, the water, which is now in motion in the pipe A, will pass through the opening O, into the pyramidal condensing chamber L, and condense the air the same as before; the condensed air will force the spring water up the tube P, (which had entered through the pipe H, during the continuance of the partial vacuum above spoken of,) into the chamber I, and condense the air therein, until its density is equal to that in the condensing chambers L and N, below. At this time the spring water will cease to flow into the air chamber I, the valve J closes, and the air in the chambers I, L and N commences expanding, that in the lower chambers, L and N, giving motion to the propelling fluid and driving it backward, producing a partial vacuum in the machine, and the air in the upper chamber I, forcing the spring water to its place of destination. The said partial vacuum in the machine, caused by the reaction of the machine, as aforesaid, and the pressure of the external atmosphere on the valve B, will cause it to open again. The water from the head then flows through this valve with an accelerating movement, until it has acquired that degree of velocity as to cause the valve to close. The water having no longer any vent through the valve B, passes through the opening O, into the pyramidal air chamber L, and repeats the operation above mentioned, successively.

In this manner the operation will continue as long as the machine remains in order, and there is a head of water to propel it. The valve V is for the purpose of supplying the chamber I with air, by admitting said air into the tube P. The said air is admitted during the time that the partial vacuum above mentioned takes place. The

air thus introduced into the tube P, ascends to the top of the same, and is forced into the chamber I, at the next stroke of the machine; said valve V is represented open in fig. 7, and may be closed or regulated by screwing the thumb-screw V.

The principal advantages this machine possesses over other machines are:

1st. In case of forcing up pure water by the propelling power of a running stream of water less pure, there is no possibility of the impure water mixing with the pure, there being at that time a column of condensed air between the two waters.

2d. The water being forced into the upper chamber I, by the condensation of air in the lower chamber, the valve J opens more slowly than when water alone is made the propelling medium, and also shuts more slowly, thereby preventing the water from escaping back through the valve J, after it is forced up; the valve J being nearly closed when the water ceases to flow upward into the chamber I. This advantage, upon trial, is found to be of considerable importance, enabling the machine thus operated, to force with a given quantity of water, several barrels more of water per day than it would otherwise do.

3d. There being no valve between the condensed air in the lower-chamber and the driving water, or at the opening O, said air is permitted to act a longer time in forcing back said driving water, and thereby making a more complete vacuum than in other machines, and rendering useless the spring for opening the outlet valve B, as used in several machines.

It is not necessary that the spring water chamber N, and the air chamber L, should be enclosed by the same envelope, but they may form separate chambers, and they may be arranged in any convenient way or manner most acceptable to the constructor, provided that the capacity of the air chamber does not exceed a due ratio between the propelling power and the water to be raised.

Clearing Land.

MR. MOORE:—Enclosed I send you \$1, for which I wish you to credit me for the present and next volume of the Farmer.

Will you, or some of your correspondents who have had experience in the business, give us the best method of clearing land? Shall we chop in the winter, and clear off the next summer—or let it lay over, or girdle and let the timber stand until it is dead? Shall we gather our ashes and sell them, or spread them evenly over the land?
Yours,
H. BRISTOL.

Mason, Mich., 1847.

WE have over a thousand subscribers in Michigan, many of whom are able, from experience, to answer the above properly. Who will do so?

Taking Honey from Hives.

MR. EDITOR:—The season of the year has arrived for people to take the honey from their bees, which is taken from the various improved boxes in different ways and sometimes in such quantities as not to leave enough to winter the swarms. The course I have pursued this last few years, has been to take the honey from the two or three year old swarms, and the weakest swarms, and saving the earliest, largest, and heaviest to raise bees from. Last year I wintered six swarms. I have had fourteen swarms out this season; twelve I saved; two the heat drove off.

Should any read these few lines who have bees to take up, I hope they will not do as a man who I once knew did, that came in possession of a number of swarms of bees by the death of a relation. As soon as the honey of harvest was past, he would kill the bees of the heaviest swarms; in a few years his bees run out.

One of my humane neighbors, took 300 lbs. of honey from his bees last fall. He told me on a cool evening he would take two swarms into a dark room; the one he wanted to take the honey from he would turn bottom uppermost, placing the other on top, and then wrap a cloth round where the boxes join and in the morning the bees would all be in the top box, and thus he saved the lives of his bees. Care should be taken not to wrap the cloth round too close to suffocate the bees.

JOSEPH CARPENTER.

Prairieville, W. T., 1847.

MR. EDITOR:—Two years ago my cow (I kept but one) was taken suddenly with a stoppage in one of her teats; so bad that most of the time it was impossible to get a stream from it, and I was obliged to fix a tube to get the milk out. At first, the milk was good for ought that I could see, but soon became bad. My neighbors said it was the "garget in the bag." I gave her garget root, through the summer and fall, but without material benefit to the milk, or in milking. The next spring I commenced feeding garget root before she came in, and had no further trouble from it, except that that part of the bag was smaller, and gave less milk.—This spring the milk in that part of the bag did not get good as soon as the others, but milks as easy, and the milk appears to be good, except that it is thinner. I have set it; and the cream, and milk after the cream is taken off, appear just like other cream and milk.

What caused the stoppage without injuring the milk?—why that part of the bag grew smaller?—and why the milk is thinner without appearing bad?—are questions which, if some of your numerous readers will answer, they will greatly oblige a subscriber and

Portage, June, 1847.

MECHANIC.

Will some correspondent answer the above?

The Genesee Farmer.

MR. EDITOR:—I wish to say a word or two in regard to the "Genesee Farmer." I really wonder why more of the farming population do not take the paper. Many will spend three or four times the price of it on some public occasion, and return home "nothing better," but often "rather the worse," and yet think they cannot afford to take your paper. Others think their own experience better than the notions of theorists. Others again think, that in regard to farming "there is nothing like the good old way." And others still are not willing to be enlightened; &c. &c. I imagine however that many more would take the paper, if it could be thrown in their way. One thing is certain; unless the present generation shall begin to read, the next will have both to read and labor, or suffer.

I am not a farmer, but I would not be without the paper for many times its value. There is no better "kitchen garden" in this vicinity than mine, and yet my ground has not been regularily manured for years; although by the aid of your paper I am able to enrich it in some way, with manurials that most of my neighbors throw away. Every paper furnishes me with hints by which I can profit. Thanks to the "Farmer" for these hints.

ONE WHO IS WILLING TO LEARN FROM
THE EXPERIENCE OF OTHERS.

Monroe County, 1847.

Premium Bee-Hives.

MR. EDITOR:—Bee-hives "is the subject of my story;" but should I digress occasionally, I trust you will allow that the fault is at least pardonable. If I am somewhat severe, it will be nothing more than, in my judgment, the circumstances of the case demand. In the first place, then, a word in relation to Agricultural Fairs. Laying aside the constitutionality, I would like to ask, is it honorable, is it just, is it even fair, that a State Society should award premiums to citizens of foreign States, while the present principle of distributing awards to our own citizens is exciting the indignation and disgust of many worthy men? Were we to judge of men's motives from their acts, what opinion are we to form of, or what confidence to place in, committees who are ever ready to bestow a prize upon the wealthy and influential Mr. —, for best breeding Mare, when the fact is, the animal is ten years old and has never had a colt?—while, at the same time, the poor man, whose influence is limited to his own immediate neighborhood, not knowing the importance of securing the services of some pettifogging friend, brings forward his noble animal with the proof at her side, and has to return to his home the wiser for having learned that it is "Money makes the mare go."

This, Mr. Editor, is no flight of the imagination—no fancied grievance—as I am credibly informed a like case actually occurred in our own county. But we set out to speak of Bee-hives; very well, at the Fair at Auburn, in 1846, the first preference was given to an article, (I think no sensible man will hardly call it a Hive,) from Vermont—while the second was given to Mr. KELSEY'S "only one of real value and utility," and the residue were deemed unworthy the attention of the public. (Wonderful! wise! committee! No doubt they are the very identical persons with whom all knowledge is to die!) Where, let me ask, was the Hive for which a diploma was awarded in 1845? Did the committee not see it? or have the inventions of the past year so far eclipsed it as to render it unworthy our attention? I would like to ask that apianian committee, what are the qualities most essential in a Bee-hive of "real value and

utility." We of Monroe county are inclined to believe that the Hive which last year was deemed worthy a diploma, and which "combines all the advantages of former improvements, with some valuable qualifications for ventilation, removing old comb, dividing swarms, and preventing the depredations of the bee-moth,—the whole under the entire control of the operator,"—is one which is at least worthy of public notice. But that Vermont Pyramid, which no one will venture to say is well adapted to the multiplying of colonies, the preventing the ravages of the bee-moth and the robber; yet, from its mathematical figure and mechanical construction so far captivated the committee, that it was allowed to bear off the palm, much to the disappointment of experienced bee culturists.

And now, Mr. Editor, we will notice the second and last regarded worthy our attention by that wise committee; or in other words, Mr. KELSEY'S "only one of real value and utility." And what are the merits claimed for this wonderful invention? Let Mr. KELSEY answer for himself:

First, "The bees are easily hived." Now can any one be found so silly as to argue that the same cannot be done by numerous patent hives, and even with the old box and straw hives?

Second—"It never becomes necessary to kill off the swarms." If this be a newly discovered principle, or even first applied to Bee-hives by Mr. KELSEY, it is for me yet to learn.

Third—"Honey can at all times be taken away when it can be spared by the swarms." Strange as it may appear, this principle has been successfully applied by Dr. O. REYNOLDS and others, long before Mr. KELSEY secured a patent for his "only one of real value and utility."

Fourth—"Young swarms can be taken away at the proper period and put into other hives." This principle has been practiced by Dr. O. REYNOLDS with great success for two years, and by others for even a longer period.

Fifth—"The swarms are entirely protected from robbery by neighboring bees." This principle depends for success as much upon the care of the apianian as upon the construction of the Hive.

Sixth—"The eggs or embryo of the bee-moth, or miller, can not hatch or mature around these hives." This, Mr. Editor, is to me a stumper. I think an apianian will have to divest himself of his experience at least, to swallow so gross an absurdity. No observing man can have kept bees for one year even, without having learned that the miller will enter wherever there is a passage for the bees, and once in the hive they deposit their eggs at pleasure in every waxen crevice, where in due time a worm is brought forth to annoy, and if not removed, to destroy the bees.—The idea that a zinc plate will prevent the ravages of the moth, is too absurd to publish to the world. I am fully satisfied from experience and careful observation, that injuries from the moth can only be prevented by closing the hive when the bees have ceased their labor for the day.—The alternating principle of Mr. KELSEY'S hive is such that honey taken for use will be more or less mingled with brood comb.

And now, Mr. Editor, notwithstanding a wise (!) committee has said that the Vermont Pyramid, and Mr. KELSEY'S "only one of real value and utility," are the hives, and the only hives worthy our attention: yet I can say, and from experience too, that "Dr. O. REYNOLDS' Non-Swarming and Dividing Bee-Hive," has with me proved itself well worth the attention of the public in general, and of Bee culturists in particular.

I remain, sir, your humble subscriber,
Webster, N. Y., 1847.

A. G. MELVIN.

REMARKS.—The above communication has been on hand nearly a year. In publishing it, we must dissent from the views of the writer relative to Agricultural Societies. The fact that one man has been deprived of a premium on his horse or bee-hive—by some unintentional error or oversight of a committee—is hardly a sufficient reason for condemning both State and County Societies and their committees. We express no opinion as to the comparative merits of the hives mentioned by friend MELVIN, not having examined all of them.

Experiments in Wheat Culture.---Hessian Fly.

MR. EDITOR:—Last year I told you I had tried experiments with unleached ashes at the rate of 72 bushels, salt five bushels, and lime from 50 to 80 bushels per acre. I saw no difference in the wheat from the ashes; the salt was a decided improvement, so much so that I shall sow about fifty barrels this season. Part I shall reserve until early in the spring, and see if there is any difference from that sown in the fall; and a few lands in each field I shall not salt, to see if the experiment holds good another season. That salted was at least four days earlier than that not salted, and a much heavier crop. The hurry of harvesting prevented me from trying, from actual measurement, how much it yielded more than an equal quantity of land adjoining. The field I limed was very much winter killed; still that with 80 bushels to the acre, was decidedly best.

Now for the Hessian fly. In your last number, page 205, you say—"As the Hessian fly lives only some 10 or 15 days during the last weeks in September or the first of October, if no wheat was up, and prepared as a nidus wherein to deposit its eggs, very few, if any, Hessian flies would be found in the spring."

Now the late sown wheat is often much more hurt with the fly than early sown; farmers of experience will tell you so. For instance, in 1845, I sowed a field on the 14th and 15th of September; my neighbor sowed one adjoining late in October, so late that it was barely up when winter set in. Mine was a very good crop—his was consumed by the fly, so that I do not suppose he got five bushels to the acre.—Our land was of the same quality, and divided by post and board fence. *When did the fly get in his wheat?*

Another query to solve. I exchanged seed wheat with a Mr. REES, of Clyde, Wayne Co., in 1845. I sowed it on half of a 11 acre field, and on the same day sowed the other half with other wheat, (Soule's wheat.) That which I obtained from Mr. REES came up yellow and sickly, while the other came up green and healthy; they continued so all the fall. I examined it, and found that from Clyde alive with the fly, and none in the other; and while that part sown with seed from Clyde gave only 12½ bushels per acre, my whole crop gave within a fraction of 31 bushels per acre—and I was satisfied that the soil in the part of the field on which the Clyde wheat was sown was as good as any of my other fields. *Now, where or how did the fly come into the Clyde wheat, if it did not get in the kernels of seed?* And if the fly only lives a short time in September or October, how does it come that many fields of barley have been destroyed by it, when barley is sown the end of April or beginning of May, and harvested

in July or early in August. Now, when farmers see such things, and Editors tell them the fly only lives a few weeks in the end of September or first of October, they may well say the men who write for papers know nothing about it. I believe that the eggs of the fly are deposited in the seed before cutting. From experience I have always found that wheat that was early ripe or the crop raised from it, was seldom hurt with the fly.

Yours respectfully,

JOHN JOHNSTON.

Near Geneva, Sept., 1847.

We thank Mr. JOHNSTON for the above interesting letter. He seems to have overlooked the important fact stated by us that, the Hessian fly produces two generations in a year; and that the one which is at maturity in the spring does the principal injury alike to late and early sown winter grain and spring crops. It is to avoid producing a spring crop of Hessian flies that we advise late seeding, not by one or two farmers, but by all wheat growers where this insect prevails. We ask Mr. J. to review his comments on our text, a part of which is in these words: "One man may raise flies enough on a twenty acre field, sown in the first week of September, to destroy half the grain in a whole township the spring and summer following."

The fly whose larvæ are sown with the seed is the *cecidomyia tritici*; while the Hessian fly of which we spoke is the *cecidomyia destructor*. Friend J. has confounded the two—one attacks the stem near its roots, and the other the heads of the wheat plant.

The New Settlements, vs. the Old.

I AM glad to see another Richmond in the field, tilting a lance in favor of emigrating to new lands in the west. J. W. FALLEY does not answer my query by a case in point. He however makes out a very good one; and I am under no temptation to give the converse of his picture, as I feel certain that he has it, in his own neighborhood, in full relief before him—else why is it that the newspapers there give such an array in their columns of Sheriff's sales and Mortgage advertisements.

But friend FALLEY only reiterates that which I before asserted, to wit: That Michigan had made the transition from log house simplicity, to the age of orange peel and paint, with a magical celerity heretofore unknown in the annals of new States. Is he not a little illiberal, when he says that I "do not understand the character of Michigan's first settlers?" Let any man ride through this county and see the great breadth of smooth half tilled fields—the roofless decayed log houses—the large but sparsely scattered farm mansions—methinks he will understand that the bone and muscle which had made and fenced these

clearings, had gone to Michigan or some where west, to clear, and, fence, and toil anew. Our impulsive young men are the salt of that earth on which they build their cabins; their industry, enterprise, and enthusiasm works out a problem in our domestic economy, which Diogenes in his tub never dreamed of; for his philosophy embraced ease, not action.

I might go farther, and say that the first settlers of Michigan gave an immediate impress of civilization to the country and the age, which no other new State can boast; yet I still contend that the alluvial plains, and still alluvial hills, of Western New York, should not suffer a diminution of population, in order that such a consummation may be attained in a sister State. Instead of that consolidation here, which adds farm to farm, as if to increase the domain of nakedness, I would rather see a continual sub-division and improvement of the soil by the farmer's sons, until something near the hundredth part of its maximum yield was attained, from the arable surface. Then the farmer's wife would not have to go a thousand miles to sympathize in the joys, and sorrows, of her children. Then the neat cottage with its shrubbery, its clambering vines, its garden, and its little highly cultivated fields, would give to the eye the impress of that thrift and good taste, which is the reward of industry in an old country; certainly more comfortable and picturesque, if not more substantial and imposing, than the great wheat fields, and coarse improvements, of the new west.

But I hope to hear more from J. W. FALLET about Michigan; he tells the truth well. I only ask him to tell the whole truth; give us the shady, as well as the bright side of the picture. Speak of the singing birds if you please, but don't neglect the musketoes.

S. W.

Seneca County, N. Y., 1847.

Comparative Profits of Agriculture, Trade and Commerce.

In regard to the relative advantages and actual profit of agriculture and trade, a considerable difference of opinion exists among those having the best means of information on these subjects. It has been asserted on strong grounds of confidence, at least probable reasons of belief, that of the whole number of men who have been concerned in trade or commerce in the United States, at least two-thirds have become bankrupt or insolvent, and some assert a greater proportion. Those also are not wanting, who confidently affirm, that agriculture is the best and most profitable business, and will often afford a profit of 15, 18, and 20 per cent. on the capital established in it. There is great reason, however, to doubt the truth or correctness of this assertion. According to the statement relative to the farm of Mr. CHADSEY, at Wickford, Rhode

Island, as contained in the Albany Cultivator for June, in which the produce and the expenses of the same are detailed, it would appear that although in the actual cultivation of the farm, he cleared 20 per cent., yet, taking into view the cost of subsistence of the family, even on a moderate estimate of \$400 or \$500 per annum, there will remain only a small profit from the farm.

Perhaps, taking all things into view, the profits of trade and commerce will, on the average, considerably exceed that of farming, when managed by merchants or traders of experience, skill, and judgment, and on an adequate capital.— Sometimes a profit of 20 and even 25 per cent. has been realized; but this is seldom the case. A rate of 8 or 10 per cent. is considered to be a good profit on the average of the business when fairly conducted. But taking into view all the various circumstances connected with the business, the certain and great expenses of a commercial establishment, the rent of the store, payment of clerks and other labor, fuel, stationary, &c.,—all which will probably vary in amount from 1,000 to 2,000 or 3,000 dollars, according to circumstances—the great cost of house-keeping, or the subsistence of the family in its various details—which also will vary from 400 or 500 up to 1,000, 2,000, 3,000, or 4,000 dollars, according to the circumstances, condition, or disposition of the man, or his family—and but few men in trade in our large cities can live comfortably (with their families) on less than 700, 800, or 1,000 dollars per year: the danger of bad debts, loss from goods of inferior quality, those damaged, or otherwise not suited to the markets, and perhaps more than all, the great risks of loans from the banks, especially in times of commercial revulsions, when it is their custom to contract their loans at the very period most wanted by the small trader—we have reason to believe, that a farmer, having the experience, skill, and caution to manage his farm properly, and not to live beyond his income, but who will be contented with a comfortable subsistence and a moderate income, or 2 or 3 per cent., (and under favorable circumstances perhaps 8 or 10 per cent.,) he will find the business of agriculture better on the whole than trade or commerce.

WM. JENNISON.

Boston, Mass., July, 1847.

WHEAT CROP OF MICHIGAN.—The wheat crop of Michigan, for the present year, as estimated by a gentleman now preparing statistics for the Patent Office in Washington, will not fall short of 8,000,000 bushels, nor exceed 10,000,000 bushels. The quality of the grain this year is superior in every respect to the crop of last year.

COL. NOBLE, of Cincinnati, exhibited at a late meeting of the Horticultural Society, a specimen of Indian corn bearing twelve ears on a single stalk.



Gen. Harmon's Merino Buck, "King of Vermont."

ABOVE we give an engraving of a Merino Buck, owned by Gen. R. HARMON, of Wheatland, in this county. Gen. H. has quite a flock of Spanish Merinos—among them many fine Paular bucks. They are well worthy an examination by those wishing to improve their stock, without the trouble and expense of importing from abroad.

Gen. HARMON writes us as follows relative to the animal represented by the engraving:—

KING OF VERMONT was got by the celebrated buck "Fortune," owned by S. W. JEWETT, Esq., of Weybridge, Vermont; his dam was a pure blood Merino, owned by the same. The accompanying drawing was taken when he was nine months old. When thirteen months old King of Vermont sheared *nine pounds of clean washed wool*. His weight at that time, with the fleece on, was 94 pounds; at the next shearing his weight was 126 lbs., and he sheared 9 lbs. and 2 ounces of well washed wool. *King of Vermont* has proved himself an excellent stock getter, as the superior stock of lambs I have got by him will show.

REPORTS from almost every section of the Union, speak of the fine promise of the corn crop. A much greater quantity has been planted this season than any previous year, and the harvest must be immense—altogether beyond comparison with any former crop.

Fair of the State Agricultural Society.

A LACK of room prevents our offering any extended comments on the leading features of the recent Fair at Saratoga. Last year \$4,400 was taken for tickets and membership at Auburn; this year, the receipts were \$700 less. As a whole, the exhibition was meagre. There was a good display of horses. The Vermont stallion, "Black Hawk," was much admired. The Morgan Horse and his stock attracted much attention. There was a fair show of Devon Cattle; a few fine Durhams and scarcely a half dozen Herefords. In Sheep and Swine, we have never seen so few competitors at any preceding State Fair. In Dairy Products the display was poorer still. The mechanics of Troy and Albany added largely to the interest of the occasion by a splendid exhibition of Stoves, Carriages, Harnesses, Trunks, Glass Ware, and Agricultural Implements. There were several machines for drilling wheat and other seed, some of which, we doubt not, will come into general use.

The operation of a "hydraulic ram," carried conviction to every mind that it is truly a valuable machine. We saw many things worthy of notice which we cannot even name in this number of the Farmer. Senator Dix was very happy in his brief eulogy of the lamented SILAS WRIGHT. There were a number of gentlemen of distinction from other States. Among them

was Ex-President Tyler, Prof. Hare, of Philadelphia, Hon. Ellsworth, Indiana, and Gov. Hill, Editor of the Farmer's Visitor, of New Hampshire.

The able and interesting address we publish elsewhere in this number. We shall endeavor to give the award of Premiums next month, a copy of which we have not yet received.

Monroe County Agricultural Fair.

THE officers and friends of this Society have reason to congratulate themselves on the zeal and spirit with which the farmers of the county turned out and competed for the numerous premiums. An equal display of Horses, Cattle, Sheep, and Swine, we have never seen at any previous Fair of the Society. The exhibition the second day, in connection with the Horticultural Society, was truly splendid. We have never seen so good a show of Fruit and garden vegetables in the State. This is saying a good deal, for the writer has probably attended more Fairs within the last five years than any other man in New York. The Editor of this journal delivered a short address to a crowded audience.

Jefferson County Fair.

We attended the recent Fair of the Jefferson County Agricultural Society, at Watertown. It is truly a *model* Society, which owns a permanent Hall 105 feet in length and 50 in width. Large as this building is, it could hold only about one-third of the farmers, their wives, sons and daughters, who attended the recent Festival. In many things they beat the Fair at Saratoga. Had we room, we should take pleasure in naming many things we saw, and in commending the zeal of the President and other officers of the Society in the cause of agricultural improvement.

The Editor's address is published in the Watertown newspapers. We are not certain whether it will do to give so much space to it in the Farmer or not. It is not often that we write out our remarks on such occasions.

Orleans County Fair.

WE are informed by a gentleman who was present, that the late Fair of the Orleans County Agricultural Society, held at Albion, was numerously attended. He speaks of the exhibition as highly creditable to the Society and the farmers of Orleans. Every thing passed off spiritedly and pleasantly. We regret that we were unable to attend.

AN ENGLISH Clergyman, at Brussels, has invented a motive power, which promises to rival steam. It is founded on the compression of fluids. Eight pails of water it is computed, would be sufficient to carry a vessel to the East Indies.

To Correspondents.

COMMUNICATIONS have been received, during the past month, from John Johnston, S. W., A Subscriber, H. Bristol, Nathaniel Smith, T. P., Jefferson Scott, *, R. P. Stevens, D. A. Ogden, N. Simons, S. D. Beers.

The publication of the Address delivered at the State Fair compels us to defer several communications intended for this number.

COLE'S AMERICAN VETERINARIAN, or Diseases of Domestic Animals, showing the Causes, Symptoms, and Remedies, and rules for restoring and preserving health by good management, with full directions for Training and Breeding. By S. W. COLE, Esq., one of the editors of the Boston Cultivator. Published by JOHN P. JEWETT & Co., Boston, and C. M. SAXTON, New York.

THE above is the title of a very useful work, a copy of which we have received from each of the publishers. It is replete with valuable matter to all persons who are breeders or owners of domestic animals, and worth ten times its cost to almost any farmer. We are informed that it has already had an extended sale. It is a neat volume of nearly 300 pages, bound in leather, and sold at 50 cents. We presume it can be obtained of booksellers generally throughout the country.

Livingston County Fair.

WE learn from persons present that this banner county for noble stock fairly beat herself at its recent Cattle Show. We rejoice to see so many evidences of progressive improvement in all rural pursuits, in Western New York. Agriculture is rapidly rising in public esteem, and ere long Practical Science will achieve the most auspicious results. Let the labor of the Hands and the culture of the Intellect go together, and we shall soon possess a nation of Farmers such as the wise men of the last generation never dreamed of. Learning, science, and rural industry must rise or fall together in this Republic.

The next Fair is to be held at Mt. Morris.—The following gentlemen were elected officers for the ensuing year: JOHN R. MURRY, Jr., President; SAMUEL J. MILLS, Secretary; and HENRY SWAN, Treasurer.

Agricultural Fairs, this Month.

AGRICULTURAL FAIRS are to be held, the present month, as follows. From other counties in which Exhibitions will be held we have received no correct information relative to time, &c.

Cayuga County,	Auburn,	Oct. 6, 7.
Genesee "	Stafford,	Oct. 7, 8.
Ontario "	Canandaigua,	Oct. 12, 13.
Onondaga "	Syracuse,	Oct. 7, 8.
Seneca "	Ovid,	Oct. 14, 15.
Wayne "	Lyons,	Oct. 6, 7.
Yates "	Penn Yan,	Oct. 1.
Vernon Center,	Vernon Center,	Oct. 6.

FAIRS IN OTHER STATES AND CANADA.
Caledonia County, Vt., St. Johnsbury Plain, Oct. 7.
Provincial Ag. Assoc'n, Hamilton, C. W., Oct. 6, 7.

ADDRESS OF THE LATE SILAS WRIGHT,

READ BEFORE THE STATE AGRICULTURAL SOCIETY, AT
SARATOGA SPRINGS, ON THE 16TH OF SEPTEMBER,
BY JOHN A. DIX.*

Mr. President, and Gentlemen of the State Agricultural Society:

Had it been my purpose to entertain you with an eulogium upon the great interests confided to your care, the Agriculture of the State, I should find myself forestalled by the exhibition which surrounds us, and which has pronounced that eulogy to the eye much more forcibly, impressively, eloquently than I could command language to pronounce it to the ear of this assembly.

Had I mistakenly proposed to address to you a discourse on agricultural production, this exhibition would have driven me from my purpose by the conviction that I am a backward and scarcely initiated scholar, standing in the midst of masters, with the least instructed and experienced of whom it would be my duty to change places.

The agriculture of our state, far as it yet is from maturity and perfection, has already become an art, a science, a profession, in which he who would instruct, must be first himself instructed far beyond the advancement of him who now addresses you.

The pervading character of this great and vital interest, however—its intimate connection with the wants, comforts and interests of every man in every employment and calling in life, and its controlling relations to the commerce, manufactures, substantial independence and general health and prosperity of our whole people—present abundant subjects for contemplation upon occasions like this, without attempting to explore the depths or to define the principles of a science so profound, and to the uninitiated, so difficult, as is that of agriculture.

Agricultural production is the sub-stratum of the whole superstructure; the great element which spreads the sail and impels the car of commerce, moves the hands and turns the machinery of manufacture. The earth is the common mother of all, in whatever employment engaged, and the fruits gathered from its bosom are alike the indispensable nutriment and support of all. The productions of its surface and the treasures of its mines, are the material upon which the agriculturist, the merchant and the manufacturer are alike bestowed, and are the prize for which all alike toil.

The active stimulus which urges all forward, excites industry, awakens ingenuity, and brings out invention, is the prospect or the hope of a market for the productions of their labor. The farmer produces to sell—the merchant purchases to sell—and the manufacturer fabricates to sell. Self-consumption of their respective goods, although an indispensable necessity of life, is a mere incident in the mind impelled to acquisition. To gain that which is not produced or acquired, by the sale of that which is possessed, is the great struggle of laboring man.

Agricultural production is the first in order, the strongest in necessity, and the highest in usefulness, in this whole system of acquisition. The other branches stand upon it, and without it could not exist. Still it has been almost uniformly, as the whole history of our state and country will show, the most neglected. Apprenticeship, education, a specific course of systematic instruction,

have been, time out of mind, considered an indispensable pre-requisite to a creditable or successful engagement in commercial or mechanical pursuits; while to know how to wield the axe, to hold the plow, and to swing the scythe, has been deemed sufficient to entitle the possessor of that knowledge to the first place and the highest wages in agricultural employment.

A simple principle of production and of trade, always practically applied to manufactures and commerce, that the best and cheapest article will command the market, and prove the most profitable to the producer and the seller, because more beneficial to the buyer and consumer, is but beginning to receive its application to agriculture. The merchant, who from a more extensive acquaintance with his occupation, a more attentive observation of the markets, better adapted means, and a more careful application of sound judgment, untiring energy and prudent industry, can buy the best and sell the cheapest, has always been seen to be the earliest and surest to accomplish the great object of his class, an independence for himself. So the mechanic, who, from a more thorough instruction in the principles and handicraft of his trade, or a more intense application of mind and judgment with labor, can improve the articles he fabricates, or the machinery and modes of their manufacture, and can thus produce the best and sell the cheapest, has always been seen to reach the same advantage over his competitors, with equal readiness and certainty; and that these results should follow these means and efforts, has been considered natural and unavoidable.

Still the agriculturist has been content to follow in the beaten track, to pursue the course his fathers have ever pursued, and to depend upon the earth, the seasons, good fortune, and providence for a crop, indulging the hope that high prices may compensate for diminished quantity or inferior quality. It has scarcely occurred to him that the study of the principles of his profession had anything to do with his success as a farmer, or that what he had demanded from his soils should be considered in connection with what he is able to do for them, and what he is about to ask them to perform. He has almost overlooked the vital fact, that his lands like his patient teams require to be fed to enable them to perform well, and especially has he neglected to consider that there is a like connection between the quantity and quality of the food they are to receive, and the service to be required from them. Ready, almost always, to the extent of their ability, to make advances for the purchase of more lands, how few of our farmers, in the comparison, are willing to make the necessary outlays for the profitable improvement of the lands they have?

These and kindred subjects, are beginning to occupy the minds of our farmers, and the debt they owe to this society for its efforts to awaken their attention to these important facts, and to supply useful and practical information in regard to them, is gradually receiving just appreciation, as the assemblage which surrounds us, and the exhibitions upon this ground most gratifyingly prove.

Many of our agriculturists are now vigorously commending the study of their soils, the adaptation of their measures to the soil and the crop, the natures of the plants they cultivate, the food they require, and the best methods of administering that food to produce health and vigor and fruit; and they are becoming convinced that to understand how to plow and sow and reap, is not the whole education of the farmer; but that it is quite as important to know what land is prepared for the plow, and what seed it will bring to the harvest worthy of the labors of the sickle. Experience is steadily proving that, by a due attention to these considerations, a better article, doubled in quantity, may be produced from the same acre of ground, with a small proportionate increase of labor and expense, and that the farmer who pursues this improved system of agriculture, can, like the merchant and mechanic referred to, enter the market with a better production, at a cheaper price, than his less enterprising competitor.

* Most of our readers are probably already apprised of the sudden demise of *Gov. Wright*, at his residence in Canton, St. Lawrence county, on the 27th of August. This Address was completed the evening before his death, and read at the Exhibition by the Hon. John A. Dix. It treats mainly on the importance of a foreign market for the agricultural products of this country. To be complete, the author should have stated, in the same connection, the advantages of finishing at the earliest practicable period, the enlargement of the Erie Canal, that this foreign market may be reached at a smaller cost of transportation. Nor should he have omitted to point out the benefits of a reliable home market for the fruits of American rural industry. We shall not attempt to supply the omission.

This change in the agriculture of our state and country, opens to the mind reflections of the most cheering character. If carried out to its legitimate results, it promises a competition among our farmers, not to obtain the highest price for inferior productions, but to produce the most, the best, and the cheapest of the necessaries of human life. It promises agricultural prosperity, with cheap and good bread, furnished in abundance to all who will eat within the rule prescribed to fallen man in the sacred volume of the Divine law.

Steady resolution and persevering energy are requisite to carry forward these improvements to that degree of perfection dictated alike by interest and duty; and the stimulus of a steady and remunerating market will rouse that resolution and nerve that energy. Without this encouragement in prospect, few will persevere in making improvements which require close and constant mental application, as well as severe physical labor.—Agriculture will never be healthfully or profitably prosecuted by him whose controlling object is his own consumption. The hope of gain is the motive power to human industry, and is as necessary to the farmer as to the merchant or manufacturer. All, who labor, are equally stimulated by the prospect of a market which is to remunerate them for their toil, and without this hope, neither mental activity, nor physical energy, will characterize their exertions. True it is that the farmers of our country, as a class, calculate less closely by the profits of their labor and capital, than men engaged in most other pursuits, and are content with lower rates of gain. The most of them own their farms, their stocks and farming implements, unincumbered by debt. Their business gives but an annual return. They live frugally, labor patiently and faithfully, and at the close of the year, its expenses are paid from its proceeds, the balance remaining, being accounted the profits of the year. Although a moderate sum, it produces contentment without a computation of the rate per cent. upon the capital invested, or the wages it will pay to the proprietor and the members of his family. The result is an advance in the great object of human labor, and, if not repaid, it is safe and certain. It is a surplus beyond the expenses of living, to be added to the estate, and may be repeated in each revolving year.

If, however, this surplus is left upon the hands of the farmer, in his own products, for which there is no market, his energies are paralyzed, his spirits sink, and he scarcely feels that the year has added to his gains—he sees little encouragement in toiling on to cultivate beyond his wants, productions which will not sell; and the chances are, that his farm is neglected, his husbandry becomes bad, and his gains, in fact, cease.

To continue a progressive state of improvement in agriculture, then, and to give energy and prosperity to this great and vital branch of human industry, a healthful and stable market becomes indispensable, and no object should more carefully occupy the attention of the farmers of the United States.

Deeply impressed with the conviction of this truth, benevolent minds have cherished the idea that a domestic market, to be influenced only by our own national policy, would be so far preferable, in stability and certainty, to the open market of the commercial world, as to have persuaded themselves that a sufficient market for our agricultural products, is thus attainable. It is not designed to discuss the soundness of the theory, where it can be reduced to practice; but only to inquire whether the state of this country, the condition of its society, and the tendency and inclination of its population, as to their industrial pursuits, are such at the present time, or can be expected to be such for generations yet to come, as to render it possible to consume within the country the surplus of the productions of our agriculture.

The theory of an exclusively domestic market for this great domestic interest, is certainly a very beautiful one, as a theory, and can scarcely fail to strike the mind favorably upon a first impression. Still, examination has produced differences of opinion between statesmen of

equal intelligence and patriotism, as to its influence upon the happiness and prosperity of a country and its population. Any examination of this question would lead to a discussion properly considered political, if not partizan, and all such discussions it is my settled purpose to avoid, as inappropriate to the place and the occasion.

Apply these bright and brightening prospects to the almost boundless agricultural field of our country, with its varied and salubrious climate, its fresh and unbroken soils, its cheap lands and fee simple titles, and who can hope, if he would, to turn the inclinations of our people from this fair field of labor and of pleasure? Here, the toil which secures a certain independence, is sweetened by the constantly varying exhibitions of nature in her most lovely forms, and cheered by the most benignant manifestations of the wonderful power and goodness of nature's God. Cultivated by the resolute hands and enlightened minds of freemen, owners of the soil, properly educated as farmers, under a wise and just administration of a system of liberal public instruction, should, and will be, and aided by the researches of geology and chemistry, who can calculate the extent of the harvests to be gathered from this vast field of wisely directed human industry?

The present surplus of bread-stuffs of this country, could not have been presented in a more distinct and interesting aspect than during the present year. A famine in Europe, as wide-spread as it has been devastating and terrible, has made its demands upon American supplies, not simply to the extent of the ability of the suffering to purchase food, but in superadded appeals to American sympathy in favor of the destitute and starving. Every call upon our markets has been fully met, and the heart of Europe has been filled with warm and grateful responses to the benevolence of our country and our countrymen, and yet the avenues of commerce are filled with the productions of American agriculture. Surely, the consumption of this country is now equal to its agricultural productions.

If such is our surplus in the present limited extent and imperfect condition of our agriculture, can we hope that an exclusive domestic market is possible, to furnish a demand for its mature abundance? In this view of this great and growing interest, can we see a limit to the period, when the United States will present, in the commercial markets of the world, large surpluses of all the varieties of bread-stuffs, of beef, pork, butter, cheese, cotton, tobacco, and rice, beyond the consumption of our own country? And who, with the experience of the last few years before him, can doubt that the time is now at hand, when the two great staples of wool and hemp will be added to the list of exportations?

These considerations, and others of a kindred character, which time will not permit me to detail, seem to me, with unfeigned deference, to prove that the agriculture of the United States, for an indefinite period yet to come, must continue to yield annual supplies of our principal staples, far beyond any possible demand of the domestic market, and must therefore remain, as it now is and has ever been, an exporting interest. As such, it must have a direct concern in the foreign trade and commerce of the country, and in all the regulations of our own and of foreign governments which affect either, equal to its interest in a stable and adequate market.

If this conclusion be sound, then our farmers must surrender the idea of a domestic market to furnish the demand, and measure the value of their productions, and must prepare themselves to meet the competition of the commercial world in the markets of the commercial world, in the sale of the fruits of their labor. The marts of commerce must be their market, and the demand and supply which meet in those marts must govern their prices. The demand for home consumption, as an element in that market, must directly and deeply interest them, and should be carefully cultivated and encouraged, while all the other elements acting with it, and constituting together the demand of the market, should be studied

with equal care, and, so far as may be in their power, and consistent with other and paramount duties, should be cherished with equal care.

Does any one believe, that for generations yet to come, the agricultural operations of the United States are to be circumscribed within narrower comparative limits than the present; or that the agricultural productions of the country are to bear a less ratio to our population and consumption than they now do? I cannot suppose that any citizen, who has given his attention to the considerations which have been suggested, finds himself able to adopt either of these opinions. On the contrary, I think a fair examination must satisfy every mind that our agricultural surplus, for an indefinite future period, must increase much more rapidly than our population and the demand for domestic consumption. This I believe would be true without the efforts of associations, such as this, to improve our agriculture. The condition of the country, and the inclination and preference of our population for agricultural pursuits, would render this result unavoidable; and if this be so, when the impetus given to agricultural production by the improvements of the day—the individual and associated efforts constantly making to push forward these improvements with an accelerated movement—the mass of educated mind turned to scientific researches in aid of agricultural labor—the dawning of a systematic and universal agricultural education—and the immense bodies of cheap, and fresh, and fertile lands, which invite the application of an improved agriculture, are added to the account, who can measure the extent or duration of our agricultural surplus, or doubt the soundness of the conclusion, that the export trade must exercise a great influence upon the market for the agricultural productions of the country for a long series of years to come?

Such is the conclusion to which my mind is forced, from an examination of this subject, in its domestic aspect simply; but there is another now presented of vast magnitude and engrossing interest, and demanding alike from the citizen and the statesman of this republic, the most careful consideration. All will at once understand me as referring to the changes and promises of change in the policy of the principal commercial nations of the world, touching their trade in the productions of agriculture.

By a single step which was nothing less than commercial revolution, Great Britain practically made the change as to her trade, and subsequent events have clothed with appearance of a most super-human sagacity, the wisdom which thus prepared that country to meet the visitation of famine which has so soon followed without the additional evil of trampling down the systems of law to minister to the all-controlling necessities of hunger. Changes similar in character, and measurably equal in extent, though in many cases temporary in duration, have been adopted by several other European governments, under circumstances which render it very doubtful how soon, if ever, a return will be made to the former policy of a close trade in the necessaries of human life.

New markets of vast extent and incalculable value have thus been opened for our agricultural surplus, the durability and steadiness of which it is impossible yet to measure with certainty. It is in our power, however, to say that a great body of provocations to countervailing restrictive commercial relations, is now removed, in some instances permanently, and in others temporarily in form; and it would seem to be the part of wisdom, for the agriculture of this country, by furnishing these markets to the extent of the demand, with the best articles, at the fairest prices, to show to those countries, and their respective governments, that reciprocal commercial regulations, if they offer no other and higher attractions, present to their people a safeguard against starvation.

Such is the connection, now, between our agriculture and export trade and foreign market; and these relations are to be extended and strengthened, rather than circumscribed and weakened, by our agricultural advances. The consumption of the country is far short of its production, and cannot become equal to it within any calculable period. On the contrary, the excess production is to increase with the increase of population and settlement, and the im-

provements in agriculture and agricultural education. These appear to me to be facts, arising from the condition of our country, and the tastes and inclinations of our people, fixed beyond the power of change, and to which theories and principles of political economy must be conformed, to be made practically applicable to us.

I simply propose to inquire as to a fact, which must control the application of theories and principles of political economy touching this point, to our country and its agricultural population, without raising any question as to the wisdom of the one, or the soundness of the other. Is the consumption of this country equal to its agricultural production, or can it become so within any calculable period of years? How is the fact? May I not inquire without offence, or transcending the limits I have prescribed for myself in the discussion? Can a fair examination scrupulously confined to this point, take a political bearing, or disturb a political feeling? It is certainly not my design to wound the feelings of any member of the Society, or of any citizen of the country, and I have convinced myself that I may make this inquiry, and express the conclusions of my own mind as to the result, without doing either. If I shall prove to be in error, it will be an error as to the fact inquired after, and not as the soundness of the principle in political economy dependent on the fact for its application, because as to the soundness of the principle, I attempt no discussion and offer no opinion. It will be an error as to the applicability of a theory to our country and not as to the wisdom or policy of the theory, when it can be practically applied, I studiously refrain from any expression, as inappropriate here. With the indulgence of the Society, I will inquire as to the fact.

Our country is very wide and very new. It embraces every variety of climate and soil, most favorable to agricultural pursuits. It produces already almost every agricultural staple, and the most important are the ordinary productions of extensive sections of the country, and are now sent to the markets in great abundance.

Yet our agriculture is in its infancy almost every where, and at its maturity no where. It is believed to be entirely safe to assume that there is not one single agricultural county in the whole Union, filled up in an agricultural sense—not one such county which has not yet land to be brought into cultivation, and much of which is to be materially improved, before it can be considered as having reached the measure of its capacity for production. If this be true of the best cultivated agricultural county in the Union, how vast is the proportion of those counties which have entire townships, and of the States which have not merely counties, but entire districts, yet wholly unpeopled and unreclaimed from the wilderness state.

When to this broad area of the agricultural field of our country, we add our immense territories, organized and unorganized, who can compute the agricultural capacities of the United States, or fix a limit to the period when our surplus agricultural productions will increase with increasing years and population? Compare the census of 1830 and 1840 with the map of the Union, and witness the increase of population in the new States, which are almost exclusively agricultural, and who can doubt the strong and resistless inclination of our people to this pursuit?

Connect with these considerations of extent of country, diversity of soils, varieties of climate, and partial and imperfect cultivation, the present agricultural prospects of this country. Witness the rapid advances of the last dozen years in the character of our cultivation, the quality and quantity of our productions from a given breadth of land, and the improvements of all the implements by which the labor of the farmer is assisted and applied. Mark the vast change in the current of educated mind of the country, in respect to this pursuit; the awakened attention to its high respectability as a profession, to its safety from hazards, to its healthfulness of mind and body, and to its productive-ness. Listen to the calls for information, for education upon agricultural subjects, and to the demands that this education shall constitute a department in the great and all pervading system of our common school education, a subject at this moment receiving the especial attention, and being pressed forward by the renewed energies of this Society. Behold the numbers of professors, honored with the highest testimonials of learning conferred in our country, devoting their lives to geological and chemical researches calculated to evolve the laws of nature connected with agricultural production. Go into our colleges and institutions of learning, and count the young men toiling industriously

for their diplomas, to qualify themselves to become practical and successful farmers, already convinced that equally with the clerical, the legal, and the medical professions, that of agriculture requires a thorough and systematic education, and its successful practice the exercise of an active mind devoted to diligent study.

The American farmer, then while carefully studying, as he should not fail to do, the necessities, the wants and the tastes of all classes of consumers of his productions in his own country, must not limit his researches for a market within those narrow bounds. He must extend his observations along the avenues of commerce, as far as the commerce of his country extends, or can be extended, and instruct himself as to the necessities, and the wants and tastes of the consumers of agricultural productions in other countries. He must observe attentively the course of trade, and the causes calculated to exert a favorable or adverse influence upon it; watch closely the commercial policy of other countries, and guard vigilantly that of his own; accommodate his productions, as far as may be, to the probable demands upon the market, and understand how to prepare them for the particular market for which they are designed. Next to the production of the best article at the cheapest price, its presentation in the market in the best order and most inviting condition, is important to secure to the farmer a ready and remunerating market.

So long as our agricultural shall continue to be an exporting interest, these considerations, as second only to the science itself will demand the careful attention and study of our farmers, and in any well digested system of agricultural education, its connection with manufactures and the mechanic arts, with commerce, with the commercial policy of our own and other countries, and with the domestic and foreign markets, should hold a prominent place. A thorough and continued education in these collateral, but highly necessary branches of knowledge to the farmer, will prove extensively useful to the American citizen, beyond their application to the production and sale of the fruits of his labor. They will qualify him the more safely and intelligently to discharge the duties of a freeman: and if called by his fellow-citizens to do so, the more beneficially to serve his State and country in legislative and other public trusts.

I hope I may offer another opinion in this connection, without giving offence, or trespass upon the proprieties of the place and occasion. It is that this education is the just and true connection between the agricultural, the commercial, and the manufacturing interests of our country, equally and impartially disseminated among the classes of citizens attached to each of these great branches of labor, would effectually put an end to the jealousies too frequently excited; demonstrating to every mind, so educated, that, so far from either being in any degree the natural antagonist of the other, they are all parts of one great and naturally harmonious system of human industry, of which a fair encouragement to any part is a benefit to all; and that all invidious and partial encouragement to any part at the expense of any other part, will prove to be an injury to all. The education proposed, will do all that can be done to mark the true line between natural and healthful encouragement to either interest, and an undue attempt to advance any one, at the expense of the united system, merely producing an unnatural and artificial relation and action, which cannot fail to work disease and injury.

The labors of this Society, and of kindred associations, have done much to inform the minds of our farmers in these collateral branches of knowledge useful to them, and much remains to be done. The science of production claims the first place, and is a wide field, as yet so imperfectly cultivated as to afford little time for collateral labors. To secure a stable and healthful market, and to learn how to retain and improve it, also opens an extensive field for the mental labors and energies of the farmer. Between these objects the relation is intimate and the dependence mutual. The production makes the market, and the market sustains the production. The prospect of a market stimulates to activity in the field of production, and the fruits of that activity urge the mind to make the prospect real. Success in both contributes to the health and vigor and prosperity of agriculture, and of that prosperity, commerce and manufactures cannot fail largely to partake.

All are willing to promote the cause of agriculture in our State and country. Most are ready to lend an active co-operation, and all are cheerful to see accomplished any valuable improvement in this great branch of productive in-

dustry. The difficulty hitherto has been in adopting any general plan to effect this desirable object. Hence, most usually, when the public mind has been awakened to the subject, arbitrary, and in many cases visionary experiments have been introduced, based upon no philosophical investigation of cause and effect, but upon some accidental trial, by a single individual, of some novel mode of culture, which, under the circumstances attending the experiment, has met with success. The single experiment, without an inquiry into, or a knowledge of the cause which, in the given case, has secured the successful result, is at once recommended as an infallible rule of husbandry. The publication and dissemination of detached experiments of this character, for a long period, constituted the most material additions to the stock of literary information connected with agriculture, supplied to our farmers; while many of the experiments were too intricate and complicated to be reduced to practice with any certainty of accuracy, and others were so expensive that the most perfect success would not warrant the outlay. Unsuccessful attempts to follow the directions given for making these experiments, brought what came to be denominated "book farming," into great disrepute with the industrious, frugal and successful farmers of the country, and excited a jealousy of, and a prejudice against this description of information upon agricultural subjects, which it has cost years of patient and unceasing effort in any measure to allay, and which are not yet removed.

In the mean time, geological research, heretofore principally confined to investigation into the mineral kingdom proper, has been extended to its legitimate office, and has brought within its examinations the formation of its various soils, and their minute constituent parts. Chemistry has commenced where geology closed, and by a careful analysis of these constituent of the various soils, of the principal agricultural products, and of the usual measures, is laboring to establish upon philosophical principles, the true relations between the soil and the manure to be applied, and between both and the crop to be planted and produced. It is seeking out, with rapid success, the appropriate food of the various vegetables cultivated by the farmer, the soils and manures in which the food for each is found, and the way in which it may be most successfully administered. So with the food of the domestic animals, and the most economical manner of feeding it.

These investigations are the reverse of the former system of arbitrary experiments. There, a result was made to justify the arbitrary means adopted to produce it. Here, causes are ascertained, and, being so ascertained, are relied upon to produce their natural effect—which effect is the result sought.

The importance of this great subject is effectually arousing the attention of the literary and scientific men of the country, and the success already experienced is drawing to these researches minds qualified for the labor, and energies equal to its rapid advancement. The progress made is bringing together the unsettled mind of the country, and producing the very general impression that the time has arrived when the foundations of a systematic, practical agricultural education should be laid, and the superstructure commenced.

It is universally conceded that agriculture has shared but lightly in the fostering care and government patronage which have been liberally extended to commerce and manufactures, nor is it believed that additional public expenditure is necessary to enable the State to do all that can reasonably be required of it, to accomplish this great object. Our educational funds are rich, and the colleges, academies and common schools of the State share liberally in the distributions from them, while a Normal school, for the education of teachers, instituted at the seat of government, is also mainly supported from these funds. These institutions present the organization, through which, perhaps better than through any independent channel, this instruction can be universally disseminated among the agricultural population of the State. The annual additions to the school district libraries may be made with reference to this branch of education, and thus place within the reach of all, the discoveries as they progress and the rules of husbandry deduced from them, as they shall be settled and given to the public from the pens of the competent professors engaged in pursuing the researches.

This Society, and like associations, may, through appropriate committees, their corresponding secretaries, public spirited commercial men, and otherwise, collect and embody in their transactions, facts and information respecting

the markets, foreign and domestic; the present and probable supply of agricultural products; the mode and manner of presenting the principal productions in various markets in the most acceptable form; the state and prospects of trade at home and abroad, and the changes present and prospective in the commercial policy of our own and other countries, with the probable influences upon the agricultural market. The commercial and agricultural press will doubtless come powerfully to the aid of the associations, in all efforts of this character, and having these great objects in view.

In this way the foundation may be gradually laid, and the materials collected for the commencement of those agricultural studies, which time and application, with the constant evidence of their utility in practice, would ripen into a system, to be engrafed upon the course of regular studies pursued in the colleges, academies and common schools, and made a branch of the studies of the male classes in the Normal School, placed under the superintendence of an instructor selected for the purpose, and qualified to prepare his classes for teaching the studies in the common schools of the State.

Thus a generation of farmers would soon come forward, well educated in the great and essential principles of agricultural production; in the true relations existing between agriculture, commerce and manufactures, and in the adaptation and preparation of their products for the agricultural markets. Such farmers, with the continued aid of the schools in which they were taught, would become the best manual labor instructors for their successors.

The passage of time reminds me that I am extending these remarks beyond the proprieties of the occasion and the patience of my audience. A single reflection shall close them.

However confidently the opinion may be entertained that other circumstances and relations might present a prospect for the agriculture of our State and country more stable, independent and flattering, certain it is, that the future here opened is full of cheering promise. We see in it the strongest possible security for our beloved country, through an indefinite period against the scourge of famine. Our varied soil and climate and agriculture double this security, as the disease and failure of any one crop will not, as a necessary consequence, reduce any class of our population to an exposure to death from hunger. We see also, in addition to feeding ourselves, that our surplus is almost, if not altogether, sufficient, if faithfully and prudently applied, even now to drive famine from the length and breadth of Europe. And that it is in our power, by faithful mental and physical application, soon to make it equal to the expulsion of hunger from the commercial world. We see that, dependent upon the commercial markets, our agriculture may bring upon our country a high degree of prosperity, and enable us, when extraordinary occasions shall call for its exercise, to practice a national benevolence as grateful to the hearts of the humane as to the wants of the destitute. And we see that by the wider diffusion and more secure establishment of a successful agricultural among our citizens, as a permanent employment, we are laying broader and deeper the foundations of our free institutions; the pride and glory of our country, and prized by its freemen as their richest earthly blessing; the history of all civil government, confirmed by the experience of this republic, furnishing demonstrative proof that a well educated, industrious, and independent yeomanry, are the safest repository of freedom and free institutions.

Science with Practice.

UPON this subject the Rév. Mr. HUXTABLE, of England, observes—

"By what process of cultivation, when we manure highly for wheat, the straw can be so much stiffened as to bear the increased weight of ear, is at present, in my humble judgment, one of the great problems in agriculture that presses for solution; as it is well known that this stiffness arises from the presence of the silicate potash (an imperfect sort of glass,) chemists have suggested that this soluble silicate, or that of soda, should be added to the ammoniacal manures, which we use for wheat: but these salts are expensive; nor am I aware of any experiments having been made which would justify our incurring the outlay for them. Mor over, some interesting facts mentioned by Professor Johnston (*Journal of Agriculture*, p. 103, 1845) shew that

there is already abundant silica in our cultivated soils, and that plants are able to decompose and extract silica for their use, even from the most stubborn silicates. If there be alkali enough at hand, the vital forces of the smallest living plant will form the silicates it needs—a process which man accomplishes only by the blast of the hottest furnace. I think, therefore, that in seeking to remedy weakness of straw, we should rather try to diminish that rankness of vegetation in our corn crops, which causes that weakness; and this I think we can accomplish by a simple application. I think there is one cheap and effectual remedy; it is common salt. This will make the straw heavier and stiffer, and correct the tendency of the ammonia, in the manure, to produce a rank vegetation. Mr. Frideaux, of Plymouth, informs me that wheat grown very near the sea stands up better than that grown inland. Mr. Hannam testifies to the increased weight of the straw. Mr. Gardiner (*Highland Transactions*, p. 239, 1844) states, 'that 3 cwt. of salt per acre, thrown over wheat in May, produced no change of color, but improved the tillering of the plants, which had small stiff, shining, wiry straw.'

"Bones digested in sulphuric or muriatic acid have the same tendency to check rank vegetation and to strengthen the straw; see *Mr. Gardiner's Experiment*, p. 242; also an experiment of Mr. Fleming (*Johnston's Lectures*, Appendix, p. 28,) who dissolved his bones in muriatic acid, and applied the mixture to oats sown upon moss: he says that the straw appeared as stiff and shining as if it had been grown upon stiff loam.

"I think, then, that a perfect top dressing for the wheat crop, on light lands, should be composed of 2 cwt. of bones, well digested in 1 dwt. of sulphuric acid. 5 cwt. of shoddy, and 3 cwt. of salt; thus, in good years you might, I believe, grow six quarters of wheat per acre. On all light soils this assistance to the wheat should be given in the spring; but as in clay the decomposition of the shoddy is so slow, I should apply this manure when I sowed the wheat on my heavy land in the autumn. There is yet another way of growing a heavy crop of wheat on clay: lime the fields in autumn, two or three weeks before sowing; top dress, in the spring with superphosphate of lime, 3 cwt. of salt, mixed with 30 bushels of clay ashes, which have repeatedly been soaked in urine. I am vain enough to believe that this manure, suggested for wheat, will prove valuable, and quite worth the half-crown which you paid for your tickets."

Speaking of the lecture of which the above is an extract, the *Mark Lane Express* remarks:—"We earnestly recommend every farmer to get a copy of this lecture; it is published by Simonds, of Dorchester. A cheaper eighteenpenny-worth of useful information has never been offered to the agriculturist."

Three New York shillings for a single lecture—the price of the *Genesee Farmer* a year to most of its subscribers. The tickets to this lecture were sold at a "half-crown" each.

How many days and weeks have we not spent in delivering agricultural lectures, the analysis of soils and fertilizers, for nothing? The first whole year (1844) that we wrote for the *Genesee Farmer* we received just four dollars in Canada money for the service. Our compensation now, it is but justice to say, is all that the Publisher ought to pay at the low price of this journal. If each number was sold at six cents instead of three, the great principle would be practically acknowledged—that "the laborer is worthy of his hire." It would be an easy matter to charge six cents instead of three; but "book-farming" is so lightly esteemed in this country, that probably three-fourths of the readers of the *Farmers* would stop their paper.

Dig potatoes early. Look out for the rot.



HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

Peaches.

THE Peach Crop, in this section, has been the most abundant we remember to have seen.—Trees have broken down, in all directions, under their load, owing to the neglect of a proper thinning. The backwardness of the early part of the season, cool nights during August, and the excessive load have together retarded the ripening process as much as ten days or a fortnight beyond the usual period. The early varieties particularly have been belated. The *Early Tillotson*, *Early Purple*, *Sweet Water*, *Early York*, *Cole's Early*, *Haine's Early*, *Coolidge's Favorite*, &c., have nearly all come in at once.

The above are all fine varieties, and have been sufficiently tested here to enable us to recommend them for Early Peaches in Western New York. The three latter varieties are but recently introduced here; this is the second year they have borne with us, and they have proved first rate.

Cole's Early Red is an uncommonly productive, medium sized fruit; deep red on the sunny side, of a rich and delicious flavor, far exceeding the *Early Purple* in this respect, and ripening about the same time, or perhaps a few days later.

Coolidge's Favorite, a Massachusetts peach, is a fruit unsurpassed by any we have ever seen, in any place, for *beauty and excellence*. It is remarkably productive, the tree is one of the hardiest, fruit of medium size to large, about as large as the *Sweet Water*, with a bright crimson cheek, and mottled all over with great beauty and delicacy. This must be a popular Peach everywhere; if we had only two trees, one should be of this.

Haines' Early Red has borne with us this year for the second time, and proves to be a fruit of great excellence. The tree is one of the most vigorous and hardy, and bears abundantly. The fruit is large, and uniformly so, resembling the *Grosse Mignone* or *Royal Kensington* of this section; skin, pale in the shade,

deep red in the sun; flesh, greenish white, abounding with a sweet fine flavored juice.—This Peach has been tasted and examined by hundreds of persons on our grounds this season, and without an exception it has been pronounced *first rate*. It will be a popular and very valuable early orchard variety for the market.

The *Snow Peach* is a regular and productive bearer, and is now (Sept. 14,) beginning to ripen. It is a beautiful and delicious fruit. It is perfectly distinct, being white as snow, almost, both skin and flesh.

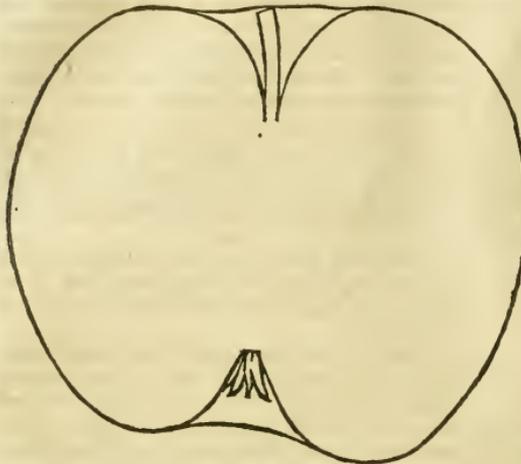
George the Fourth and smooth leaved *Royal George*, or *Bellegarde*, prove very fine large fruits—ripe this season about the 8th to 14th of September.

Those that we have mentioned are all white fleshed freestone Peaches, and all what may be called early sorts. The best yellow fleshed peaches are the *Jacques*, *Crawford's Early Malacatoon*, *Yellow Alberge*, and *Red Cheek Malacatoon*—all large, productive, delicious fruits, well adapted for the market, and all ripening before the 20th of September, in ordinary seasons. The *Morris' White Rare Ripe*, *Old Mixon free*, and *Weld's free*, are large, fine, later varieties, and the *Lemon* and *Orange* clings are among the best of that class.

We believe those we have mentioned cannot be surpassed for market varieties in this or more northern sections. We have not mentioned several fine varieties that do well here, nor the *Crawford's late Malacatoon*, as we have not yet seen it ripened here.

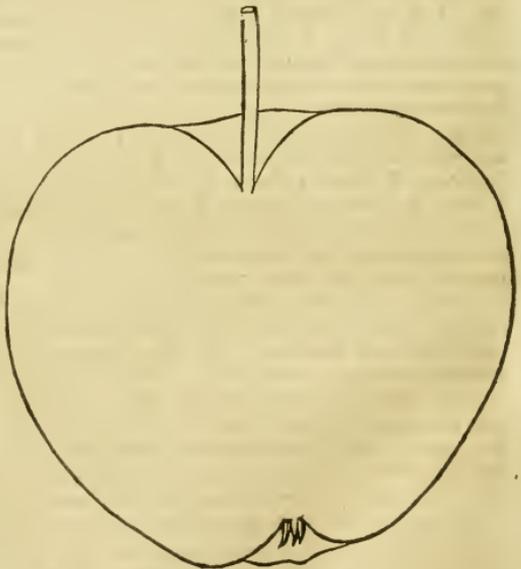
The abundant crop this season, such as we have not had for many years, and may not again for some years to come, has reduced the price to something like a fair reasonable standard, affording to thousands of persons who before never tasted a good peach, to indulge partially in that luxury. For a week or ten days *Early Purple*, *Sweet Water*, &c., sold at \$2,50 to \$3 per basket—then they came down to \$1, and we believe less. But even at the lowest, large fine specimens sold for \$2 to \$2,50; yet a dollar a basket is high enough, and our fruit growers have no reason to complain. At that rate a good five year old tree will produce 4 to 5 or more dollars—a most ample remuneration. We rejoice to see peaches growing plenty and cheap, and hope they will continue to do so until the whole working population of our cities and villages will be able to eat plenty of *good* peaches, and until our Canadian neighbors, and those who cannot grow peaches in our own State, may be supplied with choice *Sweet Waters*, *Cole's Haines*, *Kensingtons*, *Crawfords*, *Jacques*, &c., instead of the miserable, stony, sour, hog peaches now shipped to them, and that we have really felt ashamed to see leave the shores of our fine peach growing country.

The "Benoni" and "Summer Queen" Apples.

(Fig. 57.) *Benoni Apple.*

SUMMER QUEEN.—This is a beautiful as well as an excellent dessert summer fruit—ripening, here in Western New York, during the latter half of August and first of September—coming in just after the *Early Harvest* and *Red Astrachan*. It is above medium size, being quite large on young thrifty trees—inclined to conical shape, being broadest a little below the crown and tapering to the eye, where it is usually quite pointed. Stalk long, over an inch, deeply inserted. Calyx closed in a shallow plaited basin. Skin pale yellow, striped and mottled with bright and deep red—quite covered with red in the sun. Flesh yellowish white, rich and fine flavored—stained with red on the exposed side.

The tree is of rapid growth, and has a peculiar spreading habit; young wood of a light reddish brown, covered with whitish down easily rubbed off. Leaves light delicate green. The tree is distinct. It is an early and most abundant bearer, and makes an orchard tree of the first class.

(Fig. 58.) *Summer Queen.*

ANSWER TO INQUIRIES.—Our correspondent at Ithaca will find his inquiries, respecting the 12 best varieties of peaches, anticipated in the leading article in this Department of the present number. All the varieties there mentioned have been fruited here under our own eyes, and the remarks made are consequently based on actual observation.

As to the season for planting we cannot speak decidedly. On dry ground, not wholly exposed to the north and west winds, we prefer early fall planting—say middle of October, for all hardy

BENONI.—This is an early apple of the very finest quality—ripe, here, latter end of August and beginning of September.—Fruit, medium size, sometimes large—roundish, of a beautiful bright red color, showing a little pale yellow ground in the shade. Stalk short, in a regular cavity. Calyx open, in a narrow, smooth and pretty deep basin. Flesh, white, crisp, juicy; pleasant sub-acid flavor. This apple has been kept longer with us, after being pickled, without losing its juice, freshness and flavor than any other, and this is a quality of some importance.

The tree is a vigorous, upright grower; young shoots of a reddish brown color.—Leaves large, slightly folded in at the edges, and deeply serrated. This is a Massachusetts fruit, introduced by E. M. RICHARDS, of Dedham, and stands at the head of their summer apples in Mass.

trees; but on ground where water would be likely to lodge around the roots for any great length of time, or where the trees would be exposed to the unobstructed severity of the north and west winds during winter and early spring, we would advise spring planting. In either case prepare your soil well by two or more thorough, deep plowings. Procure good trees, of good varieties, and have them planted in the very best manner. See remarks on this subject, in another place.

H.'s article, on the Blight, next month.

Horticultural Festivals in Boston and Phil'a.

WE had, during the past month, the pleasure of attending the exhibitions of the two oldest and best Horticultural Societies in America—those of Pennsylvania and Massachusetts.

They were both unusually fine. It was a feast, such as we have not had in some years, to see so many new and rare fruits, flowers, and vegetables,—and to meet with so many distinguished amateur and professional cultivators.

We also visited several of the best collections of fruits in the country, and have collected a budget of memoranda that will be serviceable to ourselves and to the readers of the Farmer hereafter. Philadelphia excels in *plants and flowers* and floral designs—Boston in *fruits*. Philadelphia turns out whole Green Houses of plants, and immense quantities of everything. Boston excludes nearly everything but Pears; of these Mr. MANNING, of Salem, exhibited over 200 varieties; M. P. WILDER, Esq., Pres't of the Society, over 150; MESSRS. HOVEY & Co., S. WALKER, Esq., of Roxbury, and many others—great collections. Splendid Grapes, grown under glass, were exhibited by MESSRS. HOVEY & Co., and others. We saw magnificent bunches of *Black Hamburg*, *Syrian*, *Wilmot's new Black Hamburg*, *White Frontignac*, *St. Peters*, *Rose Chasselas*, (this is a beautiful Grape,) *Golden do*. These are the leading sorts grown. This is becoming a great business at and around Boston—in every direction there are grape houses. There is every encouragement for them—the common market price, at which there is nothing like a supply, is 75 cts. to \$1.00 per lb.

We hope to see grape houses erected in Western New York and other sections soon. Other people could eat fine Black Hamburgs and Muscats as well as the Bostonians. We shall refer to this matter again.

Transplanting Trees.

AUTUMN planting should be commenced just as soon as practicable—that is, as soon as cold weather and frosts have fairly arrested vegetation. By early planting you gain a month or more before heavy frosts set in, and trees become firmly fixed in their new situation, and in many cases will have made new roots. Planting at this season should be done only on *dry* ground, where there cannot be the least apprehension of water lodging around the roots; but this caution is unnecessary, as few persons will think of planting trees on wet ground till *thoroughly drained*.

In our last volume (page 263) we gave a description and illustration of a mode of supporting autumn planted trees, to which we must refer those who are now about planting. It has been found to answer, completely, the double purpose

of securing the tree against the winds and preventing the frosts from penetrating to the roots. To all who are about to plant we would say, be sure to select good sorts—get good healthy trees—have them carefully dug with the roots uninjured—carefully packed before taking them from the nursery—and then planted in the very best manner.

Horticultural Exhibition at Rochester.

THE Horticultural Society of the Valley of the Genesee held its annual exhibition in Minerva Hall, on the 23d ult. The display of Fruits, Flowers and Vegetables was unusually fine. The increased number of contributors, and the great variety and superior quality of the articles exhibited on this occasion, bears gratifying evidence of the zeal and rapid progress that we are now making in every department of Horticulture.

The reports of Committees have not been prepared until our day of publication, so that we are unable to give any details. We shall do so in the next number. The ladies, we are glad to say, did their part well—four, we believe, exhibited 150 varieties of flowers each.

Don't Steal that Fruit.

Sure, an' ye don't call it stealing to get over and take a little fruit, do ye? Yes we do, and the *meanest* kind of stealing, too. You would'n't walk into that man's house and take his money from his draw, nor his bread from his table, and yet very likely that money and that bread has not cost its owner half so much labor, and is not half so much prized and valued as his fruit.—Don't steal it. Children and young people are generally the trespassers on this sort of property. They ought to be carefully cautioned by their parents,—by their guardians,—by their school-teachers, and by the whole of the older parts of the community, to avoid these species of transgression. Nothing is more aggravating to a person who has for years spent his time and his money in rearing up good fruit of any kind, than to have it filched from him by any body.—The theft is contemptibly mean, and yet there are many who look upon it as a very trivial affair, and as one hardly deserving the trouble of a rebuke, when the whole community ought to frown it down.—*Mcine Farmer*.

GIVE CREDIT.—Editors copying articles from the *Genesee Farmer* will please give proper credit. We almost daily find articles in our exchanges, copied from this journal, without the least acknowledgment. Many articles, which originally appeared in the Farmer, are going the rounds of the papers, credited to other journals, "A word to the wise."

The Ripening of Winter Pears.

CULTIVATORS of the Pear begin to understand the necessity of properly ripening sorts, in order to bring them to perfection. Hence we have lately had many inquiries on the subject, and even requests to furnish through this paper plans for *fruit houses*. The following article from the "Horticulturist," on this subject, by S. WALKER, Esq., of Roxbury, Mass., is the best we have seen, and will furnish to those of our readers who are interested in this matter, some valuable hints:

The increasing demand for fruit, and more particularly for autumn and winter pears, has caused frequent inquiries to be made by the cultivators of this delicious fruit, as to the best mode of keeping and ripening the different varieties for the table and for the market. The subject, at present, is but partially understood; but, with your permission, I will venture to offer a few crude hints, and all the practical experience I possess on the subject.

"To begin at the beginning," I consider it very desirable that every fruit-grower should have a *Fruit-House*, or *Fruit-Rooms*, consisting of at least two apartments, viz: a *keeping* and a *ripening* room. For this purpose I would suggest an ornamental building of brick, stone or other material, so constructed as to keep out the frost, divided into two rooms of such size as may meet the wishes and wants of the cultivator.

The floor of the keeping-room to be of brick or stone; the ripening-room floor to be of wood, if you please, covered with a carpet, and to render it comfortable and suitable for the purpose, a fire-place to heat the apartment when necessary.

The same treatment will not, I believe, suit all the kinds of pears (maturing at the same season) whether they be autumn or winter varieties. For illustration, let us compare the *Chaumontal* and the *Vicar of Winkfield* (*Monsieur le Cure*) the first will ripen when subjected to great changes and exposure to frost; indeed, it may be left upon the ground with only a slight covering of leaves, grass or other light substance, at times covered with snow, the thermometer varying from 10° above zero to summer heat, and still the ripening process advances, and is, in all probability, accelerated by these sudden changes until the fruit is nearly ripe, at which time, if the fruit is taken into a cold cellar for a few days, (if frozen put into some soil to take out the frost,) and then removed into the keeping-room, there boxed up with cotton batting, and then placed in the ripening apartment, the maturing process will be promoted until the fruit has acquired its highest state of perfection. These remarks, I have no doubt, will apply to other varieties, of which time and experience will give, to the close and attentive observer, further information on this important subject. I will, however, venture to express an opinion that the *Beurre Rance* and *Easter Beurre* may be put into this class.

On the contrary the *Vicar of Winkfield* belongs to a class of pears requiring a very different course of treatment. This variety should never be exposed to frost, but for late keeping it should be placed upon the floor of the keeping-room, and whenever the fruit is wanted for the table it should be put into tight boxes, wrapped up in cotton, and placed in the warmest part of the ripening-room, the temperature varying from 55° to 75°; in this manner the fruit will be ripe in from fifteen to twenty days. Having thus attempted to show that the same treatment is not adapted for the ripening of all the varieties of the pear, (and this I have no doubt will apply to the apple,) I shall proceed to give my views as to the general treatment of autumn and winter pears.

All pears which come to maturity in the autumn and winter, should not be gathered until the fruit has attained its full growth, (the middle of October is about the season in the neighborhood of Boston.) This should be done by hand, some fine day when the fruit is perfectly dry, putting it away carefully into barrels,* buckets or boxes,† according to quantity, keeping each kind separate, labeling the same with its name, the day it was gathered and the season of its ripening. The fruit having been thus gather-

ed and secured, it should be arranged in the *keeping-room* of the fruit-house, as the owner may think proper. The barrels may be placed upon the floor, the baskets hung up, and the boxes placed upon shelves. Where large quantities of any one kind are raised, bins may be proper.

The fruit being now placed in the *keeping-room*, care should be taken to keep the room cool, dark and dry; shutters and curtains should be provided for the windows, to close them up during the day, if the weather is bright, dry and hot; at night, when the weather will permit, the thermometer not ranging below 30°, the windows may be all, or in part, left open for fresh air and ventilation. The windows and shutters should be closed early in the morning, to keep in the night air and to preserve the fruit. If mould or mildew should be seen upon the fruit, it should be removed with a dry cloth or silk handkerchief; if about the floor, or other part of the building, strew a small quantity of air slaked lime about the room.

As the period of ripening approaches, all the varieties should be examined; the fruit that shows signs of its soon coming to maturity should be carefully packed up with layers of cotton batting, in tight boxes, and in no case should the box be opened or the fruit unnecessarily exposed to the air. From the time fruit is gathered, until it is *fully* ripe, it should, in my opinion, be kept in close, dry vessels. The pears thus boxed up should be placed in the ripening-room, keeping the room at a temperature of from 55° to 75° of heat. As the fruit becomes ripe, send it to the table. When the fruit is intended for sale, it should be sent to market a few days before it is *fully* ripe.

SAMUEL WALKER.

* All vessels used to keep fruit in should be perfectly dry, clean, sweet and tight. Barrels, after they have been used as "four barrels," are not at all suited for fruit, unless well washed and dried, as the particles of flour left in the barrel will mould and impart to the fruit an unpleasant odor and flavor. Fruit put into lime casks has kept well. Every thing in contact with fruit should be sweet and clean, and the vessel in which it is placed dry and tight. It should be handled or disturbed as little as possible.

† When fruit is put into small boxes, to ripen, it may be wrapped up in cotton batting, but while it remains in the keeping-room, neither straw, paper or other like material should be placed with the fruit, as it is always more or less injurious.

Acknowledgments.

To H. K. NORTON, Esq., Brockport, for a couple of branches loaded with very pleasant juicy little pears, now in eating (Aug. 25). In size less, and in shape somewhat similar, to the Madalaine, but with a much longer stalk.—We suppose it to be the Long stem Blanquet. It is not so fine flavored as the Skinless, ripening at the same time—but as it appears to be a *fine bearer*, it may be worthy of culture.

—S. WORDEN, of Oswego, for a box of fine specimens of the Pie Apple. We noticed this fruit last season. It is a valuable variety, being a remarkably fine grower, an abundant bearer every year, and withal a most excellent fruit for cooking and dessert. We shall give a figure and description of its soon.

—W. E. ARNOLD, Esq., for beautiful specimens of his "Genesee Chief Apple," "Fall Russet," and another excellent variety which he has been in the habit of calling "Sour Bow," a not uncommon synonyme for the "Early Harvest," in this section. This apple, however, is on an average more than one-third larger, in eating three weeks to a month later, and is much more flattened. The color and flavor are the same as the Early Harvest, and the wood is similar. Mr. A.'s apples are somewhat of a puzzle to us. The trees were planted by an Englishman, many years ago, and appear to have been imported.

—JOHN MORSE, Esq., of Cayuga, for a box of specimens of the Augustine Apple—a large, oblong apple, pale yellow in the shade; bright red, sprinkled with gray spots, in the sun. Flesh, fine grained, rich, and sweet. In appearance it resembles the American Summer Pearmain, but is lighter colored. In our opinion this is a most desirable summer sweet apple.

—L. RISLEY, Esq., of Fredonia, for specimens of the Risley Orange Apple—a very large oblong fruit, inclining to conical—of a greenish color, becoming deep yellow when ripe. Flesh coarse, but crisp, juicy, rich, and fine flavored. In eating now, (Sept. 12.) This is an excellent September fruit, very popular through Chautauque county.

LADIES' DEPARTMENT.

Making Pickles.

THIS is the season for making pickles, and we are sure many of our female readers will thank us for inserting the following extracts from Miss Beecher's Receipt Book :

PICKLES.—Do not keep pickles in common earthen ware, as the glazing contains lead, and combines with the vinegar.

Vinegar for pickling should be sharp, but not the sharpest kind, as it injures the pickles. If you use copper, bell metal, or brass vessels for pickling, never allow the vinegar to cool in them, as it then is poisonous. Add a table spoonful of alum and a teacup of salt to each three gallons of vinegar, and tie up a bag with pepper, ginger-root, and spices with all sorts in it, and you have vinegar prepared for any kind of common pickling.

Keep pickles only in wood or stone ware.—Anything that has held grease will spoil pickles.

Stir pickles occasionally, and if there are soft ones, take them out and scald the vinegar, and pour it hot over the pickles. Keep enough vinegar to cover them well. If it be weak, take fresh vinegar, and pour on hot. Do not boil vinegar or spice over five minutes.

To Pickle Tomatoes.—As you gather them, throw them into cold vinegar. When you have enough, take them out, and scald some spices tied in a bag, in good vinegar, and pour it hot over them.

Fine Pickled Cabbage.—Shred red and white cabbage, spread it in layers in a stone jar, with salt over each layer. Put two spoonsful of whole black pepper, and the same quantity of allspice, cloves and cinnamon, in a bag, and scald them in two quarts of vinegar, and pour the vinegar over the cabbage, and cover it tight. Use it in two days after.

To Pickle Cauliflower or Brocoli.—Keep them twenty-four hours in strong brine, and then take them out and heat the brine, and pour it on scalding hot, and let them stand till next day. Drain them, and throw them into spiced vinegar.

To Pickle Onions.—Peel, and boil in milk and water ten minutes, drain off the milk and water, and pour scalding spiced vinegar on to them.

To Pickle Gherkins.—Keep them in strong brine till they are yellow; then take them out and turn on hot spiced vinegar, and keep them in it in a warm place, till they turn green. Then turn off the vinegar, and add a fresh supply of hot, spiced vinegar.

Mangoes.—Take the latest growth of young muskmellons, take out a small bit from one side, and empty them. Scrape the outside smooth,

and soak them four days in strong salt and water. If you wish to green them, put vine leaves over and under, with bits of alum, and steam them awhile. Then powder cloves, pepper, and nutmeg in equal portions, and sprinkle on the inside, and fill them with strips of horseradish, small bits of calamus; bits of cinnamon and mace, a clove or two, a very small onion, nasturtions, and then American mustard seed to fill the crevices. Put back the piece cut out, and sew it on and then sew the mango in cotton cloth. Lay all in a stone jar, the cut side upward.

Boil sharp vinegar a few minutes, with half a teacup of salt, and about a tablespoonful of alum to three gallons of vinegar, and turn it on to the mellons. Keep dried barberries for garnishes, and when you use them turn a little of the above vinegar of the mangoes heated boiling hot on to them, and let them swell a few hours. Sliced and salted cabbage with this vinegar poured on hot is very good.

AN IMPROVEMENT IN BREAD-MAKING.—Persons who are so unfortunate as to be poorly provided with those agents of mastication, good teeth, will be glad to know that there is a method of baking bread which obviates the necessity of a hard crust. The crust commonly attached to the loaf is not only troublesome to such persons, but is often the cause of much waste. The way to be rid of it is as follows: When the loaves are moulded, and before they are set down to 'rise,' take a small quantity of clean lard, warm it, and rub it lightly over the loaves. The result will be a crust beautifully soft and tender throughout. This is not guess-work.—*Prairie Farmer.*

CORN MEAL CAKES.—Excellent breakfast cakes can be made in the following manner: Mix two quarts of corn meal, at night, with water, and a little yeast and salt, and make it just thin enough to stir easy. In the morning stir in three or four eggs, a little saleratus, and a cup of sour milk, so as to leave it thin enough to pour out of a pan; bake three-quarters of an hour, and you will have light, rich honeycomb cakes—and with a good cup of coffee and sweet butter at breakfast, one finds with Hamlet, "increase of appetite to grow with what it feeds on."

FRYING FISH.—A writer in the Boston Courier says that fresh fish should never be put into cold fat when they are to be fried. They thus absorb it, and become unfit to eat. The fat should be plenty enough to prevent the fish sticking to the pan, and boiling hot when the fish is put in. It is thus cooked quickly, and is in fine eating order when taken up. These rules will not apply to meats.

THE Pear leaf has 24,000 pores to the square inch, on the under side. The Pink has about 35,500. Some plants have as many as 160,000.

PAIRING PEACHES.—There may be some who have an abundance of peaches this season, who would like to know some more expeditious way of pairing to dry, than the common way of flaying with a knife. I have tried the plan of scalding as an experiment, and found it successful, and would suggest it through the medium of the Farmer, that others may try it if they see fit.

The method of scalding which I prefer is to have a kettle, of convenient size, partly filled with water heated to about the boiling point; then have the peaches in a basket, or vessel with holes in the bottom, and immerse in the scalding water. The peaches must be ripe (or mellow all over,) for scalding. They can be paired in this way with much facility, by slipping off the skin. They should be stoned and spread for drying soon after pairing, as they become more soft and of a darker color by lying in a mass.

Summit Co., Ohio, 1847. A SUBSCRIBER.

MUSIC IN THE FAMILY.—Its beneficial effects may not be doubted. No family should fail to encourage the largest possible amount of musical talent. Independent of its happy influences on the mind, it should be fostered on account of its physical advantages. The late Dr. Rush said, "The Germans rarely die of consumption, because they are always singing." If this beautiful accomplishment tends in any degree to mitigate a malady so terrible, for the world's sake, let us have a world of it. But there are other reasons—it induces amiability and banishes bad passions. We have somewhere read the testimony of an excellent clergyman, possessing much knowledge of human nature, who instructed a large family of daughters in the ordinary practice of music. They were observed to be amiable and happy. A friend inquired if there was any secret in his mode of education, to which he replied: "When anything disturbs their temper, I say to them, sing; and if I hear them speaking against any person, I call them to sing to me; and they sing away all the causes of discontent, and every disposition to scandal." Such a use of this accomplishment, might seem to fit a family for the company of angels; young voices around the domestic altar, breathing sacred music at the hour of morning and evening devotion, are a sweet and touching accompaniment.

THE AFFECTIONS.—How beautiful are these words of Longfellow: "One by one the objects of our affection depart from us. But our affections remain, and like vines, stretch forth their broken, wounded tendrils for support. The bleeding heart needs a balm to heal it; and there is none but the love of its kind—none but the affection of the human heart."

Obituary.

DIED, in this City, on Sunday morning, September 5, LILLA, only daughter of DANIEL D. T. and ANNA E. MOORE, aged 1 year and 22 days.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,.....	\$1 10	1 12	Pork, bbl. mess	15 00	16 00
Corn,.....	50		Pork, cwt.,...	4 50	5 00
Barley,.....	50		Beef, cwt.,...	3 00	4 00
Oats,.....	33	40	Lard, lb.,...	9	10
Flour,.....	5 12½	5 13½	Butter, lb.,...	12	14
Beans,.....	75	87	Cheese, lb.,...	5½	6
Apples, bush.	12	37	Eggs, doz.,...	10	
Potatoes,.....	18	25	Poultry,.....	6	
Clover Seed,...	4	50	Tallow,.....	10	
Timothy,.....	1 50	2 00	Maple Sugar,...	—	
Hay, ton,.....	8 00	10 00	Lamb Skins,...	31	44
Wood, cord,...	2 00	3 00	Green Hides, lb	4	
Salt, bbl.,.....	1 25		Dry " " " " "	7	3
Hams, lb.,....	8	10	Calf Skins, ...	9	

Rochester, Sept. 30, 1847.

New York Market.

[By Magnetic Telegraph.]

NEW YORK, Sept. 30—7 P. M.

FLOUR AND MEAL.—Market without marked change, and good enquiry from home trade. Sales 4 or 5000 bbls at \$5,87½ for new Genesee; \$5,69a\$5,75 for fresh ground do: \$5,62½\$5,75 for fresh western and Oswego, and \$5,50a\$5,75 for old western and Genesee. Nothing sound below \$5,50. Sour flour \$4,25, and unspiced \$4,87½ a\$5,12½. About 2000 bbls sold. Receipts of Flour moderate. Rye Flour is \$4,25, and supply very small. Buckwheat Flour \$2,25a\$2,50.

GRAIN.—Good enquiry for wheat; receivers firm, for a good parcel Genesee \$1,25; sales 1000 bush Fredericksburg at \$1,19, and a cargo North Carolina under negotiation at \$1,20; 7 or 8000 bush red western and New Orleans at 92c\$1,06, according to quality. Corn, fair enquiry, but dull at the close; sales 25,000 bush at 66a67 for mixed, 68a69 for yellow, including 3000 bush round yellow at 67 cts in slip. Rye fell off 3 or 4 cts; sales 8000 bush at 80a83c closing at 81c; new Barley 80c asked, no sales. Oats 54a56 cts at retail.

PROVISIONS.—Pork firm but not active; sales 700 bbls at \$10,75a\$11 for prime, and \$14,25a\$14,50 for mess. Beef is dull at \$7,75a\$8,25, and \$11,75a\$12,25. Lard quiet.—Cheese in fair request; 1500 boxes Herkimer sold at \$7½, and 500 do Ohio at 6¼a7¾c.

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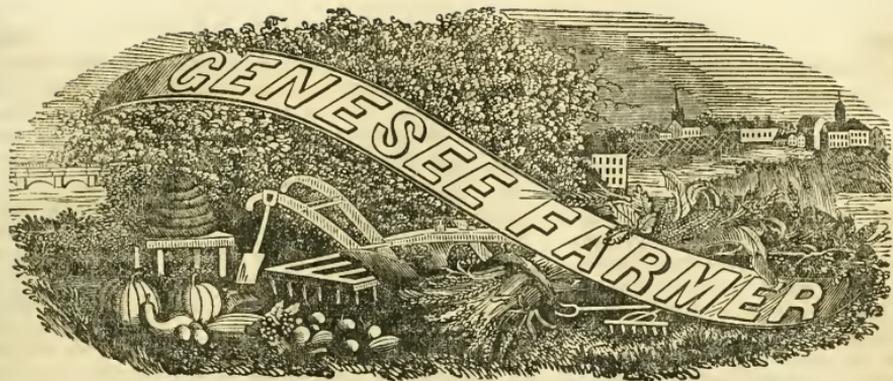
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THE GENESEE FARMER:

Issued the first of each month, in Rochester, N. Y., by

D. D. T. MOORE, PROPRIETOR.

DANIEL LEE, EDITOR.

P. BARRY, Conductor of the Horticultural Department.

To Correspondents.

COMMUNICATIONS have been received, during the past month, from G——, N. SIMONS, G. C., G. W. PRATT, H. of Fairport, *, H., T. W. PAINTER, Geo. Bishop, jr., Spectator, S. W., and S. E. S. H. NOTT, M. D.

Books, Periodicals, &c., have been received as follows:

"*The Farmer's Book and Family Instructor.*" A work embracing a variety of useful matter. It contains over 550 pages, and is illustrated with numerous engravings—some of which might perhaps be omitted without impairing the value of the work. For sale by S. HAMILTON, State-st., Rochester.

"*Landreth's Rural Register and Almanac, for 1848.*"—This little annual contains much useful information, and will prove valuable to farmers and fruit culturists. For sale by HAMILTON, State st. Price 25 cents.

"*The American Architect*—comprising original designs of Country Residences, adapted to the taste and circumstances of the Merchant, Farmer, and Mechanic." We commend this valuable work to the attention of all interested in architectural matters. It is illustrated with excellent Lithographic designs. Published monthly by C. M. SEXTON, New York, at \$3 per annum—25 cents for single numbers. For sale by E. DARROW, corner of Main and St. Paul st., Rochester.

"*Daily American Directory of the City of Rochester for 1847-8.*" from the Publishers, Messrs. JEROME & BROTHER. This is a work of about 300 pages, containing a vast amount of correct information which cannot be obtained from any other source. It is got up in good style, creditable to its enterprising Publishers. Price \$1.25.

"*Illustrated Botany.*" We have received several numbers of this beautiful work. It is edited by J. L. COMSTOCK, M. D., a distinguished Botanist. Each number is illustrated with splendid colored portraits of Plants, together with botanical descriptions, &c. We commend the work to all who have a taste for Botany, and to the ladies particularly. Published in Magazine style, by B. H. CULVER, 139 Nassau st., New York—\$3 per annum.

We are indebted to HENRY O'REILLY, Esq. for an able pamphlet relative to the "Atlantic, Lake & Mississippi Telegraph Company,"—embodying an "exposure of the schemes for nullifying the 'O'Reilly Contract' for extending the Telegraph to the Mississippi and the Principal Towns on the Lakes."

How should Manure be applied to Land?

AT a Convention of Farmers, held in the city of New York on the 12th and 13th of October, Dr. UNDERHILL, of Croton Point, who has distinguished himself for his success in producing grapes and in horticultural operations, made a speech in which he advanced some new ideas on the use and application of Manure. He contends that it ought to be buried at least one foot below the surface, either with a plow or spade. According to his experience, manure never wastes by leaching and running deep into the ground. It always rises—the dissolved salts by capillary attraction from the heat of the sun and drying of winds; and the gasses rise by their own specific levity. So long as the rain is falling, Dr. U. admits that the water does sink deep into the earth or runs off on its surface; but so soon as the rain ceases and the surface becomes dry by evaporation, the liquid rises from below upward. Most of the farmers and horticulturists near the city of New York concur in this opinion. If true, it will modify the general practice of agriculture in this country.

We think quite favorably of this *theory*; but incline to believe that its author carries it too far. It is an exceedingly interesting question in meteorology to determine what portion of the rain which falls on a cultivated field in summer runs into the earth and off from it, and what amount evaporates from the surface. All that evaporates must leave its mineral fertilizers behind; while that which dissolves manure, and runs off, to keep up the fountains of creeks and rivers, can never restore its constituents of plants.

It is a remarkable fact that the dead bodies of persons in graves 4 and 5 feet deep in sandy soils, give off gasses which, till the decomposition is complete, cause grass and weeds to grow most luxuriantly. Dr. U. thinks that salts or minerals in porous soils rise to that depth by the capillary attraction of moisture.

FOR Award of Premiums, at late Fair of the York York State Agricultural Society, see page 262.

Twentieth Annual Fair of the American Institute, New York.

It was our good fortune to spend several days at the recent Fair of the American Institute. It has served to give us a higher opinion, as well as a juster appreciation of the natural mechanical skill of the American people. If we are proud of our country, we glory in the high intellectual powers, which Providence has conferred on its inhabitants. These powers are still in their undeveloped infancy. It is only the twilight of our intellectual Sun soon to arise, that we discover in the highest achievements of American genius. By what has been done and is doing, we may rightly infer what will yet be accomplished. Look at the improvements in the Mechanical Arts; the use of Steam in driving vessels on the wide ocean, railroad cars through mountains, over rivers and valleys, and doing every thing but talk and reason!

Among the hundreds of new inventions at Castle Garden no one has interested us so much as an admirable apparatus for drying Meal, Flour, and Grain. It employs *steam* to heat the cylinders, and thus maintains at all times a uniform and proper temperature. Steam passes through the center of the cylinder, which is made of sheet iron, has flanches on its outer surface, which carry the meal or grain as it revolves, and thus effectually dries it without scorching. It is cheap and can be made to dry several thousands of bushels in 24 hours. JAMES R. STAFFORD, patentee, Cleveland, Ohio.

The elasticity of India Rubber is now applied to railroad cars, taking the place of heavy steel springs, as well as of all lighter ones for ordinary carriages. Even the very wheels of freight trains are cast double so as to admit a collar of gum elastic around the periphery of the smaller wheel, to break the force of constant percussion on the rail.

The display of American cotton, woolen, and silk manufactures, is very creditable to those engaged in these important branches of national industry. Compare the fabrics now on exhibition with the American prints, ginghams, muslins, flannels, and broadcloths of 1827, when the Institute held its first Fair. The advancement is truly astonishing. In cutlery, shelf hardware, mechanic's and farmer's tools of all kinds, to say nothing of cabinet ware, stoves, household furniture, grates that vie with the most exquisite statuary, one can not fail to admit the rapid progress of improvement. It is in great cities, where man is most active in body and mind, where thought is ever in collision with thought, that all the inventions of genius and works of art receive their highest polish. If the tillers of the soil would often meet together to compare ideas, as mechanics, manufacturers, and merchants do in cities, their progress in improve-

ment would not be so painfully slow and uncertain. American manufacturers have paid liberally for the assistance of chemistry and other sciences in teaching them how to turn the immutable laws of Nature to the best account, in making iron, steel, and copper—in compounding colors for cotton and woolen goods—in dissolving gum elastic, converting water into steam, and performing a thousand other operations of the highest practical utility. Analytical chemistry revealed the fact that Vermont contains a bed of exceedingly fine siliceous which is *pure*; and suggested that it would make flint glass of surpassing clearness and beauty. An establishment is now in operation in Brooklyn whose goods make a grand display at Castle Garden. Some of the tumblers made of this silica sell as high as \$10 a dozen at wholesale. We are told that the supply of the material for making this superb glass is inexhaustible. Albany clay is melted into an admirable colored glass, which is used for a great variety of purposes.

When will the farmers of the United States appreciate the value of true science, applied to their first, most honorable, and most useful of all arts? Why treat with utter neglect or repel with seeming disdain, the best service of those that seek to kindle the lights of modern science in every school house in the Union? All improvements in cotton and woolen mills—in canals, railroads, steamships—in the mechanical arts of all kinds, are the legitimate fruit of close study, long and patient research, with the aid of the best appliances, the best opportunities for discovering all existing defects. Similar opportunities, similar appliances should be made available for the study and advancement of agriculture.—Geology, chemistry, physiology, anatomy, botany, natural history, and the mathematics, should have their light brought to a common focus on the great business of the husbandman. In short, the intellect which is to effect the cheap and skilful transformation of crude earth, air, and water, into grain, grass, beef, pork, wool, butter, cheese, apples and other fruit, *needs* as well as *deserves* a liberal and thorough education.—American Mind has an acknowledged *right* to a large development. The brilliant exhibition of the American Institute has impressed us deeply with the importance of improving and enlarging our system of educating the children of the masses. God has given to all of woman born a capacity for doing infinitely more good in the world as physical, intellectual, and moral beings, than any now accomplish. The grand question is, shall this capacity be abused and perverted to evil, or wisely turned to the good purpose for which it seems to have been created? High intellectual culture, embracing the whole range of the natural sciences, is eminently due to the young farmers and mechanics of this Republic. To these we say, be true to yourselves, study

and obey the laws of Nature, and the God of nature will reward you liberally for your well directed labor. Expect nothing truly valuable without patient industry. Read books which are worth reading as carefully as you would break up a summer fallow for wheat. Allen's "American Agriculture" can be studied with advantage.

The persons who took the premiums at the Fair, were all men of much thought, much study. New England and New York mechanics evince great research, such, in truth to speak, as one seldom meets with among the mass of farmers. The latter study too little. We hope not to give offence. What we say is prompted from good motives, and for a good purpose. All the intellect associated with American agriculture, should be fully and universally developed, to place this great interest in the most successful, honorable, and useful position of which it is capable. Undeveloped mind, in this country, is like a rich garden unplanted, untilled, and full of pernicious weeds, whose prolific seeds are borne far and wide by birds and winds, and scattered broadcast over the whole land. Wise and thorough mental culture must precede wise and thorough agriculture and horticulture in America, where every man is a sovereign. If enlightened Reason is to govern and direct the action of human hands, it must be qualified for its office before the duties of the same can be discharged aright. Instinct will answer for brutes; but not for moral, reasoning man. The farmer can no more do without scientific knowledge in this age of the world, than he can dispense with comfortable food and clothing—dispense with civilization, law, and religion. The great benefits which science has conferred on our race, when known to less than one in a thousand in the most enlightened nations, lead us to expect benefits a thousand fold larger, when the most ignorant shall know as much as the wisest now do. Give every agriculturist, every mechanic a good scientific and moral education, and no imagination can conceive the blessings that will accrue to our whole population, and indirectly, to the whole of mankind. Onward and upward is our destiny. Let no one hang back.

TO EXTINGUISH CHIMNEYS ON FIRE.—First shut the doors and windows of the room containing the fire; stop up the flue of the chimney with a piece of wet carpet or blanket; and then throw a little water or common salt on the fire. By this means the draft of the chimney will be checked, and the burning soot will soon be extinguished for want of air. If every fire-place were provided with a damper, or shutter of tin plate, or sheet-iron, fitting sufficiently tight to stop the draft, fires in chimnies would become of little consequence, as it would only be necessary to apply this damper to put them out. Let this be remembered by the reader.

Fattening Swine.---A Steaming Apparatus.

AN Ohio correspondent requests information on the subject of cooking food for swine. As the matter is one of considerable importance at this season of the year, we think the following extract from ALLEN'S "American Agriculture" will be read with interest and profit by many of our readers:

Where there are many swine to fatten, or grain is to be fed, a steaming apparatus is at all times an economical appendage to the farm. It has been shown from several experiments, that cattle and sheep will generally thrive as well on raw as on cooked roots; but horses do better on the latter, and swine will not fatten on any other. For all animals excepting store sheep, and perhaps even they may be excepted, grain or meal is better when cooked. Food must be broken up before the various animal organs can appropriate it to nutrition; and whatever is done towards effecting this object before it enters the stomach, diminishes the necessity for the expenditure of vital force in accomplishing it, and thereby enables the animal to thrive more rapidly and do more labor, on a given amount. For this reason we apprehend there may have been some errors undetected in the experiments of feeding sheep and cattle with raw and cooked roots, which results in placing them apparently on a par as to their value for this purpose. The crushing or grinding of the grain insures more perfect mastication, and is performed by machinery at much less expense, than by the animals consuming it. The steaming or boiling is the final step towards its easy and profitable assimilation in the animal economy. With a capacious steaming-box for the reception of the food, the roots and meal, and even cut hay, straw and stalks may be thrown in together, and all will thus be most effectually prepared for nourishment. There is another advantage derivable from this practice. The food might at all times be given at the temperature of the animal system, about 93 degrees of Fahrenheit, and the animal heat expended in warming the cold and sometimes frozen food, would be avoided.

The steaming apparatus is variously constructed. We have used one consisting of a circular boiler five and a half feet long by twenty inches diameter, made of boiler iron and laid lengthwise on a brick arch. The fire is placed underneath and passes through the whole length and over the end, then returns in contact with the boiler through side flues or pockets, where it entered the chimney. This gives an exposure to the flame and heated air of about 10 feet. The upper part is coated with brick and mortar to retain the heat, and three small test cocks are applied at the bottom, middle and upper edge of the exposed end, to show the quantity of water in it; and two large stop cocks on the upper side for receiving the water and delivering the steam, completes the boiler. The steaming-box is oblong, seven or eight feet in length, by about four feet in depth and width, capable of holding 60 or 70 bushels, made of plank grooved together, and clamped and keyed with four sets of oak joist. We also used a large circular tub, strongly bound by wagon tire and keyed, and holding about 25 bushels. The covering of both must be fastened securely; but a safety valve is allowed for the escape of steam, which is simply a one and a half inch auger hole. Into these, the steam is conveyed from the boiler, by a copper tube, attached to the steam delivery cock for a short distance, when it is continued into the bottom of the box and tub by a lead pipe, on account of its flexibility, and to avoid injury to the food from the corrosion of the copper. It is necessary to have the end of the pipe in the steam-box, properly guarded by a metal strainer, to prevent its clogging from the contents of the box. We find no difficulty in cooking 45 bushels of unground Indian corn in the tub, in the course of three or four hours, and with small expense of fuel. Fifty bushels of roots could be perfectly cooked in the box, in the same time. For swine, fattening cattle and sheep, milch cows and working horses, and perhaps oxen, we do not doubt a large amount of food may be saved by the use of such or a similar cooking apparatus. The box may be enlarged to treble the capacity of the foregoing, without prejudicing the operation, and even with a boiler of the same dimensions, but it would take a longer time to effect the object. If the boiler were increased in proportion to the box, the cooking process would of course be accomplished in the same time.

Letter from Europe.

DR. LEE—*Sir*: Having been spending my time for four or five weeks past in the north of England, I thought perhaps the following communication might possess some little interest to your readers, and if you should deem it worthy of an insertion in the Farmer, it is at your disposal.

The country between Carlisle and Newcastle, (the part through which I passed,) is beautiful and interesting to the traveller; and it is well adapted to the cultivation of grains. Yet in some places I observed that the soil was quite shallow, having a clay hard pan underneath. The soil generally did not appear to be in any way superior to the soil in the county of Monroe, and yet the average yield of bushels per acre is much above what farmers obtain in said county. Thirty bushels of wheat per acre is a very common yield, I was informed, and the yield of other grains bore a like proportion. This thirty bushels is an average yield, and they often obtain forty and sometimes fifty bushels. I think that this superior yield may be attributed in a great measure to the climate, and perhaps in some degree to the mode of cultivation.

The weather at the time that grains are ripening here, is peculiarly favorable or at least was so this year. It is cool, attended with occasional showers, and the time that it takes to ripen from the time that the head makes its appearance, is fully double of what it takes in Monroe. This allows the grain to fill well and to come to great perfection, whereas with you at the time of ripening, the weather is often excessively dry and warm, and the grain cannot fill as well.

The most common and I may say general practice is to sow the ground to wheat only once in four years—so that they have only one-fourth of their tillable land sown to wheat each year. The bare fallow they plow from four to six times during the summer; and after the first plowing they do not plow more than six inches in depth.

Draining with the draining tiles is quite general, and they experience great benefit to the land from it; though it is expensive to lay the drain, yet the farmer is soon repaid by the extra crops, and has his drains left as clear profit.

Although the seasons are often very dry in Western New York, I think that the farmer would experience much advantage from draining in some soils. The clay soil I think would become much looser by draining and would endure drouth better.

Great use is made of lime as a fertilizer, but none of plaster. As there are more frequent showers in this country and not so warm weather as with you, the plaster is not so much needed; but for this same reason, as it appears to me, the lime is necessary to give to the soil a warmth that it otherwise might lack. The lime is gen-

erally applied before the wheat crop, which is very judicious.

The principal agricultural productions are wheat, barley, oats, beans, turneps, and potatoes. I saw none of the field beet cultivated, but the turnep is raised extensively for keeping sheep and cattle. The short horns are the favorite breed of cattle for fattening, as far as I learned, and the Leicestershire and Cheviot sheep are the kinds generally kept—the Leicestershires mostly, though for killing a cross between the Leicesters and the Cheviots is preferable.

Though farmers do not own the land which they cultivate here, as they do in America, yet I think that their profits are greater. They bear a more just proportion to the profits received by people engaged in other occupations, because there is a good market for all agricultural productions. Since I came to England I am doubly convinced of the great importance of building up the manufacturing interest in America that the farmer may receive an adequate compensation for his labor; for a foreign market can not be depended upon.

The following prices will perhaps give you some idea of the profits of farming in this country. Though prices have continued to decline for two and a half months past, the following prices in sterling money were paid in Edinburgh, yesterday, for the best samples: Wheat 8s. per bushel; Barley, 4s. 6d.; Oats, 3s. 9d.; beans, 6s. 6d.

The following prices of Sheep and Cattle were furnished me by an intelligent butcher living near Newcastle: Leicester fat lambs from 25 to 26 shillings sterling per head. When 15 months old, £2 per head. When the prices were high, and before the sheep were shorn, full grown fat sheep sold as high as 3 guineas, or £3 3s. per head—nearly equal to \$14. Present price of a two year old beef, that would weigh 40 stone when dressed, £15

The harvest in the part of which I have been writing commenced on the 19th of August.—The cradle I observed was used to a small extent, but those which I saw were the most awkward and clumsy tools of the kind that I ever beheld. I would also mention here that I have seen no plow as yet in this country that I considered equal to the plow generally used in the State of New York.

Yours with respect,

G—.

Banockburn, Scotland, Sept. 9, 1847.

THE Farmers' Cabinet says: "We are advised that a dairy farmer in Lancashire, England, lately realized £42,12s. *dd.* by the sale of 13½ cwt. of cheese, the product of thirteen cows, in thirty eight days—full 40 cents a day for each cow." A profitable dairy, indeed,—and rarely equalled we imagine.

The Farmer.---His Position, Responsibilities, and Duties.

NUMBER TEN.

THE subject of printing and its influence, is one which only increases the more we contemplate it. The human mind, with its mighty powers of expansion, and in its restless desire for improvement, requires just such a machine as the printing press to give it full play; it puts within its grasp a power just suited both to means and end. It is the philosopher's stone to the mind—multiplies the thoughts of man into infinite numbers, and scatters them over millions of the race at the same time. It catches up every important discovery, and gathers together the mighty thoughts and great conceptions of the master spirits of the earth, and with one effort scatters them far and wide, to instruct and enlighten the world.

The farmer at his fireside, the mechanic in his shop, and the student in his study, may, through the agency of the press, collect together, in a small compass, all the valuable information and discoveries appertaining to their respective callings, and by proper application make them available to the every day business of life; but to no one class does the press promise so much good as to the agriculturist—to none is it a means so easily effective for advantage, and by none should it be cherished so heartily and warmly. The mechanic may have his journals and periodicals devoted exclusively to his interest, but after all there is an intricacy in the details of his trade, a vast amount of minutia, which cannot be reduced to paper, or explained only by practice, and much is lost by the attempt, and half the effect is destroyed by reading what it is so difficult to communicate with tool and material before him. But a great deal of the operations of the farmer is so plain and simple that it may be spread on paper and made intelligible by words and figures; and the farmer may study to-day and practice to-morrow, and reduce to immediate test and advantage knowledge thus communicated—and particularly is this the case when he has been educated a farmer and trained to habits of thought and action, suitable to a tiller of the soil.

I do not wish to be understood as advancing the idea that any body can make a good farmer in a day, a week, or a year. I verily believe that men should be educated and trained from their youth up for farmers, and when thus fitted and prepared they are in a position to receive the full advantage of the press; then it is that knowledge comes to them in all its force, and they are fully prepared to adopt, use, and profit by it, at less expense and with less trouble than any other class. I repeat, the farmer, above every body else, should prize the press—for who, like him, can enjoy his newspaper, his magazine,

and his books?—who has so much leisure to peruse, read, and study them?—who so free from mental strife and perplexing cares?—and who, then, can so fully enjoy intellectual pursuits, and so easily store the mind with useful information?—who so cheaply partake the pleasures and gather in and enjoy the fruits of knowledge? Just look at the position of the farmer in this particular. He has no profession with its office, to harrass the mind with its perplexing questions relating to property or to life; nor (as is the case with most of offices,) to dissipate the mind with idle visitors. He has no store with its goods and wares, its day-books and ledgers, to distract his attention and trouble him by day and by night. He has no shop in which to toil, and labor, and sweat, day and night, without recreation or rest.

The farmer's *retreat* and place of *rest* when the labors of the day are past, is his *own home*, by his fireside and in his family circle. And what place on earth so sacred, hallowed, and so like heaven, as the farmer's peaceful, quiet home? Pride has not entered there to despoil it of its simplicity and purity; fashion has not sung her syren song within its bowers, to lure its inmates into habits of extravagance, and to deform them with its outside gear. Nor has vice and dissipation crept in, satan like, to distract the harmony and break up the peace of the happy family. At least in thousands of farmers' homes, none of these things have yet entered; and is not such a place sweet and holy. What a beautiful place is such a family circle!—what a charmed spot, where kindred hearts gather around the same fireside, and mingle together under the same roof common sympathies and mutual affections. This world has no brighter or better pictures. And it is within this holy place, his own good home, that I would have the farmer enter when the day's work is done, after all the bars are put up and the barn doors secured—and after the beasts of the field have been cared for—and there, surrounded by his idols, his household gods, whom to love is no sacrilege and to reverence no idolatry—there, with his little ones about him, I would have him take his newspaper, his periodical, and his book, and amuse and improve himself by reading and conversation, by study and reflection. There, in his *sanctum sanctorum*, the farmer may share the highest social and intellectual pleasures, and there fit and prepare himself for the good farmer, the useful and virtuous citizen, and the honest, upright man.

There are doubtless seasons of the year when the farmer cannot enjoy all the advantages above indicated—when the hurry of the harvest is pressing and when the fatigues of the long summer day have exhausted the system—but this is comparatively but a short season; at least nine-twelfths of the year the farmer has abundant

opportunity for mental culture, for reading, study and reflection, and may, if he will, lay up day by day a little useful information and be continually filling up his mind with important facts and valuable knowledge, to use and improve upon as occasion in after life requires.

If the farmer, then, is ignorant—if, in point of intelligence and influence, he stands second—is not the fault his own?—is it not because he has neglected to improve the means, and take advantage of the circumstances within his reach for acquiring knowledge, as well that which is general as that relating exclusively to his own business? If the farmers will improve a due portion of their leisure hours by study and reflection, instead of lounging them *all* away in idle conversation, and with vicious companions—if the precious time which their occupation affords them for improvement be wisely occupied in the cultivation of the intellect as well as in the enjoyment of social pleasures—it would not be long before they would stand forth the first in point of intelligence, and be thus prepared to exercise their proper influence and assume their true position in society.

The press with its mighty power steps in to aid and assist the farmer; it gives him an intelligent, truthful companion, which he may safely introduce into his family circle, and when properly selected, is sure to make all wiser and better. He may take his "Genesee Farmer," his "Cultivator," his "Farmer's Library," or his "Horticulturalist," by his fire side, in the long winter evenings, and commune with them and learn many useful and amusing lessons. The truth is, the farmer has no excuse for being behind his neighbor, of whatever class or profession, in mental acquirements and in general knowledge; and I am glad to know that many, all over the land, are second to none in these particulars. In the good little county of Yates, there are many who till the soil, who labor day by day on their farms, who stand second to none in intellectual culture and strength—who, when occasion requires, can wield the pen or tongue in vindication of their rights, and to instruct and enlighten their fellow citizens on any subject of general interest. And this may and should become universal, and an ignorant dolt of a farmer should form an exception to the class, and be looked upon as a disgrace to the calling.

I have no idea that every farmer ever can or will become an orator, author, or scholar; but I do think that all may be and are guilty of gross neglect if they do not become well informed, intelligent men, and be fully qualified and prepared to discharge honorably every duty, public or private, which may devolve upon a citizen in a free country. The means are within the reach of all—the facilities are at the door—they have but to be used, and I ask the farmers of New York if they will not bestir themselves and

strive after an intellectual and moral elevation—seek to thus raise to its proper pre-eminence their noble calling. The power is in your hands—you can do it if you will. The advance is now being made—every year adds to the number of well informed farmers; but let the momentum of advance be increased, and then the consummation so devoutly wished for will be sooner effected, viz: the rescue of agriculture from a secondary position in society, and its elevation to its true position above and at the head of all other callings, in point of intellectual, moral, and political standing and influence, as well as in numbers and wealth.

This subject is by no means exhausted, but my sheet is full and I must close till another month.

D. A. OGDEN.

Penn Yan, Sept., 1847.

Hydraulics for Farmers.

BY C. N. BEMENT.

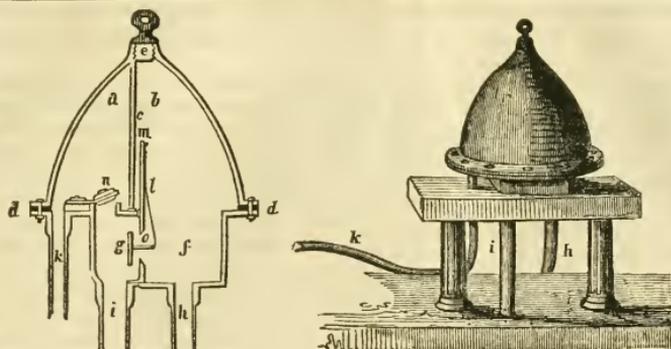
NUMBER IV.

Ellsworth's Syphon Ram.—This apparatus, invented by Erastus W. Ellsworth, Esq., of East Windsor Hill, Conn., is intended for elevating water from springs, wells, and other sources, wherever sufficient falls of water can be obtained in their vicinity, for the operation of a syphon. In principle it consists of a combination of the syphon with a machine long known as the hydraulic ram; but is different in its construction and mode of operation, from similar combinations, which have heretofore been attempted, and proved of little value for practical use. It has now been operated a sufficient length of time to place its durability and utility beyond conjecture, and to give it at least a tolerably fair title to the rank of a *useful* machine.

One of these machines was put in operation by L. B. Armstrong, last fall, at the house of Mr. G. Harvey, at Sandy-Hill, Washington county, the operation of which is described in a letter to me, as follows:

Dear Sir—I comply with your request, made at the time I was at the American in September last, to inform you of the result of my trial of Ellsworth's Self-acting Pump. I did not receive the pump until some time about the first of October. The setting up occupied about ten days; and when things were all right, off she went and has not stopped since; and what is more, it has not required a moment's attention from that time. The elevation overcome is thirty-eight feet; the fall fifteen feet, of the longest leg of the syphon. The amount delivered is half a gallon per minute, about one-sixth of the water used. There are some little alterations needed in the leather of the valves, which will add much to the syphon. But as the weather was cold when I put up the apparatus, I did not seek to make the machine do its work, and considering certainty of operation through winter, without stopping, more desirable than a large per cent. of water raised, I did not like to strain the pipes with the full power of the machine, as the quantity raised is more than is needed. For sixty-seven sturdy knocks per minute, each one something like the blow of a heavy mallet in the hand of a stalwart carpenter, "is a caution" to put down none but strong and sound pipes.

L. B. ARMSTRONG.



Ellsworth's Ram. (Figure 9.)

Its construction may be seen from the above sectional drawings, where *a b* is a hollow dome or cap, the cavity of which is divided into two distinct chambers by a partition *c*. This dome is fastened to a flanged joint, to the circular plate *d d*, to receive the bearing of the partition *c*. The central portion of the plate *d d* is sunk in the form of a box or chest, *g, f*; that part of which lying under chamber *a*, is roofed over by *d, d*, but communicates with *a*, by a valve *n*, opening upwards. That portion of the chest marked *g*, is still further enclosed by an upright plate *m*, held to its place by a couple of wedges, not shown in the section. This plate has an orifice at *o*, furnished with a valve opening towards *g*, which is suspended on the spring, *l*. From *f* passes *h*, the long leg of the syphon, and from *g, i*, the short leg. In operating the machine, *i* and *n* are first filled with water through the screw plug at *e*; as soon as the syphon is free to act, a current commences in the direction, *i, g, f, h*. It is this current, acting on the valve at *g*, soon overcomes the elasticity of the spring, *l*, and the orifice *o*, is suddenly closed: the water in *i* then acts with a momentum due to its weight and upward velocity, upon the valve *n*, and a quantity of water escapes into *a*, which when the momentum in *l* is exhausted, is prevented from returning by the closing of *n*. The moment that *n* closes, a slight recoil of the water in *i*, allows *l* to throw open the valve at *g*, and the above process is then repeated. The water which accumulates in *a*, is conducted by a curved pipe attached at *k*, to any situation above the machine where it may be wanted for use. The chambers *a* and *b*, are never full of water; they confine each a quantity of air, which, by its elasticity, equalizes the currents through *k* and *h*. These air-chambers are both indispensable to the perfect action of the machine, and if *k* and *h* are of considerable length, it will not operate at all when they are filled with water. The air in *a* is obviously under more or less pressure in proportion to the height to which the water is elevated through *k*, while owing to the same cause operating in an

opposite manner at *h*, the air at *b* is rarified, or under less than the pressure of the atmosphere. As water under pressure, in contact with air, has the property of absorbing more or less of it, and then liberating it; when the pressure is removed, the air in *a* has a tendency to diminish, and that in *b* to increase in quantity; but the position of the valves in this machine is such, that when it is in action, *a* is constantly replenished from the overplus in *b*, for the recoiling movement in *i* above mentioned, which allows valve *g* to open, draws in a few bubbles of air from *b, f*, at *o*, which air lodges in the cavity under *n*, and is driven into *a* by the next pulsation of the water in *i*.

Farmers, manufacturers, and others, have frequently attempted to carry water over elevated ground to some situation below the fountain head, but have been troubled, and often compelled to abandon the plan, from an accumulation of air in the more elevated portions of the pipe, which in the course of a few days cuts off the stream entirely, and requires it to be re-filled. This is owing either to a want of sufficient fall between the level of the supply and the point of discharge, or to some contraction in the pipe, to that degree, that the air liberated from the water, (owing to the diminished pressure to which the water is subjected in the higher portion of the syphon,) remains in the pipe. The only remedy is to obtain more fall, or give the pipe a freer aperture, until the current has sufficient velocity to carry the air through. A velocity of between one foot and eighteen inches per second, is ordinarily sufficient to accomplish this.

The quantity of water which the machine above described consumes, may be, to a considerable extent, regulated by a small crank, which enters at right angles with the plane of the section behind valve *g*, which, when turned, gives the valve more or less play, and may, if desired, be made to close it, and stop its action entirely. There is also a small fixture for opening and starting the action of the valve. When the apparatus overdraws its supply, and stops from that

cause, the syphon pipes do not empty themselves of water, as would be the case with an ordinary syphon; the first few bubbles of air then ascend the short leg of the syphon, disturb the action of the valves in such a manner that they cease to operate, and the pipes *in*, remain full of water.

In the foot of the short leg of the syphon is a short plug, which may be drawn up a little distance into and thrust down out of the pipe, by means of an iron rod attached to it, and passing up along side the pipe, to a convenient place for reaching it. This plug is drawn up into the pipe for the purpose of stopping it when the syphon is filled, and is also used in starting the machine, when the pipes are filled and ready for operation. The starting is done by drawing the plug up and thrusting it out of the pipe pretty quickly. This acts by removing the pressure of the atmosphere for a moment from the column of water in the short leg; consequently the spring throws the main valve open, and the plug immediately passing out of the pipe, allows the machine to commence its operation.

The advantages which this syphon apparatus is claimed to possess over the ordinary hydraulic ram, are, that it can be applied in many situations, where, from the form of the location, the ram could not be used, as for instance, where the source of supply is a well, or where, as is often the case in mills and factories, a pipe may be passed down into a place, to obtain the requisite fall, in which, from want of room, the ordinary water-ram could not be placed; that it is more commodiously situated than the water-ram for repair or regulation, inasmuch as it stands high and dry above, instead of below, the head of water which operates it; and that, when water is required to be raised to a considerable height, the elevation of the working parts of the apparatus upon the summit of a syphon, divides the load to be lifted, relieving the strain upon the air-vessel, and making the valves less violent in their action, and consequently more durable.

For operating this machine, not less than five feet fall should be obtained, below the level of the supply, and more than twenty is not desirable. The fall may be obtained within the distance of twenty rods, or twenty feet indifferently, and the pipes may be laid any angle, to accommodate circumstances.

The sizes of the syphon pipes required for elevating water for domestic purposes, are ordinarily between five-eighths and one and a quarter inches in diameter, according to the amount to be elevated, the height to be overcome, the quantity of supply, &c. Machines between the sizes of five-eighths and one and a quarter inch syphon pipes, can be furnished, and ordinarily set up (exclusive of pipe,) at prices ranging between fifteen and thirty dollars. The expense for pipe will of course depend on the quantity and size required.

To Prevent Smut in Wheat.

MR. EDITOR:—I have been a constant reader of your paper, and very much interested in it; and, on perusing it, I have many times wished that all our farmers knew its value—for then they would not be without it.

This is the first time that I have attempted to write for a public print, and it may be my last, as I am no grammarian, as you will perceive. But there has been something said about *smutty wheat*—and one article, in the 9th number of the Farmer, signed by IRA F. GLEASON, tells us to soak the seed in vitriol. This has been tried in this town, some years ago, and I learned by those who tried it that it was of no use. Now I wish to give a better way, or I may say one that I like better. It is this: *sow clean seed*; and if you can not get it in your town, go where you can, and get all your neighbors to do the same—and my word for it you will soon drive smut out of town.

And I want to tell you how you can raise smut by the quantity. Take 10 bushels of clean wheat, and one bushel of smut; mix them well together and sow—and I assure you that you wont ask your neighbor what makes smutty wheat. I once raised six heads of wheat from one stool; three of them I rubbed out and sowed with as many heads of smut. The produce proved to be two-thirds smut; the heads were counted to ascertain the fact. The other three heads my neighbor sowed at the same time, and not more than six or eight inches apart—and there was not a particle of smut produced. This satisfied me that sowing clean seed was the best way to prevent smut, and I think smut has been drove out of town in this way.

I would add that I have tried lime and brine, but it did no good. I dare say there has been as much smut raised in this town as in any in the State, and there has been many experiments tried, some of which have proved beneficial—but not as good as clean seed. We now probably raise as good and clean wheat here as in any town in the State. I think that lime is beneficial to wheat; but the small quantity that is generally sown with it, is, I think, of little use.

Yours, &c., N. SIMONS.

Castile, N. Y., Sept., 1847.

BOTANICAL CURIOSITIES.—MR. GREGG, the distinguished traveler and author of the *Commerce of the Prairies*, has exhibited to the American Institute an assortment of Mexican plants, numbering in all upwards of 800 specimens. They were collected from every part of the country, and to the scientific world must be of great value. They are well worth seeing on account of their many peculiarities. MR. GREGG, by the way, as we are informed, is on the eve of performing another pilgrimage into the wilderness of the far-off South.—N. Y. Express.

Letter from Wyoming. --- Farmer's Clubs.

D. D. T. MOORE—*Dear Sir*: I forward you the names of *forty-seven* subscribers for the *Genesee Farmer*, for the ensuing year. By this you will perceive that we are beginning to appreciate the benefits of your valuable paper. It is perhaps unnecessary to speak particularly of its merits, so generally are they admitted. But should you deem the publication of a few remarks a source of encouragement to others, I would say that the farmers of this town are beginning to take an interest in the great subject of agricultural improvement.

A farmer's club has been organized here consisting of nearly fifty members—meetings once a week. The discussions have been interesting and profitable, and the interest is increasing.—We have as important matters to talk about as the N. Y. Farmer's Club, and if we have not eloquence, we have at least experience on these matters. We are favored with the assistance of Mr. SANFORD, recently a teacher in the Agricultural School in Wheatland, now a tutor in the Academy here. We earnestly recommend the formation of these associations in every town; not only for the information thus acquired, but for the greater advantages that will result from creating a spirit of investigation and inquiry.

Though I am not a farmer, but a mechanic, still I am induced to favor the cause in view of the general good to community; also with the confident expectation that when the farmers prosper I may be permitted to partake of their benefits, in return for harnesses and such other "fixins" in my line as they may need.

Yours, &c., I. H. GOULD.

Wyoming, N. Y., Dec. 31, 1847.

REMARKS.—The above should have appeared before, but was filed with numerous other letters containing remittances. We trust the suggestion relative to the formation of Farmer's Clubs will receive attention.

Mr. GOULD is entitled to much credit for his exertions in the cause of Improvement. We shall be glad to receive similar favors in behalf of our next volume. How many of our friends will do as well on or before the 31st of December *this year*? We offer several large premiums for new subscribers, as will be seen by reference to the last page of this number.

LARGE TOMATOES.—A few days since I picked from my plants three very large tomatoes, which weighed one pound and ten ounces each. I do not know but others may have seen larger, but these were the largest that I had ever seen. They were the large red; or, as I have called them, the "mammoth." Many of them weighed a pound, or more; and some of the plants produced, I doubt not, more than fifteen lbs. of fruit.

H., OF FAIRPORT.

Cob Meal.

MR. EDITOR:—In your October number, "A Subscriber," dating at Canandaigua, inquires if there is any nourishment in the Cobs of Corn. During the winters of 1845-6 I had about 300 bushels of Corn in the cob ground, and fed the same to sheep, hogs and horses. The results of this experiment satisfied me that the Cob meal was not only useless, but positively injurious. Horses fed upon corn and cob meal were not in as good condition as those fed upon hay alone. I think it is only necessary for a farmer to examine a cob to see that its particles must necessarily be almost as indigestible as pounded glass. If corn meal is too concentrated and requires bulk to fill the stomach, I should decidedly prefer *sawdust* to cob meal, as being safer and more digestible.

Allow me to recommend Indian meal shorts as an excellent feed for horses; say 1 bushel of meal to 3 bushels of shorts. But by all means, if you use the cobs at all, substitute them for pounded glass in the destruction of sharks.

G. W. PRATT.

Greece, Oct., 1847.

Slobbers in Horses.

EDITOR GEN. FARMER:—I have read an article in the *N. Y. Courier and Enquirer*, extracted from your paper, the writer of which accounts for the slobbering of horses from their eating Lobelia. In this region we have always charged it upon the second crop of clover, either red or white; it cannot be Lobelia, for none or very little grows here. Horses that feed exclusively on Timothy and Blue grass never slobber, in this section of Kentucky.

I have ascertained the *horse weed* to be a certain preventive; and if horses can get it they will be cured in a few hours. The horse weed, as we call it, (not knowing its botanical name,) grows very abundantly in grain fields, but is soon exterminated in pastures, by all kinds of animals—and, in its absence, slobbering soon follows. But if a sufficient quantity of this weed can be procured, the disease may always be arrested in a few hours.

Yours, JEFFERSON SCOTT.

Bourbon Co., Ky., 1847.

ONIONS.—Most gardeners now prefer sowing their onion seed in the fall. September is the month most commonly selected for this purpose, but as considerable inconvenience not unfrequently attends the adoption of this practice, many prefer sowing in October or November; the onion being a hardy production is in no way liable to injury from cold or frost.—*Selected.*

Do not keep a horse too fat, or too lean, as either disqualifies him for hard labor.

Agriculture of New York.

DR. LEE—*Dear Sir*: I have been lately looking over and examining Vol. I. of Prof. EMON'S Agricultural Report, being Part V of the Natural History of the State. The eyes of many who have been waiting for this part of Prof. EMON'S labors, expect from his erudition, his careful observation, and his well known skill in analytic chemistry, a valuable acquisition to the agricultural literature of the day; and we have not been disappointed. The volume presented is every way worthy of his fame and an honor to the State, which authorized the work and published it. It ought, in some form, to be in the hands of every practical agriculturist of the State. It is a source of regret, that being published as it is, in uniformity with the other volumes of Natural History, and especially, distributed as it will be, so very few copies will reach that class of our fellow citizens the most to be benefitted by its information.

It is not my intention to go into a careful nor extended review of the whole work. This is not my province; I leave that to the able editors of agricultural journals. I shall content myself with looking over the table of contents, and bringing the work before the numerous readers of your valuable paper.

Our author, after giving a sketch of the topography of the State, divides it into six agricultural districts; and this division is not arbitrary nor fanciful, but has its origin in nature. These divisions are—

1st. The Highland Districts, one and by far the largest, lying in the north east part of the State; extending from Little Falls to the north eastward as far as Lake Champlain. Some parts of this district are so elevated that water freezes in small pools every night in the year. Its agricultural resources, as one might suppose, are very limited. Oats, peas, barley, rye, and wheat may be raised in the valleys. The two first are constant crops. The other highland district lies partly in the counties of Rockland, Putnam, and Westchester. It is of not much importance.

2d. The Eastern Agricultural District extends north and south along the borders of Vermont, Massachusetts, and Connecticut, to the Hudson River Valley. Corn grown in this district the Professor thinks the best in the State—owing, he also thinks, to the magnesia of the soil.

3d. The Third District comprises the Valleys of the Hudson and Mohawk. Here are rich alluvial bottoms, and the hills are fine grazing lands.

4th. The Western District. Beginning near the Little Falls, it extends West to Lake Erie; and from Lake Ontario southward to about the middle of Cayuga and Seneca Lakes. This is emphatically the Wheat District.

5th. The Southern District. It embraces the southern counties from Lake Erie to and including the Kaatskill range, and the counties of Delaware, Greene, and Otsego. This is a grazing district.

6th. The Atlantic District. This comprehends Long Island with its sands and light soil, the latest gift of Ocean.

Whoever has traveled much through the State, will acknowledge the correctness of these in the general outlines. It is perhaps as good as could be made. Founded as it is upon *Geological substratum*, would not our future committees on farms, in the State Agricultural Society, do well to recognize it, in offering their premiums? It is quite apparent that a farm located on the rich gypsaceous shales of the Onondaga Salt Group, of the 4th District, would in a report overtop the farm located on the primitive formations of the 1st or Highland District. The suggestion is thrown out for what it is worth.

Chap. III is occupied with the climate and temperature of the State. It is worthy of consultation by all or any who desire to change farms from one part of the State to another.—From it we learn that, in Western New York we have as enviable a temperature as is to be found in the State. Our seasons are longer than in any other portion, save the Atlantic District.

Chap. IV is devoted to Agricultural Geology. Chap. V to the Taconic system. Nearly fifty pages are occupied with this. The vexed question as to the relative position and age of the rocks grouped in this system, the Professor learnedly discusses, and we might reasonably conclude too much room has been occupied by it. It is a matter of more interest to the grouper of rocks, than the herder of cattle or grower of wheat.

Chap. VI the Professor devotes to the New York system. Here he succinctly gives us the combined labors of his able coadjutors. From it much valuable information may be obtained by all practical men.

His concluding chapter (VII) he devotes to the soils, their origin and distribution; their elements, classification, and temperature, he ably discusses; their composition and analysis he dwells largely upon, though not so largely as we could desire; yet from the material furnished full as much as could be demanded. One is led to wonder that so few persons forwarded to him samples of soil, in answer to a circular sent to the farmers of the State. Indeed, he tells us that not one answered it, and he was compelled to visit different sections of the State for this purpose.

In his preface he candidly confesses that he was among those who doubted the utility of analyzing soils; but experiment and observation have wrought a change in his views. The im-

provement of the soils is worthy the close attention of the practical farmer.

The whole work is amply illustrated by drawings and sections. Some of the plates are beautiful, especially the large ones illustrating the scenery of the different Districts. A large agricultural map adorns the volume. On the whole, the Professor is deserving the thanks of the public for his work; and, which would the more readily and abundantly be yielded him, a rich harvest, if it only could be published in such a form as the great public could get hold of it.—The Legislature could not do a better deed for the farmers of the land, than to direct Professor E. to publish an octavo edition, abridged somewhat, and also more popular, and place a copy in each school district library, and have a supply for all the farmers and others who might wish to add it to their libraries. R. P. STEVENS.

Ontario Co., N. Y., Sept., 1847.

WHEAT CROPS INCREASED BY AMONIAL MANURES.—On a space of ground cultivated in 1843, by Mr. J. B. LAWES, of Rothamsted, England, which had not been manured, the yield per acre was 16½ bushels of wheat, and 1,116 lbs. of straw. This may be considered as the natural produce of the soil, subject only to the atmospheric influence of that particular season. The same space of ground was cultivated and manured for three consecutive years, with the following results:—

In 1844, the application of 560 lbs. of burnt bones and 220 lbs. of silicate of potash, produced 16 bushels of wheat and 1,112 lbs. of straw.

In 1845, 1½ cwt. each, of sulphate and muriate of ammonia, produced 31½ bushels of wheat and 4,226 lbs. of straw.

In 1846, 2 cwt. of sulphate of ammonia yielded 27½ bushels of wheat and 2,244 lbs. of straw.

In another experiment, a quantity of farmyard manure was weighed into two portions, at the rate of 14 tons each per acre, one being burnt to ashes, and the other plowed into the soil; the product of the unburnt dung was 22 bushels of wheat and 1,476 lbs. of straw; and that of the ash, 16 bushels of wheat and 1,104 lbs. of straw.

Hence the absolute necessity of supplying nitrogen (the essential part of ammonia,) to enable the soil to produce more wheat than it could do in a natural state.—*Am. Agriculturist.*

EXTRACTS FROM THE FARMERS' CREED.—We believe in small farms and thorough cultivation.

We believe in large crops which leave the land better than they found it.

We believe in going to the bottom of things, and therefore in deep plowing.

We believe that the best fertility of the soil is the spirit of industry, enterprise, and intelligence; without this, lime, marl, plaster, bones, and green manures will be of little use.—*Id.*

Potato Rot.

LAST year, in consequence of the dryness of the season, my potatoes ripened in August, and were dug and deposited in the cellar by the 1st of September. I found a few rotten ones at the time of digging, and a very few of them rotted afterwards. The weather was dry when they were dug, and they were kept dry in the cellar. The present season I planted the same spot of ground, and chiefly with the same kind of potatoes. Last year I spread ashes over a part of the ground before plowing, and put ashes in the hill at the time of planting the other part. This year I neither used ashes nor any other kind of manure. Owing to the early summer rains, the potatoes did not ripen this season till in September, and in consequence of wet weather and a multiplicity of business, although I commenced digging about the middle of September, I did not finish till this day, (Oct. 15th.) In the first that I dug I scarcely found a single rotten tuber. When about half done, I found several, and towards the close, still more. The different kinds of potatoes planted were, Mercers, Merinoes, Long Pink Eyes, and Early June potatoes. In regard to the several kinds, I think I have observed the following particulars: viz.

1st. That the Mercers seem most affected by the rot, the Pink Eyes next, the Merinos next, and the June potatoes least, or none at all.

2d. That the rot was evidently aggravated by the wet, the potatoes being left too long in the ground after being ripe, and the rains being frequent.

3d. That those tubers that lay nearest the surface were oftener affected than those below.—This I suppose to have been caused by the greater influence of the wet and cold upon them, in consequence of their great exposure.

If you think the above of any value, Mr. Editor, it is at your disposal. H.

Fairport, Oct. 15th, 1847.

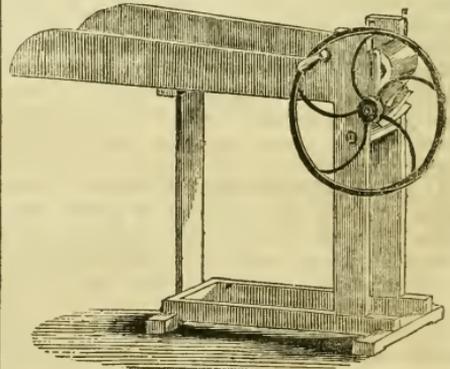
WAR ON THE COTTON WORM.—The Woodville (Miss.) Republican records a very interesting circumstance in what follows. After saying, "We hear little or no complaint of the worm at present," that paper of a recent date, adds—"A little fly, called by some the 'ichneumon,' in consequence of similarity between its habits and those of the Egyptian animal, seems to have taken the worm and crysalis in hand, and devoured nearly all of them. This they do, we are told, by boring into the shell or crysalis and eating its contents. Myriads of the crysalis may be found in the cotton fields thus conditioned, and had it not been for this fact our cotton fields would doubtless have been destroyed before now. What a wise order of Providence, and what an impressive example of a trust in his dispensation!"

Our next Volume.

On the first (advertising) page of this number we publish a prospectus for the next volume of the Farmer. The reader will observe that the price of the paper is to remain the same as heretofore. When it was enlarged, in August, we contemplated changing the terms, at the end of the volume, from 50 to 75 cents for single copies, and from *three to four* shillings to clubs. But, although we have apprised many of our subscribers of the probable change, we have recently determined to publish the ensuing volume at the present terms. We believe that the paper will accomplish a greater amount of good—though we may realize no pecuniary profit from its publication. A very large subscription list will be necessary to pay its *actual expenses*. To enable us to meet these expenses we confidently rely upon a *large increase* of substantial friends and supporters. We believe that most of our subscribers will promptly renew their subscriptions, and trust that all who can consistently do so will lend their assistance to augment the circulation and usefulness of the Farmer.

In this connection we wish to return grateful acknowledgments to the many individuals, in various sections, who have essentially aided in the extending the circulation of the Farmer. While we have labored for much less pecuniary recompense than we might easily obtain in other pursuits, we have been constantly cheered by words and tokens of encouragement from distant friends of Improvement—those who have done, and are doing, much to advance the Agricultural Interest in their various localities, by enhancing the usefulness of the Farmer and other similar publications. Without the aid of such friends—men of influence and benevolent motives and actions—the agricultural press would be comparatively powerless; but, seconded by their efforts, it is accomplishing a great and glorious work. True they are few in number; yet there is hardly a county from Maine to Texas in which you will not find earnest advocates of Improvement in Agriculture and kindred pursuits—"book farming," if you please. They are introducing agricultural publications to the notice and patronage of their friends and acquaintances, and by precept and example, endeavoring to raise the profession of Agriculture to its proper position. We rejoice that there are such men, all over the land, and bid them God-speed in their worthy and noble labors. Well conducted agricultural journals are now published at the North and South, East and West. Agricultural books are being multiplied—the *steam press* is preparing the way for the *steam plow*. Let these journals and books be generally distributed, and carefully perused by the Agriculturists of America, and the rays of intelligence and science will ere long take the place of ignorance and prejudice.

But we are digressing. We designed merely to state that the terms of the paper would remain unchanged—to thank our friends for former aid, and solicit a continuance of their influence in its behalf. We can promise that no exertion on our part shall be lacking, for we are determined to *deserve success*. We solicit no *patronage*, as such—but frankly ask every one who believes our paper to be *useful*, and calculated to benefit individuals and communities, to make it known to their neighbors and friends. There are thousands of farmers, in Western New York alone, who would readily subscribe for the Farmer, if solicited to do so by a friend or neighbor. Are we, then, asking too much in requesting our readers to form clubs of subscribers in their respective localities? We believe not, inasmuch as the benefit will be mutual. We leave the decision of the question to each of our friends—not doubting their response will be favorable to the advancement of the cause in which we are engaged. Let us all strive to "Teach one another."



Stevens' Spiral Straw Cutter.

THIS machine was introduced into this section last spring, from Boston. Persons who have used it for several months, assure us that is an excellent article. It is a very perfect self-feeder. The knives are spiral, and firmly set in an iron arbor, cutting against a raw hide roller placed on the top. It cuts from one to one and a half inches long, according to the number of blades on the arbor. For sale at the Ag. Warehouse of NOTT & ELLIOTT, 23 Buffalo-st., Rochester.

GENESEE COUNTY FAIR.—An account of this Fair has been sent us by a friend at Batavia, but was received too late for insertion in this number. We shall endeavor to give it next month. Our correspondent says that "although it rained almost constantly, and the roads were very bad, the turn out was equal to that at any Fair ever held in the county."

McCormick's Virginia Reaper.

THE editor of the Chicago Democrat, speaking of the wheat harvest in Illinois, says:—

"The difficulty in harvesting the present crop has been great on account of the inadequate number of Machines to be had for reaping.—About 200 of McCormick's Reapers have been disposed of here the present season, and yet the demand for them has much exceeded the supply. They are furnished at a cost of \$120, and will cut from 12 to 20 acres of grain per day.

"We learn Mr. McCormick has associated with him Mr. Gray, of this city, in their manufacture, and that they have made arrangements to put up an establishment near the Lake House, when they will be enabled to fill all orders for them hereafter. These reapers are a great improvement upon the old cradle system, and no farmer should be without one."

It will be seen by reference to an advertisement in this number of the Farmer, that Mr. McCORMICK has contracted with Messrs. FITCH, BARRY & Co., of Brockport, in this county, for the manufacture of 300 Reapers for the harvest of 1848. We hear favorable accounts of the operation of the Reaper, in Livingston and other counties, during the past harvest season.—Can any of our correspondents give definite information on the subject.

COUNTY OF NEW YORK CATTLE SHOW.—This was much better than we expected to see. The exhibition was held at Haerlem. There were many fine steers, and a few excellent blooded cows on the ground. In brood mares and colts there was not so good an exhibition as we expected from the proximity of the Long Island race course. At the Plowing Match a very exciting competition was had between a half dozen spademen. A Yankee took the premium away from his disappointed Irish competitors—spading faster, deeper, and better, in the opinion of the bystanders, than they.

THE WIRE WORM.—A subscriber at Clarkson, N. Y., inquires for information relative to exterminating the *Wire-worm*. Will some correspondent answer the inquiry through the Farmer?

The following plan for the destruction of wire-worms was communicated to the *British Farmer's Magazine*, by a practical English farmer, Mr. TARRANT. He cleans the infested field of all weeds and roots, and drills white mustard seed, keeping the land hoed, and by the end of the season finds the worms entirely gone.

CORRECTION.—In an article headed "Experiment in Making Pork," published in our August number, (page 192,) one or two errors were made by the printer. In last line of first column, for "31st of October," read 13th of October; and in 21st line from the head of second column, for "corn and oob meal," read corn and *corn* meal.



Race's Self-regulating Parlor Stove.

THIS is decidedly a superior article in the stove line. We have one of them, and from experience in using it last winter, are satisfied that it combines more good qualities than any other parlor stove with which we are acquainted. The *regulator* (as will be seen in the engraving,) is placed upon the outside of the stove, and is consequently governed by the atmosphere of the room. The advantages of this stove over most others, are, that it requires but little fuel, and can be so regulated as to keep a room at any desired temperature. It is also a beautiful article, and generally much admired by the best critics—the ladies.

The economy in fuel, and even temperature obtained, must bring this stove into general use. It is manufactured and sold by Messrs. H. C. SILSBY & Co., of Seneca Falls. It is for sale by J. E. CHENEY, Exchange street, Rochester. We presume it can also be obtained in most other principal towns in Western New York.

RECEIPTS AT THE STATE FAIR.—It appears that we were in error last month, in stating that the receipts at the recent Fair at Saratoga were \$700 less than the year previous—though our information was obtained from an officer of the Society. We learn from the Secretary, B. P. JOHNSON, Esq., that the receipts at Saratoga were \$4,034 22—about \$350 less than those of the previous year, at Auburn.

ENORMOUS PEAR.—MONS. CALLE, of Brionne, France, has raised a cooking pear, which he has named the Belle Angevine. A specimen of this fruit weighed two pound and fifteen ounces avoirdupoise, was thirteen inches in circumference, and eight inches in height.

THE POTATO ROT is prevailing to a considerable extent, and causing much damage, in many sections of the country.

Premiums Awarded at the New York State Fair, 1847.

CATTLE—CLASS I.—DURHAMS.

Bulls over 3 years old.—1. Bell & Morris, Westchester county, "Marius," \$20—2. H. N. Carv, Marcy, "Oregon," \$15—3. J. B. Packer, Charlton, "Tecumseh," Herd Book.

Two years old Bulls.—1. Z. B. Wakeman, Herkimer co., "Young Meteor," \$15—2. George Vail, Troy, "Buena Vista," \$10.

Yearling Bulls.—1. E. P. Prentice, Mount Hope, "Bepo," \$10—2. D. D. Campbell, Schenectady, \$5.

Cows.—1. Geo. Vail, "Hilpa," \$20—2. E. P. Prentice, "Charlotte," \$15.

Two years old Heifers.—1. Z. B. Wakeman, "Sylvia," \$15. *Yearling Heifers.*—1. Geo. Olen, Schenectady, "Lilly," \$10—2. D. D. Campbell, \$5—3. Jane T. Gould, Troy, "Jenny," Herd Book.

[In addition to the cash prizes mentioned, each of the above persons received a copy of the American Herd Book.]

Bull Calves.—1. Z. B. Wakeman, "Kirkleavington," \$5—2. Geo. Vail, "Major," Washington's Letters.

Heifer Calves.—1. Geo. Vail, "Willy 4th," \$5—2. Geo. Vail, "Willy 3d," Wash. Letters.

CLASS II.—HEREFORDS.

Bulls 3 years old.—G. Clarke, Otsego co., "Major," \$20. "2" E. Wells, Fulton co., "Fulton," \$15.

Cows.—Edward Wells, "Adelaide," \$20.

CLASS III.—DEVONS.

Bulls 3 years old.—Nelson Washburn, Butternuts, Otsego co., "Baltimore," \$20.

Bulls 1 and 2 years old.—1. S. A. Law, Meredith, Delaware co., "Rover," \$15—2. Nelson Washburn, \$10.

Bull Calves.—1. Nelson Washburn, \$5—2. Nelson Washburn, Wash. Letters.

Cows.—1. Nelson Washburn, "Connecticut," \$20—2. Same, "Baltimore," \$15.

Heifer Calves.—1 & 2. Nelson Washburn, for his heifer calves, \$5, and Wash. Letters.

CLASS IV.—AYRSHIRES.

Yearling Bulls.—1. E. P. Prentice, Mount Hope, "Dundee," \$15.

Cows.—1. C. N. Bement, Albany, "Fairy," 5 years, \$20—2. E. P. Prentice, "Ayr," 9 years, \$15.

Heifers 2 years old.—1. E. P. Prentice, "Mida 1st," \$15—2. C. N. Bement, "Maggie," \$10.

Bull Calf.—C. N. Bement, "Rhoderick Dlu," \$5.

Heifer Calf.—1. E. P. Prentice, "Mida 2d," \$5.

CLASS V.—CROSS AND NATIVE.

Cows 3 years old.—1. John Lee, Cambridge, Wash. co., \$20—2. N. Washburn, \$15—3. Phineas Fletcher, Saratoga Springs, \$10.

Two years old Heifers.—1. C. N. Bement, \$15—2. N. Washburn, \$10—3. David Gillet, Butternuts, \$5.

Yearling Heifers.—1. John Lee, Cambridge, Wash. co., \$10—2. C. N. Bement, \$5—3. Joshua Bliven, Saratoga Springs, "Fanny," Vol. Transactions.

Heifer Calves.—1. Joh Lee, \$5—2. H. H. Lawrence, Saratoga Springs, Wash. Letters.

Bulls.—1. Maynard Deyoe, Saratoga Springs, Col. Tour. —2. Joseph Wood, Greenfield, Wash. Letters—3. Daniel Beers, Ballston. Transactions.

Working Oxen—best yoke.—1. Elon Sheldon, Sennet, Cayuga co., aged 4 and 5 years, \$15—2. Pliny Gould, East Nassau, Rensselaer co., 4 years old, \$10—3. John Lee, pair twins, 5 years old, Transactions.

Three years old Steers.—1. Elon Sheldon, \$10—David Gillet, \$8—3. James S. Wadsworth, Geneseo, Livingston co., Transactions.

Best 10 yoke Steers.—1. James S. Wadsworth, \$15.

Best 2 years old Steers.—1. Elon Sheldon, \$10—2. Lewis E. Smith, Halfmoon, Saratoga co., \$5—3. H. N. Cary, Marcy, Oneca co., Transactions.

Yearling Steers.—1. A. Gilbert, Hamilton, Madison co., \$8—2. James P. Noxon, Stillwater, Saratoga co., \$5.

Boys training pair 3 years old.—1. J. N. Adams, Butternuts, Colman's Tour.

Training 2 years old Steers.—1. Seth Whalen, Jr., West Milton, Saratoga co., Col. Tour.

Training pair yearling Steers.—1. A. S. Gilbert, Colman's Tour.

Milch Cows.—1. Ambrose Stevens, New York, Durham

cow, "Grace," 6 years old, Diploma—2. E. P. Prentice, Durham cow, "Esterville," 5 years, Herd Book—3. H. N. Cary, Durham heifer "Rose," 3 years, Trans.—4. John Lee, native cow, Trans.; 5. H. H. Lawrence, Trans.; 6. Wm. Wolford, Albany, "Red Daisy," Trans.

FAT CATTLE.

1. Warren Halsey Trumansburgh, Tompkins co., \$15—2. Edward Morrison, Sennet, Cayuga co., \$10—3. John B. Holmes, Saratoga, Colman's Tour.

HORSES.—CLASS I.—ALL WORK.

Stallions.—1. Joseph Milliman, Greenwich, Washington co., "Chief Justice," \$15—2. Simeon Christie, Mayfield, Fulton co., "Young Dread," \$10—3. Daniel A. Cornell, Pittstown, Rensselaer co., "Peacock Diamond," Youatt on the Horse—4. Lorenzo M. Lown, Sand Lake, "Rockingham," Vol. Trans.

Mares.—1. J. B. Burnett, Syracuse, \$15—2. Joseph Daniels, Greenfield, \$10—3. Henry W. Dennis, Saratoga, Youatt, —4. Maynard Deyoe, Saratoga Springs, Trans.

CLASS II—Draught Horses.—1. Wm. Larman, Pittstown, Rensselaer co., "French Emperor," \$15.

CLASS III—Blood Horses.—1. Ed. Long, Cambridge, "Tornado," \$15—2. Elias Ireland, "Alexander," \$10—3. "Abra," Butler, Wayne co., "Young Mogadore," Youatt.

Three years old.—1. Simon Schermerhorn, Rotterdam, "Waxy," \$10—2. S. R. Garrett, Ballston, "Highlander," \$5—3. H. Bailey, Bethlehem, "Sampson," Youatt—4. D. Davis, Guiderland, "Rough and Ready," Trans.

Three years old Mares.—Harman Becker, Easton, "Lady Jane," \$10.

Two years old.—Hiram Hall, Grafton, "Empire \$8.

Ponies.—Four imported ponies, very finely trained, were exhibited by the sons of E. P. Prentice, Mount Hope, and J. H. Prentice, New York. They were exercised by the lads with great skill and judgment, and the committee recommend a Diploma to each.

GELDINGS AND MATCHED HORSES.

Geldings.—1. Arden Merrill, Rome, gray geld., Diploma—2. P. M. Moriarty, Sar. Springs, gray, 6 years, Youatt.

Matched Horses.—1. Herod, Otis, Jordan, Onondaga co., bays, 7 years, \$8 and Diploma—2. A. Freeman, Milton, Saratoga co., browns, 5 and 6 years old, \$5—C. Gasper, Onondaga co., dark gray, 4 years old, Vol. Trans.—N. W. Moore, Saquoit, Oneca co., black, 5 yrs. old, Trans.—L. G. Morris, Morrisiana, Westchester co., bays, 5 and 6, Trans.—D. R. McCarthy, New Baltimore, grays, 6 years old, Trans.—Lester Hungerford, Watertown, Jefferson co., brown, 4 years old, Trans.—Henry Vail, Troy, sorrels, 7 years old, Eclipse horses, Trans.

SHEEP.—CLASS I.—LONG WOOLLED.

Best Sheep.—1. L. J. Van Alstyne, Canajoharie, \$10—2. E. H. Ireland, Watervliet, \$5.

Best 5 Ewes.—1. Wm. Rathbone, jr., Springfield, \$10.

CLASS II.—MIDDLE WOOLLED.

Bucks.—Z. B. Wakeman, Herkimer, \$10—2. J. McD. McIntyre, \$5—3. Z. B. Wakeman, Am. Shep.

Best Ewes.—1. Z. B. Wakeman, \$10—2. do. \$5—3. J. McD. McIntyre, Am. Shep.

Best 5 Lambs.—1. Z. B. Wakeman, \$5.

CLASS III.—MERINOS AND THEIR GRADES.

Best Bucks.—1. Joseph Blakeslee, Salen Centre, Westchester co., \$10—2. J. B. Holmes, Saratoga, \$5—3. D. S. Curtis, Canaan, Columbia co., Am. Shep.

Best Ewes.—1. Jos. Blakeslee, \$10—2. D. S. Curtis, \$5.

CLASS IV.—SAXONS AND THEIR GRADES.

Best Bucks.—1. Joseph Haswell, Hoosick, Rensselaer co., \$5—2. W. Joslyn, Buskirk's Bridge, \$5—3. Hiram Whitlock, North Salem, Am. Shep.

Best Ewes.—1. Wm. Joslyn, \$5—2. J. L. Randall, and Sylvester Milliman, Clay, Onondaga co., \$5—3. Joseph Haswell, Am. Shep.

FAT SHEEP.

1. Z. B. Wakeman, Herkimer, \$10—2. J. McD. McIntyre, Albany, Colman's Tour.—3. L. J. Van Alstyne, Canajoharie, Trans.

SWINE.

Large Breed.—Best Boar, 2 years old, Henry Holmes, Saratoga, \$10—Best 1 year old boar, Berkshire, J. Pitney, Sar. Springs, \$8—Best boar, 6 months and over, J. Pitney, \$5.

Best sow, 2 years old, Z. B. Wakeman, Herkimer, \$10—Best sow, 1 year old, Berkshire, James Stewart, Saratoga Springs, \$8.

Small Breed.—Best sow, 2 years old, James Stewart, \$10

—Best sow, 1 year old, J. Pitney, \$8—Best lot of pigs, J. Pitney, \$5—Second best, N. Mann, Saratoga co., Trans.

POULTRY.

Best lot of Dorking fowls, H. Vail, Troy, \$2 and Am. Pouterer—Best lot of large fowls, J. T. Blanchard, Saratoga Springs, \$2 and do.—Best pair of ducks, \$2 and do.—Lot of Poland fowls, \$2 and do.—Best and greatest variety of barnyard fowls, J. A. Brackett, \$5 and do.

FOREIGN STOCK.

HORSES—*Best Stallions*.—I. D. & N. Hill, Bridgport, Vt., "Black Hawk," \$15—2. Silas Hale, Royalton, Mass. Green Mountain Morgan, \$10—3. S. C. Smith, Bloomsbury, N. J., "Top Gallant, jr." Youatt.

Brood Mares.—1. E. H. Morgan, Rutland, Vt., \$15—2. Calvin Blodgett, "Lady Burbank," \$10—3. F. A. Wier, Walpole, "Lady Wildair," Youatt.

CATTLE.—A. H. Jerome, New Hartford, Conn., best yoke working oxen, Diploma.

SHEEP—*Cotswold*.—C. W. Keybold, Delaware, Diploma. Saxons—S. C. Scoville, Salisbury, Conn., Diploma. Merinos—Joseph Hinds, Brandon, Vt., Diploma.—J. N. Sawyer, Salisbury, N. H., 5 bucks and 5 ewes, Diploma—Jacob N. Blakesly, Conn., 1 buck, Diploma.

FARM IMPLEMENTS, &c.

PLOWS.—Minor Horton & Co., Peekskill Plow, \$10 and Diploma.

Farm Implements, Wagons, Harrows, &c.—1. Silas Briggs, Ballston, lumber wagon, \$10 and Diploma—2. Hollister, with 3 pair steel springs, Col. Tour.—3. John W. Sherman, market and spring wagon, new and ingenious construction, Trans.

Harrows.—Z. H. Wakeman, Herkimer, \$3.
Cultivators and Scarifiers.—Anthony Van Bergen, Coxsackie, \$3.

Fanning Mill.—I. T. Grant, improvement on former mill exhibited, Silver Medal—2. J. E. Clapper, Trans.

Horse Power.—M. S. V. D. Cook, Pittstown, \$5 and Diploma : 2. A. & W. C. Wheeler, Chatham 4 corners, Trans. *Stalk and Straw Cutter*.—Geo. Catchpole, \$5 and Diploma : 2. Byron Densmore, Trans.

Drill Barrows and Seed Planter.—H. L. Emery, Albany, \$3, Pennock's Seed and Grain Planter, certificate : C. Masten, Patent Lever Drill and Grain and Seed Planter, Diploma and Trans.

Portable Grain Mills.—Chas. Ross, "Fitzgerald's Burr-Stone," Trans.

Smit Machine.—Leonard Smith, Troy, Trans.

Broadcast Sowing Machine.—Peter Gleason, Trans.

Corn Sheller and Separator.—Luther Tucker, Trans.

Root Cutter.—Luther Tucker, "Ruggles, Nourse & Mason's vegetable root cutter," Trans.

Hay Fork.—L. Bachelior, & Son, a very highly finished hay fork, Trans.

Mowing Machine.—F. Ketchum, Buffalo, Diploma.

Reaping Machine.—T. R. Hussey, Diploma.

Field Cultivator.—1. Dortha Hinkston, South Barre, Orleans co., Diploma : 2. Nathan Ide, Shelby do., Trans. : 1. Alanson T. Odell, Royalton, Niagara co., Trans.

Seed Sower and Weeder.—Exhibited by Noadiah Moore, Chazy, N. Y., Diploma.

Corn and Cob Crushers.—Butterfield & Greenman, Utica, \$5 and Diploma.

Flax and Hemp Dresser.—James Anderson, Louisville, Ky., \$5 and Diploma.

Ox Cart.—G. B. Powell, Saratoga, \$5.

Horse Rake.—Henry Warren, Troy, \$5 and Diploma.

Ox Yoke.—1. Azor Monroe, Galway, Saratoga co., Diploma : 2. Elon Sheldon, Sennett, Cayuga co., Trans.

Saddle.—Lyman J. Lloyd, Albany, Diploma.

Grain Cradles.—Myers & Bryan, Schaghticoke, Diploma : I. T. Grant & Co., do., Diploma.

Six Manure Forks.—Luther Tucker, (Partridge's) Diploma.

Six Hand Rakes.—Luther Tucker, "Mayher & Co., N. Y." Diploma.

Grass Scythes.—Hiram C. White, Albion, Orleans co., made by R. B. Dunn, Wayne, Maine, Diploma : Six cradle scythes, Knickerbacker & Hurlbut, Saratoga Springs, Diploma.

Churn.—Nathan Parish, Rush, Monroe co., Diploma.

Portable Grain Mill and Bolter.—Charles Ross & Co., Broadway, N. Y., Diploma : D. C. Duncomb, Rochester, Bradford's patent bolter, Diploma.

Corn Cutter.—Seth Whalen, West Milton, Sar. co., Diploma.

Dig Power and Churn.—A. Burdick, Moreau, Sar. co., Diploma.

Two Hay Forks.—Deming & Hart, Farmington, Conn., of excellent workmanship and finish, Diploma.

Butter Firkins.—John Holbert, Chemung, Diploma : W. Trap, jr., Ithaca, Diploma.

Cheese Press.—T. Burch & Co., Little Falls, (Kendall's patent), certificate.

Best Collection of Agricultural Implements.—Luther Tucker, \$10 and Diploma.

PLOWING MATCH.

1. Flavel Shattuck, Galway, \$15 : 2. John Smylie, West Galway, \$12 : 3. James McDougall, Argyle, Washington co., \$10 : 4. Howard Delano, Mottville, Col. Tour : 5. John Newland, Wilton, Saratoga co., Trans. : G. W. J. Bronson, Amsterdam, (special) Col. Tour.

Boy 13 years old.—George Wesley Steves, Milton, Sar. co., \$10.

DAIRIES.

Butter.—O. C. Crocker, Union, Broome co., for the best lot in 30 days, 242 lbs., from 5 cows, from 13th June, \$25 : E. R. Evans, Marcy, Oneida co., for 2d best lot in 30 days, 216 lbs., from 11th August, \$15 : John Holbert, Chemung, for best 25 lbs., made in June, \$10 : O. C. Crocker, Union, 2d best, Col. Tour. : Hamilton Morrison, Montgomery, Orange co., 3d best, Vol. Trans. : B. A. Hall, New Lebanon, for best 50 lbs., made at any time, \$15 : O. C. Crocker, for 2d best, \$10 : Stephen C. Hays, Galway, Saratoga co., 3d best, Col. Tour. : John Holbert, Chemung, 4th best, Silver Medal.

CHEESE.—Wm. Keese, Ausable, Clinton co., for best 100 lbs., 1 year old and over, \$15 : T. Burch, Little Falls, Herkimer co., 2d best, \$10 : T. Burch, for best 100 lbs., less than 1 year old, \$15 : Wm. Keese, 2d best, \$10 : Henry Lincoln, Greenfield, Saratoga co., Silver Medal : Newberry Bronson, Wyoming, 4th best, Wash. Letters : Wm. Angels, Cobleskill, 5th best, Vol. Trans.

SUGAR.—H. Davenport, Copenhagen, for best 25 lbs., maple sugar, \$10.

SILK.—Mrs. Lewis Wescott, Greenfield, Saratoga co., for best cocoons and silk sewings, \$10 : Mrs. S. J. Pierce, Burlington, Vt., for two white handkerchiefs and black long shawl, Diploma and Downing.

DOMESTIC MANUFACTURES.

George W. Henry, Martinsburg, Lewis co., for best woolen blanket, very superior, \$5 : Albert L. White, Rutland, Jefferson co., 2d best, \$4 : Mrs. B. R. Voorhees, Amsterdam, 3d best, \$3 : Wm. Wilson, West Milton, 4th best, Trans. Seth Whalen, 5th best, Trans. George W. Henry, Martinsburg, Lewis co., for best 10 yards flannel, \$5 : Mrs. L. D. Scoville, Monroe co., 2d best, \$4 : Wm. Dunning, Greenfield, Saratoga co., 3d best, \$3 : Nelson P. Jordan, Malta, for best 10 yards woolen cloth, \$5 : Mrs. B. R. Voorhees, Amsterdam, for best woolen carpet, \$5 : Stephen C. Hays, Galway, Saratoga co., 2d best, \$4 : Mrs. L. D. Scoville, Monroe co., 3d best, \$3 : Mrs. Benj. Russel, Saratoga co., for best hearth rug, \$5 : Joseph Wood, Greenfield, Saratoga co., 2d best, \$4 : Mrs. L. D. Scoville, Monroe co., 3d best, \$3 : P. R. Waterbury, Saratoga Springs, 4th best, \$2 : B. A. Hall, 5th best, Trans. Mrs. Joseph Daniels, Greenfield, for best 10 yards linen cloth, \$5 : Mrs. Jane Harrell, Rensselaer co., 2d best, \$4 : Mrs. L. D. Scoville, Monroe co., linen diaper \$5 : Ezra Westcott, Milton, Saratoga co., kersey, \$3.

Rag Carpet.—1. Jacob Ambler, Saratoga Springs, \$3 : 2. J. Moulton, West Troy, \$2 : 3. Mrs. William Newcomb, Pittstown, Trans.

Carpet Coverlet (double).—1. C. R. Nichols, Darien, Genesee co., \$4 : 2. Joshua Bliven, Saratoga Springs, \$3 : 3. Miss. Delia A. Jones, Westmoreland, Oneida co., \$2 : 4. Joseph Wood, Greenfield, Trans.

Linen Stockings.—1. Mrs. B. R. Voorhees, Amsterdam, \$2 : 2. Mrs. Felix Thomas, Trans.

Woolen Knit Stockings.—1. Mrs. B. R. Voorhees, \$2 : 2. — Haskins, Stillwater, Trans. 3. Wm. Dunning, Greenfield, Trans. 4. Mrs. Esther Root, Saratoga Springs, (87 years of age,) \$2 and Diploma.

Diplomas were awarded to Utica Mills for 5 pieces super-fine broadcloth, (W. C. Churchill.)

Seneca woolen mills : 4 pieces of cassimere, (Wm. Langworthy, agent.)

Palmer & Co., N. Y. handsome specimens tapestry.

Timothy Baily, Cohoes, very fine specimens of drawers and wrappers.

Scofield, Capron & Co., Walden, Orange co., two pieces superfine broadcloth from American wool.

Wool-grower's manufacturing Company of Little Falls, M. W. Priest, agent, two pieces broadcloth, made from native wool.

NEEDLE, SHELL AND WAX WORK.

Embroidery.—Miss Caroline Pierepont, Troy, \$3 and Silver Medal; 2 Miss Olivia Slocum, Troy, \$3; James R. Westcott, Saratoga Springs, fire screen, \$2; Charles Damarest, Rochester, bed quilt, \$2; Miss R. W. Alley, Rochester, piano cover, \$2; Mrs. Polly B. Westcott, of Greenfield, for two quilts, silk bead purse, and other articles, \$3; Mrs. Wm. Dunning, of Greenfield, for linen table cloth and other articles, \$2; Miss Helen Hodgeboom, Schodack, otoman covers, \$1; Mrs. B. R. Voorhees, Amsterdam, for a ingeniously wrought vest, from the listing of premium cloth presented Henry Clay, \$1; To the same, for a large variety of articles of her own ingenuity and industry, \$10 and Silver Medal; Mrs. James M. Andrews, Sar. Springs, for a boy's coat, \$1; Mrs. D. Shepherd, Sar. Springs, for an infant's blanket, \$1; Miss Amanda Ensign, Sar. Springs, watch case, \$1; Miss Sarah M. Davison, Sar. Springs, worsted work, \$1.

Quilts.—1. Mrs. John Cramer, 2d., Waterford, worked quilt, \$2; 2. Miss Nancy A. Gregg, Waterford, worked quilt, \$1.

Rundell and Leonard, Troy, specimen of needle work, and best made shirts, \$5; Miss Jesena Bronson, Amsterdam, port-folio, and table cover, \$2; Mrs. Sarah Churchhill, New Lebanon, veil, \$1; Mrs. Wasson, (77 years of age) counterpane, \$2; Harvey Davis, child's knit coat, made by his daughter, \$1; A. A. Lansing, Albany, shirts, &c., \$2; Miss Gould, Moreau, embroidery, \$1; Miss Eliza Benedict, Ballston, fancy bed quilt, \$2; Miss Legget, Sar. swansdown muff and tippet, \$1; Miss Francis Ann Green, Mayfield, Fulton co., shell work box, \$3; Miss Harriet Berry, Sar. Springs, cotton knit table spread, \$2; Mrs. Eliza Whitford, Sar., embroidered lace veil, \$2; Mrs. Washington Putnam, Sar. Springs, specimen needle work, \$2; Miss C. A. Waterbury, Sar. Springs, embroidered hearth rug, \$2; Mrs. Wm. Hill, album quilt, \$1.

ELOWERS.

Professional List.—Greatest variety, James Wilson, of Albany, \$5; Greatest variety dahlias, James Wilson, \$5; Best 24 dahlias, James Wilson, \$3; Greatest variety of roses, James Wilson, \$5; Best 24 blooms, Thos. Ingram, \$3; Greatest variety of verbenas, James Wilson, \$3; Best 12 varieties of verbenas, Thos. Ingram, \$2; Greatest variety German asters, Wm. Newcomb, \$3; Greatest variety pansies, James Wilson, \$3; Best 24 blooms, Thos. Ingram, \$2.

Amateur List.—Greatest variety, Mrs. Washington Putnam, Silver Medal; Greatest variety dahlias, Wm. Newcomb, Silver Medal; Best 12 blooms, Miss E. Clarke, Sar. Springs, Horticulturist; Greatest variety roses, Mrs. E. C. Delavan, Ballston, Silver Medal; Best 6 phloxes, Dr. Herman Wendell, Albany, Horticulturist; Best Seedling phloxes, Dr. Herman Wendell, Wash. Letters; Best 12 verbenas, Dr. Herman Wendell, Horticulturist; Best 12 Seedlings, Dr. Herman Wendell, Horticulturist; Greatest variety German asters, Mrs. Newcomb, Horticulturist; Greatest variety pansies, Mrs. Truman Mabbitt, Halfmoon, Horticulturist.

General List.—Best collection greenhouse plants, Mrs. J. Ford, Sar. Springs, Silver Medal; Best floral design, J. Dingwall, Albany, Silver Medal; Best ornament, Mrs. T. Mabbitt, Silver Medal; 2d best, James Wilson, Albany, Col. Tour; 3d best, Mathias Tillman, (gardiner to Dr. Wendell), Horticulturist; Best flat hand bouquet, James Wilson, Albany, Horticulturist; 2d best, T. Ingram, Sar. Springs, Wash. Letters; 3d best, Miss Sarah M. Davison, Sar. Springs, Downing; Best round bouquet, James Wilson, Albany, Horticulturist; 2d best, T. Ingram, Saratoga Springs, Downing; 3d best, Mrs. Dr. J. Clarke, Saratoga Springs, Downing.

FRUIT.

Apples.—E. C. Frost, Catharines, Chemung co., for Dowsie apple for cooking and winter use, worthy of further attention; Holland pippin variety of fall apples; Riley apple, of the fall pippin variety, worthy of note; requested for future exhibition, Diploma; Wilson, Thorburn & Teller, 18 varieties, (9 approved); Truman Mabbitt, 4 varieties early apples—"Early Harvest," "Yellow Bough," "Strawberry," Downing; H. N. Langworthy, Rochester, 4 varieties; Henry Vail, Troy, 27 varieties, 23 ap-

proved; 2d premium, \$5 and Downing; J. W. P. Allen, Oswego, 5 varieties, all approved, Downing; J. L. Randall, Lysander, 31 varieties, 19 approved, Downing.

Pears.—1. C. Reagles & Son, Schenectady, largest and best variety, Downing, colored plates; 2. Dr. H. Wendell, \$5 and Downing; 3. Wilson, Thorburn & Teller, Trans. Best collection Autumn pears, J. W. P. Allen, Oswego, \$5 and Downing; J. W. P. Allen, exhibited a remarkable fine specimen of a limb of Oswego Beurre, loaded with fruit, styled by the committee "Seedling No. 1," commended to special notice, and to which they award a Diploma; Prof. Ives, New Haven, Conn., presented a small seedling early autumn pear of high flavor, Downing; L. Prevost, Astoria Nursery, for a splendid specimen of Duchesse d'Angouleme, grown on quince stock, Diploma; Isaac Rapalje, Astoria, presented fine specimens of the Rapalje Seedling, a new pear, which on the sea coast may prove a substitute for the White Joyenne, Downing; H. N. Langworthy, by J. Alley, of Rochester, fine specimens of Onondaga pears, Diploma.

Peaches.—Best 12. A. Snyder, Kinderhook, \$2 and Downing; 2d 12, Enoch H. Rosekrans, Glens Falls, Downing; Best Seedling variety, Oliver Phelps, Canandaigua, large yellow cling, \$3 and Downing; James Mills, Poughkeepsie, beautiful specimen pine apple cling, extraordinary size and flavor, Diploma; Prof. A. H. Stevens, N. Y., presented several large and beautiful specimens of the N. Y., white cling stone, grown in his garden at Astoria, Downing; Jerry Warner, Springfield, Mass., fine specimen Seedling peaches, from a tree 3 years old, by J. Stafford, Diploma; E. P. Prentice, Mt. Hope, 12 fine specimens of Bergen's yellow, Diploma; H. N. Langworthy, by J. Alley, Rochester, fine specimens of Royal Kensington, and yellow melocoton, Diploma.

Plums.—Best collection.—1. S. C. Groot, Schenectady, 25 varieties, \$5 and Downing; 2. H. Wendell, Albany, 20 varieties, \$5 and Downing.

Best six varieties.—1. S. C. Groot, \$3 and Thomas' Fruit Cult. 2. Dr. Wendell, \$1 and Thomas' Fruit Cult.; Abel Whipple, Lansingburgh, for best Seedling, known as Locofoco, \$5 and Downing; S. C. Groot, for best 12 plums, \$1 and Thomas' Fruit Cult.

NECTARINES AND APRICOTS.—Best and greatest variety.—1. H. Snyder, Kinderhook, \$3 and Downing; 2. Dr. Wendell, \$2 and Thomas' Fruit Cult. Col. Young, of Ballston, presented some specimens of nectarines produced from the peach stone.

Quinces.—1. Best 12 of any variety, Dr. R. T. Underhill, Croton Point, \$3 and Downing; 2. Robert McDonald, Greenfield, Saratoga co., \$2 and Downing.

Grapes.—1. Best and most extensive collection of native, Daniel Ayres, Amsterdam, \$5 and Downing; 2. J. C. Hubbell, Chazy, Clinton co., \$2 and Downing; 1. Best dish native, R. T. Underhill, Croton Point, Thomas' Fruit Cult., and Diploma; 2. Wm. C. Sage, foreign and native, Downing; Col. Thomas H. Perkins, of Boston, sent a box containing bunches of eight varieties of foreign grapes, extraordinary fine specimens, grown under glass in his garden at Brighton—sorts, Nice, two varieties, St. Peters, Black Hamburg, White Frontignac, West St. Peters, Grizly Frontignac, White Muscat, Muscat of Alexandria; also some beautiful Nectarines of remarkable flavor and growth, produced under glass, Boston, Red Roman, and Norrington, Diploma and a letter of thanks.

Special commendation to Mrs. Voorhees, of Amsterdam, for a bottle of choice gooseberry wine, of her own manufacture.

To John H. Waring, for best peck cranberries, (superior specimen) \$5.

VEGETABLES.—To N. H. Waterbury, Sar. Springs, for 12 best ears seed corn, \$1; 1. Best $\frac{1}{2}$ peck table potatoes, C. R. Nichols, Darien, Genesee co., \$1; 2. H. Morrison, Montgomery, Orange co., \$1; Greatest and best variety of Seedling potatoes, Rev. N. S. Smith, Buffalo, (30 varieties,) \$10; Thomas Cody, Saratoga Springs, for 3 best heads of cabbage, \$1; N. H. Waterbury, for best 12 carrots, \$1; N. H. Waterbury, for best 3 squashes, \$1; Truman Mabbitt, for best 12 tomatoes, \$1; Thomas Cody, for best 3 egg plants, \$1; C. Schuyler, Ballston, Spa., 2d best 12 ears seed corn, Trans. C. Schuyler, for best 12 onions, \$1; A. J. Parker, Sar. Springs, for Lima beans, \$1.

PAINTINGS AND DRAWINGS.—Wm. E. McMaster, New York, "May Queen," \$5 and Diploma; No. 335. Landscape, water colors, \$5; Ambrose Stevens, animal portraits, horse and cow, \$10 and Diploma; Miss A. M. Hill, Canton Village, Onondaga co., drawing in pencil—\$5; Miss Martha Wheeler, Sar. Springs, drawing, \$5; The committee noticed with approbation several portraits by N. Cook, of Sar. Springs, among which were excellent likenesses of Judge Willard, Judge Marvin, and O. M. Coleman.

STOVES.—For wood fire.—1. Theophilus Smith, Galway, "American Reverse draft," Diploma; 2. Elisha Walter, Syracuse, "Rough and Ready," Silver Medal.

For Coal Fire.—Wilson, Mechanicsville, Diploma; 2. Anthony Davy & Co., Troy, "Washington airtight," Silver Medal.

Parlor Stoves.—A. T. Dunham, Wet Troy, "Trojan parlor stoves," Diploma; 2. Vail & Warren, "Sar., air tight," Silver Medal; Anthony Davy & Co., Troy, for Summer baker, Diploma; L. Morse, Athol, Mass., stove for burning sawdust, &c., Trans. Buck's patent hot air cooking stove was exhibited, and entitled to commendation heretofore given.

DISCRETIONARY PREMIUMS.

[The committee on Discretionary Premiums reported only in part, and intend to submit an additional report to the Executive Committee of the State Society.]

C. N. Bement, Albany, osier willow, \$5.

Mathias F. Coons, Lansingburgh, for six specimens of hurdle fence, Silver Medal.

J. L. Gatchel, Elkton, Maryland, for hydraulic ram, Gold Medal.

W. Wheeler, Rockford, Illinois, for "Chandler's morticing and tenoning machine;" \$5.

Beautiful models of Bee Hives exhibited by Oliver Reynolds, Monroe co.

Joseph C. Rich, Penfield, Monroe co., Washing Machine, Trans.

Gnstavus White, Middle Centre, Otsego co., Potato Washer, Trans.

S. Morrison, Granville, Spinning Wheel and Reel, Trans.

J. Ball & Co., indestructible water pipe, Diploma.

Henry Brackett, Wilton, Saratoga co., well curb, Trans.

L. G. Hoffman, Albany, Egg Hatching Machine in operation on the ground, Diploma.

R. Pomeroy, Pittsfield, Mass., for improved mail axels, Silver Medal.

Augustus Thayer, for combination pump, Silver Medal.

James H. Kelley, Rochester, cigars and tobacco, Silver Medal and Diploma.

John Lock, 51 Ann st., N. Y., shower bath, Silver Medal.

Lewis E. Close, of Sar., Springs, a lad of 12 years of age, for a handsome and ingenious small bedstead, manufactured by himself, Silver Medal. The committee give this premium with much pleasure, to encourage industry and ingenuity in youth.

Thomas Peck, improved door spring, Silver Medal.

Wm. Bushnell, Rochester, case surgical instruments, fine finish, Silver Medal.

J. Orville Olds, deaf and dumb Institute N. Y., elements of chi-rography, Wash. Letters.

A. Menedy, West Troy, three church bells, Certificate.

Alfred Cross, Saratoga Springs, dress coat, pantaloons and vest, Wash. Letters.

Thomas Davies, Utica, miniature steamboat, in operation at Fair—a very ingenious and beautiful article, Wash. Letters.

Diplomas were awarded to L. J. Lloyd, Albany, for one set of double and single harness, and one Russel leather travelling trunk; R. T. Norgrove, Albany, for elegant wrought carpet bags and satchels, saddle and trunk; James Henry, jr., an educational chart; F. P. Burns, Albany, piano; James Gould & Co., Albany, sleigh and wagon; W. W. Bryan & Co., Rochester, cooper's tools; William Trapp, jr., Ithaca, stove and barrel machine; Rogers & Oakley, Albany, water proof cloth; Leonard & Bunker, Troy, a Prince Albert buggy, very neat workmanship; Albany Argillo Works, glass ware and argillo door knobs, very superior; Francis C. Young, Painted Post, Steuben co., Munsell's patent boring machine for wagon hubs; Cornelius Oakley, N. Y., for pure Turkey tobacco of the kind used in Turkey for smoking; W. Haworth, N. Y., collar stuffing and shaping machine; F. W. Wood, 67 Frankfort st., N. Y., and 173 River st., Troy, for superior leather beltings; W. S. Segare, Utica, window springs; David Muaddel, 116 Fulton st., Brooklyn, pair gentleman's boots; Mrs. G. Anderson, Broadway, Albany, a splendid assortment of confectionary and cake; Edward Owens, Albany, surgical and dentist's instruments, and other articles, very superior; Philander Salmon, Reading Conn., Wood's patent shingle machine; Parker & Cooke, Albany, exhibited a suit of clothes of most excellent workmanship and finish; Benjamin Bruff, Rochester, model sash fastener, a very useful invention; Troy Rolling Mill Co., railroad iron; L. E. Field, Moscow, Livingston co., metallic spoke suspension carriage wheel; B. W. Franklin, Little Falls, gold pens; Frothingham & Co., Albany, hats, caps, &c.; Flagler, Baker & Co., for portable forge and bellows.

Vols. of Transactions of the Society, were awarded to John Hemstede, Sandy Hill, blacksmith's vice; James Wilkinson, Saratoga co., harness stirrups &c.; Barton & Fenn, Troy, fancy soaps; Connolly & McCormick, Sar., Springs, pair boots; Whipple & Co., Sar., Springs, grave stone; J. Hodgman, Sar., Springs, screw plate; Nathan Bixley, New York, gumelastic maps, &c.; H. P. Hall, Sar., Springs, Daguerrotype; Cromwell & Co., Mechanicville, crockery; Isaac Spalding, Sar., Springs, bass viol; J. H. Welcome, New York, Diamond cement; Thompson & Howland, Cayuga co., barrel of Cayuga plaster; John Harrison, Stillwater, door knobs, &c., T. Lawrence, Sar., Springs, garden and fire engine; Wm. Platt, Waterford, universal chuck; Dr. E. Platt, New York, patent metallic india rubber valve, breast pump, &c.; S. Benson, apple paring machine; Anable & Smith, Albany, superior leather; Thomas Ling, Saratoga, fire engine.

Commended.—A lot of Military Trimmings, very beautifully got up, and are worthy of commendation for their execution, L. T. Boland & Co., Albany.

A splendid carriage and harness were exhibited by Le Grand Smith, of Albany, much admired.

John Williams, of Rochester, exhibited two barrels flour of the well known and highly prized Whitney brand, remarkably good. Whitney Putnam, Rochester, 1 barrel flour from the city mills, very good.

WHEAT, oats, rye, Indian corn, potatoes, hay and tobacco, are raised in every State and Territory in the Union.

SALTING MEAT.—The sooner meat is salted after being killed the better, as it then possesses considerable absorbent power, which it gradually loses by age, and when it once becomes putrid it can never be salted at all. One of the best modes of curing is, to rub the meat well with a mixture of common rock-salt 2 lbs.; saltpetre 2 oz.; and moist sugar 1 oz., till every crevice is thoroughly penetrated, after which it should be set aside till the next day, when it should be covered with fresh salt in such parts as have been most exposed. It may then be advantageously placed in a proper vessel and subjected to pressure, adding a little more salt as may be necessary, and turning it daily till sufficiently cured.

When the brine, as it forms, is allowed to drain from the meat, the process is called *dry-salting*; but when, on the contrary, it is allowed to remain on it, the mode is called *wet-salted*. On a small scale, the latter is most conveniently performed by rubbing the meat with salt, &c., as above directed; and after it has lain a few hours, putting it into a pickle formed by dissolving 4 lbs. of rock-salt, ½ lb. of sugar, and 2 oz. of saltpetre in 2 gallons of water. This pickling liquor becomes weaker by use, and should therefore be occasionally boiled down a little and skimmed, adding, at the same time, more of the dried ingredients.—*Agriculturist*.

MEASURE OF HAY.—The *Massachusetts Plowman* gives the following relative to estimating the weight of hay by the space it occupies.

"Six hundred cubic feet have been sold here for a ton—that is, a mow ten feet by ten broad, and six feet high—equal to 600 cubic or solid feet. Perhaps this bulk would be necessary to make a ton of red top or herd grass in case no pressure of any kind is applied over it. Clover would lie tighter.

But in broad and deep bays.—say 20 feet by 30, and twenty feet in depth, the pressure is immense, and 500 cubic feet would make a full ton. Some estimate that 400 feet will do it, but they think the pressure in such a mow is equal to that of the common screws used for pressing.

Twenty times thirty equal six hundred, and one foot in depth would at this rate make a ton—600 cubic feet. But if 400 feet are sufficient, then eight inches in depth in such a mow would amount to a ton. By repeated measurements and weighings we could judge pretty nearly by measure alone."

PRESERVING CABBAGES.—There are several good ways of keeping cabbages during winter by burying them out of doors. The difficulty is, it is hard to get at them during winter, without damage to those left. The following plan appears to avoid this difficulty: Cut the head from the stump, and pack closely in a cask, taking care to fill up all the vacancies with chaff or bran, and keep in a dry cellar.

Epidemic among Horses.

[THE following article, written by one of our correspondents, we copy from the Boston Medical and Surgical Journal.—Ed.]

In this section (the western part of Ontario and eastern part of Livingston counties, N. Y.,) there is at present prevailing an epidemic among horses; an account of which I have thought might be of interest to some of the readers of your valuable journal.

During the past winter and spring an epidemic erysipelas has been prevailing, and still prevails, among the human species; and some time in March it was first observed, by the writer of this article, that many of the horses he met on the road were frequently snorting and oftentimes coughing; and this, too, when the condition of the animal would not lead one to infer it was diseased with the glanders, colt distemper, or even a common cold. The latter part of April my own favorite horse commenced snorting—a short, rough, spiteful, irritated snort—as if some insect, or offensive particle of dust, was highly irritating the nares, and he was endeavoring, partly in anger, to dislodge it from the mucous membrane. It increased, and in a few days I was led to make a careful examination of his morbid mucous membranes, and compare his case with some eighty or a hundred others.

DIAGNOSIS.—The mucous membrane of the nares bright red, like scarlet, with numerous minute, dark-red points. The blood vessels highly injected. In slight cases, thin ichorous matter covered the whole membrane, and in snorting was blown out, in a shower of fine mist, perhaps full in the face of the examiner. In bad cases, patches of aphthæ, or ulcerations, could be seen, with pus trickling down from the higher portion of the nares. At the angles of the jaws, the cervical glands swollen and enlarged, and sometimes indurated. The tongue pale, cold, and smooth. Appetite poor, or very variable. Pulse 60 to 95, hard, wiry, and demanding venesection. Ears cold, also heels and ankles. Eyes heavy and sunken. In bad cases, the pulse would be full and hard, the hair rough and staring, and the mane and tail easily starting from the root. The glands of the neck very much enlarged. A short, frequent, and uneasy cough, with scanty expectoration, or discharge from the nose. In almost all of these cases, death was the finale; oftentimes very speedy, from exposure to damp atmosphere or a change of temperature. I presume, within the circle of a few towns, I have heard of more than thirty deaths. Ten were out of one lot of western horses. There were no symptoms of its being contagious—at least I know of none.

TREATMENT.—“Horse doctoring,” as usually practised, is so much like quackery, if not essential quackery, that one is hardly free to speak

of it. I shall only refer to a few cases, under my own care. In one very bad case, where I judged that the mucous membrane of the lungs was affected, I bled very freely, and the blood drawn was in a highly inflammatory condition, as indicated by the buff coat. Gave saline cathartics, with antimony. The latter was continued for a number of days in small doses. This treatment was successful. In another, where there was a congestion of the liver, calomel with antimony was exhibited, and the latter continued until the highly injected state of the mucous tissue of the nares had subsided. In very mild cases, a warm stable, short diet, and nitre and antimony in the water drank, were sufficient. In cases of swollen glands a liniment of sweet oil, six ounces; oil vitriol, two ounces; spirits turpentine, eight ounces; was used for discussing the tumors. The heroic remedy, as in all cases of inflammation of the horse, was bleeding. Not one horse has died where this was used promptly and decidedly.

It is a point of interest to the philosophical pathologist, how far the epidemics of the “lords of creation” extend to the inferior orders of animals. In the epidemic just described, no one who has seen the epidemic prevailing among the human species, will at all doubt that there is an “identity of upity” in the two. I have in remembrance an epidemic bilious pneumonia, which prevailed in my ride in the winter and spring of 1813, which extended to horses, and destroyed twelve in my own neighborhood. My beautiful horse died of gangrene. In the epidemic fevers of 1838, of the western country, hogs and dogs, as well as horned cattle and horses, were affected, not only with the fevers, but the sequelæ of them, in diseased livers, enlarged spleens, dropsies, marasmus, and broken-down constitutions.

EQUUS.

E. Bloomfield, N. Y., July, 1847.

A LIFE PRESERVER FOR THRASHERS.—Tear a piece off the finest sponge, enough to cover the mouth and nostrails, hollow it out so as to fit closely; tack a tape string around the outside, long enough to tie over the top of the head; soak the sponge in soft water and squeeze the water out with the hand, and when ready to commence work, tie it on tightly and evenly, so as to cover the mouth and nostrails completely. You can breathe and talk through the sponge almost as freely as without it—and you can thrash where the dust from the machine rises like a dense fog around the head, and the lungs will be as free from harm as if you were hoeing corn. I have thrashed with a machine for the past four years, and always suffered much from the dust inhaled into the lungs, until last year, when I tried the sponge; and I can truly say it has been a life preserver to me.—*Correspondent of Ohio Cultivator.*



HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

Horticultural Hints for November.

THE most important matters in the Garden and Orchard, that demand attention this month, are the *preparations for winter*.

Transplanting hardy trees, shrubs, and plants may be continued during the first week or two, or as long as the weather is mild. But in cold, exposed situations we would advise laying in the trees by the roots, in a slanting, nearly horizontal position, in dry soil and a sheltered situation—and planting them out as early in spring as practicable. This will avoid the risk of winter killing.

Fall planted trees should, in all cases, be secured against being blown around by the winds, either by throwing up the earth in a mound around the base, as we have illustrated in previous numbers of the Farmer, or by tying up to stakes. A covering of six inches deep of litter or manure is serviceable around the roots of trees during winter. If spread on now it can be forked or spaded in among the roots in spring, and will improve next summer's growth.

Clean all long grass and rubbish from around your orchard fences; this will, in a great measure, save your trees from being girdled by mice. Throwing up the earth around trees, a foot high or so, prevents mice from attacking them, and is no way injurious to the tree. It is easily levelled down in spring.

Hardy Bulbous Roots, such as Hyacinths, Tulips, Crocus, Lillies, Crown Imperials, &c., &c., may yet be planted, and will bloom finely next spring. The beds should be covered with six inches or so of leaves or straw. Hyacinths soon degenerate in our gardens. Where a fine show of these sweet and beautiful spring flowers is desired, fresh imported bulbs from Holland should be procured. A lady lately observed to us that she did not care for Crocus, "because they bloomed so early!" That is their greatest merit. They are always the welcome harbingers of spring.

Raspberries were so severely winter killed last season that the crop was an entire failure throughout a great portion of the country last summer. Those who took the precaution to protect their plants, had as good a crop as usual. We hope this winter will find Raspberry beds well dressed and protected. All the suckers should now be taken up, leaving in a hill about three of the strongest canes; these should be tied *loosely* to a stake and covered with a sheathing of straw—or they may be laid down, and covered with leaves or branches of evergreens.

Strawberry beds should be dressed, (cutting off runners and old decayed leaves,) and protected with a few inches deep of leaves from the woods, or straw when easier obtained. Manure is not good on the tops of the plants, as it is apt to rot them.

Asparagus beds should now be covered with three inches deep of well rotted, rich manure—to be spaded or forked down in the spring dressing.

Grape vines.—Foreign varieties, such as Black Hamburg, Sweet Water, Chasselas, Muscats, &c., grown in the open ground, should now be taken down from the wall or trellis, and covered with straw or earth. Old vines that may be difficult to bend down may be protected with thick mats or branches of evergreens tied against them.

All half hardy or tender shrubs, Roses, &c., should receive timely protection. Climbing shrubs and Roses, should be taken down from the arbor or trellis—the tops tied together and covered with leaves or straw. Upright plants can be easily thatched with straw by putting down a stake by them to keep them stiff.

Tender Herbaceous Plants or Bulbs may be easily protected by cutting away the old flower stems, and placing an inverted sod over them.

Carnations can be protected, where there are only a few plants, by putting a small glass box, or anything of that sort over them, and uncovering them occasionally on fine days during winter. Where the collection amounts to two or three dozen plants, a small hot bed frame or a similar frame should be taken, placed on a dry spot, and the Carnations transplanted into it.—Manure can be thrown around the frame outside, and the top covered with boards or sashes and mats, or straw. Uncover occasionally in mild weather, during the middle of the day, and they will winter finely. *Monthly Roses* will winter better in such a frame than in a green house or parlor. All the fine Tea, Bourbon, Noisette, Bengal, &c., can be wintered in this manner.

Do not forget to gather and secure, in season, your Winter Cabbages, Celery, Squashes, Beets, Parsnips, and other culinaries; clean up manure; trench and ridge up the vegetable garden, to prepare it for early spring crops. Work of this sort should all be done now.

New vegetable and flower gardens should be

laid out, and garden and carriage walks graded and improved. Spring brings with it so many labors that many are forgotten or cannot be attended to.

If you wish to transplant some large specimens of forest trees to your grounds or avenues, select them now now, and dig a deep trench around the ends of the roots before the earth freezes, so that you can take them up in winter with all the earth about the roots in a frozen state. Large evergreens may be transplanted in this way, that will not succeed otherwise.

Horticultural Exhibition of Genesee Valley Society.

WE intended to give at this time somewhat of a detailed account of this exhibition, but as we were absent on the occasion and depended on the reports of the committees, and finding little in these beyond the announcement of the premiums, we think they would be of little use or interest to many of our readers. We extract from them the following items :

L. Wetherell, Esq., carried off the first premium for *Native Flowers*, having presented 150 species. The premium is "*Lindley's Vegetable Kingdom*," worth \$8—a treasure of a book for the botanist.

Mrs. S. G. Crane was awarded the first premium of \$15, for the best display of *Annual Flowers* during the season, having presented 139 species correctly named. Mrs. E. K. Blyth the second premium, \$10—53 varieties. Miss Hooker presented 45 varieties. Mrs. L. C. Fitch 31 species, exclusive of *varieties*. Miss L. J. Whitney, 142 varieties, not named. Mrs. J. W. Bissell, 136 varieties; and Mrs. Geo. Ellwanger 173 varieties. The two latter ladies come under the class of *Nurserymen*, (so says the report,) and consequently could not come in for premiums. That was too bad.

Dahlias.—The display was fine. We are glad to see more attention paid to this magnificent flower. The past season has been more propitious for them, here, than any previous one we remember. The thoroughfares of our city have been really gay with them all the autumn up to the 15th of October. The report says :

Mrs. John Williams presented thirty varieties of dahlias, all of the choicest varieties, which were so arranged as to call forth the admiration of all who examined them. We doubt whether there was ever a finer display of this beautiful flower in Western New York, and the collection did much toward giving character to the Fair.

Mrs. Lewis exhibited thirty varieties of dahlias, all very fine, but her collection lacked a few of recent introduction, which were included in Mrs. Williams' collection, but they were tastefully arranged and did honor to the donor.

Messrs. Ellwanger & Barry presented seventy-two most splendid varieties of dahlias, including all the leading varieties, many of which surpassed in richness of color any ever before exhibited at our previous meetings. They also presented a large assortment of roses, all of the choicest varieties. We were not furnished with the number, or their names, which was perhaps owing to the short time allowed to the committee for their examination.

Wm. King presented thirty-three varieties of dahlias, which was one of the choicest collections at the Fair. His

collection of dahlias, and his floral ornaments, were much admired. There are few of our florists who cultivate with more taste than Mr. King. Mrs. King presented some fine bouquets and cut flowers, many of which were very beautiful.

Miss S. Shaw presented five bouquets of cut flowers, tastefully arranged.

A *discretionary* premium of \$15 was awarded to Miss L. J. Whitney for the best display of flowers without list. Very liberal, indeed—a proof that our society is determined to encourage floricultural taste.

The committee on Vegetables report only the names of the successful competitors—not the names of the varieties to which they gave the preference; we wish they had given this in particular.

The Fruit committee report the following premiums :

Apples.—Greatest variety and best grown, H. Hooker; 2d, S. Briggs; 3d, W. Shepard.

Best Fall Apple, the St. Lawrence, H. N. Langworthy; 2d best Fall Apple, the Hawley, M. B. Seward.

Pears.—1st premium, L. A. Ward; 2d, S. Briggs. Best Fall Pear, the Onondaga, H. N. Langworthy.

Peaches.—1st premium, H. N. Langworthy; 2d, W. Shepard.

Grapes.—Greatest number of varieties, R. C. Brown; Best dozen bunches, T. B. Hamilton; Best single bunch, Mrs. Mathies; 2d best single bunch, G. W. Currier.

Quinces.—Best dozen, P. Kearney.

Watermelons.—Best, Imperial, J. Donellan; 2d best, Spanish, H. N. Langworthy.

Muskmelons.—Best, J. Donellan.

Nurserymen.—Best display of Apples, Pears and Peaches, Ellwanger & Barry, a Diploma.

The Dyer Apple, presented by Messrs. Ellwanger & Barry, merited more attention than most of the Autumn Apples, being a variety lately introduced here, certainly equal to any Autumn Apple in fine flavor and richness, and superior to most of the Apples presented.

S. MOULSON,
S. MILLER,
J. W. BISSELL, } Committee.

RICHARD'S BEURRE PEAR.—Not long ago a *new pear* by this name was noticed in the *Horticulturist* and *Hovey's Magazine*, and the descriptions were so glowing that pear growers all over the country were writing to Western New York for trees or scions of it. Now that same "*Richard's Beurre*" proves to be the old "*Summer Bonchretien*" and nothing else—one of the most common and well known varieties in America! There is scarcely a garden in this county where it is not to be found. We saw many trees the past season, through Mendon and Bloomfield, with 20 or thirty bushels of fair fine fruit on each.

EARLY BUDDING.—In a former communication I stated that, in consequence of budding early, I had succeeded better than formerly. I now perceive that, although the buds appeared to "take well," yet the growth of the trees since appears to have absorbed some of them, while others seem to have "grown out," so as to sit upon the surface of the bark, so that it is very doubtful whether they will ever start. They appear not to have been sufficiently matured.

Fairport, Sept. 1847.

H.

Starting Buds too Soon.

A CORRESPONDENT in the Genesee Farmer thinks he has made a discovery, by the accidental breaking off of the stock just above the inserted bud, which caused the bud to grow immediately. He will probably discover next spring that the winter has totally killed the shoot, if it is a peach, apricot or nectarine; and by the end of another summer, that he has gained nothing in growth, if hardy like the apple, a few inches growth this year, rather stunting than accelerating the growth.—*Horticulturist*.

THE above refers to an "Experiment in Budding," by our Fairport correspondent "H.," to which we should have appended a note, had we seen it before it was published.

As a general thing it is not well to have buds of fruit trees start the same season they are inserted, as the shoots made are necessarily weak and immature when winter comes on them—though we have seen Pears this season that were budded early cut back as soon as the union was perfect, and in August they had grown a foot; and being a rare variety it was intended to make saleable trees of them by Autumn. This was at Oswego. Roses may be cut back as soon as the buds have taken; if budded in June they will make fine plants the same season—and if monthly or perpetual varieties, will produce a good bloom in autumn. Buds of climbing Roses frequently grow five or six feet the same season they are inserted.

Early Joe Apple.

JOHN J. THOMAS speaks of the Early Joe Apple, in the October number of the *Cultivator*, as follows:

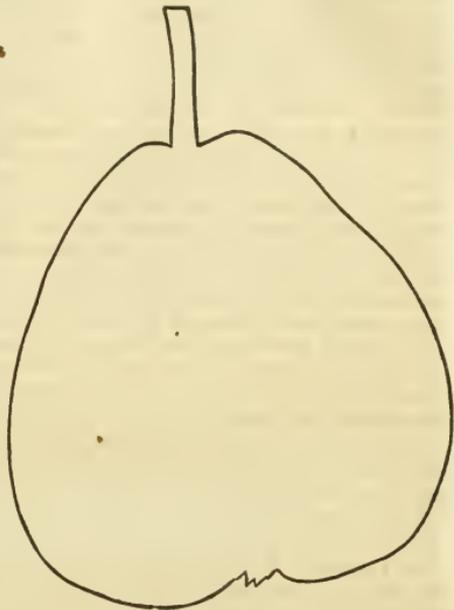
From four years acquaintance with this new and eminently productive summer variety, we have deliberately come to the conclusion, that when in perfect eating order, it is decidedly the most perfect and agreeable table apple we ever had the pleasure of touching. But to be thus excellent, the fruit must be of fresh well ripened specimens, and not those plucked immature, and ripened in the house, or on a railway voyage. A gentleman of veracity, who has long had a bearing tree, assures us that he has seen a man sit down by a basket of this delicious fruit, and taking up one after another, actually eat half a peck before he was aware of what he had done. Indeed, to hazard a mere conjecture, this must have been the identical apple which our friend Downing saw in the hand of Pomona, in his famous dream, that being the only sort which she claimed as superior to the Newtown pippin, which we are sure is excelled by the Early Joe!

This apple is only medium in size, and sometimes inclining to small, flat; sometimes slightly approaching flattened-conical, smooth and regular; light yellow on the shaded side, covered with numerous short broken stripes, which pass into a nearly uniform shade of deep red next the sun, and interspersed with conspicuous white specks. Stalk three quarters of an inch long, in a rather shallow and wide cavity, calyx in a small, even basin. Flesh very fine in texture, exceedingly tender, slightly breaking, very juicy, with a mild, sub-acid, rich, and faultless flavor. Ripens during the last half of the 8th month, (Aug.) The growth of the tree is slow, the young shoots dark color, and while it is a profuse bearer, the fruit is always fair. T.

It is stated in one of the Ohio papers, that peaches were exhibited at a late Fair of the Columbus Horticultural Society, measuring more than a foot in circumference, and weighing 14 ounces.

The Golden Beurre of Bilboa Pear.

THIS is one of the very finest of all September Pears. We have the past season seen it in bearing and ate of the fruit raised in various sections of the country, and in every case we have found it complete in all the requisites of a fine Pear.



The tree is a vigorous, handsome grower, and bears excellent crops. *Fruit* large, very regular, obovate, with a stout brown stalk inserted in a slight cavity, calyx closed; basin shallow. Skin of a golden color, when ripe sprinkled with russet. Flesh fine grained and buttery, with rich vinous flavor. It grows and bears well on the quince. It has received the commendation of every pear grower in the country who has become acquainted with it. It is said to have been imported to this country from Spain, 18 years ago.

ACKNOWLEDGMENTS.—We are indebted to Jno. MORSE, Esq., of the Cayuga Nursery, for box of specimen fruits.

—S. WORDEN, Esq., of Oswego, for a box of the *Bake* apple.

—ROBT PATTERSON, Perry, for specimens of Apples.

—GEO. HOADLEY, Esq., of Cleveland, O., (President of the Horticultural Society,) for a paper containing the reports of the annual exhibition.

—W. R. Prince & Co., of Flushing, for a copy of "Prince's Descriptive catalogue of Fruit and Ornamental Trees, Shrubbery, Vines, and Plants, cultivated and for sale at the great original establishment, Prince's Linnæan Botanic Garden and Nurseries." The catalogues of this establishment are as the preface says, "always progressive, and the present one comprises all the new acquisitions made to the various classes of fruits and other departments."

THE honor of an honorable man, so far as dollars and cents are concerned, dies when he dies; therefore, honorable conditions should be in writing.

Apple-Tree Blight (?)

MR. EDITOR:—I have of late observed what appears to be a blight of the Apple tree. The phenomena, as I have noticed them, are the following, viz: The extremity of a young branch (of this year's growth,) begins to wither, and very soon the branch dies down to the extent of several inches. The leaves on some branches at first exhibit a dark, dull green, color, sometimes almost black; on others the color is not essentially changed. Sometimes some of them appear as if they had been scalded, and partly dried; when they feel soft and leathery. Immediately after the branch dies. Sometimes single leaves turn black, or nearly so, and die. Spots, or patches of an iron-rust color, are often found on the branch—and sometimes small oblong blisters, (especially on those that have just perished,) filled with a kind of *pussy*, semi-fluid matter. Sometimes the branches exhibit an appearance of having been stung by insects; but upon cutting and examining them with a *magnifier*, nothing peculiar can be discovered. Some unusual appearances, it is true, may be detected; but they are, I conclude, rather the effect than the cause of the disease.

In regard to the cause I can say nothing. As the phenomena first made their appearance on a tree that was grafted last year, and from which all the "natural branches" were removed and some additional grafts inserted last spring, I at first supposed the disease might be occasioned by an excess of sap in some of the young branches. But various facts and considerations preclude the possibility of such a supposition.—It cannot be considered the effect of frost, for it has attacked only branches of the present summer's growth. It has appeared on one tree in my orchard, on several small ones in my nursery, and on one or two in my neighbor's orchard; and seems to act very much like the pear and the quince blight, of the latter of which we have several specimens.*

Another thing I have noticed in regard to the growth of some young trees, both apple and plum, but more especially of the latter. Having grown about a foot, more or less, they frequently shoot up in long, slender spikes with small, contracted, imperfect, leaves, of less than half the size of a perfect leaf, and no lateral branches. I have not been able to discover any satisfactory cause for this singular appearance. Perhaps you, sir, or some of your readers, may be able to assign the cause, and, if it be a disease, the remedy.

H.

Fairport, Aug., 21, 1847.

* It is frequently the case, that the top of a young apple tree, of one or two years' growth, dies from the effect of the *aphis*. Several instances of this kind I have observed the present season. These, however, are very different from those mentioned above.

Salt on Plum Trees.

I LATELY applied a quantity of salt to six of my plum trees, putting perhaps a pint around each, which I spread over about two square feet of surface. Like Judge CHEEVER, (see Gen. Far. p. 204, Vol. 8,) I *thought* I had seen it recommended to be used at the rate of a pint to a square foot; (which I afterwards found to be a pint to a square rod;) in other words, to be spread about a quarter of an inch thick. The result of the experiment and my reflections upon it have made me ashamed of it, and of my shortsightedness; and had it not been for the article in the "Farmer," referred to above, the world would perhaps never be the wiser for it. But to the results.

No. 1. A Bohnar, first year from the bud, on a common stock, about an inch in diameter.—Effect: The leaves and ends of the tender branches withered as if scalded, and soon the lower leaves fell off; and the ends of the branches died. In about two weeks it began to put forth new leaves, and now it has several young thrifty branches.

No. 2. A Huling's Superb, third year from the bud; stock, a plum; variety unknown; about an inch and a half in diameter. Effect: Leaves died as in autumn, and fell off; buds and branches appear fresh and sound, but the tree is as naked (Sept. 10th) as in mid-winter. A few buds have since opened, and now (Oct. 1st) there are several small tufts of leaves, and two or three small clusters of blossoms; evidently those intended by nature for next year.

No. 3. A German Prune, age, size, &c., as No. 2. Effect: Many of the leaves died and fell off; so that many of the branches became entirely naked. A currant bush standing near No. 2, and another near No. 3, have both lost their foliage.

No. 4. A common Egg plum, size, &c., as No. 2; no visible effect.

No. 5. A Prince's Gage, set on a peach stock below the surface of the ground. Age, three or four years; size as No. 2; no visible effect.

No. 6. A common garden plum, three or four inches in diameter. No visible effect.

The salt was put on in July, and lay on the ground several days without rain. The effect began to show itself immediately after the first rain. The soil is similar in all (a sandy loam,) except No. 1, where it was a little more clayey.

I had previously, in the spring, poured a quantity of brine which had been used for beef, around a small plum tree, after the branches had grown an inch or two, and although it did not kill the tree outright, it stopped its growth and caused it to cast its leaves; and to save the tree I transferred it, sometime in July, to another place; after which it seemed to revive for a time, but eventually died.

H.

LADIES' DEPARTMENT.

PARING PEACHES.—I wish to suggest, through the medium of the Farmer, a better way to pare peaches to dry than to scald them. They can be pared with a machine as well as apples; all that is necessary is a three tined fork, which will let the pit between the tines, and hold the peach firmly. And they should be hard, or not very mellow, to be in a proper state to dry.

I think this plan much better than "A Subscriber's" way of scalding; for a mellow peach is not as good to dry as a hard one—and if we wait for them to get mellow, we must lose some if we have many. N. SIMONS.

Castile, N. Y., Oct., 1847.

SUPERIOR MODE OF CURING HAMS.—Agreeably to your request, I send you the process of curing the hams I sent you in March, which recently called forth the admiration of the American Agricultural Association, and the Farmer's Club at New York.

I made a pickle of two quarts of salt, to which I added one ounce of summer savory, one ounce sweet marjoram, one ounce allspice, half ounce saltpetre, and one pound of brown sugar; I boiled the whole together, and applied the mixture, boiling hot, to one hundred pounds of ham, and kept in the pickle three or four weeks.

My process of smoking was not the most expensive, but may not be the less available on that account. I smoked the hams in a seed cask, with one head in, with a small hole for the smoke to come out, hung my hams to the head, and used about a peck of mahogany sawdust for fuel. I smoked them but one week.—*Exchange.*

"PUMPKIN BUTTER."—In answer to the inquiry of "Mary," as to the best mode of making pumpkin butter, I would send you the following, which is our plan, and which suits our taste very well. Strictly speaking, it is not pumpkin butter, but we call it such:—To one barrel of sweet cider, boiled down about one third, take about two bushels of pumpkins, cut in pieces like you would apples, (peeled and cored, of course,) and if your kettle be large you can put them nearly all into the cider at once, but if small, boil a part of them soft in cider in another kettle, (copper or brass,) and as it boils down put the balance in, stirring it all the time, until you boil it down to about 10 or 12 gallons. Just before taking off, spice to suit taste. We put in about one half pint of ground cinnamon to the above quantity. If you know a better plan than the above, which, doubtless you do, please throw this under the table and let us have it.—*Ohio Cult.*

MARTHA.

HORSE-RADISH may be kept during winter, by grating it while green, and corking up in bottles filled with strong vinegar, set in a cool place.

HOW TO PREPARE SUPERIOR MINCE-MEAT FOR PIES.—Take stoned raisins, currants, sugar, and suet, of each 2 lbs.; Sultana raisins, boiled beef (lean and tender), of each 1 lb.; sour or tart apples 4 lbs.; the juice of two lemons; the rind of one lemon chopped very fine; mixed spice $\frac{1}{2}$ lb.; candied citron and lemon-peel, of each, 2 oz.; brandy one gill; and chop the whole very fine. The preparation may be varied by adding other spice or flavoring, and the addition of eggs, or the substitution of chopped fowl or veal, for beef, according to fancy or convenience.

HINTS ABOUT FOOD.—Roast meat contains nearly double the nourishment of boiled, but boiled meat is better adapted to weak digestion. Frying is one of the very worst methods of dressing food, as broiling is one of the best. Baked meat has a strong flavor, is deprived of some of its nutritious qualities, and is difficult of digestion. Spices, sauces, and melted butter, should never be used by the invalid, and in health they are not required.—*Kitton's Practical Medicine.*

FACTS USEFUL TO BE KNOWN.—Water, when hot dissolves more salt, sugar, &c., than when it is cold. Hence the utility of pouring hot salt and water over articles to prepare them for pickling; and hot syrup upon preserved fruits; for the salt or sugar that would crystallize as the liquid cooled, is taken up by the fruit, &c., which by being heated also, absorbs more than it could be made to do if it were put on cold.

FEMALE EDUCATION.—It was a judicious resolution of a father, as well as a most pleasing compliment to his wife, when, on being asked what he intended to do with his girls, he replied; "I intend to apprentice them all to their excellent mother, that they may learn the art of improving time, and be fitted to become, like her, wives, mothers, heads of families, and useful members of society." Equally just, but bitterly painful, was the remark of the unhappy husband of a vain, thoughtless, dressy slattern; "It is hard to say it, but if my girls are to have any chance of growing up good for anything, they must be sent out of the way of their mother's example."

THE HAPPY GIRL.—Ay, she is a happy girl; we know her by her fresh looks and buoyant spirits. Day in and day out, she has something to do, and she takes hold of work as if she did not fear to dirty her hands or soil her apron. Such girls we love and respect wherever we meet them, in a palace or a hovel. Always pleasant and always kind, they never turn up their noses before you, or slander you behind your back. They have more good sense and better employment. Give us the industrious and happy girl, and we care not who worship fashionable and idle simpletons.—*Selected.*

THE subjoined extracts from letters received since the commencement of the present volume, show the estimation in which the GENESSEE FARMER is generally held. We have received many similar evidences of approval and encouragement from almost every section of the Union :

A staunch friend at Romulus, N. Y., in a letter containing a remittance for 21 subscribers, thus speaks of the Farmer:—"In answer for myself that the last volume was worth more than any previous one in my opinion. If I am not mistaken I have been a subscriber to the Farmer for the last 16 years, and I am satisfied that it has had an influence upon me, and from it I have derived many new ideas in the science of agriculture. I believe if it had been read by every farmer in Western New York, (though he might not have more than two acres of land to cultivate,) the quantity of produce would have been increased 20 per cent.—and the quality, as a general rule, would have been much improved."

After sending us about fifty subscribers to the present volume of the Farmer, (from an office to which only a few copies were sent in 1846,) a mercantile firm in Orleans county write as follows:—"In urging the claims of your paper we have found many farmers prejudiced against 'book farming,' and all our arguments to induce them to become subscribers have proved unavailing. We have also found others 'too poor' to take the Farmer; others again have 'no time to read'—while a few have 'no eyes.' We hope, however, that the eyes of many will yet be opened to see the importance of a more thorough system of farming than has yet attained among us. This we think your paper calculated to effect, and we (although merchants,) are willing, so far as we can, to assist in its circulation."

A subscriber at Oberlin, Ohio, says:—"I take a deep interest in the 'Farmer,' believing it to be one of the instruments which are securing great good to the world. I rejoice in the prospect of the agricultural profession taking its proper place among the other professions. You are engaged in a great as well as delightful work. Formerly, I obtained a number of subscribers for the Farmer. I think more of it now than I did then—that is, it has lost nothing by changing hands. I think I may do something more by way of obtaining subscribers."

In renewing his subscription, an able farmer, residing in Genesee, says:—"I wish to continue the Genesee Farmer another year, considering it as I do the best Agricultural Paper now extant. I am very much gratified to see the improvements which are being made in agriculture, (a business which was considered of quite minor importance but a few years ago,) and sincerely hope that it may attain the highest rank in the land."

An old subscriber at Lockport, N. Y., in remitting for two years subscription, says:—"I have been a subscriber to the Genesee Farmer since its commencement in 1831. I have delayed sending payment for the present volume in hope of obtaining more subscribers for your excellent journal, which I consider of more value, for this latitude, than any other published in this country. The indifference of our farming community to reading is lamentable. I shall continue my efforts, and hope yet to send you a few names as subscribers."

An intelligent farmer of Truxton, Cortland county, in a letter containing a remittance for 19 copies of the Farmer, says:—"I have obtained these within the last two weeks without making any unusual effort, only asking my neighbors when I saw them to take the Farmer—the paper recommending itself. I shall probably obtain more subscribers, in the course of the winter, as I know of several who have taken the last volume, who, if asked, will doubtless take the present."

Our Cortland friend takes the right course. If each of our subscribers will show the Farmer to his neighbors, and ask them to subscribe, the usefulness of the paper may soon be greatly increased.

Monroe County Agricultural Society.

The Annual Meeting of this Society, for the election of Officers, &c., will be held at the Office of the Genesee Farmer, in Rochester, on the second Tuesday (the 14th day) of December next, at 10 o'clock, A. M. A punctual attendance is requested.

Nov. 1, 1847. JAMES H. WATTS, Rec. Sec'y.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,.....	\$1 25	1 31	Pork, bbl. mess	15 00	16 00
Corn,.....	44	50	Pork, cwt.,...	4 50	5 00
Barley,.....	50		Beef, cwt.,...	3 00	4 00
Oats,.....	38		Lard, lb.,.....	9	10
Flour,.....	6 00	6 25	Butter, lb.,...	12	16
Beans,.....	75	87	Cheese, lb.,...	5 1/2	6
Apples, bush.	12	37	Eggs, doz.,...	13	
Potatoes,.....	25		Poultry,.....	6	
Clover Seed,...	4 50		Tallow,.....	10	
Timothy,.....	1 50	2 00	Maple Sugar,...	7	
Hay, ton,.....	10 00	13 00	Lamb Skins,...	62	
Wood, cord,...	2 00	3 00	Green Hides,lb	4	
Salt, bbl.,.....	1 75		Dry ".....	7	8
Hams, lb.,....	10	10 1/2	Calf Skins,...	9	

Rochester, Oct. 28, 1847.

New York Market.

[By Magnetic Telegraph.]

New York, Oct. 27.—3 P. M.

ASHES.—Pearls are up to \$8.12 1/2. Sales of all offering. Pots \$6, 50. Sales 100 barrels to arrive.

FLOUR and MEAL.—Market rather active. Transactions reached 7 or 8000 bbls, including 2000 bbls of Oswego for England, at \$6.50 1000 lbs. Mich., old, from store, at \$6.50, \$6.25; and 1000-bbls. Gen. deliverable in all the year at \$6.37 1/2. This figure was offered for another 1000 bbls. Also sales 1500 to 2000 bbls. Oswego at \$6, 56 1/2. 200 bbls. Indiana, a good lot, at 6 62 1/2. A lot of round hoop Ohio at \$6.50. Receipts not large. The demand from the east fair. Meal steady at \$3.12 1/2 a \$3.25. Rye flour is \$4.75 a \$5 for good.

GRAIN.—Demand for wheat. Holders are asking more than buyers are willing to pay. No sales. For Genesee \$1.50 was asked and \$1.46 offered. Corn had an improving appearance and there is some speculative movement. Sales of 20,000 bu. including heated at 72c, mixed 74 a 75c, part in store; 76 a 77c for yellow flat, and round. Rye is higher. Sales 6000 bu. at 92c in the slip and 93 a 94 delivered. Barley very little offering. 3000 bu. old at 80c for pearling. Oats steady at 47 a 49c.

PROVISIONS.—Market for all descriptions dull. Pork and Beef heavy. New Beef offered at \$7 and \$10. 150 bbls. Beef hams at \$12.37 1/2 a \$12.75.

LARD.—200 bbls. inferior at something off 10c.

Sales 1000 bu. flax seed at \$1.35. Clover steady at 7 1/2 a 7 1/2.

HOPS.—Market dull at 9 a 10c. Sales 25 bales, eastern, at 8 1/2c at auction.

BROOM CORN is scarce and held at \$200 per ton.

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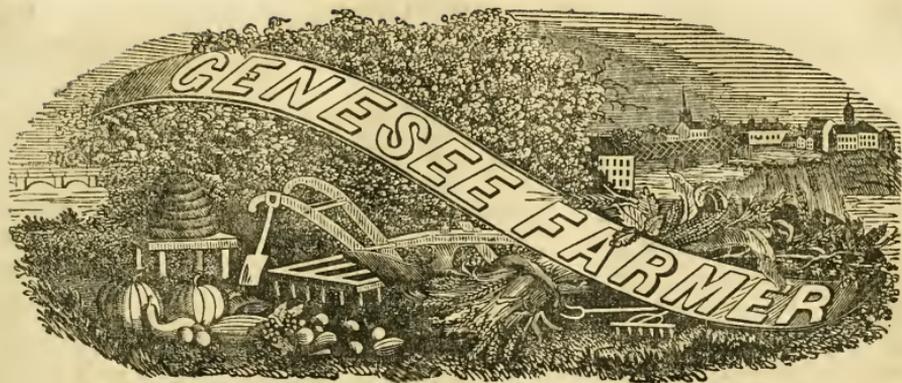
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**THE GENESEE FARMER:**

Issued the first of each month, in Rochester, N. Y., by

D. D. T. MOORE, PROPRIETOR.

DANIEL LEE, EDITOR.

P. BARRY, Conductor of the Horticultural Department.

WITH this number closes the EIGHTH volume of the GENESEE FARMER. We have not space for extended remarks, and must therefore omit noticing some matters pertinent to the occasion. Were we to adopt a custom much in vogue at the present day, we should perhaps state that we have accomplished much less than we intended—and then promise ample amends for the future. But we are not inclined to discourse in that wise, for we have endeavored faithfully to discharge our duty to the readers of this journal, and the agricultural community. Whether that duty has been performed as it ought, and in the manner best calculated to benefit those for whom we have labored, each subscriber will judge for himself. We do not expect that ALL our readers have been particularly interested or benefitted by the perusal of the FARMER, yet we trust its pages have imparted appropriate and useful information to a large majority.

Our subscription list is now the largest, with a single exception, of any agricultural journal published in the United States—and we think our contributors and correspondents, in numbers and ability, are at least equal to those of any other similar journal. We are under great obligations to the numerous persons who have aided in promoting the usefulness of the Farmer, by extending its circulation and contributing to its pages. If continued, the assistance of such generous friends—without whose approval and influence we could do little or nothing to advance the cause of improvement—will enable us to make our next volume still more interesting and valuable. In consequence of the very low price of the Farmer a larger subscription list is necessary to sustain it properly. But we leave this matter with the Farmers and Horticulturists of the Country.

A Farmer's Library.

LONG winter evenings are close at hand. The season for reading good books, for studying the Science of Agriculture, has already arrived.—How greatly can we elevate our standing in society, our usefulness in the world, and increase our ability to command an independent livelihood, by the due improvement of all our leisure hours! Few young men justly appreciate the advantages which cheap books, and periodical journals like the Farmer, place within their reach. Rapid, careless, slips-hod reading is the crowning folly of the young men and women, whom it is our fortune to meet. They lack patience, perseverance, and untiring industry in the prosecution of useful studies. How few young farmers can show an agricultural library of twenty volumes. What would they think of the professional attainments of a lawyer, physician, or clergyman, whose reading in his calling was thus limited?

Permit a friend to suggest the purchase and careful study of Johnston's Lectures on Agricultural Chemistry and Geology; Boussingault's Rural Economy; Allen's American Agriculture; Lindley's Theory of Horticulture; and Liebig's Chemistry—not to name more expensive works.

We know of no contemporary agricultural journal unworthy of support; but to commend any one would seem invidious and unkind toward the others. We ask attention to the fact that, of the four millions of male adults employed in agriculture in the United States, not far from three millions nine hundred thousand, or thirty-nine in forty, take no paper of the kind. To them the experience and carefully conducted experiments of other practical farmers, become utterly valueless, so soon as they are printed on paper! The number who take agricultural papers in the State of New York is much larger than one in forty. But take the whole Union together, and our estimate is rather above than below the truth.—Friends of the Farmer and of the Writer, will you not aid the cause by doubling the subscription list of this journal for 1848? The volume shall be worthy of a place in any man's library.

Southern Agriculture.

THE writer has long desired to study the *art* of Husbandry as practiced by the best farmers in every State of the Union. He now rejoices in an opportunity of learning what he may from the experience and practice of Southern planters. As at the North, very few make pretensions to a knowledge of Agricultural Chemistry, Geology, and the kindred sciences, which shed a flood of light on all rural operations. I find, however, a large number of observing, intelligent men, from whom I learn many interesting facts relating to tillage, and the organization of the most useful plants. In the north-western part of South Carolina good farmers grow winter wheat after this fashion :

The crop follows one of corn, which is planted in rows five feet apart. The ears are picked and hauled in a big wagon to some convenient place to be husked or "shucked." A plow, with no other working part than a couler, is run two or three times through each row of corn, to tear it up by the roots. The large, long plants, including roots, stems, and leaves, are evenly spread with the butts all one way, like a winrow of brushwood made of small trees. The center between the rows of corn is first laid and covered with the plow, and so on till a bed is formed a little over four feet wide. On this bed wheat is sown and harrowed in without crossing the beds, and rolled in the same direction as plowed. The water course between the beds is cleared with the hoe, if needed. As heavy rains fall here in winter, it is highly important to provide for its easy escape. Wheat is often badly injured by the heaving of the earth from frost.

As an improvement on the above system of culture, (which gives from 12 to 20 bushels per acre,) I have recommended the application of 5 bushels of ashes, 5 of lime, and one of salt, per acre, to be scattered over the stalks before they are covered.

I find a good many farmers waiting now (7th November) for rain before they sow wheat. It is exceedingly dry in all this region (Augusta, Ga.) The thermometer in a cool brick store, on the first floor, ranges between 64 and 70 degrees.

I own myself the wiser for learning that the best crops of barley and oats are made in this latitude and climate by seeding in the fall. I have seen several fields of barley now up, and soon to yield a good bite for winter feed, and to be harvested the last of May. Peas are not put into the ground till spring; and often after wheat, oats and barley are harvested, and on the same land.

I have seen a few acres of clover, but so far south as Augusta, it needs a good deal of nursing to make it live. I shall take another opportunity to speak of Southern grasses.

If the "cow pea" will do as well at the north as it does here when planted with corn (after the

corn is up and plowed out,) its culture will be profitable. I do not think that its growth with corn injures materially the yield of the latter, while the quantity of peas harvested is large—say from ten to twenty bushels on good, strong land. This plant, as has been well remarked, is the clover of the South. It can be made to render invaluable service in the way of fertilizing poor lands.

The recent disastrous and extensive failures of commercial houses in London and Liverpool, have knocked down the price of cotton some three cents a pound. Its influence on dealers and planters in this region, can easily be imagined. Agriculturists begin to see as well as feel the importance of growing wool, of making far more beef, pork, butter, cheese, and grain than they now do. So far as I can learn, there is but one farmer in all Georgia who makes a pound of cheese. He is from New Jersey, and is literally coining money by selling all he makes at 15 to 18 cents a pound. In this small city, around which cows can be kept about as cheaply as in Western New York, milk is selling at *ten cents a quart*. Good cabbage at from 15 to 30 cents a head; they are brought from North Carolina and New England. Northern potatoes are selling at \$3.00 a barrel; apples the same. Northern butter is worth from 25 to 30 cts. per lb. by the firkin. All the northern portion of Georgia is admirably adapted to the dairy business, stock, and wool growing. I shall have more to say of its capabilities after I have explored the region which lies several hundred miles at the base or southern declivity of the Alleghany mountains. It sends fine beef to this market, as well as pork and mutton.

The distance from this city to Charleston is 136 miles by a good railroad; to Savannah by the river and steamboats, it is about 200. Ordinary freights to New York are about 50 cents per 100 pounds. Augusta is at the head of navigation on the Savannah, there being rapids just above; although small boats of 20 tons bring down cotton many miles. This is a great market for this staple. Some of the ware-houses here cover an acre and a half of ground. The crop is far from being all gathered at this time. The average yield per acre is probably not more than 300 lbs. clean cotton. No crop varies more in its product.

D. L.

FATTENING POULTRY.—It is asserted in the "Transactions of the Society of Arts," that there is a great advantage in fattening geese, turkeys, and in short, fowls of every description, on potatoes mixed with meal. On this diet they are said to fatten in less than one-half the time ordinarily required to bring them to the same condition of "excellence," on any kind of corn, or even on meal itself. The potatoes must be boiled and mashed fine while they are hot, and the meal added, just before the food is to be presented.

Northern Rice.

GEN. VERPLANCK, the Commissioner to negotiate a treaty with the Chippewas, in speaking of the wild rice which grows abundantly in Minnesota, says that it is better than the Southern rice. The berries are larger and its flavor is better; for when boiled and stewed and left to cool it forms a consistent mass like good wheat bread, and more nutritious. Any quantity of it grows on all the lakes in this northern country. The outlets and bays are filled with it. It ripens in the month of August, and is the main reliance of the Indians during the winter months for their sustenance.

If this is truly a valuable plant, there are thousands of acres in all the northern States where it can be grown at a very small expense. Rice is confessedly the most remunerating crop cultivated at the South. One planter on the Savannah below where the editor now is, has received \$40,000 for his crop this fall season. It grows almost spontaneously; as the wild rice in Minnesota does altogether, without seeding or culture. We know Gen. VERPLANCK. He is not a man to mis-state a fact of this character.— Gentlemen residing at Galena or the Falls of St. Anthony can easily procure the seed. We should be glad to see a fair trial made with it on ground which can be suitably inundated with water.

A Remarkable Experiment.

A RECENT work of science gives the following novel experiment, which settles questions of some importance in philosophy:

"Two hundred pounds weight of earth were dried in an oven, and afterwards put into an earthen vessel. The earth was then moistened with rain water, and a willow tree, weighing 5 pounds, was planted therein. During the space of 5 years the earth was carefully watered with rain water, or pure water; the willow grew and flourished; and, to prevent the earth being mixed with fresh earth, or dust blown on it by the winds, it was covered with a metal plate perforated with a great number of small holes, suitable for the free admission of air only. After growing in the air for five years, the tree was removed, and found to weigh 169 pounds and about 3 ounces; the leaves which fell from the tree every autumn were not included in this weight. The earth was then removed from the vessel, again dried in the oven, and afterwards weighed; it was discovered to have lost only about 2 ounces of its original weight; thus 160 pounds of woody fibre, bark, and roots were certainly produced; but from what source? The air has been discovered to be the source of the solid element at least. This statement may at first appear incredible, but on slight reflection its truth is proved, because the atmosphere contains carbonic acid, and is a compound of 714 parts, by weight of oxygen, and 338 parts, by weight of carbon."

THE above has been traveling the rounds of the American press for two months. We clip it from the National Intelligencer to remark that the statement can not be true, and is calculated to mislead the honest inquirers after truth. To say nothing of the half pound or more of earthy matter in the *ash* of the willow, the minerals in the leaves which were organized in five years would weigh more than two ounces. If we substitute pounds for ounces the statement may be correct.

Lime in Planting Trees.

MANY object to planting trees, either for orchards or use, in consequence of the numerous failures they experience. This, however, it should be recollected is not a necessary result. With proper care there is no more difficulty in transplanting than in planting or propagating from the seed or germ. In setting trees, we have ever found that they do best when taken up in the fall, about the time the leaves drop. Fruit and forest trees, shrubs and perennial plants of all descriptions, may, at this season, be removed with perfect success. In setting we usually put a small quantity of lime in the hole—about half a peck to a tree, mixing it thoroughly with the mold, in order that it may be easily accessible to the roots, which ramify in every direction in quest of food. An English publication says that an extensive plantation of trees has been formed within a few years, without the loss of a single tree, and this has been effected simply by putting a small quantity of lime in the hole before depositing the tree. Four bushels are said to be amply sufficient for an acre. The effect of the lime is "to push on the growth of the plant in the first precarious state." There seems to have existed, at first, an apprehension that liming the plant would force it on prematurely, but this apprehension experience has demonstrated to have been perfectly groundless.—*Maine Farmer.*

OF the benefit of lime about fruit trees we have long been convinced by its use. Old plaster, burnt shells and bones, exercise important and beneficial action, and especially in spots where a tree has failed and been removed, as without fresh earth and lime it is almost impossible to make a new tree thrive in the same place. All fresh manures are injurious to recently planted trees. Old and well rotted manures, rotted sods, or rich alluvial or virgin soil, is best. Make the holes large, and when half filled, puddle down with a pail of water; then fill up and not pack too hard, nor set the roots too deep. Fall planting of the apple, pear, and other hardy trees, is probably the best; but peaches, cherries, apricots, &c., do best set very early in spring, before the sap moves.

The success of young fruit trees imperiously depends upon the cultivation of the land in some hoed crop, and proper manuring. When they have got a sufficient size for general bearing, they may be put in grass. Clover, by its long tap roots, seems to exercise injurious effects.— Timothy and other grasses are preferable; in those even it should not lay too long without plowing. * * *

A VALUABLE TABLE.—The following table compiled from the calculations of J. M. GARNET, Esq., of Virginia, will be found exceedingly valuable to many of our readers:

- A box 24 inches by 16 inches square and 22 inches deep, will contain a barrel, or 10,352 cubic inches.
- A box 24 inches by 16 inches square and 11 inches deep, will contain half a barrel, or 5,476 cubic inches.
- A box 16 inches by 16.8 inches square and 8 inches deep, will contain one bushel, or 2,150.4 cubic inches.
- A box 12 inches by 11.2 inches square and 3 inches deep, will contain half a bushel, or 1,075 cubic inches.
- A box 8 inches by 8.4 inches square and 6 inches deep, will contain one peck, or 537.1 cubic inches.
- A box 8 inches by 8 inches square and 4.2 inches deep, will contain one half peck, or 268.8 cubic inches.
- A box 7 inches by 4 inches square and 4.3 inches deep, will contain a half a gallon, or 131.4 cubic inches.
- A box 4 inches by 4 inches square and 4.2 inches deep, will contain one quart, or 67.2 cubic inches.

Hints for December.

POTATOES have turned out worse than any body anticipated. Look out for your winter stock; overhaul, examine, and select, of the whole bin will be a mass of putrefaction. The first fair day open those that are buried, and see if all is right. It is a good plan to leave a small hole in the top of the heap where potatoes are buried, and fill with a wisp of straw the size of your arm, as a ventilator. Bagas and turneps will not keep well without this precaution.

Stable your cattle if possible. The saving in manure will pay for the extra labor, and the saving in quantity of food consumed is clear gain. The animal system is like a cold room with a stove—the colder the weather the more wood is required. The greater degree of cold and exposure the animal undergoes, the greater quantity of food is required. The decomposition of food and its recomposition into the various nutrients required by the system, is the sole cause of animal heat.

Don't let your stock get poor by being left too long to subsist on the dead and frost burnt pastures; a stern chase is a long chase, and it is an unprofitable operation to have to lift cattle by the tail all winter, that come into the yard poor.—The cheapest way to mend this defect, is to give each creature about two ears of corn per day, till they recover their flesh. Sugar beets or carrots are still better, particularly for milch cows.

Store hogs will winter on ruta bagas, but much better on the sugar beet. A greater amount of nutriment can be produced from an acre in beets and carrots, and with less labor, than from any other crop. One acre of good soil in roots may be made to produce as much actual food, as the general average of fifteen acres in hay.

Push on your fattening hogs, and to assist them to assimilate and convert their food quickly and profitably, cook all their food, or their stomachs will have to do it at your expence. Remember that Indian corn makes fat only, while other food makes more muscle or red flesh than oleaginous matter.

Blanket your horses with good sized articles, well lined, with a breast strap and crupper, confined by a surcingle. And don't stint them in bedding. It is a comfort to the animal, absorbs the urine, which is worth twelve times as much as the solid droppings, and will add immensely to the manure heap. Digestion is carried on very slowly when the animal system is heavily taxed with labor; water often, but feed lightly during the working hours; let the principal feed be given at evening when they have ease and quietness to digest.

Secure cellars and all situations exposed to frost. Glaze all your windows and give the old petticoats, hats, and sun-bonnets to the poor, if you have no better use for them.

See that all the youngsters are at school, and attend strictly to its duties. School houses are a better fortification to defend the liberties of our country, than all the walls and cannon of Quebec or Vera Cruz.

See also that the young people make a free use of that valuable provision the Common School Library; and even my adult reader make a proper use of them and other good books during these long evenings yourself.

Be mindful of the poor and suffering, for those that give to the poor *lend* to the Lord; and among other good acts, don't fail to renew your subscription to the GENESEE FARMER. *

Potato Rot.

MR. J. PINNEO, of Hanover, N. H., writes to the editor of the Boston Cultivator that it had been remarked in that vicinity that the potato rot did not affect the hills which were planted in the immediate neighborhood of shade trees, though all other parts of the same field were seriously affected with the rot. The inquiry is, how this can be explained?

The editor of the Cultivator seems to think that there is no doubt that shade trees protect potatoes from the rot. He says, "They save the potatoes from the extreme heat of the sun, and they prevent dews from falling on them, thus avoiding the extremes of heat and cold, which are doubtless a principal cause of this malady, especially when the changes are sudden, and the plants are very tender from a luxuriant growth."

If there is any virtue in shade to protect the potato from the rot, it might be well to try the experiment of planting between corn hills, or even every alternate row; although, from our experience, we are not prepared to believe the statement in full—for this year we planted two orchards entirely with potatoes on fall plowed green sward. The apple trees are medium size, set 33 feet apart in one case, and in the other the same with a peach tree between each. They were planted on the 10th to 12th May; they made very little progress in setting tubers, owing to the great drouth, till after the rains, first and second week in August. They were harvested and laid on a barn floor for three or four weeks to dry. In assorting for table use and feeding, about four-fifths of the Mercers had the rot, and a few of the round pink eyes—but the flesh color and merinoes were almost entirely free of the disease. If there is any virtue in shade, this crop had enough of it. The tops were entirely dead nearly a month before any frost.

Many close observers think there is no communication of virus from the leaf and stem to the tuber, but that the vine dies before the maturity of the potato, and they rot as any other immature vegetable production does. The Early June, Kidney, and Ash Leaf, that ripen in July, are not liable to this disease; but they yield only a small crop, and if left till the usual time of digging they are apt to commence a second growth—and if dug when ripe they do not eat well, being kept exposed to the air during the hot weather.

L. MANLY.

Monroe County, Nov., 1847.

Meteorology and Meteorological Observations.

BY L. WETHERELL.

Every farmer is interested in Meteorology; and no class of practical men enjoy so good facilities for making observations in this department of science as the farmers. The result of their labor depends mainly upon the favorable or unfavorable workings of the laws of meteorology: if these laws work favorably, the result is, with good husbandry, a plentiful harvest and full barns—if otherwise, the result is a stinted harvest and barns to let. The farmer, knowing this, is led to observe closely the passing seasons, and also to compare the present with the past, in order to calculate results bearing upon the future, which will not only affect his own interest, but the interests of all classes of society.

Now I recommend to every farmer who reads the "Genesee Farmer," to procure for himself a Thermometer, a Barometer, and a Rain Gauge; and that he commence keeping a register of his daily observations made by these instruments, with the exception of the rain gauge—and that he record in this book or register all the important phenomena which occur, such as high winds, aurora borealis, remarkably cold or warm, wet or dry seasons, and their effect upon crops: also the appearance of spring birds, the progress of vegetation, &c., &c. Every farmer would in a few years attach great value to a book of this kind; and so would his children, for they not unfrequently take great interest in this department of useful and interesting knowledge. There is no mystery or difficulty about this, that need deter any one: a little work and much pleasure will be the result of the experiment. Try it, and then recommend it to your neighbor. I speak from experience relative to this matter. I have kept a similar register for more than seven years, and derive no little pleasure and satisfaction from reviewing it occasionally; and it is not the least part of the pleasure afforded me, that I am enabled occasionally, through the medium of the "Farmer," to furnish my brother farmers an opportunity to read by their fire-sides some of the results of these observations.

The mean temperature of the summer months of 1846, was 68.06 degrees—of 1847, 67°.

The amount of rain which fell in 1846, during the summer months, was 11.20 inches—1847, 9.97 inches: difference, 1.23 inches. The rain for the autumn of 1846, 13.16 in.—1847, 12.71: difference in favor of 1846, .45 of an inch.—The number of days on which rain and snow fell in 1846, was 47—1847, 51.

The general opinion prevails that we have had an unusual amount of rain this autumn, but the reader will see that the quantity is less than last autumn; and as it regards the number of days on which rain and snow fell, the difference is slight.

The canal is open; the temperature of the water to-day, 43°. Last year, on the 26th of November, it was frozen, and there were about 6 inches of snow.

There have been several splendid displays of the aurora borealis during the year; the one on the 19th of March was remarkably splendid, and widely observed over our country. The one last evening was very fine. It is very probable that we shall have many such during the winter. It is thought by many that this wonderful phenomenon has an effect upon the weather: how or in what way, or whether at all or not, meteorologists are not agreed.

Rochester, Nov. 26, 1847.

To Correspondents.

COMMUNICATIONS have been received, during the past month, from W. A. W., *, L. Manly, C. N. Bement, Wm. Van Dusen, R., N. R. Y., J. Dunham, H., L. Wetherell, A. W. Wheelock, S. Harris, and A. S. Hermon.

During the past season we have received several well written articles on chess, transmutation, &c., but our pages have been too crowded to give them insertion, without omitting more seasonable matter. The same explanation is due to the authors of articles on the potato disease, and various other subjects. We hope to make room, during the winter, for a part if not all of the communications we have on file for publication. Meantime we shall be happy to receive contributions from former correspondents, and all who may be disposed to communicate the results of their observation and experience for the benefit of the agricultural community.

The series of excellent articles on "Hydraulics for Farmers," by C. N. BEMENT, Esq., are concluded in this number. We shall be pleased to hear from Mr. B. on other subjects.

Notices of several books, pamphlets, &c., recently received, will be given next month.

COLE'S AMERICAN VETERINARIAN.—As none of our Rochester booksellers has this excellent work, we have obtained a few dozen copies from the publishers,—and can now supply the numerous persons who have recently inquired for it.

DENSMORE'S STRAW CUTTER.—The reader is referred to an advertisement of this valuable machine, in the advertising department of this number. We shall probably give a figure and description of it in our next.

SHEEP.—It is stated that there are one hundred thousand sheep in Addison county, Vermont, which must be driven to other sections of the country to be wintered, or slaughtered. The deficiency of the crop of hay and the ravages of grasshoppers have caused a scarcity of food.

True Farming.---Great Farming on a Small Farm.

A. MACUMBER, of Spring Port, Cayuga county, has a farm of only 60 acres including two public roads. It was originally covered with oak and hickory trees; the soil a clay loam, with limestone pebbles. He keeps three horses, four cows, and 35 sheep. His crop this year is 652 bushels plump wheat; 150 bushels oats; 5 acres of corn, very stout; 4 acres clover seed; between 30 and 40 tons of hay, and more pasture than can be found on any other farm of the size in the county of Cayuga.

He always sows his corn ground with wheat; first haul off the corn, harrow, then plow, then seed, then harrow again three times, and sow plenty of clover seed in the spring. He makes all the straw into manure and puts most of it on his corn ground. The great secret of this man's success, is in keeping his ground covered either with grain crops, or a heavy mat of clover and timothy grass. He considers the exposure of a naked fallow to the sun of July and August, a sort of necessary evil; that the soil, to be kept strong, should be covered.

In addition to barn-yard manure, Mr. MACUMBER applies plaster, salt, and ashes broadcast to his crops. He says he was induced by DAVID THOMAS to take the *Genesee Farmer*, many years ago. Although no friend to too many experiments or theories, he is a very decided advocate for the union of science with agriculture, as it is explained by Dr. LEE in the *Farmer*.

Now I am aware that many farmers who read the foregoing, will say that MACUMBER must either hire a great deal of help, or work very hard himself. Very true; but has he not the product to pay for the labor. He himself avers, that the labor of harvesting and securing his crops is the most formidable part of his farm labor. How much better thus to expend money to harvest and secure crops, than waste money and labor in a tardy, slovenly, ill directed course of farming, which gives no crops to the harvest, or very poor ones.

Such men as A. MACUMBER are before hand, and in season with all their work; their corn leaves never bleach in a wet season, nor curl in a dry one. They keep no old sward to hybernate worms, the affliction of all lazy farmers, as well as of those who have too many arable acres. They are the favorites of fortune, because fortune delights to favor those only who court her favors. It is in the tact, intelligence, and good will with which they apply their labors, rather than in the labor itself, which enables them to succeed so well! Such men are strangers to that hopeless egotism, which is the curse of all progress—the nurse of self willed ignorance and heavy error.

S. W.

Seneca County, Oct., 1847.

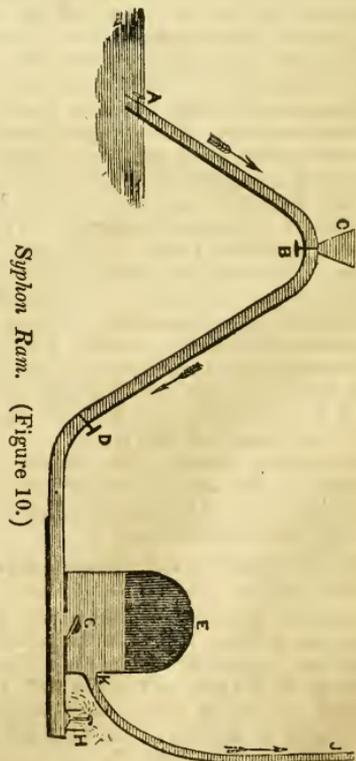
Hydraulics for Farmers.

BY C. N. BEMENT.

NUMBER V.

Syphon Ram.—The following is a description of a Syphon Ram, constructed by H. H. Strawbridge, of New Orleans. Though the principle is quite against our laws of natural philosophy, still facts would seem to contradict theory. It is contended by scientific writers, that the same power might be obtained by making the driving pipe of the same length of the syphon when straightened, and placing the ram further from the head. The question naturally arises, whether there is not less friction in perpendicular than in an inclining tube, by which momentum and power is gained. In the experiment of Mr. Strawbridge, power was gained sufficient to burst his machine, by increasing the height of the syphon.

"A few years ago," says Mr. Strawbridge, in the *Farmer's Cabinet*, "before these machines had come into use, in the United States, I caused one to be constructed near Covington, La. The fall of water requisite to work it being very small, I continued to increase it by the improvement which I am about to describe.



"A B D is a leaden pipe, bent into the form of a syphon and carried over the bough of a tree, the short leg A, B, resting in the pond or spring that feeds the machine, and the longer leg B, D, conducting to and terminating in the machinery itself, which is placed a few inches lower. C, is the funnel connecting with the interior of the syphon through an air-tight three-way water cock B, of the same

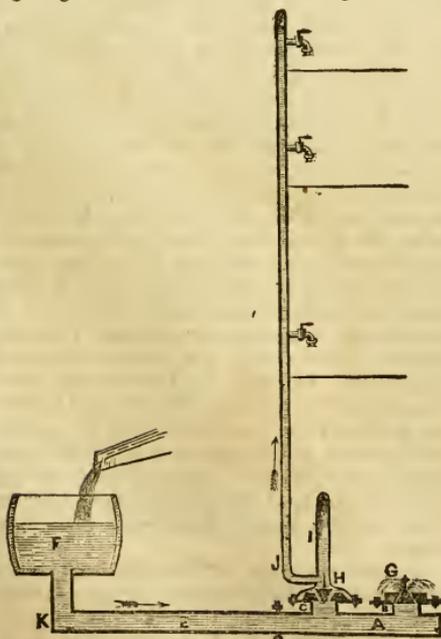
calibre as the syphon itself. At A, under water, and at D, a few inches lower down than the end of the pipe at A, are stop cocks, also the same diameter as the interior of the pipe.

"The cocks A and D being closed, the cock at B is opened so that water poured into the funnel C, will fill both legs of the syphon. This being completely filled, the cock B is turned so as to cut off all communication with the funnel, leaving the syphon still open. The cocks at A and D are then opened simultaneously, when the water begins to enter the short leg of the syphon and descends the leg D in a continued stream, with a force amply sufficient to set the machine in operation.

"In this manner by employing a syphon instead of a straight pipe, conducting from the spring or pond to the ram, a fall six to twelve inches, which would not afford sufficient power to work the ram, may be increased in power so as to equal that of a natural fall of many feet. A fall of one foot or more may be obtained in any situation by partly burying the ram, so as to place it lower than the feeding reservoir; and the escape of the waste water will not impede the working of the valve, for I have made it work at a depth of two feet under water by simply lightening the escape valve at H of a part of its weight. A fall of five or six feet is amply sufficient for all ordinary purposes. This will give a power of fourteen pounds to the square inch, if merely the dead pressure be taken into consideration, but a much greater power if the momentum of the descending column of water be calculated."

"My first machine," continues Mr. S., "was made entirely of wood, including the air vessel, and worked well. But when the syphon was applied and the descending current set the valves in motion, so great was the power obtained that the machine burst with an explosion like that of a swivel. The perpendicular height of the syphon when this experiment was tried, might have been about ten or twelve feet. Another put together more strongly, with cross bolts and rivets of iron withstood the pressure, although the water was forced through the pores of the wood and stood like dew on the outside."

Experimental Ram.—In order to illustrate the capacity or the power of the Hydraulic Ram to raise water at different heights, we give the following diagram, from the 'American Agriculturist.'



Experimental Ram. (Figure 11.)

"The experimental machine we examined," says the

editor, "was made by one of our subscribers, as the piece A, of cast iron pipe, 2 inches in the bore, and about 2 feet long, having two flanch nozzles cast on it, B, and C. One end of the pipe was closed, and the other open, with a flanch to connect it about 35 feet of two inch cast or wrought iron pipe E. The other end of the pipe E led to an open water cask, F, placed seven feet above the ram, and this cask was supplied by a hose, at the rate of eight gallons per minute. Of course the fall from the level of the water in the cask, is equal to a fall of seven feet, with a stream giving eight gallons per minute."

The operation of this machine is the same as those before described.

"In the machine we saw, the strokes were seventy each minute, and plainly heard at the distance of one hundred and fifty feet. In the course of two or three minutes the pipe J became full and ran over the top. On measuring the quantity of water which was thus thrown up in twelve minutes, seventy-three feet above the level of the cask, it was found to be four gallons; and as during the twelve minutes ninety-six gallons of water had passed from the water cask into the ram, it appears that it required twenty-three gallons of water to raise one gallon to ten and a half times its own height.

"This experiment was continued and the same quantity of water, four gallons, was thrown up sixty-six feet high in eleven minutes; fifty-three feet high in seven minutes; and forty-two feet high in four minutes. Thus, in the first trial, the machine required twenty-eight gallons of water to throw up four gallons to six times the height of the fall. It would have been easy to have made the head of water ten, twenty, or thirty feet high, and a series of interesting experiments might be made to ascertain experimentally the relative differences in the momentum of the water descending from a greater or less distance; the fall of seven feet, however, was preferred, in order to give the machines the ability to throw up water to more than ten times the height of the fall, a difference which would not often occur.—Whether a fall of seventy feet instead of seven would have thrown up the same relative quantity of water four hundred and twenty feet is a question we confess we are not able to solve.

"The (driving) pipe E, it is found, must be thirty or forty feet long, or the valve G will not work; almost all the water ran out of it, when the water cask was put directly over the ram. The valve made fifty strokes per minute. It is not necessary to have the pipe E a perfectly straight one, but it may be bent to suit the inequalities of the ground and may even be bent at right angles, as shown in the sketch K. It is far better, though, to have the pipe straight."

The hydraulic ram when properly constructed, it is said, is not liable to get out of order, or to require repairs; lapse of time or muddy water passing through them may give occasion for trifling repairs, and when these become necessary, the machine can be easily detached from the pipes and carried in one hand for convenient repairing. It is also said that the height to which one of these machines can raise water is limited only by the power of valves and pipes to resist the pressure. A moderate sized one has been made to send water to a perpendicular height of three hundred feet. On this principle, works have been erected at Marley, France, which raised water in a continuous stream to the height of one hundred and eighty-seven feet. Indeed a ram has been made in England, to raise one hundred hogsheads of water to a perpendicular height of one hundred and thirty-four feet in twenty-four hours, with a head of only four and a half feet.

There are two rules for ascertaining how much a given stream of water will raise. First, find how many times higher the water is to be

raised than the fall of the driving power; then the adding an 0 to the number and dividing by 7, you can ascertain the number of gallons that will be required to force up a single gallon of water.

Second, "measure the amount of water discharged by the stream in a given time. Ascertain the greatest amount of head or fall that can be obtained, and the elevation to which the water is to be raised. Then divide the elevation by the head or fall, and the amount of water by the quotient. Deduct 30 per cent. from this result and it will give the amount delivered in the given time. For example, suppose an elevation of sixty feet, with a fall of five feet. The supply four gallons per minute, or five thousand seven hundred and sixty gallons per day.

Then $5)60=12$; then $12-5760=480$; deduct 30 per cent., which leaves 336 gallons per day.

If the machine is properly made and put up, it is said this rule may be depended on."

In a letter from Mr. Birkinbine, we are advised that one of his rams is now in operation, rising with a two-inch supply pipe B, over five thousand gallons of water per day, thirty feet high.

The simplicity of the machine and its operation, proves its effectiveness as well as its durability, and shows the very small amount of attention and repairs it will require to keep it in order. The ram and pipes should of course be laid under ground, beyond the reach of frost.

The very small expense of a ram, and pipes necessary to work it, being in most cases less than that of a wheel and pump, are strong inducements to adopt it in preference.

Removing Sheep Manure.

MR. EDITOR:—Having been a highly interested reader as well as a subscriber to the "Farmer," for several years, I am bold to say that its contents of truth and undeniable good sense have satisfied me beyond a doubt that I have not "paid too much for my whistle." Frequently the knowledge of some simple fact alone, from the pen of a practical farmer, has proved of such paramount importance to my success, that I am sure my fifty cents have been replaced tenfold.

Permit me through your paper to make known to my brethren a convenient mode of getting out sheep manure. We all know that that kind of manure is so dry, hard, and crusty, generally, that it is more difficult forking and pulling apart than any other. When ready to commence loading take an old axe that is not too dull and chop parallel lines across the pile about one foot asunder; then turn and cut at right angles, making squares about one foot in size, which may then be peeled off at any desired thickness and weight, according to the strength of the laborer.

J. DUNHAM.

Etna, Tomp. Co., N. Y., 1847.

Saving and Application of Manure.

MR. EDITOR:—In the last number of the Farmer I observed an article under the head of "How should manure be applied to land," which is pronounced a new theory. Perhaps Mr. UNDERHILL'S theory may be new with many, at least scientifically; but it is by no means an untried theory in this Western New York among practical farmers. The old theory that manures lose their properties by leaching and running deep into the earth, especially in our good wheat soils, has always looked to me to be incorrect, and one which my experience has fully proved to be so. In all of our good wheat lands the subsoil contains so large a portion of clay that water is very slow to penetrate it, while the gasses and salts imparted by fermentation of manures are always rising to the surface. There is perhaps no branch of farming which is more injudiciously managed than the saving and application of manures, and certainly there is no one thing so vastly important to the farmer's prosperity as that of manuring and keeping the soil rich.

Every farmer has, or at least should have, a theory or system which he follows in all his operations in business; and being myself desirous always of hearing and learning the views and practices of others who follow the same calling as myself, I take the liberty of giving to you my theory and experience in the use of farm manure. In the first place my theory is, that yard manure should be covered deep in the soil that the gases which arise from it while fermenting and decomposing may be incorporated in the soil, and taken up by the roots of plants. In the next place, that coarse manures lose half their value by lying in the heap till thoroughly decomposed; and next, that the soil is capable of producing a crop annually, without diminution, provided we restore to it the like properties which the crop requires in its production. We are all aware that the straw of wheat in this wheat section forms the principal heap in the farm yard. I have annually in my yard the straw of about fifteen hundred bushels of wheat, which I put in a snug stack at the time of threshing. In winter I allow my cattle, hogs, &c., to run to the stack at pleasure. In December I commence demolishing the stack by cutting off a slice and scattering it around the yard—following it up about twice a week, in proportions to get it all under foot about the middle of March. In this way my stock have always a dry yard, and need no other protection than open sheds to shelter them from storms.

My corn stalks are cut fine in a machine by horse power and fed in troughs, sparingly, through the winter—which, together with the straw stack, keeps my stock in good condition through the winter till warm weather begins, when a little hay carries them through in fine condition. My

manure heap, you will perceive, is then well wet down by rains and snows which fall at intervals, while the straw is being spread over the yard, and, interspersed with the excrements of the cattle, is ready about the last week in April or first of May to cart to the field designed for it, which I do at the rate of about thirty or forty cart loads (according to the condition of the land,) to the acre. I then commence spreading and plowing, turning the manure under about ten inches deep, taking care not to have it spread faster than just to accommodate the plow, to avoid drying up by the sun and wind. It is sometimes necessary to have a man follow the plow with a rake to draw the manure into the furrow to prevent clogging the plow. When this is done, and rightly done, I roll down the furrows, harrow well and plant to corn—planting an early kind that it may be ready to harvest by the middle of September; which latter is done by cutting up at the ground and drawing off. The ground is then plowed and sown to wheat about the 20th of the month. This I count as good as a naked fallow, and frequently turns out better, while the corn crop is much benefitted and no value of the manure for the wheat crop lost.

Yours, R.

Sweden, N. Y., Nov., 1847.

Ashes on Corn.—An Experiment.

MR. EDITOR:—Last spring, after I planted, I took what ashes I had saved during the last year, and put on my corn, at the rate of about $3\frac{1}{2}$ bushels to the acre. In a part of the field which was as near like the rest as possible, I left two rows which I did not ash. The soil was light—a sandy loam on a hard-pan bottom—in many places not more than 6 inches deep. The effect of the ashes was so plain that it could be observed 60 rods off.

On harvesting I cut up the two rows which were not ashed (or twenty rods of them,) and set them apart from the others in stouts; and then I cut up two rows of the same length, on each side, which had been ashed, and set them by themselves. On husking, the following was the result:

No. 1. The two rows, ashed, on the west side, gave of corn in the ear, 207½ lbs. No. 2. The 2 rows not ashed, gave 166½ lbs. No. 3. Two rows on the east side, ashed, gave 205 lbs.

I then sorted each lot and the difference was still greater. No. 1 had of pig, or soft corn, 29½ lbs. No. 2 had 45½ lbs. No. 3 had 27½ lbs.—Thus leaving of merchantable corn in the ear—No. 1.—178 lbs.; No. 2.—121 lbs.; No. 3.—177½ lbs.

I then measured off an acre, and made a calculation upon it, after having weighed one bushel of ears of merchantable corn, (which weighed 42 lbs.,) and the result would be as follows, per acre: No. 1.—72 bushels and 2 lbs.; No. 2.—

48 bushels and 41 lbs.; No. 3.—72 bushels and 1½ lbs.

Thus you will perceive that where I had ashed I have 23 bushels more of ears of merchantable corn per acre, than where I did not; and hence, on the 5 acres, the grain was 115 bushels. Beside I think I had one-fourth more of corn fodder where the crop was ashed—and all for 17½ bushels of ashes.

Yours, &c., WM. VAN DUSEN.
East Barry, N. Y., Nov., 1847.

REMARKS.—We thank Mr. V. D. for the above. It is another conclusive evidence of the great benefit of ashes as a manure; and we trust the result of the experiment, so accurately and briefly given, will prove valuable to many of our readers.

Shrinking of Pork.

MR. EDITOR:—Can you, or any of your correspondents, give the correct reason, or the remedy, or both, for the “shrinking of pork,” when boiled in summer? I have heard several reasons assigned, but none of them are satisfactory. Some have ascribed it to the influence of the moon, but of this I have no evidence. Others say, that if the animal be killed when his appetite is good, when he feeds well, and is consequently in a thrifty, growing state, his flesh will not shrink when boiled. But this is contrary to my experience. I always kill at such times, and yet my pork shrinks. Others say, that if the animal be long fatted, so as to give his flesh time to become firm, &c., the pork will not shrink. This too is contrary both to observation and experience.

My father always commenced feeding his hogs as early as the latter part of August, and continued the operation till near the first of January, (about four months,) supplying them plentifully with peas, boiled potatoes, and, for the last five or six weeks, corn; and yet he always complained of the shrinking of his pork. In regard to myself, I have always been troubled in the same way, except the first one or two years, when my casks were new; and then my pork was all that I could wish. I have ever since managed in the same way, but not with the same results. I have sometimes thought that the casks, (which are made of oak,) become unfit for use, after the first or second year.

Any information that you, or any of your subscribers, can give, through the Farmer, will be gratefully received. H.

Fairport, Nov. 1, 1847.

IRON-WATER FOR FOWLS.—A writer in the English Agricultural Gazette, recommends that a piece of steel be kept constantly in the water to which fowls have access. Iron-rust, he says, is an excellent tonic. A roll of brimstone is also recommended to be kept in the water.

Genesee County Fair.

MR. EDITOR:—The Show and Fair of the Genesee county Agricultural Society came off on Thursday and Friday last; and although it rained almost constantly, and the roads very bad, there was a turn out equal to any Fair ever held in this county. The horned cattle exhibited would number about 175 head. As a lot, they were said to be first rate. There were many full blood Devons—not one full blood Durham. There were about 400 sheep on the ground, nearly all fine woolled, showing a most decided improvement from the first exhibitions of this Society. The show of stallions, working horses, mares and colts, was good—in some respects better than former exhibitions. Swine were scarce, the male part only having two representatives on the ground. The farm implements exhibited were few, but so far as Cultivators and Plows were concerned we think would be hard to beat. The domestic manufactures spread out in SPRAGE'S long room, on the 7th, afford convincing proof that the *women* of this county are determined to do their part towards sustaining our Society.

The receipts of the Society, during the first day, amounted to about \$126. Nearly half of this amount was paid by the *village* of Batavia. This shows that the farmers of this county are woefully remiss in contributing their money to the support of the Society—a fact which I am ashamed to state, yet it is a truth. A farmer unwilling to contribute fifty cents a year for the support of an Institution which tends directly to enhance the value of every thing which he possesses! Who can believe it? Yet who can disbelieve it when we see it all? There are many men in this county who have had more to say, either in finding fault with, or directing the movements of this Society, than any officer in it; still they have not been members these two years—not having paid their fifty cents, which is necessary to entitle them to membership.—What, men who imagine themselves first in society where they live, who have been honored with seats in our legislative halls, not ready to pay fifty cents per annum for the support of an Agricultural Society! These men are even a thousand times more ready to pour out the added contents of their heads, than the shining contents of their purses. "Know thyself." I would that these men did know themselves; for I am satisfied that a little better self-acquaintance would cause them to act very differently on such occasions.

I do not wish to be uncharitable, but these reflections, and many more, force themselves upon me when I review the scenes of the 7th and 8th. But I hope we shall see a different state of things before long; if not, it will soon be up hill business for the few who now contribute their means

for the support of the Society. But *it must be supported*. This, and all institutions of a like tendency, must continue their onward march, till the Agriculturist shall occupy the position that God designed he should occupy—the highest in the scale of intellectual, moral, and physical worth.

But I am digressing from my subject. There was an interesting trial of skill with the plow. There were thirteen teams entered, and the laudable spirit of emulation manifested is certainly worthy of all commendation. The work was done in fine order and every thing passed off agreeably. We had an excellent and instructive Address from AMBROSE STEVENS, Esq.—and elected JAMES B. TODD, of Byron, President; SAMUEL HESTON, Secretary, and HENRY MORRELL, Treasurer. Yours,

Batavia, Oct. 10, 1847. SPECTATOR.

REMARKS.—Although the above article may be considered somewhat severe yet all who know the difficulty of properly sustaining agricultural societies will admit its truth and justice. Many of the remarks of "Spectator" will apply with equal force to other counties and sections, as well as Genesee. It is a humiliating fact, that so many farmers are unwilling to contribute to the support of societies which benefit themselves and neighbors, unless they are quite sure of an immediate profit—premium—in return for the trifling amount of their membership.

Butter Making. --- Inquiries.

MR. EDITOR:—By request of a subscriber and butter dairyman, the following questions are proposed for the benefit of butter makers, viz: Can more butter be made from churning the milk entire than from setting the same and churning the cream?—and if so, at what temperature, (Fahrerheit,) and how long after milking should it stand before churning? If from the cream, at what temperature should the room be kept in which the milk is set? Likewise whether butter can be kept better under water by sinking the firkins than above the water? Also in setting milk what depth of milk in the pans is best calculated to yield the most butter? In all of the above, the best quality of butter is to be considered.

By giving information on the above questions through your valuable paper, you will confer a great favor to many a *young*, and perhaps to some *old farmers*. Yours with respect,

S. E. S. H. NOTT, M. D.

Hamburgh, Erie Co., N. Y.

REMARKS.—Many of the above questions have already been discussed in this journal. We shall, however, be happy to give place to a communication, answering them definitely—and hope to receive such from an experienced butter maker. Who will furnish the information desired?

Bloody Milk, &c.

MR. EDITOR:—Two years ago this fall, I had four very fine milch cows. To keep them in good heart late in the fall, I fed them for several days with the loose cabbage from the garden.—They soon after commenced giving bloody milk, so bad that the whole was given to the pigs. I used various medicines and anointed their bags with the garget ointment, but with no benefit; and thus they went on, to my great alarm, until all of my cabbage was fed out, when they immediately recovered their usual state.

And what, Mr. Editor, do you think was the cause of this appearance of their milk. Why, sir, it was as simple “as the road to parish church,” when once found out. Among my cabbage was a considerable quantity of the red variety which had headed badly, as they usually do, and this was the sole and only cause of my bloody milk—to my great discomfiture and joy of the pigs.

It is a well ascertained fact that cattle that eat the madder root have their entire horns dyed a bright red, and so perfectly, that they retain the color after being worked into toys, &c.

In a town in which I once resided, the village butcher killed a very fat young steer, which not being an every day occurrence, the whole population was agog for a steak, or a roast; and in a very short time the whole town sent up the odor of beef steak and onions—houses were scented from the kitchen to the garret, where the beef was cooking. It was an effluvia compounded of garlic, or leeks and assafœtida, at once nauseous and disagreeable, and before noon every pound was returned on the butcher's hands. He prosecuted the farmer from whom he purchased the creature, for selling unwholesome meat, and it ended in a tedious law suit; but before it was through with, the facts came out, that the animal, on the night before the day on which it was killed, broke into a yard where a quantity of onions had been topped and ate a large amount of the green tops. The butcher of course recovered damages.

These statements are true and may add a mite to our general stock of knowledge, and prove interesting to your readers. N. R. Y.

Monroe County, Nov., 1847.

HOW TO TOAST CHEESE.—Toasted cheese is much relished by some persons, but it is seldom well prepared. The following directions are said to come from a gentleman who prides himself on his “goostful” appetite. Cut the cheese into slices of moderate thickness and put them into a tinned saucepan, with a little butter and cream. Simmer very gently until quite dissolved. Remove it from the fire, allow it to cool a little, and add some yolk of egg, well beaten; and then make it into convenient shape, brown it before the fire, and eat while it is warm.—*Ex.*

Curing Hams and Pork.

AFTER dressing, the carcass should be allowed to hang till perfectly drained and cool, when it may be cut up and salted. The usual way is to pack the pork in clean salt, adding brine to the barrel when filled. But it may be dry salted, by rubbing it in thoroughly on every side of each piece, with a strong leather rubber, firmly secured in the palm of the right hand. The pieces are then thrown into heaps and sprinkled with salt, and occasionally turned till cured; or it may at once be packed in dry casks, which are occasionally rolled to bring the salt into contact with every part. *Hams and shoulders* may be cured in the same manner, either dry or in pickle, but with differently arranged materials. The following is a good pickle for 200 lbs. Take 14 lbs. of Turk Island salt; $\frac{1}{2}$ lb. of salt petre; 2 qts. of molasses, or 4 lbs. of brown sugar, with water enough to dissolve them. Bring the liquor to the scalding point, and skim off all the impurities which rise to the top. When cold, pour it upon the ham, which should be perfectly cool but not frozen, and closely packed; and if not sufficient to cover it, add enough pure water for this purpose. Some extensive packers in Cincinnati and elsewhere, who send choice hams to market, add pepper, allspice, cinnamon, nutmegs or mace and cloves. The hams may remain six to eight weeks in the pickle, then hung up in the smoke-house, with the small end down, and smoked from 10 to 20 days, according to the quantity of smoke. The fire should not be near enough to heat the hams. In Holland and Westphalia, the fire is made in the cellar, and the smoke carried by a flue into a cool dry chamber. This is undoubtedly the best method of smoking. The hams should at all times be dry and cool, or their flavor will suffer. Green sugar-maple chips are best for smoke; next to them are hickory, sweet birch, corn cobs, white ash, or beech.—The smoke house is the best place to keep hams till wanted. If removed, they should be kept cool, dry, and free from flies. A canvass cover for each, saturated with lime, which may be put on with a white-wash brush, is a perfect protection against flies. When not to be kept long, they may be packed in dry salt, or even in sweet brine without injury. A common method is to pack in dry oats, baked saw-dust, &c.—*Allen's Agriculture.*

VINEGAR.—A correspondent in the Ohio Cultivator asks how to transform old cider into vinegar? Make it run through a barrel of clean wood shavings by a small stream trickling over a large surface. Cider, or whiskey diluted, can be made into good vinegar in 48 hours.

THE Chinese call going to law, “losing a cow to win a cat.” With us it is often losing of the cow without a winning of the cat.

Matters in Central N. Y.—Cheese Making.

MESSRS. EDITORS:—I came from Buffalo to Utica last week on the railroad, over as rough a road as any man would wish to travel on. The timbers are decaying, and the iron is a flat rail, and so light as to be frequently starting off from the bed pieces; and it requires a man of some nerve, who knows the danger, to ride with perfect composure. They are beginning to lay the road anew with heavy T rail, which carries the cars very smoothly, and on which they run with more speed and safety.

The Legislature have passed an act requiring the whole line of road from Buffalo to Albany to be laid with the T rail, previous to the first of January, 1849.

They call the wheat crop in Western New York, a fair crop; but it looks very light on the line of the railroad from Buffalo to Rochester, and the oat crop is hardly worth cutting; east of Rochester to Utica the oat crop looks better, and the corn bids fair for a heavy yield. I never saw the trees so loaded with apples as they are this year every where, but they are small sized.

I called on one of your subscribers, who lives near Utica, Mr. B. F. Jewett. His farm is cultivated for hay mostly; and every nook and corner, dry land and wet, is made productive. His wet land he makes tillable, by digging ditches from 2 to 3 feet deep, and laying two scantlings in the bottom, 5 or 6 inches apart, and covering them with a slab. He then throws the surface dirt in the bottom, and levels up with the subsoil on the top.

Herkimer county is the greatest cheese county in the State, and probably in the United States. Almost every man who has land enough keeps cows and makes cheese. They have some important improvements, that every man should know who makes cheese to any extent any where. One of the most useful articles I will undertake to describe. It is a tin vat. The first one I saw belongs to John Everett, Esq., of Litchfield. It is made of tin, 2½ feet wide, 6 feet long, and 19 inches deep. This vat sets inside of a wooden vat, 4 inches larger than the tin vat, which leaves a space of 2 inches between the vats—so that the tin can be surrounded with water. Mr. Everett has 30 cows. At night he fills the outside vat with cold water; this surrounds and chills the tin vat; the milk is then strained into the tin vat, and is chilled and kept from souring before morning. In the morning the milk is strained in with the night's, and then with a small boiler steam is introduced into the water between the vats, until the milk is heated to about 84°, which is ascertained by a thermometer.—They then put in the rennet, and as soon as the curd has set they break it up, and then introduce the steam as before to scald the curd, which they heat to 104°; they then elevate one end of the

vat a little and take a plug out of the lower end, and set in a tin strainer; the whey then runs off, while they stir and break up the curd. The whey is conducted from the vat to the cow barn, in a small trough, and is then fed to the cows. Most cows eat it greedily, and they think it is a greater benefit to feed it to cows than to hogs. The cheese from this dairy weigh from 60 to 90 pounds, and is marketed to be delivered on the canal monthly, at 6½ cents.

I also visited the dairy of Rodney Wilcox, in the same neighborhood, who has 70 cows. He pursues nearly the same method in making his cheese, and says the labor of making a cheese from his 70 cows, with his tin vat and steaming apparatus, is not much more than it formerly was to make a cheese from the milk of a dozen cows. He advocates hard pressing, and says you cannot press too hard, or get the whey out too quick; that he gets about all the whey out in 20 minutes, but it stands in the press 24 hours. His cheese weigh from 150 to 220 lbs. He has marketed them to be delivered in the fall at 7 cents in boxes.—*Prairie Farmer*. JOHN GAGE.

Litchfield, N. Y., Sept., 1847.

BROWSE FOR SHEEP.—Browse of various kinds is good for sheep in winter. They are very fond of it, as it affords a change, being a green food. The browse of oak, and other powerful astringents should be avoided. The browse of evergreens is used, not only as a wholesome food, but for its medicinal qualities, particularly pine and hemlock. And in some cases it is used to considerable extent as a substitute for other fodder. Pine and hemlock are best, but spruce and fir are also good.

Some farmers have nearly supported their sheep on browse for months, when hay was scarce. J. Whitman, of Turner, Maine, has used pine and hemlock for his sheep for more than forty years, and he has known no injury from them, but a benefit, and a saving of hay.—He says that hemlock does not injure sheep with lambs. He prefers pine and hemlock boughs to spruce and fir.—*Cole's Veterinarian*.

INCOME FROM POULTRY.—It is stated in the report of the committee on fowls, made at the last Worcester (Mass.) Cattle Show, that EBEN LINCOLN, of Grafton, from 27 fowls, in seven months, obtained 199 doz. eggs, which sold for \$28; and 92 chickens sold for \$23; total, \$51—besides 29 doz. eggs used in his family. The food of the fowls was, "some meat, some fish, all kinds of grain, some lime, or pounded shells, enough sand and water, a warm dwelling, and good roosts." Reckoning the 29 doz. eggs which were used in the family at 14 cents per dozen, (the price which those sold brought,) the whole income from these 27 fowls in seven months, would be a fraction over \$55.—*Cult*.

Mode of Cleaning Wheat for Seed.

As the wheat crop this season is unusually foul, abounding in chaff and cockle, I will, with your permission, make known to the readers of your paper a plan I have adopted for cleaning my wheat for several years past with much success.

After passing the wheat once through the wind mill in the ordinary way, take a common newspaper of good quality and place it double over two-thirds of the surface of the fine riddle, leaving one-third or about four inches of the front side uncovered. One good tough paper will last long enough to clean 100 bushels if the grain is not damp.

The operation is as follows:—The grain on falling through the coarse riddle on to the paper, accumulates a certain quantity before it will begin to fall over the margin of the paper; by this means the cockle is carried forward so as to fall on front of the screen, and thus have a chance to run the length of it, and is more likely to fall through, and the chaff and white gaps, being lighter than the wheat, as they fall over the margin of the paper are mostly blown out in front of the mill, and the chaff that is not blown out runs the whole length of the screen and seldom escapes falling through. Care must be taken to give the riddle its proper inclination, and the mill must stand level, so that the grain will fall evenly over the margin of the paper.

To farmers whose grain is foul, I would say, clean your wheat for seed twice or thrice according to the above plan and if there is still an occasional grain of cockle in it, pass through your fields next summer when the plant is in blossom and a little labor will eradicate it.—*Ohio Cult.*

ANIMAL FOOD FOR SWINE.—There cannot be a doubt but these are highly fattening in their nature and also that swine, being somewhat allied to the carnivora, will greedily devour them; but the question is, do they not tend to make the flesh strong and rank, to inflame the blood, to create in the animals a longing for more of such food, and thus lead them to destroy fowls, rabbits, ducks, and even the litters of their companions? Many will give blood, entrails, scraps of refuse meat, horse flesh, and such like to swine, but we should decidedly discourage such practices; the nearest approach to animal food we would admit, should be pot-liquor and dairy refuse. Animal food is bad for every kind of swine, and tends to make them savage and feverish, and often lays the foundation of serious inflammation in the intestines.—*Youatt on the Pig.*

KINDNESS.—No man hath measured the power of kindness, for it is boundless: no man hath seen its death, for it is eternal. In all ages of the world, in every clime, among every kind, it hath shone out a bright and beautiful star—a beaming glory.

WOOL.—The history of the growth of wool is very curious. Fifty years ago not a pound of fine wool was raised in the United States, in Great Britain, or any other country except Spain. In the latter, the flocks were owned exclusively by the nobility or the crown. In 1764, a small flock was sent to the elector of Saxony, as a present from the King of Spain, whence the entire product of Saxon wool, now of such immense value. Before the breaking out of the last war between this country and Great Britain, Colonel Humphreys succeeded in getting a few merino sheep brought out of Spain; then their exportation was prohibited under penalty of being sent to the galleys for life.

In 1809, during the second invasion of Spain by the French, some of the valuable crown flocks were sold to raise money. Our Consul at Lisbon, Mr. Jarvis, purchased fourteen hundred head, and sent them to this country. Previously, however, Mr. Livingston obtained a few sheep of the Spanish breed, as a present, in 1792. A portion of the pure unmixed merino blood of these flocks is to be found in Vermont at this time. Such was the origin of the immense flocks of fine-wooled sheep in the United States and Great Britain.—*Selected.*

HARVESTS WITHOUT PREVIOUS SOWING.—In the *Schnellpost* we find an account of a method of compelling the wheat plant to become perennial, like grass, and to perfect its grains annually without the yearly sowing of seed, which has been successfully practised at Constance, in Germany. It was discovered by a steward of an estate named Kern. His method, after plowing and manuring the land and sowing it with summer or winter wheat, is, to mow it in the spring before the ear makes its appearance. This process is repeated several times in the season, and the product is used as hay. The plant is then allowed to grow and be cut in the ordinary manner. The next year it ripens earlier and bears more abundantly than wheat treated in the ordinary manner; from one field four successive harvests have been gathered.—*Agriculturist.*

IMPORTANCE OF DEEP TILLAGE.—However skillfully and philosophically we may carry on our saving and application of manures; however well we may select our seed, and choose our seed-time, without deep tillage we can by no means receive the maximum result. Drained land, deeply stirred, and thoroughly pulverized, becomes a kind of regulator of the weather for itself; it is not soon soaked in wet, and it forms a store house of moisture in dry weather. It is a bad conductor of heat, and is therefore not easily over-heated; but on the other hand it is not soon cooled, and so keeps up an equal temperature by night and by day, in cloud and in sunshine, in the highest degree favorable to the healthy development of plants.—*Farmers Herald.*



HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

Insects.

AMONG the multifarious obstacles against which the cultivator of the soil has to contend, none are more vexatious or more annoying than *destructive insects*. Excesses of rain and of drouth, of heat and of cold, hurricanes and hail storms, pass along leaving ruin in their track. Their effects are soon outgrown and forgotten, but *Insects* are perpetually gnawing and blighting from the opening of the fruit bud until the return of winter—preying alike on the germ of vegetable existence beneath the surface of the soil and the full grown tree that has outlived several generations of men.

Nothing can illustrate more forcibly the mysteriousness of the designs of Providence, than the fact that a tiny insect, too small for the discernment of the human eye, can completely baffle the power and intelligence of men. But feeble and fruitless as our most earnest and best directed efforts may, in many cases, be, we must not fall back or despair; on the contrary we must go on, *persevere*—that is the word—availing ourselves of all the aid that the sun light of science, and the practical details of experience, may shed on our path.

What we wish to direct attention to now is that a vast deal may be done towards the destruction of insects while in their winter abodes. They burrow either in the soil, among fallen leaves or rubbish, or have woven themselves nests on the bodies and branches of trees, in forks of limbs or crevices of the bark; fallen fruit, too, are usually tenanted by them.

Now what is there in our power to do? Why, we can dig and throw up the soil of our gardens in such a way as to expose it as much as possible to the influence of frost. Around our fruit trees we can do the same. We can gather and burn or place in a fermenting heap, where all insect life will be destroyed, all fallen leaves, stems of annual plants, &c. We can examine every tree on our premises carefully, and remove all nests that have been woven in them during the

past season; every crack and crevice in the bark from the base to the top should be visited with all possible minuteness, and their sly tenants dislodged. Scraping and washing should also be done in season. All this we can do, and we know from experience and numerous examples we have met with, that such labor does not fail to receive its reward, while its neglect will be sure to incur many a weary hour of unavailing labor next summer, and many a sad disappointment.

Remember that the man who allows insects to revel and multiply at pleasure in his garden and orchard is no less a nuisance than he who grows a field of thistles to sow his entire neighborhood with. There should be a law imposing a severe and equal penalty on both; but we trust that the general growth of taste and improved culture will render such laws unnecessary.

New American Seedling Cherries.

THE past year has brought to notice several new and valuable seedling Cherries. No less than *seven varieties*, originated by Prof. KIRTLAND, of Cleveland, O., have already been noticed in the Horticulturist and other journals.—Several of these we *know* to be excellent, as we saw and tasted them last summer—though too late to see them all. We shall give a description of some of them soon.

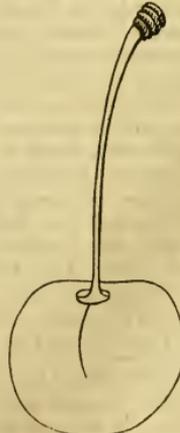
Dr. HERMAN WENDELL, of Albany, a distinguished amateur horticulturist, has fruited a seedling of his own raising, said to be very beautiful and of excellent quality. It is named

WENDELL'S MOTTLED BIGARREAU.

We find a handsome, colored, steel engraving of it in the "American Journal of Agriculture and Science." It has also been described in Hovey's Magazine, and the Horticulturist.—

The following description we take from the latter journal:—"It is of large size, regular obtuse heart-shaped; dark purplish red, becoming nearly black at full maturity, and mottled with small dark streaks or points; suture marked with a dark line half way round. Stalk of moderate length, set in a round and regular depression. Flesh firm, crisp, well flavored, and the pits small. Ripens about the season of Downer's Red."

This cannot but prove a desirable addition to the list of cherries. Originating in Albany, it must be hardy—and coming to maturity when most of the better varieties are gone, will render its possession a desideratum.



COE'S TRANSPARENT.—This is a new seedling raised in the interior of Connecticut, to which the highest character has been given.—The *Horticulturist* says that "it is undoubtedly, with the exception of Downer's Late, the finest American cherry we have yet tasted. Its merits appear to be, first, earliness—the season of its maturity being just before that of the Black Tartarian; second, unusual beauty of appearance and delicacy of flavor; third, great hardness and productiveness."

Coming nearer home we have a fine seedling raised by our friend ZERA BURR, of Perrinton, which has been exhibited for two years past at our Horticultural shows. Our absence last year in the cherry season prevented us from seeing it in bearing, and forming a decided opinion as to its merits over other varieties of the same season. We shall do so next season, however, if circumstances permit. From what we have seen and heard of it, we shall be mistaken if it does not prove equal to most of the new varieties lately introduced.

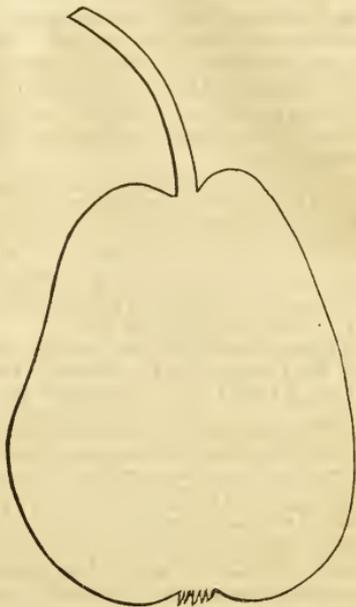
The fact that, in one season, we have over a dozen new seedling cherries named and introduced, leads us to anticipate a rapid extension of our list. We trust, however, that every precaution will be taken, in the proper quarters, to exclude every one that does not bring with it distinctness of character and undoubted superiority. Otherwise we shall get flooded with an endless variety of very ordinary cherries—people are so partial to, and inclined to over estimate, their own productions.

The Washington Pear.

THIS is an American seedling of undoubted excellence; indeed, from what we have seen of it we think it very rarely surpassed. We have eaten specimens grown the past season in Western New York, that, to our taste, were quite as delicious as a first rate *Seckel* or *White Doyenne*. It possesses, too, much distinctness of character, from its peculiarly oval form and prominent red spots on the sunny side. Its history is correctly given, as follows, by Landreth:

"The Washington Pear is a seedling discovered in a hedge row on the estate of Col. Robinson of Naaman's Creek, Delaware, some forty-eight or fifty years ago. We are informed by our friend, Dr. Thompson of Wilmington, that the tree still stands, vigorous and healthy, producing from 14 to 16 bushels of fruit annually. Dr. T. says: 'So far as my recollection of it goes, it has never suffered from disease or been attacked by blight, and I have never known the fruit of the original tree or one of its descendants by budding or grafting to crack as does the fruit of the old *Beurre* or *Butter*.' Dr. T. adds—'Delaware has some State pride in this pear, as Pennsylvania has in her fine *Seckel*, than both of which I have yet to see their superiors among autumn pears.' In the opinion of some competent judges he might have gone a little farther and said their equals, and yet from some unaccountable cause, the Washington is comparatively unknown—Coxe does not even name it in his 'View of the Cultivation of Fruits,' published in 1817; and Kenrick, from the notice of it in his 'Orchardist' had evidently never seen it. Downing has several

typographical errors in his description; that portion destined to be history should be amended in his next edition.'



(Fig. 66.) *Washington Pear.*

It may be described as follows: *Size*, medium; *form*, oval or rather long obovate—quite regular and uniform. *Stalk* pretty long, over an inch, usually somewhat curved and in a very slight depression—frequently a little fleshy ring around the base. *Calyx* small, open in a shallow basin. *Skin* bright lemon, yellow at maturity, sprinkled with small brown dots, and frequently with a ruddy cheek, and mottled with distinct red spots on the sunny side. *Flesh*, like the *White Doyenne*, white fine grained, buttery and melting. Flavor delicious. Ripe during the last half of September—but frequently continuing, here, through the first two weeks of October. In Pennsylvania and Delaware it ripens in August and lasts till September. We noticed during the past season that there is nearly a month of difference in the ripening of fruits between Philadelphia and Western New York.

Last autumn there was a pear sold in the Rochester market, for several weeks by the fruit sellers, as the *Washington*, from Perrinton we believe. It was oblong and yellow like the *Washington*, with *small* red dots on the sunny side, but was uniformly larger, and more swollen around the stem which was shorter. The flesh is coarser and deficient in juice. Although of tolerable quality and very showy and saleable on the street, it still is so inferior to the *Washington* as to be unworthy of even a comparison.

A SENSIBLE man finds no real pleasure in consolation—he seeks forgetfulness.

Buffalo Horticultural Society.

THE following extracts from the annual report of the committee on Flowers and Flowering Plants, which we find in the Horticulturist, speak well for the zeal and taste of our Buffalo friends, and afford a gratifying evidence of the efficiency of their young Society. Speaking of Roses, the committee says:

"This delightful class of plants have astonishingly multiplied with us. Ere this society became existent, three years since, the common garden or June Roses, with very rare exceptions, were the only Roses known here. The present season, however, has demonstrated that we are not behind our suburban friends in this beautiful class of plants: all, or nearly all the leading *Perpetual*, *Tea*, *Noisette*, and *Bourbon* Roses that have attained celebrity either in this country or Europe, have bloomed with us."

The same progress has also marked the culture of the *Pelargonium* (Geranium,) *Fuschia*, (Ear Drop,) *Dahlia*, &c. The report says:

"In taking a summary of the five monthly Exhibitions of the season, we find enumerated as shown, some forty varieties of Tulips, fifty varieties of carnations, one hundred and fifty varieties of Roses, thirty varieties of Pansies, over thirty varieties of Fuschias, and over sixty varieties of Dahlias, with some several hundred green-house or pot plants, embracing all the choice specimens of Cactus, Achimenes, Calceolarias, Azaleas, Pelargoniums, Nereum Splendens, Penstemons, Rhododendrons, Roses, Yuccas, Magnolias, &c. And of Annuals a most gorgeous display, embracing a great many that have never before bloomed in this part of the country. These results of the progress of our infant Society are truly gratifying to your committee, as evidencing a rapid, discriminating taste and skill in Floriculture, alike creditable to ourselves and to the city generally, and may be taken as an earnest of our future efforts for the propagation of this truly delightful and social, refining, *rational* of intelligent society."

The Red Canada Apple.

THE apple which bears this name was introduced into Western New York some years ago, from Canada, without a name, and this name was given it. We believed all along that it was some old English sort, and hence have abstained from noticing it as a *new* fruit, as we have been repeatedly urged to do.

Several eastern pomologists have said that it was the old Nonsuch; but as the color was much brighter, flesh more firm and crisp, and the size usually larger than we had seen the Nonsuch, we doubted their being identical. Recently, however, we have received specimens of Nonsuch from S. W. COLE, Esq., of Boston, and from a critical comparison, we are forced to believe them the same. Those grown here are much superior in quality, and more bright and beautiful in appearance. Mr. COLE believes them to be identical.

This fact, however, though clearly established, does not impair the estimable qualities of the fruit. Whatever it may be elsewhere, here it is one of the very best winter apples known or cultivated.

The evil of grief is in the struggle against suffering. Consent to suffer, and you will not suffer at all.

Answers to Correspondents.

MR. BARRY:—I have noticed an insect which works in the main stem of the peach tree, near the top, and in the branches. It is a new discovery to me; I cut off and burn the part affected. I should like to know whether this insect is one which would be likely to do much damage, if not attended to, I here send you a specimen of the work of the insect, which you will find very small, being near the pith.

Yours truly,
GEO. BISHOP, JR.
La Fayette, N. Y., Oct., 1847.

THE grubs found in the pith of the branch sent, are the young of some of the tree borers that occasionally, though very seldom, attack the soft wood of the peach. No serious danger is to be apprehended from them, though it is very important that their increase be prevented as far as possible, in the way you do, *cut off the parts and burn them.*

T. W. P., *Weymouth, Ohio.* The following is a select list of pears that succeed well on the quince: *Summer*—Madeleine, Jargonelle, Belle of Brussels, Summer Francreal, Doyenne d'Ete. *Autumn*—White Doyenne, Gray Doyenne, Bartlett, Duchess d' Angouleme, Louise, Beurre de Jersey, Fondante d' Automne, Beurre Diel, Countess of Lunay, Golden Beurre of Bilboa.—*Winter*—Glout Morceau, Passe Colmar, Chautontelle, Easter Beurre, Beurre d' Arremberg, and Vicar of Winkfield.

The inquiries of A. W. W. will receive attention next month.

The Currant.

WE are glad to observe a considerable degree of attention given to the improvement of this most valuable of all the small fruits. For years its importance seems to have been greatly overlooked or underrated—while special shows and high premiums have every where been bestowed on the Strawberry and Gooseberry, neither of which, in our opinion, can be compared for general usefulness to the Currant. The latter has been permitted to remain as though it had attained the ultimatum of perfection. This is very far from being true. The *Red and White Dutch*, the best varieties now in general culture, are no doubt very good; but we have every reason to believe that in a few years they will stand in the same relation to our *best* varieties that the *common* Mazzard cherry does to the Black Tartarian or Bigarreau, or as our common wood strawberry to Hovey's seedling.

We see several new varieties noticed in England and France, said to combine large fruit with fine flavor. We have taken pains to procure all the varieties of noted merit, and in a year or two shall have them fully tested here. The following notice of one of the best, we copy from Hovey's Magazine:

MAY'S VICTORIA CURRANT.

In our article upon the cultivation of the Currant, in a previous volume, (VII. p. 325,) we offered some remarks upon the importance of raising currants from seed with a

view to the production of new and improved varieties.— Among the smaller fruits, none possess a greater value than the currant, and yet none have received less attention at the hands of cultivators. Mr. Knight, impressed with the idea that very superior kinds would be the result of proper attention to the growth of seedlings, wrote an article upon the subject which was published in the *Transactions of the Society*. He also raised a great number of seedlings, and three of them were thought to possess such merits as to be deserving of names. The gooseberry has been improved from a small and austere berry to a very large and delicious fruit: the strawberry has also been produced of such size and flavor as to be scarcely recognized as the offspring of the wild berry of the woods and pastures. And why may not the same success attend experiments to improve the currant? There is no reason to doubt they will, and we may yet hope to see currants nearly as large as cherries, and possessing a flavor much sweeter and richer than any we now possess.

The White and Red Dutch currants have been cultivated for a great length of time, and have not, until now, been displaced by any new varieties. Mr. Knight's seedlings, though good, did not supersede these old sorts. We have, however, in the variety under notice, one which bids fair to take a place at the head of all. This is "May's Victoria."— Though recently raised from seed, and as yet confined to a limited number of collections, its merits are so great that it will soon find its way into every garden. The berries are of very large size, of a rich deep color, often measuring five-eighths of an inch in diameter, and the bunches are from five to six inches long. The flavor is also excellent, and,— what is of great importance,— the fruit will hang in perfection for a much longer time than the White or Red Dutch.

This variety was raised by Mr. Wm. May, nurseryman, of Yorkshire, Eng., and the fruit was exhibited at one of the shows of the London Horticultural Society, and was awarded the prize both for its size and excellence. It has been but little disseminated, owing to the high price of the plants; but, as they are easily multiplied, we may soon hope to see it introduced into every garden where the production of fine fruit is an object.

Our plants produced a few specimens last year, and, from the ordinary size of the clusters and berries, we thought it had been overrated; but, the present season, when the bushes had acquired sufficient strength to bear a crop, we were happily disappointed in finding the fruit and bunches of such large size and beautiful appearance; and our drawing (Fig. 67) is an accurate representation, by measurement, of the size of both berry and bunch.

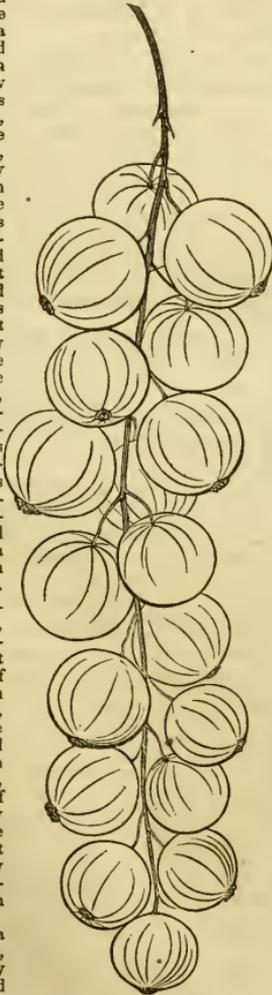


Fig. 67. Victoria Currant.

The plants are of exceedingly vigorous habit, with foliage differing from the White and Red Dutch in being thicker, deeper green, and not so finely cut at the edges: in good rich soil, the annual shoots are very stout and strong.

The currant, as we have stated in the article before alluded to, requires to be severely pruned when the object is large and handsome bunches and berries. It would be useless to expect fine fruit unless this is attended to. At the spring pruning, every new shoot should be headed back to four or five eyes, and the old wood wholly cut out, or as much of it as possible, as it is only on the young and vigorous wood that the best fruit is produced. By attending to these suggestions, the cultivator may have the finest fruit.

We may therefore highly recommend the Victoria currant; and, as its production is one step towards a superior fruit, we hope our amateur cultivators may be induced to follow up the experiment until something still better shall be the result.

We find the history of this currant given in a recent number of the Gardner's Chronicle, from its discoverer Mr. CHARLTON, a well known nurseryman in Northumberland. It appears that some 40 years ago, Mr. C., then an apprentice to a jobbing gardener who took care of Capt. Smith's gardens at Houghton Castle, was sent to gather red currants. In the course of his labors he came to a bush, the last in the row, which bore large, superior fruit. He then went to his master to inquire what sort it was. He replied he did not know; but went and looked at it, and then remembered that when he planted the row he lacked one plant, and looking around the garden found a seedling under a gooseberry bush, which he took and planted,—and this proves to be the bush in question. It was then propagated extensively, and when Mr. CHARLTON commenced a nursery on his own account, he advertised and sold it as the Houghton Castle Currant. It has since been called "Victoria" and "Raby Castle Red" Currant, by other cultivators, and has been received in this country under the name of May's Victoria Currant.

A CURIOUS FLOWER.—A singular phenomenon, says a French paper, has shown itself in a greenhouse at Lyons. At the time when all the growers of camellias, roses, dahlias, &c., are puzzling themselves to get the blue color, the only shade which nature has refused to these kind of plants, chance has thrown a shade of azure blue upon the petals of flowers produced by one single branch of a camellia root of the species *ambicala rubra*. This plant belongs to M. Dagenne. The interior petal of the flowers are of a delicate red, the superior are white, and both are united with blue. The flower thus unites three additional colors.

MARRIED, at Oberlin, O., on the 4th ult., by Prof. H. Cowles, Mr. M. B. BATEMAN, editor of the Ohio Cultivator, to Miss LOUISA JANE LOVELL, late of Unionville.

Mr. BATEMAN's numerous friends in Western N. York and elsewhere, will, we are sure, unite with us in congratulating him upon his escape from *bachelorism*. We are assured that the fair partner he has chosen is eminently qualified to make him happy at home, and aid him in the management of his Cultivator and "little farm"—just the one he has long been seeking.

Banking Fruit Trees.

MR. EDITOR:—I transplanted last November (15th.) in a light sandy soil, with a northern and western aspect, about 130 fruit trees, (apples, pears, plums, and cherries.) Dug the holes about four feet diameter and from fifteen to eighteen inches deep; deposited very old stable manure and leached ashes, without giving the roots any water. In the spring (last) the trees were late in exhibiting their leaves, which I attributed to the banking remaining (until the 1st May) a longer period than ought to have been allowed. I lost one apple tree only, but the branches of every apple tree, without exception, were killed from one foot to three or four feet in length. The trees sprouted again below where they were killed, and are doing well. The cherries, plums, and pears were not affected with the frost.

I would inquire whether it is to be attributed to the fact that after I had transplanted, only one shower of rain fell before the earth was hard frozen—and that that rain could not have penetrated more than an inch and a half in the embankment, so that the roots were not moist enough; or was it owing to the effect, that the roots, (in consequence of the banking,) being kept warm, caused too much life in the branches when the severe frosts came?

About two weeks ago I observed five apple trees with knobs around the stem at the surface of the earth, similar to the black knot on the plum tree. If it is a disease, what is the remedy?

One of the pear trees did not put forth any leaves in the spring, but the bark continued green the whole season to the present moment. In July and August I fastened a cloth around it from top to root, and kept it moistened without giving the roots any extra watering except the dripping from the cloth. A few buds just appeared, but did not shoot into leaves; had I attended to it more carefully I have no doubt it would have put forth leaves. I mention this for the information of others, as well as to obtain further information. I am, dear sir, yours, &c.,
W. A. W.

Avon, Oct. 30, 1847.

REMARKS.—We do not consider that either the absence of rain after planting, or the heat maintained around the roots by the embankment, would produce death in the tops of the branches. If trees be transplanted early in the fall while the ground is in a very dry state, and the young wood of trees soft and immature, a lack of moisture might cause the ends of the branches to shrivel and die; but this could hardly be the case in the middle of November, in this latitude, as we are then usually well supplied with rain.—The embankment would have a tendency to prevent, instead of cause, winter killing.

The "knobs around the stem at the surface of the earth," are not, we presume, the result or symptoms of any disease, but merely granulations of the sap, which often appear on root grafted apple trees at the union of the stock and graft. They are seldom seen, however, on thrifty, well grown trees, with healthy roots.

Your pear that had not vigor enough to develop its buds should have been cut back till within a few buds of the base, and the roots should have received a watering occasionally, and the roots, if unsound, should have been cut back to the sound wood, to enable them to emit new fibres.

APPLES TO CHINA.—One hundred barrels of magnificent pippin apples, from the Pelham farm, Ulster county, N. Y., were recently shipped from Boston to China. This is the first shipment ever made of this fruit to that part of the globe. The trade may yet be equal to that with England.

Acknowledgments.

WE are under obligations to E. A. MCKAY, Esq., of Naples, for splendid specimens of sweet and sour apples, two varieties new to us. They were somewhat past their prime; but judging from what flavor was left, and more particularly from their large size and beautiful appearance, they are well worthy of attention.

—Some unknown friend for a basket of specimen apples, as follows: No. 1, Baldwin; No. 2 appears to be Jonathan; No. 3, White Spanish Reinette of Downing, usually grown here as Holland Pippin; No. 6, Autumn Pearmain; No. 7 appears to be the Alexander; we are not certain of this as it was partially decayed. No. 8, Don't know; No. 13, don't know—had become quite mealy.

—S. W. COLE, Esq., of the Boston Cultivator, for a box of specimens, which we shall speak of next month.

—C. GOODRICH, Esq., Burlington, Vt., for a copy of the report of the Annual Cattle Show and Fair of the Chittenden Co. Ag. Society; with the address of J. W. MAY, Esq., delivered on the occasion. We have been in the habit of looking to that region as unfavorable for fruit culture; but whatever difficulties may be presented by climate or soil seems about to be surmounted by zeal and perseverance.

The report says—"Of Fruits the show was magnificent. Many were present who had lately seen the splendid collection of fruits at Saratoga, and we heard but one opinion expressed of the comparative merits of the two exhibitions, which was that the show of Apples, Pears, Plums, and even Grapes and Peaches at Burlington excelled that at Saratoga,—showing conclusively that at least in all the more valuable fruits the Valley of Lake Champlain can compete successfully with any part of the world.

"Of Garden Vegetables the show was extensive, and as to quality it is only necessary to say, that at a sale held at the close of the Fair, squashes sold at \$1.00, and water-melons at \$3.00 each."

Mr. GOODRICH carries off a large share of the premiums for fruit. He receives a premium for the greatest variety of fruit grown by one individual, viz: 55 sorts of apples, 11 of pears, 11 of plums, 6 of grapes, and 3 of peaches. He also receives a premium for the 5 best fall apples—Porter, Gravenstein, Scarlet Nonpareil, Fameuse, and new Baking Sweet. Also for the 5 best winter apples—Hubbardson Nonsuch, Baldwin, Danvers Winter Sweet, Roxbury Russet, and R. I. Greening.

J. O. POMEROY was awarded the premium for the best 5 fall pears—Bartlett, St. Michael's White Doyenne, Gansell Bergamot, Seckel, and VanNess. Fondante d'Autome, or Belle Lucrative, was awarded the premium as the best new fall pear; and Gravenstein as the best new fall apple.

—F. S. REW, Esq., for a Legislative document containing the Report of the State Library Committee, Message of the Governor, communication of the trustees of the State Library Com., and other documents relative to the system of international exchanges, projected and conducted by the eminent VATTEMARE. This is one of the most noble of all modern projects, calculated, in an eminent degree, to promote the advancement of the arts and sciences, the cultivation of literature, and indeed the mental and moral improvement of nations—forming them, as it were, into an immense intellectual brotherhood. The zeal and energy with which Mr. VATTEMARE has for years, unaided and at his own expense, carried forward this philanthropic scheme has justly attracted universal admiration, and we view his labors as eminently calculated to promote union, peace, and good will among men.

In this document we find "instructions" on the best mode of collecting, preserving and forwarding objects of natural history, which we shall refer to at another time.

—S. HARRIS, of Canandaigua, for an excellent communication,—which will be attended to next month.

OUR NEXT VOLUME.—We have just room enough, before adding FINIS to volume 8, to remark that we shall endeavor to improve the Horticultural Department next year. The Publisher promises us "ample room and verge enough," with superior illustrations, &c., which will enable us to make this department more interesting and acceptable.—Meantime we trust our horticultural friends will lend a portion of their influence to increase our subscription list in their respective localities,—a matter quite essential to the publisher, whose expenses are necessarily heavy.

LADIES' DEPARTMENT.

Domestic Items.

Washing Flannel.—If white, it should be done in as hot water as possible, with hard soap.

Shrinking of Flannel.—Enclose new Flannel in a bag; put it into a boiler with cold water; heat and boil it. It will never shrink any more after this operation, and should then be made up into garments.

Fragments of Bread may be all saved by making them into toast and puddings; and they also make good pancakes, by soaking over night in milk and then adding an egg or two, and a little salt and flour.

Preserves—if fermenting, boil them and add a little powdered salaratus, say size of a pea for a quart or two, but more if much fermented.

Feather Beds should be aired once a week; but do not hang them out of the front windows, unless you wish to add a striking feature in the picturesque expression of your dwelling.

Moths.—Camphor (not tobacco) will repel moths. Flannels well wrapped in linen, are safe from moths. But they should be well brushed about the first day of summer, as the moths then begin to increase.

Suet and Mince-Pie Meat, if boiled and chopped, may be kept a year, in a stone jar, under molasses.

Vials, with medicines, should be kept constantly and very distinctly labelled—it would prevent some fatal accidents.

Molasses, used for cooking, is immensely improved by previous boiling and skimming.

Straw Beds are generally improved by being boxed at the sides, or stitched through like mattresses.

Sausages.—The best proportions are 3 lbs. salt, 10 oz. sage, 10 oz. pepper, to every 100 lbs. chopped meat.

Eggs, wholly embodied in salt, the small end downwards, will keep one to three years perfectly fresh.

Heated Rooms.

Rooms heated with anthracite coal, and rooms heated with close stoves in which wood is burnt, have very dry atmospheres. The use of water in such rooms is very congenial to health, but the water should not be placed in an iron or tin vessel upon the stove, for the reason that it will undergo that degree of heat which will make its vapors offensive and injurious to breathe. It is as injurious to the human system to breathe putrid water vapors of this kind, as it is to breathe the vapors from stagnant ponds in hot weather. If water is used upon a stove, an iron pan should be made use of, and this filled with dry sand; in the sand set an earthen bowl filled with clean

water, which should be changed twice a day, and the bowl washed and kept as clean as if used for a drinking vessel.

Where hard coal is burnt in a grate, a glass globe should be suspended in the room filled with clean pure water, and as the heated air rises to the top of the room, it will steadily evaporate the water and moisten the dry and heated air. Persons who prefer the atmosphere of salt water vapor, can add salt to the water, or if they prefer an aromatic atmosphere, they can add Cologne water, or any other perfume which they prefer. It is as important to have clean air for breathing as to have clean water for drinking. Basement rooms, where hard coal is burnt, should be frequently ventilated. Small children accustomed to stay in basement rooms find a bad air near the floor. This air should be removed by allowing the doors to be opened frequently to let in fresh air. A little care in these matters will tend wonderfully to comfort and enjoyment.—*Ex.*

TO MAKE GOOD BUTTER IN WINTER.—We often hear the complaint that winter butter is poor. Ours (says a correspondent of the Boston Cultivator) was so for several seasons. It was very slow in coming, and frothy, white, and sometimes bitter; while butter made from the same kind of milk in the warm season was good. I devised many plans for improvement, such as throwing in salt, warm milk, scalding cream, &c.; but to no purpose. At length I scalded my milk when brought from the cow, afterwards, setting it either in a cold or warm place as most convenient. I mean I communicated sufficient heat to my milk to destroy the effect which frosty feed in autumn or dry feed in winter had upon it. Since which time we have made (with fifteen minutes churning) purer, sweeter, and more yellow butter than we ever made in summer—and sometimes from frozen cream gradually warmed. And were it not that the increase of manufactures, the pursuit of fashion, and other causes combined, render helping hands in the dairy room now-a-days very scarce, I should be at the trouble of scalding my milk before setting it, during the summer, as well as in winter, for surely, butter made in this way possesses a delicious richness and dryness which can not be found in any other.

HOW TO COOK GREEN CORN.—If the following is worth publishing in your paper, it is at your service, as its truth cannot be controverted: Green corn, to be healthy, should be boiled till it is perfectly done; that is, if it is full grown or nearly ready to glaze, it should be boiled at least three hours, when it may be eaten to a reasonable amount, by almost any person.

T. P.

The above may prove valuable to those who preserve the Farmer, or have good memories—though not in season, just now.

Extracts of Letters from the People.

☞ THE subjoined extracts from letters received since the commencement of the present volume, show the estimation in which the GENESEE FARMER is generally held. We have received many similar evidences of approval and encouragement from almost every section of the Union :

A Post-Master in Seneca County writes—"I am making an effort, in order to procure a *respectable* list of subscribers for your paper in this town. You ought to be patronized by every farmer in the land—yes, by every person who only plants a Garden, in my estimation. Only the price of one bushel of corn will pay for the 'Farmer' a year; this year it would have paid for it *two years*. It is astonishing to me that every farmer does not possess himself of it.—Only laud 50 cents to his Post-Master, who will cheerfully forward it to the publisher in most cases, I presume, and the work would be sent to him. I wish I had *fifty dollars* to enclose to you, for subscribers in this town. I will do all I can, by obtaining subscriptions and sending the money to you."

An influential farmer of Jefferson county, in a letter remitting payment for 16 copies of the Farmer, says :—"As an individual I have been much pleased with the general matter of the Farmer for the last year, and am gratified to notice a large increase in the number of subscribers. I consider the articles treated of by its able Editor an excellent selection, and admirably discussed—and well adapted to inform the minds of the farming community on those subjects in which their interests are most intimately connected."

An esteemed friend and able correspondent of several agricultural journals, thus writes us :—"The Farmer has also gained more within the last year in reputation, as a scientific and literary paper, than most of its contemporaries. If farmers generally do not yet appreciate it, it is only because they can not. I trust it will not be so always, as progress is busy with her wand, throughout our favored land."

A student friend at Romulus, N. Y., in a letter containing a remittance for 21 subscribers, thus speaks of the Farmer :—"I answer for myself that the last volume was worth more than any previous one in my opinion. If I am not mistaken I have been a subscriber to the Farmer for the last 16 years, and I am satisfied that it has had an influence upon me, and from it I have derived many new ideas in the science of agriculture. I believe if it had been read by every farmer in Western New York, (though he might not have more than two acres of land to cultivate,) the quantity of produce would have been increased 20 per cent.—and the quality, as a general rule, would have been much improved."

In renewing his subscription, an able farmer, residing in Genesee, says :—"I wish to continue the Genesee Farmer another year, considering it as I do the best Agricultural Paper now extant. I am very much gratified to see the improvements which are being made in agriculture, (a business which was considered of quite minor importance but a few years ago,) and sincerely hope that it may attain the highest rank in the land."

An intelligent farmer of Truxton, Cortland county, in a letter containing a remittance for 19 copies of the Farmer, says :—"I have obtained these within the last two weeks without making any unusual effort, only asking my neighbors when I saw them to take the Farmer—the paper recommending itself. I shall probably obtain more subscribers, in the course of the winter, as I know of several who have taken the last volume, who, if asked, will doubtless take the present."

Our Cortland friend takes the right course. If each of our subscribers will show the Farmer to his neighbors, and ask them to subscribe, the usefulness of the paper may soon be greatly increased. In these days of low prices of printing, and high prices of produce, every farmer can afford to take an agricultural paper.

Monroe County Agricultural Society.

THE Annual Meeting of this Society, for the election of Officers, &c., will be held at the Office of the *Genesee Farmer*, in Rochester, on the *second Tuesday* (the 14th day) of December next, at 10 o'clock, A. M. A punctual attendance is requested.

Nov. 1, 1847. JAMES H. WATTS, Rec. Sec'y.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,-----	\$1 13	Pork, bbl. mess	12 50 16 50
Corn,-----	50	Pork, cwt.,---	5 00
Barley,-----	56	Beef, cwt.,---	3 50 4 00
Oats,-----	40	Lard, lb.,-----	9 10
Flour,-----	5 25 5 37	Butter, lb.,-----	15 16
Beans,-----	62	Cheese, lb.,-----	6 7
Apples, bush.	25	Eggs, doz.,-----	16
Potatoes,-----	59	Poultry,-----	6
Clover Seed,---	4 50 5 00	Tallow,-----	10
Timothy,-----	1 25 2 00	Maple Sugar,---	---
Hay, ton,-----	10 00 12 00	Sheep Skins,---	75
Wood, cord,---	2 75 3 50	Green Hides,lb	3½
Salt, bbl,-----	---	Dry "-----	7 8
Hams, lb,-----	10 10½	Calf Skins,---	3

Rochester, Nov. 29, 1847.

New York Market.

[By Magnetic Telegraph.]

NEW YORK, NOV. 27.—7 P. M.
 ASHES.—Sales of Pots made at \$5.75 a \$5.87½, and 50 bbls. Pearls sold at \$7.75 a 7.81¼.
 BEEFWAX was lower, and sales were made at 22 cts. for yellow.
 FLOUR.—The sales embraced about 1200 bbls. Oswego at \$6, with some lots Michigan at \$6.12½. 1500 bbls. Genesee, deliverable next month, sold at \$6.25. 200 do. on the spot at \$6.25. Sales of good Ohio were made at \$6.44.
 WHEAT.—Sales 100 bush. Genesee at \$1.36. 1000 Ohio white at \$1.31, 2700 Ohio at \$1.29, and 3000 Delaware at \$1.32 a \$1.33.
 CORN.—Sales 1000 to 1500 bush. including mixed at 73 cts. and round yellow at 75 cts.
 MEAL.—300 bbls. New Jersey sold at \$3.50, 300 do. Pennsylvania at \$3.44, and 500 do. Western at \$3.25.
 RYE.—Sales 500 bu. at 87 cts.
 PROVISIONS.—Sales 1000 bbls. mess Pork at \$14.87½, and 30 do. thin mess at \$13.62. Butter and Cheese dull.

BUFFALO, NOV. 27.

This day has been the coldest of the season, and it has been snowing most of the day. Every thing in the market is dull and the sales were small.
 FLOUR.—The receipts are light, and there is no change in quotations.
 GRAIN.—Wheat is firm but inactive. We quote Chicago at 97c.; Racine 98c. Corn is steady but not active, and prices have slightly declined.
 PROVISIONS.—Pork may be quoted at \$13 a 14 for barrels. Receipts for the last 24 hours were—Flour, 2500 barrels; wheat 32,000 bushels.

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THE
GENESEE FARMER:

A MONTHLY JOURNAL DEVOTED TO

AGRICULTURE & HORTICULTURE,

DOMESTIC AND RURAL ECONOMY.

ILLUSTRATED WITH ENGRAVINGS OF

FARM BUILDINGS, IMPLEMENTS, DOMESTIC ANIMALS,

FRUITS, FLOWERS, &c.

EDITED BY

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HORTICULTURAL.

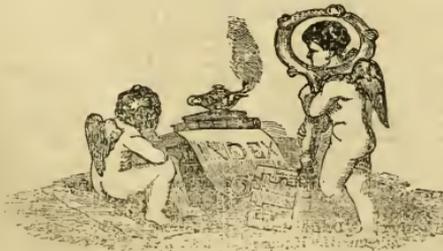
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 Conesus, L. C. Kingsbury.
 Conquest, Post Master.
 Chaumont, L. Gaige.
 Cortland Village, D. D. Cole.
 Cohocton, W. M. Eldred.
 Centerville, L. C. Veazey.
 Canadea, S. A. Race.
 Cuba, Rev. N. Leighton.
 Catharine, E. C. Frost.
 Clarence, O. B. Hopkins.
 Golden, F. J. Barber.
 Collins, D. S. Hotchkiss.
 Collins Center, A. M. Brace.
 Clymer, I. F. Gleason.
 Cherry Creek, C. A. Spencer.
 Center Sherman, J. S. Bell.
 Carroll, B. T. Morgan.
 Clifton Park, S. W. Higgins.
 Champlain, D. D. T. Moore.
 Cambria, C. MoLyneux.
 Carlton, W. H. Rapalje.
 Cranesville, J. Groat.
 Camden, W. R. Paddock.
 Canisot, A. Kniskern.
 Chester, Philo Gregory.
 Cornwall, Benj. Wright.
 Crown Point, C. Fenton.
 Chesnut Ridge, Thos. Taber.
 Center White Creek, G. K. Montgomery.
 Coxsackie, H. G. Bedell.
 Cambridge, Dr. O. Cook.
 Dansville, I. R. Trembly.
 Delphi, C. C. Slocum.
 De Ruyter, S. G. Sears.
 Dryden, A. Tanner.
 Dundee, S. S. Benham.
 Depuyster, Levi Fay.
 Dexter, N. Bassett.
 Darien, Thomas Riddle.
 Darien Center, Stephen King.
 Delhi, Nathan Merwin.
 Deposit, M. R. Hulce.
 Dewittville, John Russell.
 East Groveland, M. S. Doty.
 East Bloomfield, H. Munson.
 East Hamilton, A. D. Carrier.
 East Pharsalia, H. Baker.
 East Genoa, George Morgan.
 East Littlekan, J. Woodley.
 East Java, A. A. Waldo.
 East Pembroke, R. Willett.
 East Gaines, S. C. Perry.
 East Pike, W. Wheeler.
 East Springfield, D. Dutcher.
 East Stockholm, H. Hubbard.
 East Hill, W. Robinson.
 Evansville, Allen Nims.
 Elbridge, Caleb Brown.
 Etna, W. Marsh.
 Eaton, J. T. Whitney.
 Essex, Henry Palmer.
 Esopus, G. G. Elmore.
 East Hamburg, M. R. Dunham.

Elmira, Francis Hall.
 Elba, A. U. Wyllis.
 Erieville, Allen Curtiss.
 Earlville, D. Ransom.
 Edwards, J. B. Pickett.
 Erwin Center, A. C. Smith.
 Eagle Harbor, W. Walters.
 Eden, M. Scanlan.
 Ellington, J. S. Farman.
 East Leon, O. D. Waldron.
 Fowlersville, Jas. McPherson.
 Farmington, J. E. Macomber.
 Flint Creek, E. B. Woodworth.
 Fayette, G. W. Bachman.
 Farmer, J. D. Wintersteen.
 Five Corners, A. Palmer.
 Fayetteville, I. N. Mead.
 Fulton, E. Holmes.
 Florence, S. S. De Lano.
 Friendship, O. W. Hewett.
 Fairport, W. T. Hastings.
 Freetown Corners, W. Swetland.
 Freedom, E. Howlett.
 Farmingham, Chas. Lee.
 Franklinville, James Seaward.
 Fairview, E. Taylor.
 Farmersville, H. W. Montross.
 Frankfort, Geo. B. Judd.
 Fort Plain, S. Tingle.
 Fairfield, Wm. Mather.
 Fredonia, John Lawson.
 Fluvanna, S. Whittemore.
 Fort Corvinton, Geo. G. Payne.
 Forestburgh, Robert Atkins.
 Fishkill, J. H. Roe.
 Florida, T. J. Howell.
 Flushing, W. R. Prince.
 Goshen, B. W. Thompson.
 Groveland, Charles Gohun.
 Genesee, D. H. Bissell.
 Greigsville, J. D. Frazer.
 Gibsonville, J. Wilson.
 Gorham, D. Halsted.
 Geneva, H. G. Verplanck.
 W. H. Allen.
 Genoa, D. Hobart.
 Ganeganslet, A. Gray.
 Groton, R. C. Reynolds.
 Greenwood, Levi Davis.
 Gilbert's Mills, M. A. Fish.
 Grove Center, J. Williams.
 Grove, S. C. Jones.
 Gainesville, N. Park, jr.
 Gains, J. Hutchinson.
 Gerry, A. Langworthy.
 Griffins Mills, S. S. Clark.
 Groom's Corners, John Palmer.
 Henrietta, E. Kirby.
 Hopecye Falls, H. Wheeler.
 Hopewell, John Lewis.
 Hopecye, Wm. Chamberlain.
 Hall's Corners, T. W. Hall.
 Howlet Hill, John Case.
 Hamlet, Arvin Rice.
 Hull's Corners, B. Hull.
 Hastings, L. F. Devendorf.
 Homer, Judson C. Phillips.
 Harford, O. M. Moore.
 Hector, J. Kirtland.
 Hunt's Hollow, T. T. Lake.
 Hume, Wm. N. Emerson.
 Hornellsville, T. J. Reynolds.
 Hammond's Mills, S. Hammond.
 Hindsburgh, S. Harwood.
 Holley, H. Fretsch.
 Hermitage, Sidney Stone.
 Harland, G. L. Angvine.
 Herkimer, J. A. Rasback.
 Hagaman's Mills, D. Hagaman.
 Henderson, Rev. P. Morse.
 Helena, Benj. Nevin.
 Half Moon, W. Rulison.
 Ithaca, Post Master.
 Italy Hollow, L. B. Graham.
 Independence, J. P. Livermore.
 Irving, C. R. Leland.
 Junius, Wm. M. Dorrance.
 Jacksonville, C. H. Howe.
 Jerusalem, H. Larselere.

Jamestown, J. W. Brewster.
 Jeddo, W. Hoeg.
 Jamestown, S. S. Cook.
 Jonesville, J. H. Swetland.
 Kelloggsville, Post Master.
 King's Ferry, L. Seymour.
 Kendall, B. Denmore.
 Kirklard, Chas. E. Hart.
 Le Roy, J. H. Stanley.
 Lima, Chas. Miner.
 Livonia, H. J. Ray.
 Lakerville, R. Clark.
 Lyons, E. Hopkins.
 Lock Berlin, H. Hanchet.
 Lodi, James Mapes.
 Locke, Wm. Titus.
 Ledyard, A. Underhill.
 Lafayette P. Trowbridge.
 Liverpool, S. Jaquith.
 Lafargeville, L. Bushnell.
 Lairdsville, E. C. Saunders.
 Leonardsville, Post Master.
 Lowville, Hiram Mills.
 Linnet, C. J. Smith.
 Linklake, J. K. Bowen.
 Little York, J. E. Cushing.
 Lake Ridge, L. A. Morrell.
 Lansingville, S. C. Lyon.
 Ludowille, P. French.
 Lysander, D. Kennedy.
 Linden, J. M. Quale.
 LaGrange, C. E. Morgan.
 Lockport, H. W. Scovell.
 Lewiston, A. V. E. Hotchkiss.
 Lyndsville, E. Chamberlain.
 Little Falls, E. G. Chapin.
 Litchfield, Dr. O. W. Randall.
 Luzerne, M. Burdick.
 Lancaster, Fardon Green.
 Leon, W. Cooper.
 Lansburgh, S. D. Smith.
 Mechanicsville, E. Howland.
 Monticello, G. W. Reynolds.
 Mamaroneck, J. D. Hill.
 Milton, Stephen Taber.
 Malone, G. S. Adams.
 Mayville, Post Master.
 Mina, James Otaway.
 Magnolia, R. Whitney.
 Mexico, B. Higgins.
 Moravia, Rowland Day.
 Mohawk, H. C. White.
 McGrawville, Samuel Andrews.
 Mt. Washington, A. Wheeler.
 Martin's Hill, A. Buckley.
 Maine, R. S. Osborne.
 Mendon, D. Tallmage.
 Mt. Morris, H. Swan.
 Moscow, Wm. Lyman.
 Manchester, P. Mitchell.
 Manlius Center, Jno. Mable.
 Marion, L. Clark.
 Macedon, S. D. Wilson.
 Macedon Center, S. L. Shotwell.
 Matengo, D. Johnson.
 Mott's Corners, Wm. Mott, 2d.
 Middlesex, L. Van Anden.
 Moreland, G. Bennett.
 Mixville, L. Couch.
 Mud Creek, D. K. Coon.
 Morristown, M. Eager.
 Meeklinburgh, Jas. B. Bodie.
 Mansville, J. J. Steele.
 Montezuma, Wm. Fitch.
 Marathon, John M. Roe.
 Morganville, C. English.
 Machias, S. L. Whiteher.
 Medina, J. W. Swan.
 Middleport, E. Hurd.
 Murray, A. A. Baker.
 Marcy, W. M. Mayhew.
 Milo Center, A. G. Carr.
 Marcellus, Wm. Colton.
 Marshall, J. W. Moore.
 Modena, D. Everitt.
 Moore's, Titus Newell.
 No. Gage, A. F. Rockwell.
 No. Norwich, H. H. Beecher.
 No. Reading, J. Masters.

Nunda, J. Swain
 Newark, T. Dickinson
 New Haven, S. G. Merriman
 New Hartford, Hiram Shays
 New York Mills, S. Matthee
 New Woodstock, S. L. Hubbard
 Newfield, J. B. Palmer
 Nichols, C. V. S. Bliven
 New Berlin Center, A. Greene
 Nicholsville, E. D. Peck
 Niagara Falls, R. H. Woodruff
 Newfane, George Mann
 Newville, Jacob Walter
 Nineville, Aaron Wilcox
 Nashville, A. S. Moss
 Newburgh, Daniel Smith
 New York, Leavitt, Trow & Co.
 New Paltz, A. A. Deyo, Jr.
 No. Bay, Noah Wadhams
 No. Bergen, D. A. Barker
 No. Ridgeway, E. W. Hawkins
 No. Bloomfield, E. A. Stillman
 No. Brookfield, J. F. Falkner
 No. Wethersfield, C. Lyon
 Oakland, E. H. Fitch
 Ontario, A. W. Turner
 Ovid, C. A. Gibbs
 Ovid Center, Geo. Dunlap
 Owaseo, D. Bevier
 Otisco, E. C. Smith
 Onondaga, H. P. Shove
 Oran, L. Williams
 Oswego, Philo M. Carpenter
 Oriskany Falls, A. M. Hitchcock
 Onedda Castle, H. G. Wetmore
 Oriskany, D. C. Bates
 Omar, T. B. Stackhouse
 Oxford, C. A. Bacon
 Ogdensburgh, L. D. Pomeroy
 Oswego, G. T. Pumpelly
 Oakfield, W. W. McIntyre
 Penn Yann, D. A. Ogden
 Phelps, Samuel E. Norton
 Port Gibson, Reeve Corwin
 Palmyra, Wm. H. Cuyler
 Putneyville, C. G. Richards
 Port Byron, D. Robinson
 Pompey, Wm. J. Curtis
 Phoenix, J. R. Brown
 Pratt's Hollow, O. Chamberlain
 Peterboro', Neil Eastman
 Prattburgh, W. B. Boyd
 Putney, S. G. Smith
 Pike, Augustus Winsor
 Preston, Wm. Johnson
 Pavilion, Wm. M. Sprague
 Pavilion Center, G. Barnett
 Perry, R. Senter & D. C. Smith
 Perry Center, J. Lathrop
 Peoria, J. Gordon
 Portageville, Allen Payne
 Pekin, S. S. Sage
 Portland, E. S. Bartholomew
 Persa, J. B. Wilbur
 Poughkeepsie, D. B. Leat
 Flatburgh, I. C. Platt
 Porter's Corner, I. I. Yates
 Pierrepont Manor, J. G. Pease
 Plainville Jno. Buck
 Phillipsville, C. J. Horne
 Prattville, Hon. Z. Pratt
 Penfield, H. Fellows
 Parma Center, C. A. Knox
 Ferrinton, J. Chadwick
 Pittsford, Caleb Nye
 Rutland, Moses Eames
 Rock Stream, C. W. Barnes
 Richburgh, P. L. Evans
 Rushford, I. N. McCall
 Reading Center, A. Simmons
 Rushville, P. Force
 Ransomville, D. Lewis
 Reynold's Basin, Davis Hurd
 Ridgeway, Stephen Barrett
 Royalton, J. H. Bixby
 Richfield, F. C. Shepard
 Richfield Springs, James Hyde
 Ridge, E. Stilson
 Rose, E. N. Thomas
 Reed Creek, J. W. Carey
 Reed's Corners, S. McPherson
 Romulus, Jo. Wykoff
 Redfield, H. Griswold
 Rosevelt, J. P. Chaffee
 Royce, H. Hathway
 Remsen, W. L. Williams
 Ripley, S. B. Northam
 Randolph, M. H. Johnson
 Rosendale, Wm H Snyder, jr

Seneca Falls, Silsby & Keeler
 Syracuse, Stoddard & Babcock
 Strykersville, H. B. Rounds
 Sheldon, E. P. Beck
 Stone Church, Alvah Stevens
 Somerset, J. Mathews
 Shelby, J. Gilson
 Sandusky, E. Holmes
 Southport, C. Evans
 Salisbury, L. Carryl
 Spafford Hollow, W. O Farrell
 Stamford, C. Griffin
 So Camero, Isaac Jones
 South Valley, D. W. Rice
 Spencerport, Jesse Harroun
 Scottsville, Ira Carpenter
 Sweden, A. Comstock
 Scottsburg, C. Brewer
 Sparta, Wm D McNair
 Spotswood, Samuel Lewis
 Seneca Castle, J. W. Runyan
 Sodus, A. M. Winchester
 Salmon Creek, G. Filkins
 Sheldon, J. Harris
 Slater Hill, E. H. Barber
 Silsbyville, G. L. Watkins
 Sennett, H. Fisher
 Sterling, W. H. Langley
 Spafford, Jno Collins
 Skaneateles, W. Platt
 Scriba, Thomas Askew
 Sloat, U. P. Strong
 Smyrna, Geo. Babbitt
 Smyrna, Benj Knowles
 Sherburne, E. Shaw
 Smithville Flats, Thos Lee
 Scott, Thomas Harrop
 Slater Hill, Peter Mulks
 Searsburgh, J. Mckel
 Starkey, C. G. Tutthill
 Short Tract, M. Thorpe
 Sacketta Harbor, D. C. McGuire
 Stockbridge, D. H. Frost
 Stone Mills, James Greene
 Springville, Wm K Blasdell
 Sardinia, H. Bailey
 Stockton, Milton Smith
 Sheridan, I. Eacker
 Sherman, Post Master
 Silver Creek, H. H. Hawkins
 Southampton, B. H. Foster
 Salisbury Mills, John Caldwell
 Salem, Editor "County Post"
 So Argyle, John Bishop
 So Avon, N. J. Kellogg
 So Dansville, A. W. Beach
 So Butler, L. S. Dudley
 So Onondaga, J. Salmons
 So Richland, S. Tinker
 So Bainbridge, M. Jackson
 So Danby, A. Bennett
 So Venice, W. S. Tupper
 So Warsaw, J. Fuller
 So Plymouth, Delos Jones
 Stafford, S. Marsh
 South Hartford, Jas L Ingalsbe
 Schultzsville, D. H. Schultz
 Schuylersville, Post Master
 Saratoga Springs, W. Carpenter
 Stillwater, J. F. Wetzel
 Trumansburgh, L. Strobridge
 Truxton, Stephen Patrick
 Tyre, H. McCarty
 Tontine, A. W. Beach
 Texas, Hiram Parker
 Turin, A. Fowler
 Tyrone, C. Weller
 Tonawanda, Jacob Kibler
 Tonawanda, S. C. Sym
 Tohanna, A. Kendall
 Towlesville, C. Tanner
 Triangle, W. Jackson
 The Purchase, Samuel Willett
 Troy, Geo Vail
 Ticonderoga, M. T. Clough
 Union Springs, Wm Cozens
 Union Settlement, S. Penoyer
 Unadilla Forks, H. H. Babcock
 Union Eilery, W. Bacon
 Volusia, G. N. Van Vleet
 Versailles, A. H. Baker
 Victor, P. Parks
 Volney, S. Pardee
 Vernon Center, E. M. Foote
 Virginia, J. S. Squires
 Van Buren Center, D. J. Skinner
 Van Buren, H. R. Dow
 Wheatland, Gen R Harmon
 Webster, Dr O Reynolds

Westfield, E. C. Bliss
 Waterloo, C. H. Carter
 Wyoming, I. H. Gould
 Wolcott, G. H. Arne
 Walworth, B. Billings
 Williamson, C. S. Decon
 Weedsport, D. E. Havens
 Whites town, John Berry
 Westmoreland, A. H. Halleck
 Waterville, A. M. Owen
 Watertown, Wm Ritchey
 Woodville, J. W. Tim
 Waterburgh, L. H. Owens
 Wirt, J. B. Kenyon
 Whitney's Point, J. D. Smith
 Warsaw, C. J. Judd
 Wethersfield, R. B. Crippen
 Wilson, R. F. Wilson
 Wright's Corners, S. C. Brown
 Worcester, A. Ten Eyck
 Windsor, Silas S. Gage
 Winfield, J. T. Round
 Waterford, J. I. Scott
 Whitehall, A. M. Hall
 Willink, S. Holmes
 Williamsville, J. Hutchinson
 Wales Center, Alonzo Havers
 West Stockholm, E. D. Taylor
 West Butler, George Stewart
 West Bloomfield, D. M. Smith
 West Dresden, Wm Holden
 West Fayette, P. Kohler
 West Camden, A. W. Barnes
 West Bergen, Wm Luther
 West Somerset, M. S. Hess
 West Carlton, George Kuck
 West Saines, J. V. Saunders
 West Oneonta, Joseph Bull
 West Troupsburgh, N. M. Perry
 York, D. McDonald, C. P. Stone
 Yorkshire, L. Marsh
 Youngstown, J. Ladd
 Yates, J. B. Lowell

MAINE.

Augusta, R. Eaton
 Belfast, W. T. Colburn
 Foxcroft, H. Douty
 Fort Fairfield, J. B. Trafton
 North Wayne, R. B. Dunn
 Orrington, A. D. Atwood
 Portland, Levi Weymouth
 Readfield, H. A. Johnson
 Waldo, Henry Davidson

VERMONT.

Arlington, Samuel Benedict
 Barret, E. Eastman
 Cornwall, C. H. Stowell
 Castleton, J. D. Goodwin
 Chelsea, Jonathan Brown
 Danby, Joseph Lapham
 East Bethel, O. H. Brooks
 Factory Point, C. A. Roberts
 Grafton, Capt John Day
 Hydeville, Pitt W Hyde
 Jacksonville, Horace Tanner
 Johnson, Robert Holmes
 Middlebury, S. W. Jewett
 North Montpelier, C. Libby
 North Springfield, Joel Griswold
 Rochester, Post Master
 Simonsville, A. Hazeltine
 Shrewsbury, Dr L. W. Guernsey
 St Albans, B. B. Newton
 Sax's Mills, H. A. Hinkley
 Rockingham, B. Spaulding
 Pittsford, J. C. Wheaton
 Reedsboro' City, Joel Ranney
 Rupert, H. Sheldon
 Townshend, O. F. Butterfield

MASSACHUSETTS.

Ashburnham, Geo Atkinson
 Amherst, Daniel Cowles
 Boston, J. P. Jewett & Co
 Braintree, B. B. French
 Cabotville, M. Pinney
 Deerfield, J. A. Allen
 East Long Meadow, H. J. Crooks
 East Harwich, Samuel Bassett
 Harwich, O. Brooks, jr
 Hardwick, J. B. Wetherell
 Nantucket, S. B. Swain
 Sunderland, C. Williams
 South Reading, Hiram Eaton
 Worcester, Ruggles & Bourac & Co
 Ware, Ebenezer Gould
 Wateley, Stolham Allis
 Warren, Lyman Day

CONNECTICUT.

Avon, F. Ripley
 Brookfield, S. N. Burr
 Bridgeport, Henry Shelton
 Cheshire, Titus Morse
 Cold Spring, Eli J Morris
 Danbury, J. R. Wildman
 Derby, Robert Gates
 Fairfield, Edmund Hobart
 Fair Haven, Stephen Smith, 2d
 Greenwich, Samuel Close
 Hamden, W. Churchhill
 Hebron, Charles Post
 Hartford, Lorenzo Bull
 Jewett City, E. M. Brewster
 Lyme Rock, W. A. Crewell
 Middle Haddam, H. Selden
 Meriden, E. Iah Camp
 Marlborough, George T. Lord
 North Branford, R. Clark
 North Somers, Elias Sheldon
 Redding Ridge, C. C. Winton
 So Farms, W. L. Smedley
 So Canaan, John B. Reed
 So Britain, F. H. Gray
 Somers, Samuel D. Chapin
 Waterbury, E. Leavenworth
 Weston, S. S. Row
 Warren, J. L. Hendrick
 Waterford, J. C. Calkins
 Windham, John G. Clark

PENNSYLVANIA.

Abington Center, R. Sisson
 Allegheny, Wm Karns
 Adamsburg, Samuel Miller
 Albion, J. Hunt
 Butler, D. A. Agnew
 Bakerstown, Wm Duncan
 Beelville, Morgan Vane
 Coultsville, P. Repsher
 Cookstown, R. Kitts
 Clintonville, James Baird
 Centerville, S. Post
 Carnichael's, J. A. Patterson
 Crossville, W. Gill
 Clarksville, D. Dickson
 Carversville, Samuel Bradshaw
 Dunningville, Robert Moore, jr
 Downing, J. H. Eschleman
 Dundaff, D. W. Halsted
 Erie, Robert Evans
 Elk Creek, N. Lounsbery
 Edinboro' E. W. Gerrish
 East Smithfield, Allen Hale
 Freeport, A. Anderson
 Fulton, James C. Anothers
 Franklin, James M. Martin
 Florence, J. P. M. Buchanan
 Fredericksburg, M. J. Grove
 Finleyville, Samuel Cooper
 Girard, Mortimer Hopkins
 Gray's Valley, M. Strange
 Harbor Creek, Calvin Leet
 Harmonsburgh, John B. Rice
 Houston, N. W. Priestly
 Halifax, E. Hoffman
 Irish Ripple, John Davidson
 Jefferson, S. B. Waa
 Kittanning, I. Scott
 Kimberton, Rev. C. F. Welden
 Kennett Square, Moses Pennock
 Kenza, M. N. Powell
 Kishkimita, W. H. Richardson
 Lockport, Levi Slater
 Library, James Means
 Logan's Ferry, G. W. Martin
 Ligonier, John Hargnet
 Lewisberry, Dr W. W. Bower
 Lebanon, Samuel Miller
 Meadville, A. Hulickoper
 Mt. Jackson, J. Hays
 Mt. Morris, D. J. Boydston
 Milford, C. W. Dewitt
 North East, Wm Griffith
 New Alexandria, Lewis Seanoer
 New Milford, Wm C. Ward
 Philadelphia, J. S. Skinner
 Pittsburg, Jacob Boyer
 Ferrysville, M. V. B. McAlcer
 Pulaski, D. C. Mathews
 Paradise, Jacob Eschleman
 Reading, John K. Wright
 Reisterstown, M. W. Eckley
 Reidsburgh, G. R. Magee
 Sugar Grove, G. W. Buel
 Strongstown, Edmund Burke
 Tarentum, W. Ross, jr
 Tinker Run, Jacob Spencer

Ulysses, G H Olmsted
Van Buren, Adam Weir
Waterford, John Curtis
Wesleyville, C Hull,
Woodcock, David Swift
Wilkins, A F Gore
Washington, W Slocum
Worthington, J M Jordan
Woodbury, George Diltz
York, John Evans

VIRGINIA.

Alexandria, S N Wright
Boothville, B Linn
Circleville, George Gregg
Drumfields, J B Farr
Duffsville, Dr Mix
Green Valley Depot, A A Parker
Grave Creek, B Cockam
Holiday's Cove, James Ross
Hillsville, R C Johnson
Hague, R H Chouning
Kerr's Creek, J C Laird
Lexington, G A Baker
Lovettsville, J C White
Millwood, George H Burwell
Morgantown, E C Wilson
Mt Jackson, Dr A R Meems
Nineveh, Samuel Cook
New Market, S P Rupert
Natural Bridge, Capt J W Moore
Paris, I Settle
Panther's Gap, D Kunkle
Purcell's Store, F M Love
Richmond, R A Joseph
Spartanopolis, D Martz
Thompsonville, F L Cooper
Upperville, R H Dulany
Waterford, H T Gove

OHIO.

Akron, George E Beebe
Amboy, Apollus Kent
Avon, Wm S Hopkins
Anderson, Eph Selby
Austintown, R M Walker
Birmingham, John Hunter
Brighton, Albert Niles
Brockville, C L Young
Bath, Dr Cushman
Bucyrus, R T Johnston
Barnesville, T M Schofield
Brunswick, John Graham
Brier Hill, C Howard
Bellevue, Lemuel Morse
Cleveland, J Stair & Son
Columbus, M B Bateham
Chester X Roads, L D Stannard
Clinton, H G Washburn
Clardon, Elihu Finney
Chagrin Falls, J A Brown
Cobb's Corner, Samuel Cobb
Charlestown, L B Brown
Deardorf's Mills, H J Shotley
Defiance, Wm C Holgate
Elyria, Elijah De Witt
Euclid, A H Coit
Enon, Isaac S Wilson
Edinburgh, Rev A Y Tuttle
East Cleveland, R Harlow
Essex, George Taft
Franklin Mills, R Bradley
Freedom, O D Drake
Foster's Mills, H J Flack
Freemont, B S Adams
Fowler, Isaac A Smith
Geneseo, Geo W Shepard
Granger, Ira M Lawrence
Huntsburg, J Edwards
Hill Grove, R A Cooper
Henrietta, Wm L Van Dusen
Huntington, W Clark
Homer, Jay Wheeler
Hillsboro', J A Caldwell
Jeromeville, J W Boyd
Jefferson, S Deann
Lynde, John Seymour
Laporte, D Tenny
Litchfield, J H Carpenter
Malta, G S Hann
Medina, Joseph Fitch
Morgans, A Osborne
Monroeville, J Hoover
Malaga, D P Truax
Maumee City, W A Woodward
Maumhatton, R M Morrison
McConnellsville, H Teter
McVernon, H Minor
Milton, J J Tod
Newark, H S Sprague
Newbury, Cutler Tyler

North Rochester, B C Perkins
North Fairfield, Benj Hildreth
New Lisbon, B F Thompson
Newtown Falls, R A Burbank
Oberlin, E F Munson
Olivesburgh, W B Porter
Perryburg, J Hood
Ravanna, J S Herrick
Russell, N Robinson
Ruggles, I Fitch
Ripleyville, L W Ingersoll
Stony Point, James A Smith
Streetsboro', Ora Osgood
Savannah, J McSpichen
Salem, Dr George Baum
Sandusky City, Francis Falley
Toledo, Wm Wallis
Tallmade, H S Carter
Twinsburgh, E T Richardson
Tiffin, Louis Staib
Utica, J N Shepherd
Urbana, James Taylor
Vernon, N Case
Weymouth, J A Potter
Warrenton A Morgrove
Warren, Dea O Brainerd
Whiteford, J G Kilinc
Willoughby, Sylvester Smith
Williamsfield, Moody Chase
Western Star, H G Dodge
Warsaw, Wm Moore

MICHIGAN.

Atlas, E Goodrich
Adrian, Rev A Tucker
Ashtabula, C D White
Athens Isham Simons,
Albion, O Fice
Algonac, Norman Klein
Allegan, Daniel Foster
Absecon, G B Murray
Birmingham, John Davis
Blissfield, D Carpenter
Berrien Springs, George Essick
Bellevue, John F Hinman
Battle Creek, A Noble
Bertrand, Charles M Riley
Big Beaver, Ira Smith
Brownstown, T Woodruff
Bainbridge, J T Taber
Cold Water, James B Trippin
Constantine, J K Briggs
Colon, S S Riley
Convis, H G Hodskin
Clinton, D Keyes
Climax Prairie, N Eldred
Cooper, B Earle
Cortland, Phil Beers
Concord, L Keeler
Detroit, Rev G W Harris
Dearbornville, H Van Orden
Davisburg, H Palmer
Dundee, S S Benham
Dewitt, D Ferguson
East Raisinville, L Sackett
Eckford, Wm N Wilder
Edwardsburg, Anson Lisk
Eaton Rapids, H & D Wilcox
Eaton, Wm Southworth
Fentonville, R LeRoy
Franklin, B D Worthing
Fredonia, Seth Chase
Farmington, P Dean Warner
Flint, Post Master
Flowerfield, J N Wheeler
Florida, W Thompson
Grand Rapids, O H Foote
J D Lyon
Grand Blanc, J K Abbott
Geneseo, A E Wilcox
Galesburg, H P Sherman
Greenville, H M Moore
Grand Haven, S S Secord
Gun Plains, D B McMartiu
Hillsdale, H Johnson, Jr
Highland, Mrs R E Perry
Homer, J M B Wetherwax
Hudson, W L Larned
Hadley, Edward Fortune
Holland, R A Roy
Howell, Geo W Leys
Ionia, Benj Harter
Iron Creek, G S Smith
Jonsville, C Gregory
Jackson, Otis O Freeman
Joseo, Wm H Redfield
Johnstown, D L Shotwell
Jackson's Mills, John Ivison
Kalamazoo, A Ransom,
" W L Booth

Lansing, Hon Geo B Cooper
Litchfield, L Smith
Lapeer, J M Wattles
Marshall, O C Comstock, jr
Macon, Israel Pennington
Milford, John Taylor
Mt Clemens, J T Traver
Mason, Hiram Bristol
Moscow, E Belding
Monroe, T B Van Brunt
Manecheer, A W Case
Morenci, D M Haight
Marion, H Wieg
Medina, A Allen
Mackinac, G T Wendell
Manlius, R Curtis
Muskegon Forks, J F Stearns
Matherton, Wm Mather
Niles, James Aldrich
Northville, D H Rowland
Nagve, S W Palmer
New Haven, R O Milton
Nottaway, J H Clowes
Novi, James Elmore
Oakville, S T Hardy
Oshtemo, R R Cook,
Oncida, S Preston
Pinecreek, L D Smith
Pontiac, S W Denton
Plymouth, J W Averill
Paris, S S Bailey
Paw Paw, J Smolke
Fort Huron, A Fish
Pittsfield, John Hoy
Plainwell, Wm Wadhams
Pittsfield, C Mullen
Rochester, E W Lawrence,
Raisin, E Jones
Royal Oak, C Brewster
Rollin, E S Marvin
Ridgeway, Oliver Miller
Richard, F Lytle
St Joseph, C C Sutton
Spring Arbor, James De Puy
Saugatuck, S A Morrison
Stockbridge, S Beebe
Schoolcraft, E G Robinson
Summit, E Whittaker
South Nankin, J J Wright
Springville, J Hart
Summersville, A Hammond
St Clair, Wm B Barrow
Sackett's, James Miller
Seneca, A Stevenson, jr
Three Rivers, H H Cole
Tecumseh, J H Miles
Thetford, D N Montague
Tekonsha, H Proctor
Utica, Wm H Lester
Union City, J C Leonard
Vanilla, Robert Holmes
Vermontville, Henry Robinson
White Pigeon, W O Austin
Wayne, Justice Gage
White Lake, H Voorhies
Waterford Center, Wm Capron
Ypsilanti, Eli Dickinson

INDIANA.

Annapolis, W Hadley
Armsburg, R K Harris
Aurora, P B Vail
Brookville, E Burton
Bristol, D D Cathcart
Bath, Wm Mixer
Cannalton, J B Maynard
Canton, M McCoy
Fort Wayne, J D G Nelson
Fairfield, J N McManus
Goshen, J R McCorrd
Good Hope, R Stone
Hagerstown, Wm V Davis
Hudson, H Kellogg
Indianapolis, Powell Howland
Leo, Henry Miller
Lafayette, James Hollingsworth
Logansport, R F Graves
Mishawaka, S F Hart
Martinsburgh, Jesse Crim
New London, John Newliu, jr
New Salem, Post Master
New Harmony, Wm Cox
Northport, D Law
Onondaga, Major Tuttle
Princeton, John Arbutnot
Fayok, David Hiburn
Plymouth, James Bannon
Patriot, Wm Gibson
Richmond, Wm Wiggins
Rainsville, Ezra High

Rochester, J W Holman
Salem, Deal & Birdsong
Scipio, R McGuire
Spiceland, D Boone
Smelser's Mills, J Smelser
Troy, John P Dunn
Utica, W P Robinson
Unionville, James W Carter
Union Mills, L Stevenson
Versailles, D P Shook
Valparaiso, Oliver Somers
Walsh, A P Ferry
Williamsburgh, S Johnson
Williamsport, Dr C Boyer

KENTUCKY.

Alexandria, F Brown
Athens, Richard Spurr
Bridgeport, Post Master
Bowling Green, Adams & Holson
Big Spring, Dr McMurtry
Bellevue, J & R E Bennett
Brushy Fork, Dr C Stuart
Carrollton, G D Hinkle
Centerville, J B Wasson
Cynthiana, Samuel Tucker
Dry Ridge, Geo W Tucker
Dallas, M G McQuary
Elkton, W B Taylor
Edmonton, Post Master
Floronce, Wm P Tucker
Fairfield, Thomas Bryant
Glasgow, James Ewbank
Hopkinsville, Thomas S Bryan
Jeffersonton, J W Garr
Kiddville, John Goff
Louisville, Post Master
L Lebanon, Samuel Spaulding
Lebanon, R S Shelburn
Mortonsville, D D Walker
Middle Creek Mills, J M Colyer
Mt Ida, G Gateskill
No Middletown, N G Darnall
Paris, A G Tompkins
Port Royal, Dr S K Page
Stanford, H C Helm
Simpsonville, H B Oliver
Trenton, L B Leavell
Union, V Dickerson
Winchester, J Taliaferro
Williamstown, S Doud
West Point, R A Bartlett

WISCONSIN.

Aztalan, H H Sedgwick
Alooe, J Y Westervelt
Benton, George L Boss
Beloit, Granger Gates
Bea Town, Silas Burt
Big Bend, Isaac Bailey
Baraboo, James M Clark
Cresco, Charles R Angle
Clinton, J L Winegar
Delavan, Thomas M Martin
Elk Grove, H Dishelherst
Fond du Lac, Wm C Dodge
Fox Lake, C M Kingsbury
Grafton, B McConville
Hartford, L E Peck
Ive's Grove, S C Howard
Johnstown, S Belden
Jamestown, James Gilmore
Koshkonong, E H Bingham
Linden, John Wasley
Madison, Dr H A Tiffany
Milwaukee, J Curtis
Milwaukee, G L Whitney
Muskego, L Parker
Mansfield, H Warriuer
Neanah, Wm H Scott
Oshkosh, James Gillespie
Palmyra, P H Turner
Port Washington, Thos Mooney
Port Winnebago, C Randall
Potosi, D R Bart
Rochester, Wm Watts
Racine, Alfred Smith
Raymond, Elder D Dye
Rock Hill, O W Bow
Spring Prairie, E D Smith
Southport, Rev Thomas Tenny
Sheboygan Falls, J Brown
Sheboygan, Post Master
Vernon, J M Stillwell
Waukesha, J A Carpenter
Wawatosa, N Wesson
Waterloo, Charles D Topping
Watertown, J A Hadley
Whitewater, E S Kellogg
Wausara, B Ferguson
Wheatland, L Chesley

THE GENESEE FARMER.

Vol. 9.

ROCHESTER, N. Y. — JANUARY, 1848.

No. 1.

THE GENESEE FARMER:

Issued on the first of each month, at Rochester, N. Y., by

D. D. T. MOORE, PROPRIETOR.

DANIEL LEE & D. D. T. MOORE, Editors.

F. BARRY, Conductor of Horticultural Department.

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Letters containing remittances, or making inquiries for the benefit of the writer, must be *post-paid* or *free* in order to receive proper attention. Address the Publisher.

Agricultural Education.

A FEW weeks since we spent several days at Milledgeville, where the Legislature of Georgia is in session, and was highly gratified to see all parties favor a bill which appropriates \$2,500 a year to found and sustain an Agricultural Professorship in the State University. There is good reason to believe that this bill will become a law.

We have just returned from a visit to Columbia, the capital of South Carolina, where we attended the commencement of the flourishing College under the presidency of the Hon. W. C. PRESTON, one of the most gifted and eloquent men now living. A young gentleman is now fitting himself at Geissen University with LIEBIG, to teach agricultural chemistry in South Carolina College. This institution receives annually \$24,000 from the State to pay the salaries of professors, and has 240 students.

It is cheering to one who has long urged the importance of studying agriculture as a learned and most useful profession, to find so many States willing to foster this branch of knowledge. The agricultural Colleges in Tennessee and Ohio, are said to be in a flourishing condition. Nor can we doubt of the success of Messrs. HORSFORD and NORTON, the former of Harvard, and the latter of Yale College. Some time after the other twenty-nine States have introduced the study of agricultural science into their institutions of learning, we expect to see the Legislature of our native State, New York, appropriate the first dollar for a similar purpose. What other State has public works which yield an income of three and a half millions? How easily New York might establish a most useful agricultural department in connection with all her Acad-

emies and literary Colleges! Where are her statesmen, her men of generous impulses, of enlarged and liberal minds? Alas! they are driven into obscurity by a race of selfish, mousing politicians. To the Young Farmers of the Empire State we look to elevate their noble calling, in learning, in science, and in public favor, to a par with the most cherished in the Union.

Wherever we address popular assemblies in other States, the young men come forward and cordially take us by the hand, with an earnest expression of hope to see Agriculture placed at the head of the learned professions in this Nation of Farmers. This result must be achieved. It is a noble work, in which all noble minds will cheerfully toil by night and by day, till fully accomplished. No sneers and ridicule, no secret opposition nor open indifference, can prevent the ultimate triumphs of knowledge over both prejudice and ignorance. A good scientific agricultural education will one day be placed within the reach of every poor man's son. This is our faith. Instead of there being four millions of adult males employed in rural occupations in America, thirty-nine in every forty of whom never see an agricultural paper or book, ninety-nine out of every one hundred farmers will be more thoroughly educated than lawyers, doctors, and clergymen now are, in their respective professions.

Our ideas of education are too narrow, too small for the greatness of those intellectual powers and moral perceptions, which our Maker has bestowed on us for purposes as great as the gift. The physical man can have only his victuals and his clothes. JOHN JACOB ASTOR can not obtain a particle more with all his wealth. Man was not designed to pass through life a mere animal machine—a living thing to toil with its muscles, eat, propagate, and rot. He needs other aliment beside the bread and meat produced by the agriculturist. It is the legitimate purpose of a good education to cultivate the Man as well as the Earth, out of which he was formed.

What we particularly desire is, to see everywhere in this Republic the union of the culture of the earth and the tillers of the same. It is only by their just and harmonious union that man-culture and field-culture—*homo-culture* and *agri-culture*—can be brought to a high state of improvement. It is no vanity to say that we have long studied the science of Homoculture in connection with tillage. The subject is one of inestimable moment. The extreme selfishness of man as a physical being, is the most powerful obstacle in the way of his intellectual and moral elevation. Strong as is this animal selfishness,

it is not insuperable. In the end, it must yield obedience to a higher power. This higher power must be brought to full and perfect maturity in the person of every laboring man and woman in the United States. Rural and mechanical laborers of either sex should be more thoroughly educated than those that live without work.—Idle, lazy persons, have no share in our regards or sympathy. We want every laboring man to know how to set himself at work to the best advantage; and then, how to keep all that his muscles and highly cultivated intellect shall call into existence. The science of keeping property as well as the art of creating a comfortable subsistence, should be taught to every child. Why not? Yes, *why not?* We pause for a reply.

Manure fermenting in the Soil.

OUR correspondent "R.," of Sweden, has a valuable article in our last number in regard to the Saving and Application of Manure. He "believes that manures lose half their value by lying in the heap till thoroughly decomposed." In this he is undoubtedly right, for reasons which we will briefly explain:

Vegetables, when undergoing decomposition, (rotting,) give off a gas called carbonic acid, water, and nitrogen gas or ammonia. Each of these constituents of cultivated plants is not merely valuable as food to the growing crop, be it what it may, but they all contribute to the improvement of the soil in a variety of ways. To avoid the too rapid solution of lime, Providence has rendered it insoluble when in its natural state, in water in which there is no carbonic acid.—The atmosphere contains only 1 part of this gas in 2,500. Rain water imbibes a portion of carbonic acid in its fall from the clouds to the earth, and is thus capable of dissolving a limited quantity of common limestone in the soil. When water, thus charged with this indispensable mineral, enters the roots of plants, it carries into their circulation the much needed lime, in small and appropriate doses. Where lime is lacking, it should be applied. During dry weather, when of course no rain falls, this source of carbonic acid and moisture is measurably cut off. If fermenting manure be buried in the soil, its decomposition yields water and carbonic acid as well as ammonia and the minerals in the vegetables out of which the manure was formed. Water rising up from the subsoil by the evaporation from green leaves, and the drying of the surface of the ground, through capillary attraction, is saturated with carbonic acid from the manure, and hence prepared to dissolve lime. This acid greatly aids in decomposing the insoluble silicates of potash, soda, magnesia, and lime—forming soluble carbonates of those alkaline bases.—These minerals, as is well known, are indispensable in the organization of all cultivated plants.

If Providence had rendered the elements in the surface of the earth which form vegetables, very soluble, like common salt, it is plain that they would dissolve like snow in May, and run into rivers and the ocean. This would lead to speedy and irredeemable sterility. The more carefully we study the growth of the plants which feed the higher order of animals, the more deeply are we impressed with the infinite wisdom and goodness of the Creator of the world which we inhabit. Cultivated reason has power to investigate and comprehend the natural laws which *dis-organize* the products of vegetable vitality, and *re-organize* the earth, air, and water, evolved by the decay of organic matter. At the time such decay is in progress, if the gasses given off find a well tilled, permeable soil, they will increase the solubility of all the minerals which form the ash of forest trees, and of all minor vegetables. *Mold* undergoing decomposition, produces in a less degree the same results as manure. Hence, deep plowing and mixing mold (organic matter) with the minerals below, favors their solution, secures the access of solar heat and the atmosphere, to prepare nourishment for the crops of the skilful husbandman.

On soils which are naturally poor the farmer's stock of fermenting manure can be profitably increased by gathering a large quantity of forest leaves to be used as litter in yards and stables.—The most successful agriculturists at the South keep boys at work with horse rakes in the open pine or oak forests, raking up into winrows the large mass of leaves spread over the ground.—Other boys or men throw these winrows into carts drawn by mules, and the leaves are hauled to stables and cattle yards to be made into compost. The writer finds that the long leaf pine gives 4½ lbs. ash to 100 lbs. dry leaves. The leaves of black-jack oak yield on the barrens of Georgia less than 3 per cent. of ash. We have traced the roots of these trees seven feet into the earth, and have admired the wonderful resources of Nature as she draws thousands of tons of potash, soda, lime, iron, and magnesia, combined with sulphuric, phosphoric, hydrochloric, silicic, and carbonic acids—the minerals in the leaves of forest trees—from seven feet below the surface, to spread them on the top of the ground and thus renovate poor soils. These salts are combined in pine leaves with 95½ per cent. of organized carbon, oxygen, hydrogen, and nitrogen, drawn either directly or indirectly from the atmosphere. Here, then, we witness the hand of Providence scattering the seeds of pines over the sterile debris of granitic rocks, almost drifting sand, which extract their mineral food from five to ten feet below the surface, and their carbon, water, and nitrogen from the air. The nitrogen exists in the atmosphere in the shape of ammonia and nitrous or nitric acid dissolved in vapor, and falling in rains to the earth. Keep-

ing an eye on the sources whence the ingredients are derived which form forest leaves, we see a thinking, reasoning, talking animal, transforming these leaves into bread, meat, milk, fruit, wool, cotton, and silk. This animal has much to learn in the way of thinking, reasoning, and talking, before he will bring the production of human food and clothing to the highest attainable perfection.

In this good work of human progress and human elevation, we respectfully ask every reader to lend a helping hand. Communicate to your brother farmers through the pages of this journal a knowledge of any great, or of any small improvement you may make or learn from others. Be willing to try experiments, at least in a small way, to evolve new truths in the art and science of rural economy. No man is so humble that he can not contribute to the sum total of human knowledge. Our maxim, "Teach one another," should be held in remembrance by every subscriber. The usefulness of the Farmer depends in a great degree on the contributions of so many excellent practical husbandmen. These have the gratitude, not only of the writer of this, but of every reader. The Genesee Farmer has acquired a national reputation through the ability of its correspondents.

Shrinking of Pork.

Our esteemed correspondent "H.," of Fairport, asks for information in the December number in regard to the causes which make pork shrink when cooked. This is a curious and interesting subject of inquiry. If there is any material difference in the shrinkage in the weight of the flesh of swine, equally fat, when boiled a given time, the cause must be sought in the greater quantity of soluble gelatin (glue) in the tissues of one animal than in another. It is very possible that, if one was to evaporate the water in which corresponding pieces of pork from different hogs equal in weight had been boiled, the liquid in which shrunken meat had been cooked, would give the larger quantity of jelly. It is not water that the meat looses in boiling; but soluble organized matter. Hence, salt meat, whether pork, beef, or mutton, should have its excess of salt, if any, soaked out in pure cold water, that all the dissolved jelly or flesh may be eaten as well as a chicken, veal, or beef soup.

The science of dietetics is very little understood, as we took occasion to point out a few months since. It is a curious fact, that we neither know how to raise and improve pigs, nor how to fatten, cure, and cook their flesh, nor how to eat it in the way to impart to our systems the largest amount of nourishment. After a great deal of study, the wisest just make out to learn that they know next to nothing. Experi-

ence teaches us that a pig fed on mast, or still slops, will make more oily pork—meat more melting in boiling water—than one fattened on sound corn. This is generally understood.—But the causes which change the quality and solubility of lean meat, as well as fat, are not so apparent. We must search into the *legumin* in peas, and the muscle and tissue forming elements in the vegetables, pot-liquor, butter milk, and other food of swine, for a solution of the problem.

In a hen's egg we see all the constituents of a perfect bird in a semi-liquid state; while hot water solidifies the whole contents of the shell. Albumen in meat and flour, as well as in the white of eggs, coagulates in hot water. But even this will come out of meat, as it separates from its solution in old brine on scalding it. Some say that such brine should not be scalded; for the reason that, after its capacity for dissolving albumen and jelly is exhausted, it is better to apply to fresh meat, (after it is also saturated with salt,) than new brine. It is possible that the character of the brine may have a decided influence on the shrinkage of pork and beef in boiling them. If all the nutritive matter which is dissolved out of meat in brine, and boiled out in dinner pots and wasted, were saved, it would be worth several millions a year to the people of the United States. It is only honest to own the truth and admit that, old as civilized society is, we, the men and women of forty and upward, have yet to learn our A B C in domestic economy. In the first place, we waste about half of our labor by its misapplication in unwise tillage, and then waste nearly half of what we pretend to save, by some "slip between the cup and lip."

From the best investigation of the causes which make meat shrink in boiling, we long since came to the conclusion, (whether wise, or other-wise,) that it is better to bake and roast than to boil it, unless for soups, stews, and the like. Much might be said on the degree of cooking which flesh ought to receive, in order to render it most easy of digestion. "The upper ten thousand" run into the extreme of *ravenousness*; while the million often cook meat so much that no human system can form living flesh out of it. The daily loss from the latter cause is immense—incalculable.

ANTI-FRICTION COMPOUND FOR WAGON WHEELS.—Two parts in bulk of hogs lard, one each of wheat flour and black lead. Heat till the lard begins to melt, and stir the whole into a pasty mass. In very cold weather it may be softened by the addition of any cheap oil. This composition will well repay the trouble of making, and will kill all friction and *squealing* long after it is dry.

MANKIND make a parade of their sorrows, as they do of a new coat.

European Extracts.

UNDER this heading, we design giving, each month, condensed extracts from our European exchange publications. We have only room, in this number, for the following :

Potato Rot.—M. VAN DER TRAPPE, of Wessel, Prussia, planted a large field of potatoes, one half in the usual method, and the other on a plan of his own discovery. Those cultivated by the usual method were diseased, and the foliage failed and dried up early ; while those cultivated by his peculiar plan remained green till late in autumn. The tubers were sound, and a great yield. So palpable was this experiment, that delegates were appointed by the town to examine the result ; and they have officially promulgated the facts, and requested the discoverer to publish his secret.

Great Crop of Wheat.—Mr. WHITING, of Monmouth, England, has the past year grown a crop of wheat, on a field of $6\frac{1}{2}$ acres, which produced 61 imperial bushels, (equal to 71 bushels and 10 lbs. of our measure,) per acre. It was drilled in, early in January—five pecks to the acre.

Sheep Pox.—This very destructive and infectious disease, which arose in Germany, has been introduced into Great Britain by importations from Hamburgh, and proves very fatal to sheep. From the frequent intercourse and importations of stock from England, there is great danger that this disease will find its way across the Atlantic. Its ravages are great and rapid. It seems to be extremely contagious and epidemical, making its appearance in wide spread localities. Inoculation is the great remedy for prevention, and safety during the disease—saving nine-tenths of the cases, and rendering the symptoms lighter of those incipiently diseased. A pamphlet is about to be published, giving its history, symptoms, prevention and cure, for free distribution. It is also to be tried on the human system, as a preventive against the small pox and varioloid.

Great Yield of Wheat.—Mr. CULLAND, of Reculver, Kent Co., selected one acre of wheat from a field ; it was reaped and gathered with great care, for the purpose of deciding a wager, and was found to produce ten quarters and three bushels, or 83 English bushels—equal to 96 bushels and 50 lbs. of our measure.

The largest amount on record, as grown in the Genesee country, was raised at Mt. Morris, by Gen. MILLS, it being 66 bushels and some pounds.

Slide Rule and Cattle Gauge.—This is an instrument lately introduced among the buyers of fat cattle, by which they can at once ascertain their weight with a very great degree of certainty.

Remedy for Hoven or Bloat, occasioned by the eating of wet or luxuriant clovers, and young grasses, turnip tops, &c.—Two to three table spoonful of liquid ammonia, (hartshorn,) diluted in a half pint of water instantly stops fermentation, and causes the gasses (carbonic) to discharge.

Book Farming.

WE do not know whether the following was intended for publication or not, but it is so pertinent to the subject that we venture its publicity :

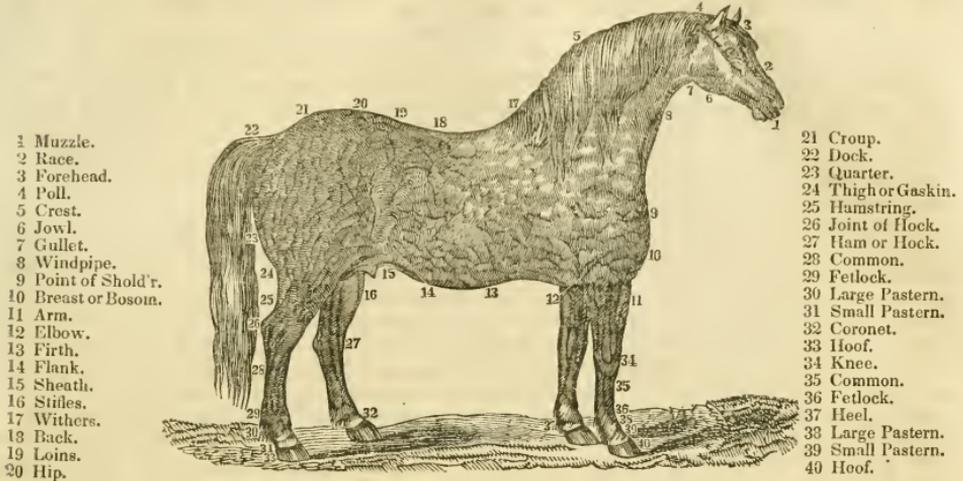
SIR:—Enclosed you will receive \$8 for 20 subscribers to your coming volume. I do not enter for the premiums, but am willing to do all the good I can to the agricultural community, for I am free to say that I am actually benefited, in dollars and cents, more than 50 dollars this year from the information that has accrued from reading your useful paper. One of my neighbors tells me that he saved himself \$20 by a single suggestion. It seems to me that the cry of "book farming" is a mere cover for ignorance and idleness—a wilful determination against improvements, and a setting up of perfectibility.

Supposing that I were a person of common observation and industry, and that I had spent twenty years of my life in the cultivation of tobacco, or hemp, or quinces, or melons, or strawberries, and tried all varieties and manures and methods, until I had arrived at almost the perfectibility of the art—and that I could give, intelligibly, the whole of my experience in one page of your paper—would it not be ridiculous of any one who wished to commence raising the same crop to say, "Oh, it's book farming, I won't read it," when five minutes attention would save him 20 years practice to arrive at the same conclusions I had. How does the physician, the lawyer, the scholar, procure his knowledge, except by that all powerful engine—Books ?

It is not to be supposed that all, or even a moiety of what is printed is true, or judicious ; a great many articles are suggestive, speculative, and suppositious. Let all read, and use their best judgments to select the wheat from the chaff. If a writer says that wheat will or won't turn to chess, or that he has found out the cause of the potato disease, or that the barberry blasts wheat, or that the tree corn grows so big you can't harvest it, or that the morus multicaulis will make your fortune—or any other improbable or self evident assertion—why eschew it—say *stuff*, *fudge*, or any other expletive ; but experimental facts, which are borne out by reason, and endorsed by a respectable name, ought not to be rejected merely because it has the *misfortune*, according to some individuals' views, to have been *printed*.

Your friend,

December, 1847.



(Fig. 1.) ENGLISH CART-HORSE.

TERMS DENOTING THE EXTERNAL PARTS OF THE HORSE.

THE above engraving represents an *English Cart-horse*, to which the highest prize of the Royal Agricultural Society was awarded. These horses are of a large size, distinguished for strength and endurance, and well adapted to slow, heavy draught.

The author of "Domestic Animals," (a new work noticed elsewhere in this number,) says: "The English Cart-horse has for a long time made up some of the best, heavy horses in this country, and late importations have refreshed the breed with additional choice specimens. The *Cleveland bay* has been introduced of late, and promises good carriage-horses from our well-spread, sizeable mares. The *Norfolk trotter Belfunder* was imported many years since, and with our high-bred mares, has produced many choice roadsters and trotters."

The terms denoting the external parts of the horse will be useful to many of our readers, and particularly interesting to young persons who are not familiar with the subject.

The Respectability of Agriculture.

AN elegant writer on the rural industry of Holland, in the last Edinburgh Review, says in relation to agriculture, "That the errors of practice are corrected, and causes of failure of crops made clear by the discoveries of modern chemistry. That by it alone the rocks and shoals that lie in the way of agricultural improvement are mapped out; deeper and more direct channels brought to light, and new methods suggested, by which not only are known ends to be attained, more completely and more economically than

before, but objects also realized, which have hitherto been considered unattainable.

"The doctrine, economy, composition, preparation, and skilful use of manures—how wonderfully have all these points been illustrated and developed in late years! What the plant consists of—how and with what substances it is fed—what the soil naturally contains—how it is to be improved, so that what is present in it may be made readily available to the plant, and what it lacks be in the best way supplied—where the kinds of food necessary to the plants are to be obtained most abundantly, and how applied most profitably to the soil—what effects climate, situation, and tillage exercise upon the fertility of the land, and upon the fertilizing virtues of whatever is laid upon or mixed with it. These, and hundreds of similar questions, all involving or suggesting peculiar modes of practice, are arising daily, where culture is prosecuted as an advancing art—and they are solved especially by chemical research. They are all included, therefore, under what we term the chemical division of agriculture.

"Let a farmer avail himself of this knowledge, and he is unconsciously raised into the intelligent cultivator of a most interesting branch of natural science."

A knowledge of chemistry sufficient to enable a farmer to work understandingly in Nature's laboratory, his own farm, requires only that he should study the nature of about thirteen substances.

W.

THE celebrated chestnut on Mt. *Ætna* is 163 feet in circumference, but evidently has 5 trunks

Hints for January.

THIS month is an important epoch in Time; but whether this old beldame, Earth, first begun to buzz round on this first day, sacred to the heathen god Janarius; or whether Adam on this day was first created and given power over all the beasts of the field, and the birds of the air, or whether it is entirely an assumption of our progenitors, we plead ignoramus. But our belief is that it is entirely arbitrary, and confess to a dread and dislike of the cold blasts of winter; that death and nonentity of all things beautiful and fair—that period of monotony—of snows, of frosts, of wind, and mud; the absence of leaf and life, of song, and the blessed invigorating rays of the glorious luminary of day. Had we, in the fulness of our human ignorance, the power of commencing time, of beginning our solar year, it would have been at a period when all things are as *verdant* as our precious *selves*—when nature in the redundant luxury of fruition makes this glorious world a paradise, a paragon of beauty and life. “But it is as it is, and can’t be no ’tiser.” So we must be content, and grub along with the best grace we may, on spare-rib and Jonny cake, leafless trees and cold toes. So let us turn over a new leaf; that is, all of us who are not so perfect as to be beyond amendment—for many of our old leaves are blotted and dirty, by bad acts, dogs-ears, and sins of omission and commission—and start *de novo* upon the improved knowledge and principles of a forever past year’s experience.

Look over your books, and see how you stand with the world, in the Debit and Credit scale. Pay thy creditor while thou art in his way, lest he send the sheriff, and he send thee to prison; verily thou shalt not depart until thou hast paid the utmost farthing. But, thanks to our liberal legislators, who go about the world like roaring lions, doing good, we are out of that scrape—we can’t be imprisoned for civil debt; but nevertheless, dear reader, if you can pay all of your indebtedness when you lay your head upon your pillow, an independent man, Santa Claus will fill your stocking and your store—nightmare and indigestion will vanish—your wife will be kind, your children obedient, and all mankind be brethren and friends.

Don’t smoke, drink cider, and dream away these long evenings. Life is short enough, and time flies fast enough, without the adventitious aid of provocatives. Settle accounts—make calculations and estimates for future use—read and digest good and profitable books—overhaul the children’s progress in school, and see that they make good use of that invaluable institution, the School Library—encourage social singing in the family, of sacred music and moral and patriotic sonnets, which is a much better recreation for young and old than the chequer-board, cards, &c.

Remember in laying down pork, that a little too much salt is just enough—that lean meat is a loss, and every ounce of bone decidedly injures the flavor of the meat. Rattle up the wood, and see that the wood house is supplied, for it is enough to make a horse break his bridle to see a woman out in the snow hacking wood, she does it so awkwardly.

Litter your stables and sheds freely, and if you have straw in plenty, cover the whole yard. Feed chaff in tubs or half barrels, or troughs; it saves half. If the milch cows fall off in milk with good feed, it is a sign they want salt—a gill every other day is none too much; but above all things, see that they get plenty of water, handily and when they want it. Look well and often to sheep; see that they keep up; a few oats or small quantity of corn are wonderful assistants.

The first good sleighing, get your plaster home. Take good care of all the house ashes, for one bushel on most land, is worth two of plaster—except perhaps for clover. House and paint the wagons, sleighs, plows, harrows, &c. One gallon of boiled oil, and six pounds of Venetian red, will save twenty-five dollars a year.

Make farm gates, and make fence with the bars. Get out your rails and stakes. Look to your potatoes—do your duty to God and man. So doing, kind reader, we wish you a Happy New Year.

Butter.—Experiments, &c.

BUTTER is one of the staple productions of our State, and every hint that serves to improve its quality or increase its quantity must be useful. According to the returns of the late census in 1845, the amount of butter made the same year was 79,501,733 lbs., which, at 12½ cts. per lb., and which is a fair average price, yields \$9,937,716—only \$2,114,877 less than the produce of the wheat crop of that year. This amount might be greatly increased, if more attention was paid to the manufacture, and a better article sent to market. As it now comes, not more than one half of the quantity is fit for the table, and some of it entirely unfit for any culinary purpose whatever. This should not be.

There are various methods of making butter, and there is certainly a vast difference in its quality. One cause of this difference may be ascribed to the herbage or food upon which the cows are fed, the breed of cows, or the season; but more generally in the management. Every one imagines their method best, and are too wise to learn.

Being very fond of good butter ourselves, many experiments were tried while residing on the farm, and the following rules were finally settled on:

First: Cleanliness must be strictly observed in every thing appertaining thereto, from the

milking of the cow to the packing of the butter. All the utensils must be sweet and free from any taint or smell.

Second: The milk must be immediately strained, on coming from the cow, into pans, and set for the cream to rise, as with some cows a separation commences even during the process of milking.

Third: The cream should be freed from milk and frequently stirred, particularly when additions are made, and a little salt added to keep it from curdling. In summer the cream must be churned as often as every other day. In winter it may stand for several days, if kept in a low temperature, say from 45 to 50° Fahrenheit.

To make the cream rise more perfectly, the temperature should be at 60°. A temperature below 35° will prevent the cream from separating or rising in any considerable quantity. The elevation of the temperature to 55° will cause the cream to rise in 30 hours; at 60°, in 24 hours; at 80°, in 12 or 15 hours.

Much depends upon the temperature of the cream when the churning is commenced. We found, from repeated experiments, that the cream, when churning is commenced, should not be under 55°. It will rise in churning from 5 to 10 degrees. In winter this temperature can easily be attained. In summer it cannot be attained without the aid of ice, or very cold well water. In Pennsylvania spring-houses are much used, where a constant stream of cool spring water passes through for the purpose of regulating the temperature.

For milk-pans we preferred tin, of the ordinary size, holding about six quarts, which were about three-fourths filled, which gave a depth of about 4 inches of milk. We tried broad shallow pans with the milk only about an inch deep, supposing the greater the surface exposed the greater the quantity of cream would rise, but such was not the fact.

The greatest quantity of cream from the least quantity of milk we ever obtained was by means of a water-bath, or double pans, as follows:—The pan into which the milk was strained, was four inches deep and flaring. Another made six inches deep and nearly straight in the sides and just large enough at the top to receive and embrace the upper pan, within half an inch of the top, and it should fit tight, so that little if any of the steam will escape. A small tube was soldered near the top of the under pan for the admission of hot water, and a small hole was made on the opposite side for the escape of air while pouring in the hot water. The first I had made was soldered together at the top, but we found it difficult to wash and dry; being separate, they can be washed and dried without difficulty.

The milk was strained into the upper pan and left at rest for 12 hours; then the same quantity of boiling water was introduced into the under

pan and suffered to stand 12 hours longer, when the cream was found perfectly separated and of such consistence that the whole might be lifted off by the finger and thumb.

The cream was churned immediately after skimming at a temperature of 58°. In this manner first quality of rich yellow butter was obtained in 15 minutes, in the month of March. Under the ordinary treatment, much less butter would have been obtained, and of a white color, insipid, without flavor and unfit for the table.— Besides it is a long and tedious operation to convert the cream into butter, while in the former process it occupies but a few moments.

Churning the milk is a much more laborious method, from the difficulty of keeping in motion such large quantities of fluid; but in this way it is said that a larger quantity of butter is obtained, and of a more delicate flavor.

The rising of the cream and churning is but a portion of the process for making good butter. There is some skill or art required in working it which cannot be described; but suffice to say, it is best done with a bowl and ladle, in a peculiar manner, to *press* out the milk—for unless the milk is thoroughly separated it is needless to expect good butter that will keep sweet any length of time. If not properly worked, and the milk thoroughly extracted, it is apt to be soft, spongy, or oily. In some dairies the hand is used instead of the ladle, but we protest against that, as the heat of the hand is injurious. In others the butter is washed with pure cold water as long as the water is rendered milky. We preferred not to wash it, believing that much of the aroma or high flavor was carried off by the water.

Albany, Dec., 1847. C. N. BEMENT.

Seedling Potatoes.

In the fall of 1846 I saved a small quantity of seed from the balls of the Mercer potato, which I sowed last spring, with the expectation of raising some new varieties of the potato. Owing to the early drouth, and some other untoward circumstances, the plants did not do well; and when I gathered them, (about the middle of October,) I found a small quantity of very small potatoes, most of them very much resembling the Mercers; and, what was quite unexpected, several of them were rotten, and several others decayed soon afterwards.

If this experiment proves anything, it proves the imperfection of the *seed* as well as of the *tuber*; or, at least, that fruit produced from the seed, i. e. seedling potatoes, are liable to rot as well as old varieties. I am therefore inclined to abandon all theories on the subject of the potato malady, except that which ascribes it to a kind of epidemic; or, as some have called it, the "Potato Cholera." H.

Fairport, Nov., 1847.

Liming and Brining Seed Wheat.

MESSRS. EDITORS:—I regret to see that your correspondent, N. SIMONS, doubts the benefit of salt and lime to prevent smut. I am so well grounded in my belief of its efficacy, that it is almost as daring an innovation on a well settled principle, as to attack my belief in holy things. As far as my experience goes, together with a multitude of others, it is a *specific* for that disease, and the only one that never fails, and when properly and faithfully applied, prevents, in all cases, its propagation. I have been in the constant use of the practice for ten years past, without even an appearance of smut, and one of my neighbors who constantly *limes and brines* his seed, proclaims, that he will give one dollar each for every smut head that can be found on his farm.

A very careful experiment was made in England, at great expense, under the patronage of the National Agricultural Society, in which was thoroughly tested all the popular notions in use as a preventive, with the foulest seed, and with clean seed thoroughly impregnated with the fungus known as smut, in which it was conclusively proved, that it was not only propagated by the foul seed, but that clean seed wet and rubbed with the fungus, also produced it abundantly.—The prevention that succeeded best was soaking in *stale urine*, and drying with quick lime; the next best was *strong brine and lime*. So that I cannot but suspect that there was something wanting in your correspondent's manner of preparing his seed, or it is one of those vicissitudes of nature, that sometime defeats an almost unerring rule.

A strong case in point happened, a few years since, under my own view and knowledge. A father and son-in-law had each a summer fallow, side by side, of equal quality, exposure, and soil. Their own seed being rather objectionable on account of foul seeds, they procured a load of 40 bushels from a distance of some 15 miles. On arriving at their homes they divided the bags according to their several wants. The father, on looking at his discovered that it was considerably smutted and immediately salted and brined it; the son-in-law was a disbeliever and omitted it. They both sowed the same day, and under precisely the same circumstances. On harvesting, one was clean and the other was foul. The father got 94 cents per bushel, while the son-in-law could only get offered 69 cents, it was so excessively smutted.

Now, Messrs. Editors, under these circumstances I cannot help having a strong and reliable belief in the efficacy as a preventive of smut, in the use of brine and lime.

December, 1847. L. B. LOVELAND.

REMEMBER the truism—that what is worth doing at all, is worth doing well.

Use of Green and Dry Wood — Loads — Loss.

SOME years ago I was led to ascertain the weight lost by wood in drying or seasoning. For this purpose I weighed green rock maple and beech, taken from the sapwood and from the heartwood, and from both together, and dried the specimens carefully in a warm oven, so as to be more free from water than common wood as ordinarily seasoned. The loss was from *one fourth to one third* of the weight. This loss was water. If the wood is burned while green, this water must be evaporated and thrown into the atmosphere, and a considerable part of the caloric or heat produced by the combustion of the wood must be in this way carried off, and be of no use in heating or warming.

To ascertain the caloric lost, we must find the weight of water in a cord of wood. In his careful experiments on the combustion of wood, Count RUMFORD proved that a cord of dry beech weighs about 2800 pounds, which must be *three fourths* of the weight of the *green* beech; that is, a cord of green beech must weigh 3700 lbs., or taking the mean between $\frac{3}{4}$ and $\frac{4}{4}$, must be more than 4900 pounds. In burning a cord of green beech, at least 1000 lbs. of water must be evaporated, and 1000 lbs. of water would fill three barrels of 32 ale gallons, or nearly two hogsheads of 63 gallons wine measure. The quantity of caloric lost in this way may be estimated in a rough way by the quantity of wood consumed in evaporating three barrels or nearly two hogsheads of water.

The farmer will at a glance see that a cord of green wood must form a load of nearly *two tons* in weight, and he will probably conclude that his team has a much greater load than is commonly supposed. Timber three feet in diameter will have a cord of solid wood in every *eighteen* feet, and if 36 feet long, will weigh above *five* tons.

It is also obvious that in drawing green wood, the farmer must load and transport three barrels of water in every cord, or 60 barrels in twenty cords, allowing that wood as commonly seasoned in a summer, has lost only two-thirds of its water. In drawing 100 cords of such dry wood there will be a saving, in loading and transporting, of 200 barrels of water. A barrel of water contains about five cubic feet, and weighs more than 300 pounds.

In the combustion of 20 cords of green wood, 60 barrels of water must be evaporated. Now, it takes six times as much heat to evaporate a pound of water, as to heat a pound from 50° of temperature to the boiling point.

The economy in using dry wood is well understood by many. These views give adequate reasons for it. Yet, it is to be feared, that many a farmer does not use proper care in drying and housing his wood.

C. D.



PORTRAIT OF A SAXON RAM. (Fig. 2.)

Saxon Sheep.

[From Morrell's American Shepherd.]

THE following history of the introduction of the Merinos into Saxony was written by the late Mr. HENRY D. GROVE, of Hoosic, N. Y., whose decease will long be lamented by those who knew his many private virtues, and by American agriculturists, who will not cease to pay the homage of gratitude to his memory, for the enthusiastic enterprise and zeal he continued to manifest to his latest moments to improve the fleece of his adopted country.

"In the year 1764, the Elector of Saxony obtained, by special negotiation through his ambassador, a grant from the King of Spain, for the purchase of one hundred ewes and one hundred rams, and a few surplus ones to keep that number good in case any should die during the passage. Accordingly one hundred and nineteen ewes and one hundred and ten rams were selected, principally from the Escorial flocks, then the king's private property, under the care and management of the monks belonging to the monastery of that name, and which were considered the finest sheep of the kingdom. They were shipped at Cadiz, in the month of May, 1765, accompanied by two Spaniards to take care of them. Five rams and three ewes died on the passage; the remainder arrived safely at the Elector's private domain at Stolpen. The Spanish shepherds remained with, and took care of the flock till the middle of the following year, when they took their departure for Spain. During the time, however, they remained in Saxony, they instructed Saxon shepherds in the care and management of sheep.

"In order the better to make this valuable acquisition benefit the country as much as possible, the Elector appointed a commission, to superintend and direct the general concerns of the sheep establishment, whose particular duty it was made, to spread all the information they could obtain on the care and management of sheep before the public, and who were especially instructed to dispose of the young rams at low prices, in order to induce the sheep-owners to improve their flocks. The tenants of the government domains were particularly favored, by giving them the preference in the purchase (which is kept up till this day,) while every possible care was taken to induce farmers generally to improve their breed of sheep throughout the Electorate. It was further required of the said commission to make a detailed report to the government, annually, on the condition of the sheep establishment, and at the same time

to submit a list of the persons who had received sheep from the national flock.

"During the first years these valuable animals found many opponents, and the improvement of the Spanish crop was very slow, mainly on account of the common prejudice of the farmers, which was heightened when the scab broke out among them, but afterwards they became convinced of their value, and the improvement was more rapid. But as most of the flocks in Spain are more or less affected by the scab, those transported to Saxony had to undergo the same ordeal. This, of course, heightened the prejudice of many against them, who pronounced them as entirely unfit for the country, their meat not eatable, or at best, of a miserable description; a notion, however, which soon exploded. The scab, however, caused great ravages among them before they were entirely cured of this disease.

"When the commissioners had exercised their functions ten years, the call for young rams was so great,—and in order the more rapidly to improve the breed of the country—that they resolved to petition the government to make another importation of ewes and rams from Spain, for which purpose the Elector obtained another grant from the King of Spain for three hundred rams and ewes. At the end of the year 1777, a gentleman by the name of Vaigt, manager of Count Eiorsidel's farms, who was considered one of the best judges of sheep at that day in Saxony, was provided with the necessary credentials and sent on that mission.—But, for some cause unknown, he selected only one hundred and ten two years old rams and ewes, and returned home with them. These were, however, of a very superior quality, selected from the best flocks of Leon, Escorial, Cavagnon, Negretti, Montarco, and Sorian, and exceeded greatly in beauty of form and quality of wool, the first importation. The cost of them was about forty six dollars per head.

"With this acquisition, the commissioners then planted the Merino Tree on the fruitful soil of Lohmen and Rennersdorf, from whence, in conjunction with Stolpen, many pure blood flocks derive their origin. And I owe it to truth to remark, that I have examined private flocks equal, if not superior, to the national flocks.

"It would lead me too far here, to detail the introduction of the Spanish and Saxony Merino into other parts of Germany, Prussia, Austria, &c. Suffice it to say, that many districts rival Saxony: Prussia, especially, fosters her flocks, not only by premiums, bestowed through her agricultural societies, but by that enlightened protection to domestic industry, which so truly characterizes that government."

The invaluable properties of pure Saxon wool, and the demand consequent for its manufacture into fabrics, the fineness of which the world has

never before produced, is the cause of the high value of the Saxon sheep, and their spread over so large a portion of Europe, and remote parts of the world. No other breeds are so highly prized on the Continent, and none which command such enormous prices. Mr. GROVE has stated, that while grade Saxons sell for three to fifteen dollars per head, individual rams of uncontaminated blood often bring from one hundred to two hundred and fifty six dollars; a flock was purchased, destined for Russia, a few years since, for which the average price paid exceeded five hundred dollars; and Mr. SPOONER states that, latterly, rams have been sold at the almost incredible prices of one hundred to near three hundred guineas per head. The cause of these extravagant prices has been stated; and so long as there exist grades in society, and the highest of these covet a wardrobe of the finest texture, the breed will continue to be appreciated, and sedulously cultivated.

[To be continued.]

Management of Merino Sheep.

[From Trans. of N. Y. State Ag. Society.]

DEAR SIR:—Your favor, requesting me to send you an article giving an account of my management of Merino sheep, was duly received, and I the more cheerfully comply, because I consider the wool growing business already a primary object of agriculture with very many of the farmers of many States, and have no doubt that it may become one of the chief objects of agriculture throughout the Northern and Western States. My management in the season for grass is, to have the lambs drop from about the 25th of April, to the 20th of May; to keep the sheep where they may be protected from storms when necessary, and where they may be often under the eye of the shepherd, so that any young lambs that may not be able to draw nourishment from their dams, may be assisted and saved. If the weather is warm, and the ewes in good condition, sometimes nearly an hundred per cent. of lambs may be raised; while at other times, in case of frequent storms of rain and snow, it requires the most vigorous effort on the part of the shepherd, in housing and protecting them. And notwithstanding all his efforts to save, he sometimes meets with some loss of young lambs. I think my average to be about 90 per cent. of lambs raised.

I usually shear early in June. I think that if breeding ewes are suffered to retain their long thick fleeces on their backs, much later than that time, the warm days will so affect them as to make them uncomfortable, and cause them to afford less milk for their young. Great care should be taken to give them shelter, in case of long or cold rains soon after shearing.

Dry lands for pastures, with frequent changes,

are very necessary, where only one flock is kept, and a certain amount of pasture is allotted them. It is much better so to arrange their pastures, if possible, as to be able to change them frequently, from one field to another, so that each in its turn may become fresh and green. Sheep do not require long feed, but need a sufficient quantity, with plenty of salt. When troubled with ticks, I dip the lambs in a decoction of tobacco, about eight or ten days after shearing. Lambs should be weaned as early as the middle of August; they should be put into a fresh pasture of tender grass, so far from the dams as not to hear each other, with one or more tame sheep, to aid in making them also tame. They should have plenty of salt, and be kept on the very best pastures until the season for feeding hay. They should, as well as all other sheep, have access to, or be driven under shelter, during the cold storms of autumn.—Ewes, after the lambs are taken from them, should have short pasture for a few days, say 10 or 12, in order to dry up their milk, and thus prepare them for good pastures, with which they should be supplied, together with plenty of salt, until the season for feeding hay. All other sheep should be kept on good dry pastures, with frequent changes and salt. With this treatment they will be likely to be sufficiently strong and fleshy to commence the winter.

The seasons for grass are also the time for pruning the flock, and of disposing of such individuals as are most objectionable as to fleece or form, after receiving a mark at the time of shearing, denoting the objection. This plan for raising the strength and condition of the sheep, during the seasons of grass, I think, will always be found to be much cheaper and better than that of letting them remain poor until winter, and then attempting to raise them by extra feed of hay and grain. At the commencement of winter, every sheep should have a place, and be in its place. I feed altogether in racks placed in barns that are closed on all sides, but so ventilated that when necessary the air may be made nearly equal with that of the field. I feed plenty of salt, and give them free access to water. I usually feed from six to eight quarts per day, to one hundred sheep, of corn, or its equal in peas, shorts, or some other grain, generally ground. I commence feeding grain at the same time that I do hay. I make no allowance for waste of hay, none at all. I cut my grass, if clover, (which I prefer,) when in bloom; other varieties tolerably green. I feed hay morning and evening, what they will eat, and no more; and usually grain at noon, also straw of whatever kind I have; the greater the variety the better; and what they leave in the racks affords sufficient litter to keep their apartments always dry and clean.

My pure blooded merino sheep, the pedigree of which may be traced to the hands of the im-

porters without any cross whatever with any other breed, and which are known and certified to be such by gentlemen of the highest respectability and unquestionable veracity, I keep and breed by themselves. I do this, in the first place, to keep this invaluable breed pure beyond a doubt, and secondly, because I consider the purity of blood the first requisite towards perfection of fleece. In selecting sheep for breeding, I have reference to fineness, evenness, length, thickness, and style of fleece, worn by a well formed animal. Any sheep whose pedigree cannot stand the ordeal, or about whose pedigree there is the least uncertainty, is placed among the grade sheep, which I also keep and breed by themselves, in flocks according to age, size, and condition. The smaller the number in the flock the better; but not to exceed one hundred. I use pure merino bucks. I also keep the sexes by themselves, and rarely meet with any loss of sheep, except by dogs or other accidents. Hon. S. LAWRENCE, of Lowell, is right in his opinion, (American Shepherd,) that a breed may be reared which will give four pounds of exquisitely fine wool to the fleece. My full blood merino ewes have never given so small an amount on the average; bucks, from five to eight pounds, and sometimes more with higher feed. Sheep should always be well tagged previous to turning to grass in the spring. Much pains should be taken in washing and shearing them; also in folding the fleeces, that they may be clean and whole.

Respectfully, yours,
Lysander, N. Y., 1847. J. L. RANDALL.

Save Your Fodder.

MESSRS. EDITORS—As there is no stock upon the farm probably that is so prone to run over and waste their fodder as sheep, I would suggest to my brother farmers a plan of making moveable racks to feed them in, which I find from experience, is a very great saving.

Take 4 posts 3 feet long, of 3 by 4 scantling; place them 2½ feet apart one way, 12 feet the other; take some rails, 2 by 4; frame them in, top and bottom, and pin them together; take a board 8 inches wide, nail round the bottom for a base. The lower rail should be framed in 7 inches from the bottom of the post, so that the base board will lap on to it one inch—or, in other words, prepare it in the same way you would to make a common picket fence. Then take your slats, 6 inches wide, nail them on, up and down, 6 inches apart, (let them run up as high as the top rail)—that will leave a space 6 inches wide for the sheep to get their heads in, which is sufficient.

One such rack, 12 feet long, will accommodate about 25 sheep. Any farmer will save hay enough, in one winter, to pay the expense of building them. After feeding is over in the

spring, they can be laid away under your shed, and will last a number of years. I would also recommend to every farmer moveable racks for foddering cattle, a drawing of which may be found in the February Genesee Farmer, for 1845, page 29.

A. W. TURNER.
Ontario, N. Y., Dec. 1847.

CUTTING FOOD FOR STOCK.—It has frequently been asked how cutting hay for stock adds to its nutritive qualities. It is precisely upon the same principle as cutting up meat fine and making a mince of it. There is more or less nutriment in the tougher pieces, and even gristle; if these are cut fine with the chopping knife, and nicely cooked and agreeably seasoned, the dish is eaten with peculiar relish, easily digests, and goes twice as far as in the ordinary method of taking meat in slices; for under such circumstances we reject all that is not tender, juicy, and particularly palatable. In cutting hay all the coarser parts and even straw are made agreeable to the taste of animals, especially if it be cut up and spiced with a little meal, shorts, or bran. Nor have they the power to reject any part when cut up, and as all is more or less nutritious the hay must go further; nor can it be pulled out and wasted as when fed loose. Another important consideration is, an animal can fill its stomach much more easily and readily on cut than uncut food, and can then lie down and ruminate, and rest, allowing the food full time to digest and distribute its strengthening qualities throughout the system, and renovate it for renewed exertions.—*Amer. Agriculturist.*

HORSE POWER.—We are frequently asked the question, what is understood by a *horse power*? and why that way of reckoning came to be adopted, and brought into general use?

Before the power of steam was generally known and applied to mechanical purposes horses were used to raise coal and other heavy bodies, and Mr. MOOTS, in his experiments, carefully compared the relative power of the different breeds of horses, and found its average equal to raising 33,000 pounds one foot per minute, or what is equivalent, to raise 330 pounds 100 feet, or 100 pounds 330 feet during that space of time, when attached to a lever or sweep of a given length. Thus, this afterwards became the standard of measuring power or force applied to mechanical purposes, and which is still retained in common use.—*Farmer & Mechanic.*

THE ENGLISH QUARTER, at which wheat is quoted in the English reports, is 560 pounds, or one-fourth of a ton gross weight of 2240 lbs. The English legal bushel is 70 lbs., and consequently 8 of those bushels is a *quarter*—equal to 9½ of our statute bushels of 60 lbs. Facts that should be known to all who wish to compare English prices with ours.

What are our N. Y. Farmers Doing?

GETTING RICH. If any man doubts it, let him go into a shop and see a farmer open his well stuffed pocket-book. If you are still incredulous, go to the bank with a check; there you will be told by the teller, that the whole circulation of the bank is in the farmers' pockets; that the wheat and barley checks have exhausted the till to the last rag; and that you must await the arrival of another package by the R. R. Express.

Go into a village store to buy a buffalo skin, and you will be told now, on this side of winter, that only one or two skins are left from several bales; all, all sold to farmers and their sons.

I was amused the other day in a neighbors' shop at the sale of a muff to a farmer's daughter. True to her self-denying education, she coveted only a low priced muff; but her father said she should have the finest and best, or none. The girl protested that a sixteen dollar muff was much too fine for her; but the lord of the soil was peremptory, and the poor girl, more frightened than pleased at the dangerous stride she was taking from the simple to the genteel, went off only half pleased with her purchase.

If it is asked, are farmers any more inclined to learn the theory of their art—to study it as a science, that furnishes facts, the knowledge of which both saves labor and makes it more available?—I reply, that there is daily evidence that the crust of egotism is broken, and that the self-sufficient part of our farmers begin to doubt their own infallibility. Many of them are thus early subscribing for agricultural papers with avidity, who but a few years since looked upon what they called "book farming" as an *errant* humbug.

At our Union School in this village there are already more than fifty sons and daughters of farmers, generally boarding scholars. As we daily see the same laughing girls pass along the side walks, we are struck with the progressive physical changes made by schooling and example; the rosy cheek of the country girl is soon blended with the carnation of the town; their rambling gait and noisy tread is now subdued by chastened discipline and improved taste, into a more graceful carriage. The farmers' boys now enjoy advantages of school learning which their father's knew not of. But the fathers who send their sons and daughters to school have the sensibility to see their own early privations, and the generosity to fit their own children to enjoy higher privileges and a more advanced civilization.

All these signs of the times proclaim the advent of a more honorable and respectable position in society for the farmer. If I mistake not, the day is coming when he will not leave his religion to his priest, his political interests to the lawyer legislator, or refer to his grandfather as his umpire in all his disputes on rural economy.

Waterloo, N. Y., Dec., 1847. S. W.

Dr. Underhill's Theory.—Drainage, &c.

THE theory of Dr. UNDERHILL, in the November number of the Farmer, that the *food of plants in the earth rises by the attraction of the soil in dry weather in the water thus raised from below towards the dryer surface*, is undoubtedly correct. Though the theory has not before been published, yet it has been taught in more than one place in the country, as founded on facts, though not known before to be adopted by others. We can not account for the growth of vegetables, cultivated and uncultivated, in dry weather, and when the moisture is so far exhausted from the surface, without adopting that theory. This is doubtless one of the economical principles in the adaptation of the earth and soil and seasons to the vegetable kingdom. It is probably for this reason in part that deep plowing proves advantageous, in putting the deeper and harder earth in a situation to send up in this way its nutritious elements to the roots nearer the surface.

It cannot but be true, however, that a portion of manures, and of any soluble diet of plants, should be carried off by the water that percolates the earth and then is discharged by some outlet. It is abundantly proved by the *under-drainage* of moist soils, now so extensively practiced in many parts of Europe. Portions of the *drainage* water have been analyzed, and found to contain the chief mineral elements that enter into the composition of vegetables, and are necessary to their proper constitution. The color of the water that runs off from the surface shows full well that the soluble parts of manure are in part carried off with it. The drainage from a barn-yard often proclaims the same fact in the more abundant crop of vegetables fertilized by it.

On this theory, too, the deeper covering of manure, effected by deep plowing, is rendered obvious. Profitable results must follow to the farmer.

C. D.

Model Farming in Ireland and Scotland.

THE annexed account of Agricultural Education in Ireland and Scotland I do not recollect to have seen in your valuable journal. At this time, when so much is said on the subject of education for farmers, it seems to me that it may prove interesting and useful to the readers of the Farmer. The examples here given show that lads from 12 to 15 years of age may receive instruction from *practical* and scientific men, which will prepare them for usefulness, and eventually result in permanent advantage to the agricultural interest. Improvements of this character would doubtless be in accordance with the feelings of the farmers, and would not "shock them by rash innovations," which would result from the employment of mere theorists, who in their studies may talk learnedly and wisely, it may be—but who,

never having themselves tested their theories, may produce much more cost than benefit to the agricultural interest in the present condition of our country. Elementary instruction is all important to the agricultural interest : J.

An important step has been made to promote agricultural education in Scotland. During the late agricultural meeting at Glasgow, a number of gentlemen, favorable to the establishment of elementary schools for the purpose, met in the Mechanic's Hall, when, besides gentlemen connected with the Agricultural Chemistry Association of Scotland, several strangers attended, including Lords Wallscourt, Clements, Ranelagh, Sir Robert Bateman, Sir K. Houston, and others. The Lord Justice Clerk took the chair, and Professor Johnstone explained the object of the meeting. Mr. Skilling, superintendent of a model farm at Glasnevin, near Dublin, under the Irish Board of Education, made a statement of the measures carried out by the board since 1838. There are now three thousand teachers under the board; there are seven training establishments to supply teachers, but there will shortly be twenty-five, and it is intended to plant one in every county of Ireland. Mr. Skilling described the plan pursued at the Glasnevin training school established in 1838. The labor is limited to spade husbandry, only the spade and wheel-barrow being used.

"The scholars, amounting to sixty or seventy, were lodged near the farm, and fed from it. After being engaged on the farm in the mornings of five days in the week, they went into the town for their literary education; but the whole of Saturday was appropriated to examinations.—They had a garden, and, in connection with it, a competent gardener, who lectured for a half hour in the morning; and he (Mr. Skilling) also lectured to the young men on agricultural subjects. At stated periods the teachers attended the farm, and witnessed every practical operation which was going on upon it. They observed every system of cropping, and got explanations on every subject with which they were acquainted; and the result was, that when they went away, at the end of the course, they were found to be vastly improved in the scientific knowledge of agriculture and its practical details. During the course, they were enabled to obtain a considerable knowledge of agriculture, chemistry, and geology; they also received practical information as to the principles of rotation in cropping, the cultivation of green crops, and the like. The practical errors which existed, as to the management of land, were also pointed out to them, such as the loss caused by bad fences, seeding beds with weeds, &c.; and, on the other hand, they were shown the advantages of draining, and opening, and turning the land, and the beneficial results of these on the general management."

This model farm had not only paid its rent, but returned a profit of £150 or £170 a year. Afterwards five boys, educated in a training school at Larne, in the north of Ireland were introduced and examined.

"They seemed to belong to the better class of peasantry, being clad in homely garbs, and they appeared to be from twelve to fourteen or fifteen years of age. They were examined in the first instance by Mr. Gibson, inspector of schools, on grammar, geography, and arithmetic, and scarcely a single question did they fail to answer correctly. They were then examined by professor Johnstone on the scientific branches, and by Mr. Finnie, of Swanton, and Mr. Alexander, of Southbar, on the practical departments of agriculture. Their acquaintance with these was delightful and astonishing. They detailed the chemical constitution of the soil, and the effect of manures, the land best fitted for green crops, the different kinds of grain crops, the dairy, and the system of rotation. Many of these subjects required considerable exercise of reflection; and, as a previous concert between themselves and the gentlemen by whom they were examined was out of the question, their acquirements seemed to take the meeting quite by surprise, at the same time that they afforded the utmost satisfaction, as evincing how much could be done by a proper system of training. The youths and their teachers retired amidst much applause."

Lord Clements bore testimony relative to the eagerness for instruction evinced by the peasantry near his property, in the wildest part of Connaught—men twenty years of age coming from a distance of many miles to attend the school. Mr. Ailee, the teacher of an agricultural school on Lady Noel Byron's property, at Ealing, reported the success of that establishment. There were at that moment five

hundred applicants for admission to the farm as boarders. Principal McFarlan advocated education in agriculture; but exhorted the meeting to carry on their improvements in accordance with the feelings of the people, not shocking their habits by rash innovations. He moved a resolution, that elementary instruction should be afforded to the rural population of Scotland. This was seconded by Mr. Alexander, and carried unanimously.

Col. Lindsay, of Bolearras, declared that the people of Scotland must make haste, least they should be behind in the progress of improvement.

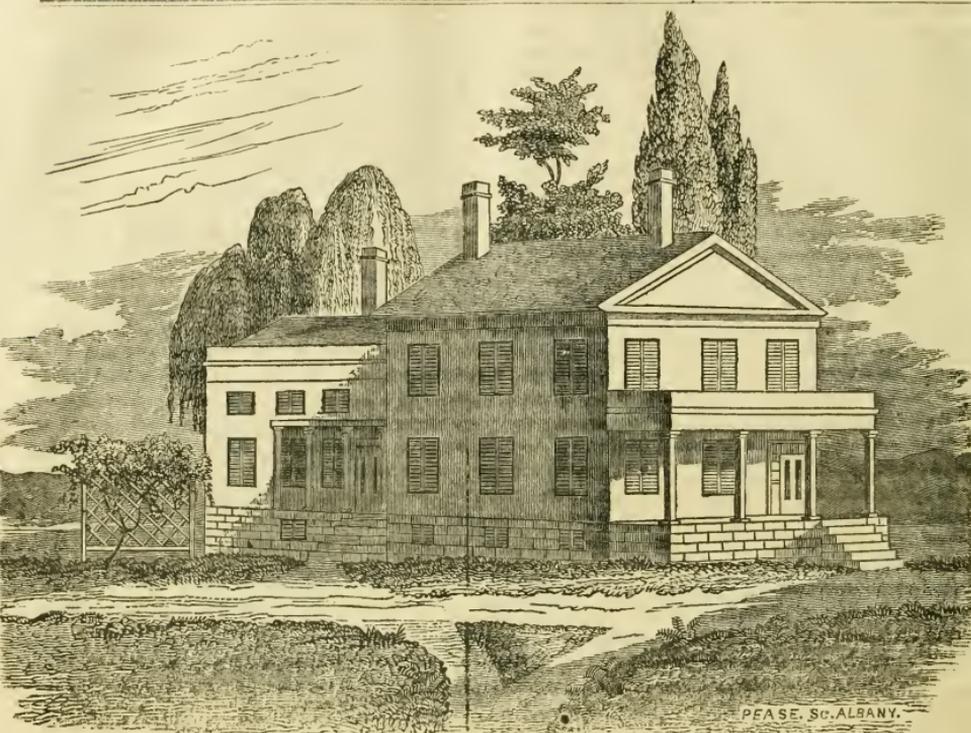
"He must congratulate these young men from Ireland on the admirable display they had made. To be a Scotsman was often found a recommendation in procuring employment elsewhere; but these young men from Ireland would soon show to Scotsmen that they were behind the Irish; and that, if they would maintain their high character for industry and intelligence, they must be instructed as they were. These lads from Ireland had evinced so much agricultural information, that, when ready for employment, they had only to ask, to obtain it. He was almost ashamed to admit his belief, that there was not a similar class of youths in Scotland who would answer the questions as these Irish lads had done."

Farmers' Clubs.

I was pleased to see a notice, in a late Farmer, of the doings of a Farmers' Club in a town in Wyoming county. The writer says a student from Dr. LEE's Wheatland School was lecturing on Agricultural Chemistry before the Club.—This is as it should be. Let a few young farmers who have commenced learning the rudiments of Agricultural Chemistry begin to explain the truths, and the "hopes that is in them," and a general interest is at once felt among those farmers' sons who, up to the time being, have known no higher or more intellectual amusement than attending a singing school or playing pawns.

In Fayette, in our own Seneca county, a Farmers' Club has been got up, which bids fair to give our Dutch friends a glimpse of what in the *alder deutsche land* is now doing to enable farmers to produce great crops from a long used soil. Nothing carries authority with it, to a German, that is not homogeneous. Speak to him of the English improvements in wheat growing, by which sixty bushels are grown on an acre, and he looks incredulous. But only name the advances made in his own *vater land*, in agricultural science, and his hitherto dull eye glistens. Speak to him the names of Mulder or Liebig, and the German sound thereof is a seal to the truth of your assertions.

Much credit is due to Mr. DELAFIELD, the President of the Seneca county Agricultural Society—to Messrs. FOSTER, JNO. JOHNSON, DR. OAKLEY, and others—all of the same town, for the efficient character of the Fayette Club. DR. OAKLEY, long a practical farmer, delivered a lecture before the Club on Saturday evening last, which has been described to be most interesting and instructive to every farmer living on our rich alluvial formations. It is said that several young men are preparing lectures, which are to be the subject of conversation and debate at the periodical meetings of the Club. Verily the school master is abroad among the farmers. S. W.



PERSPECTIVE VIEW OF FARM HOUSE. (FIG. 3.)

Design for a Farm House.

To DESIGN a farm house, in which beauty and utility shall combine, is not a difficult task ; but to design one that shall meet the wants, suit the taste, and come within the means of the *mass* of farmers, is quite another affair. There are many families who would consider a house complete if it afforded sufficient room for working and lodging, with the addition of a parlor. Others would think it very deficient if it did not contain, beside these, a library, dining room, nursery, and bathing room.

In the first place, the size of the family, and the kind and quantity of labor to be performed, should be taken into consideration. If there are a number of small children, it is very important that there should be a nursery upon the first floor, connected with a bathing room, and as near the dining room and kitchen as possible, that the mother may be spared all *unnecessary* steps in attending to her duties in these several departments. A small library is another indispensable.

If but a small dairy is kept, time and labor may be saved by having suitable rooms for milk and cheese, as it is very unpleasant passing to

and from a dairy house in bad weather. (The soil and situation must determine the place for a milk room ; few cellars are sufficiently dry and airy for that purpose.)

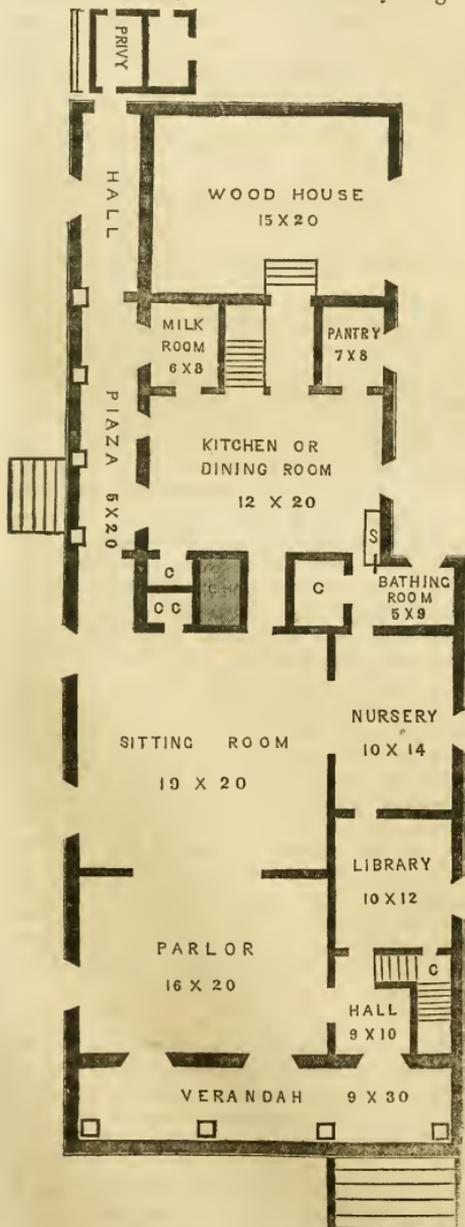
In this design I think I have secured all these conveniences without covering too much ground ; and the rooms are so arranged that they may be used to suit the tastes or meet the wants of the occupant, without abridging their convenience. If a spacious parlor is wanted, it can be had by throwing the two large rooms into one. The library and hall could be thrown together in the same way, whenever the former is not needed for more private purposes. I would also have folding doors for the nursery, for convenience in case of sickness, or to be thrown open in warm weather. The library, (if one is not desired) would make a very commodious bed room for children, as it communicates with the nursery.

As my main object has been to save labor, by securing convenience, the underground kitchen is intended *only* for washing and doing other heavy and dirty work for the farm. It could, however, be used as a common kitchen, if the room in the wing should be desired exclusively for a dining room.

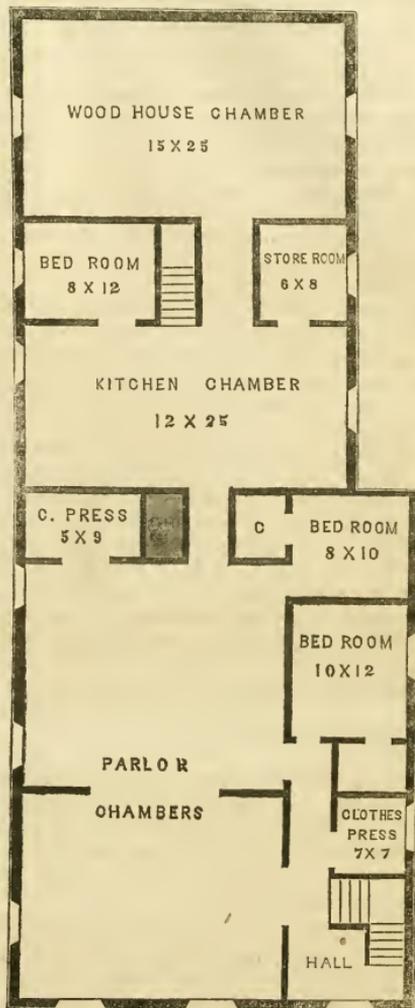
The house is designed for the use of a hot

air furnace, consequently there is but one *real* chimney; two would be sufficient for those who do not like this method of warming their houses, by placing stoves in the library and nursery.

The dimensions of the house are 30 feet by 40 for the main building, and 25 by 35 for the wing, which I think will afford all the room necessary for comfort and convenience in a farm house; and if some attention is paid to scenery and location, may be made sufficiently elegant



GROUND PLAN. (FIG. 4.)



SECOND STORY. (FIG. 5.)

to satisfy any one who is obliged to consult his interest as well as fancy. Some might object to it as being *too large*. For those the dimensions could be reduced to 24 by 34 for the main part, and 20 by 25 for the wing, without altering its construction. But it must be remembered, that the *farmer* does not buy his land by the foot, and that he needs a great deal of store room, which he will find much cheaper, as well as more convenient to have under one roof; and unless it is provided in the first place, unsightly additions will be made, or little store houses erected to mar and deface the beauty of the grounds.

I have allowed 10 feet parts for the lower rooms, and 8 for those above, which will make light airy chambers. I know modern taste is generally in favor of the low cottage, and their

outward appearance is certainly very agreeable and picturesque; but unless they are sufficiently spacious to contain all lodging rooms on the ground floor, I should protest against them; and I think all advocates in their favor would have abandoned their predilection, had they taken lodgings in one of their *little pretty snug* chambers, during the months of last July and August.

The cistern it will be seen, is directly beneath the bathing room, and the arch so near that, a little trouble will at all times secure both cold and warm water for bathing.

An aperture of 6 by 18 inches, should be made through the floor of the milk room, into the pantry in the cellar, which will keep the milk room cool, and ventilate both rooms; it should have a trap door to be closed when necessary.

A drain is constructed in a corner of the cellar kitchen, into which all dirty water and suds should be thrown to cleanse the back drain, and be saved in the manure yard. To ensure cleanliness in the drains, the back grounds should incline from the house. I have not made an estimate as to the expense; that would depend very much upon the materials used and the mode of finishing. The scenery and location should determine on which side of the house the hall should be, also the piazza in the wing.

MRS. JAMES M. ELLIS.

Onondaga Hill, Nov. 1847.

WE copy the preceding design and description from the last volume of the Transactions of the N. Y. State Agricultural Society. In preference to any remarks of our own, relative to the design, we annex the Report of the Committee on Farm Houses:

THE committee on designs for farm houses, report, that only one design for a premium has been made, and this was by a lady. The plan is very excellent, and we award the first premium, \$15, to Mrs. JAS. M. ELLIS, its designer; with great confidence, that in so doing, we are recommending to the farmer, who is about to decide upon a plan for his dwelling, one that is not only very commodious and tasty, but in view of its perfection in every respect, is economical. Durability is an important consideration, and heavy bills for repairs, coming often, are to be guarded against. Modern fashion appears to favor projecting gables, vallies in the roof, and bay windows, and in many cases cornices are embellished with hanging ornaments that soon decay and fall off. These things are not suited to the farmer. A good house, well adapted to the wants of a large household, in which is to be performed all the various operations of cooking, washing, making butter and cheese, &c., &c., and which, at the same time provides for the elegancies of life, will cost a large sum, without resorting to expensive ornamenting.

The farmer's house should be large, and should convey to the observer, the idea of strength and durability; the justice of its proportions, rather than its ornaments, constituting its beauty. We think Mrs. Ellis has shown good taste, within the limits of proper expenditure, and in every particular has come up to our views of a first rate farm house; and who but a lady, with a cultivated mind, and who is herself the mistress of a house, and the mother of a family, should know what is demanded for the comfort of such an establishment? The communication accompanying the drawing, contains the views of the designer, and we think them so just, that we ask that it may be published.

Respectfully submitted,

GEORGE GEDDES,
J. McD MCINTYRE, } Committee.
E. MACK,

The Farmer for Agricultural Societies.

MESSRS. EDITORS:—As the time is approaching for Agricultural Societies to make out their premium lists, allow me to suggest, through its pages, the GENESEE FARMER as a very suitable publication to be included among such premiums. I think that all our societies should make it a point to offer a large proportion of agricultural books and papers as premiums; and among the latter I know of no one, taking *size, contents, and price* into the account, better adapted to the purpose than the Farmer. This suggestion, I think, is especially worthy the attention of the officers and members of our various societies in Western and Central New York.

Another idea. In some of the Eastern States the Agricultural Societies furnish each member with a copy of an agricultural paper, on payment of annual dues. By ordering a large number of the publisher, the papers are obtained at the lowest price; and hence members receive a paper for one year, aside from the benefit of membership, by paying only a trifle over its subscription price. This plan is found to work well, and aids the societies as well as benefits their members. Why may not this same course be adopted advantageously by our New York Agricultural Societies and Farmer's Clubs? I think it a good one, and at least worthy of consideration. Is it not also a good plan to adopt in organizing and sustaining Farmer's Clubs?

Ontario Co., Dec., 1847. AGRICOLA.

REMARKS.—Many of our Western N. York Agricultural Societies include volumes of the Genesee Farmer and other journals among their premiums. We have always been of the opinion, before and since our connection with the agricultural press, that the plan of furnishing each member of societies and clubs with a volume of some good agricultural journal, would prove mutually beneficial to all parties.

EDITOR'S TABLE.

TO CORRESPONDENTS.—Communications have been received, during the past month, from C. N. Beiment, S. W., C. D., * L. B. Loveland, J., An English Farmer's Wife, A. W. Turner, Agricola, W., Yates Co. Ag. Society, Joseph Carpenter, Wm. Shelton, Milo Ingalsbe, A. Huidekoper, Montgomery Arnold, H. Hipple, P. Parks, Adams, J. S., W. H. H., M. J. Grove, A. Eaton, L. P. C., Mortimer Hopkins, H. C. W., and T. W.

Several communications and inquiries were received too late for attention this month;—and others, the publication of which would be unseasonable at this time, are on file for insertion in future numbers.

ARTICLES for publication, or inquiries, when sent with remittances for the Farmer, should be written on a part of the sheet separate from the business matter. Our friends will oblige us by bearing this in mind, and so arranging their letters that each portion may be filed separately.

"DOMESTIC ANIMALS."—This is the title of a new work, by R. L. ALLEN, Esq., author of "American Agriculture," &c., a copy of which we have just received from the publisher. Not having examined it particularly, we can only say, now, that it gives the history of various domestic animals—directions for their management, breeding, &c.—their diseases and remedies. It is handsomely got up, and illustrated with numerous engravings. Published by C. M. SAXTON, New York. For sale by HAMILTON, Rochester. Price 75 cents.

PHYSICAL EDUCATION AND MEDICAL TREATMENT OF CHILDREN: For the use of Families and Teachers. By M. M. RODGERS, M. D.

We are indebted to the author for a copy of this work. A medical friend in whose opinion we have much confidence, pronounces it an excellent treatise. Unlike most other medical books, it is written in a style which renders the author's statements and directions intelligible to ordinary readers. It is a neat little volume, illustrated with handsome and appropriate engravings from the graver of Mr. J. MILLER. Published and for sale by E. DARROW, corner of Main and St. Paul streets, Rochester.

AGRICULTURAL JOURNALS.—The various monthlies, for December, have been received. Those published in this State—"The Farmer's Library and Monthly Journal of Agriculture," "The Cultivator," and "American Agriculturist"—are unusually interesting. The Farmer & Mechanic, an excellent weekly, which reaches us with unflinching punctuality, is also well filled. Most of our cotemporaries in other States likewise close the year in a spirited manner. We wish all, far and near, abundant success—and trust that each will receive increased patronage with the new year. No farmer should be without at least one agricultural paper, and many can afford to take several. The rapid increase of the readers of agricultural books and papers argues well for improvement and intelligence among American Farmers. Let the conductors of the agricultural press but do their DUTY, and the farmers THEIRS, and an incalculable amount of good will be accomplished by agricultural publications during the year 1848.

KNICKERBOCKER MAGAZINE.—This venerable monthly occupies the highest rank among American literary periodicals. The December number which closes the thirtieth volume, fully sustains the high reputation of the work. The new volume, commencing this month, is to be issued in an entirely new dress. We commend the Knickerbocker to all who prefer substantial and sensible literary matter to the "love and murder" trash of a large majority of our literary journals. Terms—\$5 per annum. Published by JOHN ALLEN, New York.

GODEY'S LADY'S BOOK.—We have received the January number of this beautiful and popular Magazine—being the first of the 36th volume. The illustrations are numerous and superior. It contains several engravings illustrative of fancy knitting, netting, &c., particularly interesting to the ladies. The literary department is well sustained. Edited by Mrs. S. J. HALE. Published by L. A. GODEY, Philadelphia—\$3 per annum.

THE ANNUAL MEETING of the N. Y. State Agricultural Society is to be held in Albany, on the 19th of this month. Professor NORTON, of Yale College, is to deliver the annual address, which we doubt not will be able and interesting.

SAXONY SHEEP.—ERASTUS HURD, Esq., of Middleport, Niagara County, has recently obtained a choice lot of pure blood Saxonic. After spending several weeks in examining different flocks in New York and Vermont, he purchased 100 ewes of JNO. BARNET, of Hoosick, N. Y.—and obtained 18 bucks of DANIEL ROGERS, of the same place. From a hasty examination of these sheep, we think them superior to any flock of Saxonic we ever before saw in this section of the country. We congratulate the farmers of Western New York upon so valuable an accession to their "flocks and herds."

Mr. ROGERS, from whom the bucks were obtained, received the highest premium (a Gold Medal,) at the late Fair of the American Institute, for the best Saxony fleece.

LOOK TO THE WEIGHT.—Caution to Farmers.—In selling grain, pork, or live animals by weight, farmers should see that they are weighed correctly. We are assured that many of the platform scales now in use are imperfect. As an example—an intelligent farmer of Wheatland, Mr. GEO. SHAEFFER, while in this market a few days since, saw a hog weighed imperfectly on a patent scale and sold by such weight. Thinking the weight wrong, he informed the parties interested that the scales were not correct, or not properly used—and, in justice to the owner, insisted upon placing the porker upon the center of the platform. On doing this the hog weighed *thirty-five pounds more* than had been counted in selling!

Another farmer, of Brockport, mentions a similar mistake as having come under his observation, in weighing wheat—by which the sellers loss was about one bushel in every ten. In view of these facts we would caution farmers to look well to the weight in similar cases, and thus avoid loss.

We are indebted to its author for a copy of an excellent address delivered by B. P. JOHNSON, Esq., before the Greene County Agricultural Society, at its late Annual Fair. This address is one of the best we have read for a long time.—We shall endeavor to give some extracts from it in a future number.

We learn from the Rome Sentinel that the farmers of Clinton and vicinity, (Oneida county,) have organized a Farmer's Club for the promotion of Agriculture, Horticulture, Rural Architecture, and Landscape Gardening. The meetings are held monthly. We wish similar clubs were in operation in every section of the country.

A LARGE TURNIP.—The one shown us, a few days since by Mr. ERASTUS HARRIS, of York. It measured $37\frac{1}{4}$ inches in circumference, and weighed 16 $\frac{1}{2}$ pounds. Rather large for a common field (purple top) turnip—grown in the ordinary manner, with no extra culture.

EXTENSIVE BRICK YARD.—Mr. PETER HUBBELL, of Charlestown, Mass., manufactures yearly from fifteen to twenty millions of bricks for the Boston market. He has thirty machines in operation for moulding, (the invention of Mr. A. HALL, of Perth Amboy, N. J.,) and with each machine makes from ten to twelve thousand bricks per day. In three years the repairs of these thirty machines have not cost more than ten dollars. This is said to be the largest brick-yard in the world.

CORRECTION.—In an article, published in our December number, (page 183,) under the heading of "Bloody Milk, &c.," our printer made a slight mistake. The third paragraph states that "cattle that eat the madder root have their entire horns dyed a bright red"—but the author said, or wrote, "their entire *bones*," &c. We assure our esteemed correspondent that we will endeavor to avoid coloring the horns, in future.

THIS NUMBER OF THE FARMER contains 28 pages of reading matter—four more than we promised. Of its contents the reader will judge for himself. We may be permitted to remark, however, that the number contains several highly valuable articles from correspondents—while the illustrations given exhibit the skill of our engraver.

BACK VOLUMES of the Transactions of the N. Y. State Ag. Society may be obtained, in this city, of JOSEPH ALLEN, Esq. The price, we believe, is \$1.25 per volume.

THE weather, in this section, has been very unfavorable for business during most of the past month. The first part of the month was rainy, and the roads almost impassable.—About the 20th we had sleighing for a few days—but the snow has disappeared, and the roads are again "muddy exceedingly."

Turning over a New Leaf.

THE November number of the "American Journal of Agriculture and Science" contains a very interesting and graphic sketch under the above heading. As the subject of reform is always "in order" on the birth of a New Year, perhaps we cannot better occupy a page or two of the Farmer than by giving the Journal's article. It happily blends the "romance of rural life" with useful suggestions. We think its perusal will afford amusement to many, both old and young—while some kind easy souls may be induced to adopt a more prompt and thorough system in the management of their farming operations. Here it is.—Listen :

"ARE you going to get in that corn to-day?" said John Hendricks to Mr. Butler, the farmer for whom he was at work by the month.

"Yes," said Mr. Butler, "we must try to get it in, in course of the day."

"If it is to be got in to-day, we must go about it this morning. It is time it was in, it is half destroyed now.—Benton's cattle were in again last night."

"I know they were. Here Saul, do you run over to Benton's, and tell him his cattle lay in our corn last night, and ask him to take care of them."

"And he will tell me to tell you to put up the fence," said Saul.

"The fence ought to be seen to. Hendricks you bring me the axe, and I'll go now and tackle it up a little," said Mr. B.

Hendricks went for the axe, and having searched in vain for it, returned to Mr. Butler, who was trying to set up a wash tub, which had fallen to pieces in despair of the fulfilment of Mr. Butler's promise, that he would get a hoop to-morrow."

"I can't find the axe; I would as soon undertake to make a thing as to find it in this place. It seems to be a rule with every one who uses a tool here to put it where it can't be found no how. If it was left where it was used last, a body might find something once in a while, but as it is, 'tis about impossible. I expect the barn will be among the missing some day."

"Never mind," said Mr. Butler, in a conciliating tone, "the axe will turn up in the course of the day. You see if you can set these staves up, I want to step over and see if Holmes can come and cut that buckwheat to-day."

Hendricks did as he was requested. He set up the staves and looked round for the hoop to confine them in place.—"I wonder," said he, "if I am expected to sit here and hold these in place all day. There is no hoop between here and the blacksmith's, I dare say. I have done harder work than sitting and doing nothing, and more profitable work for my employer; but I must obey orders. Benton's cows are to have another pull at that corn, I see plainly."

In due time Mr. Benton came, and Mr. Holmes with him, and Holmes was ready to go at the buckwheat as soon as he had ground up his new scythe, and spliced one of the fingers of his cradle.

"You have got them set up, have you?"

"Yes, but what is a going to hold them up when I let go of them?"

"Here is a hoop," said Mr. B. "I forgot to tell you about it."

Hendricks took it, and while Butler and Holmes were grinding the scythe he put it on and drove it down.—

"There," said he, "that's the first job I've known to be finished on this ground since I came here three months ago." At this moment Saul returned. "Well, Saul, what's the news?"

"Benton says Hyde's cattle are in the lower meadow."

"Very likely; I saw a red squirrel running towards the fence, and I thought it likely he would get on it and throw it down. If they find the potatoes, it will save some labor."

"What about the potatoes?" said Mr. Butler coming up at that moment.

"Hyde's cows are taking care of them," said Hendricks.

"You run and drive them out, Saul, and find out where

they got in, and put up the fence a little, just enough to turn them for the present, I'll see to it in a day or two.—Hendricks, you harness the horses, we will try to get a load of that corn in before dinner."

In about half an hour, during which time Messrs. Butler and Holmes had been employed in splicing the cradle finger, Hendricks came to Butler, and asked, "where is the harness for the off horse?"

"Oh, I let Finkle have it last night. I didn't know as we should need it to-day. Isn't there something else you can do to-day?"

"Yes, there is enough to do, if a body could ever get at it. There he comes with the harness. You are sure you haven't lost any of the linch pins?"

"I guess not."

"Well, it may be," said Hendricks to himself, "that some of that corn will be saved after all."

The reader has had a specimen of the mode of proceeding on Mr. Butler's farm, and will be enabled to form a pretty shrewd guess why it was that Mr. Butler, who had an excellent farm and who was always busy about something, was not "deemed and taken" by his neighbors to be a fore-handed man.

Hendricks, with the aid of Saul, succeeded in getting in most of the corn to which allusion has been made, so that Mr. Benton's cows came home the next day, which was the Sabbath, much less well filled than ordinary.

On Monday morning Hendricks was out by daylight, and at work when Saul made his appearance, which was not till he had given the sun due precedence. Hendricks informed him that a new leaf was to be turned over. "Things about the place are going to be done this week as they ought to be done," said he.

"I'm agreed" said Saul, who was quite willing to work, but wished very much to be relieved from the responsibility of directing his own movements.

"Mr. Butler," said John after breakfast, "has that axe come to light yet?"

"I haven't seen it."

"Here it is," said Lizzy, "I found it in the grass in the garden."

"And took care of it like a sensible body," said John, taking the axe from her hand, "Thankee."

The compliment was not a very polished one, but it brought over her beautiful countenance a blush which she hastened into the pantry to conceal.

"Now," said he, "if you and Saul will go at those potatoes, I will put that fence in a shape that will keep Hyde's cattle out of that meadow for some time I guess."

"Hyde ought to put up part of it," said Butler.

"I know he had, but he will never do it; you might as well try to get a hen to do a sum in the rule of three, as to get him to do anything worth while. Come let us have all those potatoes in, and that fence up before sunset."

"If we get all the potatoes in, it is not much matter about the fence."

"What is the reason it isn't?" Who wants the cattle making mortar of the meadow? Come on."

They got into the wagon which had been brought to the door before breakfast, and Hendricks drove off at a rapid rate, making a great clattering of the loose boards in the wagon, and rendering it somewhat difficult for Mr. Butler and Saul to keep themselves, or rather the board on which they sat, in place.

"What has got into John?" said Mrs. Butler, pausing from her efforts over the butter bowl, and watching the rapidly disappearing wagon.

"I don't know," said Lizzy, softly. Now she had better not have made any reply to the question, for it was not asked with any expectation of a reply. I say she had better not have answered it, for I am not sure but that she strained the truth a little in so doing. Some passages which had taken place between John and herself as they came home from meeting together on Sabbath evening, and sat in the "front room" together, till the roosters crowed, were in fact the causes of the turning over of the new leaf in the management of the farm.

Before night the fence was put up, in the most substantial manner, and the potatoes all put in the cellar.

The next morning when they were all at breakfast, John inquired, "Is Holmes to work for you to-day?"

"He promised to come and do what he could towards finishing the buckwheat. He thinks it will take him a day and a half to finish cradling it."

"Well, you don't want him to-day. Send the cradle home, and tell him it is cradled."

"Cradled! who did it?" "I did it."

"When?" "This morning."

The look of astonishment and admiration with which Mr. Butler regarded John, was not unobserved by Lizzy, and led her to meditate on the propriety of another retreat to the pantry. She adopted, however, the expedient of holding a coffee cup to her lips for a very unnecessary length of time.

"What shall we go at to-day after we have shocked up the buckwheat?" said Hendricks.

"I don't know; what do you think we had best do?"

"Have the rye in where we took the corn off."

"Well, we will go at that, then."

In like manner John's advice was asked daily and followed; so that before winter set in, the farm presented a very different aspect from that which it usually wore at that time. Commonly, some potatoes were frozen up, and some portion of the intended sowing left undone, in consequence of the frost overtaking the plow. But now, every crop was secured, the grain sown, and up quite green, the house banked, and quite a "string of stone wall" made. That the corn was all husked in season, might have been owing to the fact, that the turning over the new leaf had inspired the family with such a spirit of industry, that Lizzy had joined them in their evening huskings, and took her seat near John, that he might break off such of the ears as were beyond her strength. It happened on one or two occasions that these two continued their labors long after Saul and his father had gone to bed.

In the course of time it came to this, that Mr. Butler used to ask John what he was a going to do, as though his right to direct operations was unquestionable. For example, one morning John had a stone boat, with several crow bars in it, at the door.

"What are you going to do?" said Mr. Butler.

"I am going to build a stone wall, on the east side of the meadow. The ground is high enough there for a wall to stand, and there are stone enough on the knoll there which ought to come out to make it."

Mr. Butler made no reply, but together with Saul went to digging stone.

"This looks like a new farm," said Mr. George one day to his neighbor, as they rode by Mr. Butler's house.

"Yes," replied his neighbor, "there is a new hand at the bellows."

"Does Hendricks work it on shares?"

"No, he works by the month."

"Does he? What makes him drive on so?"

"I don't know for certain, but I guess Butler's daughter is at the bottom of it."

When winter set in, Saul, though he was a good boy to work, felt a desire to have a little more furniture in the upper story, asked leave to go to the Center to school. "Uncle Zeb says he will board me if I'll come."

"I don't see how I can spare you. We must build in the spring, and we have all the timber to get out, and logs to get to the mill," said Mr. Butler.

Saul looked rather down hearted.

"You can go," said John, who was sitting before the blazing fire, between Saul and Lizzy. "I'm a going to stay, that is, if they will let me. I tell you what it is, turning to Mr. Butler, if you will give me *this critter*, laying his hand on Lizzy's arm, I'll stay and work for you at any lay you choose."

Lizzy turned very red, but neither ran for the pantry, or pushed away John's hand.

"Well," said Mr. Butler, who had recently seen what things were coming to, "that must be pretty much as you and she can agree, musn't it mother?"

"I guess so," said Mrs. Butler, dropping several stitches in a stocking she was knitting for John.

"There won't be much difficulty about it then, I guess," said John. "Saul must go to school. He may go to college if he has a mind. I can get his support out of the farm without hurting any body, I reckon." Then turning to Lizzy, he said, "The road is good, and Jack wants to stir himself, and I want to go over to mother's. Suppose you just hop into the wagon and ride over with me."

Lizzy looked towards her mother, and rose up and went to "put on her things." The horse was soon at the door, and Lizzy was soon in the wagon, and the wagon was soon at John's mother's, and John's mother was soon introduced to Lizzy, who soon became her daughter-in-law, that is to say, on New Year's eve.

Yates County Agricultural Society.

THE annexed preamble and resolutions, adopted at a recent meeting of the Yates Co. Agricultural Society, embody some excellent ideas and suggestions:

WHEREAS, it is conceded by all classes that the science of agriculture is, of all subjects, the most interesting, and, indeed, absolutely necessary to the existence of the human family; therefore it should claim the greater share of their attention. It is a self-evident truth that in union there is strength, and that by associated action, the standard of agriculture may be very much advanced among us, not only in theory, but in attaining to more perfect and certain results in practical farming than we have yet aspired to.— Knowledge, the motive power of every science, must be brought to bear upon this subject. This can only be done in the science of agriculture by experiments—these must be extensive, and carefully and accurately compared until effects can be traced to their causes. Agricultural knowledge can in no way be so well disseminated and experiments so well compared as by agricultural societies.— Therefore,

Resolved, That it is the opinion of this meeting, that the Yates County Agricultural Society should, as a matter of vital interest to us, be sustained; and that it would become a large proportion of the farmers of Yates, to throw aside the appellation, so often used by them, of "your society," and make it *their own*, lending it their cordial support.

Resolved, That we consider it advisable to hold our next annual Fair two days—the first to be set apart for the exhibition of Stock, Farm Implements, &c., and, upon which all articles may be brought in; the last for the plowing match, the hearing of the reports of committees, the address, &c. The intervening evening may be profitably spent in holding an agricultural talk.

Resolved, That at each annual meeting, members be appointed to attend the Agricultural Fairs of the adjoining counties, two members to each, in order to collect such information as may be for the benefit of this Society.

Resolved, That our neighbors of the adjoining counties be requested to visit us at our Fair; and to extend their invitation to counties adjoining them, so that a chain may be formed between the several agricultural societies of the State.

Resolved, That we request the Legislature to continue the appropriations to the several Agricultural Societies throughout the State.

Resolved, That the above Preamble and Resolutions be published in the county papers, the Genesee Farmer, and Cultivator.

CHARLES LEE, President.
ARTEMUS BIGELOW, Secretary.

Bilious Colic.

THE following recipe we are assured is a certain remedy for that distressing disease, as it has never been known to fail in a single instance:

"Take, say a fourth of a pound, of chewing tobacco, tear it well to pieces, and put it into a vessel and pour on to it a sufficiency of boiling water to moisten and swell the leaves, then lay it on a cloth and apply it to the seat of the pain." Relief will be obtained in less than fifteen minutes.—*Maine Farmer.*

Our friend Dr. HOLMES should be cautious how he encourages the application of tobacco juice to the bowels, or other parts of the human system. We have used it to aid in the reduction of a strangulated hernia, when the absorption of the poison through the skin over the abdomen produced bad symptoms. Medical books abound in cases where persons have suffered severely by the absorption of a decoction of "chewing tobacco." It is a powerful anodyne—allayer of pain—but should be used with caution.



HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

The New Year.

"We take no note of time but from its loss."

THE advent of a *new year* can hardly fail to incline the most unreflecting minds, even in these busy "progressive" days, to moralize—to review the past, and plan and project for the future. It were well indeed if every man, whatever might be his situation or pursuit in life, would do so. The present is never truly estimated. In the past, only, can we see things in their proper light: "we take no note of time but from its loss." So we should pause a moment now, at the commencement of a new year, and make a sort of retrospect of the one we have just terminated.

In relation to Horticultural matters, to which alone it is our purpose to allude here, let us ask ourselves if we have taken our proper part in the great work of improvement that is going on around us, with such astonishing rapidity and happy results. Whether we have, as far as our means permitted us, enriched our Gardens and Orchards with the most valuable fruits that have been brought to notice—added to our homes the comforts and embellishments of trees, shrubs, and flowers—availed ourselves of the vast improvements in the modern construction of implements and modes of culture; or whether we have comparatively neglected all these things—planted one tree where we should have planted twenty—allowed weeds to grow up around our doors and windows, instead of flowers—and without reading or study rolled along, with time, in our old way, with our old notions and prejudices buckled tightly on, like a coat of mail, preventing a new idea from entering our head, or our recognising in any improvement but an "innovation" or a "humbug."

These may not prove unprofitable reflections to any of us. We rejoice that there are but a few, comparatively, that have been altogether dead to progress in rural matters; but there is yet a vast number who have done much less than

they ought to have done, or might be expected of them. The aggregate advancement which this country has made, within a short period, astonishes the world; but when we come to investigate the subject somewhat in detail, we cannot avoid the conclusion that there is yet much to be done—that we have in fact but started. Sitting at home and reading the accounts of Agricultural and Horticultural societies, and the progress of gardening in every part of the country, we are sometimes half inclined to imagine the whole country a garden, as it were, where every dwelling had its fruit and its flower gardens; but let us go abroad into the country among the farmers and we will find, at this day, the largest proportion without either. We have traveled through a portion of some eight or ten States of the Union the past summer, in the best and worst cultivated portions, and we know this to be the case throughout.

The want of *leisure* is urged in a multitude of cases; but a farmer might as well say that he had no leisure to cultivate his farm, as his orchard or garden—both are indispensable to comfortable life, and are highly remunerative; and as to *ornament*, a few days work during the season with a little taste would plant and keep a few trees, shrubs, and flowers around a dwelling that would make it a paradise in comparison. A want of *knowledge* is urged by thousands, and why? Are books scarce and dear? In no country in the world are they so cheap or plenty.

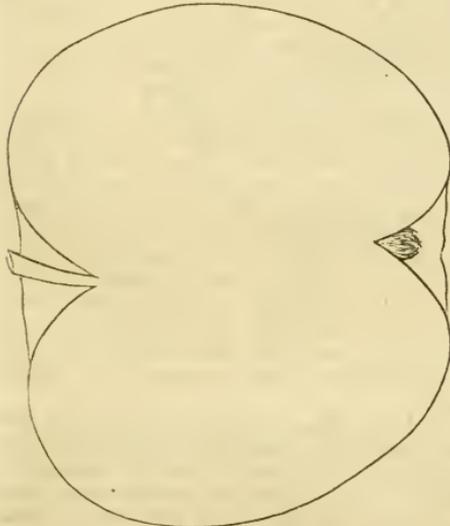
We allude to these things now, not in a spirit of fault finding, or to depreciate the progress we have made and are making. By no means.—We rejoice that such a spirit of improvement pervades the community in relation to gardening; but we wish to see that spirit manifested more generally out from cities and villages among the actual tillers of the soil. If the merchant, artisan, or laborer, confined in their offices or workshops from 6 A. M. to 6 P. M., can have their fruit gardens and tasteful "door yards," why can not the farmer, whose business is with the soil and its products, and who has all the facilities, and occur to possess the requisite knowledge, for the culture of Fruits and Flowers?

Now, at the commencement of the new year let us urge upon young farmers more particularly, whose habits, tastes, and opinions are not completely fixed and unchangeable—who are full of hope and energy, and should aim at keeping pace with the spirit of their age and country—to be active in these matters. With the study of the science and practice of Agriculture, their profession, let them mingle the science and art of gardening, that their homes may be homes of comfort and taste, and the aggregate wealth and prosperity of their country augmented, and its surface beautified.

If the counsel be good, no matter who gave it.

Norton's Melon Apple.

This delicious winter apple, that now begins to attract some attention, was noticed and described by ELLWANGER & BARRY, of Rochester, three years ago, in the Albany Cultivator; also in the Boston Cultivator of same date—the same period at which the "Northern Spy" was first publicly noticed. We copy the description of the "Melon" then given, which, after five years acquaintance with the fruit, with abundant opportunity of seeing and using it every year, we think, is perfectly accurate as far as it goes.



Norton's Melon. (Fig. 6.)

"Norton's Melon.—This is an apple entirely new to us, and which we strongly suspect is a native. We found it in the same neighborhood where the "spy" originated. We are informed that it has been cultivated in that vicinity for a great number of years, but have not been able to trace its origin satisfactorily. It is a great bearer, and is esteemed in Bloomfield, one of the very best table apples they have, for fall and winter use; to our taste it is a first rate fruit, and eminently worthy of cultivation.

It is commonly called the "Melon" Apple, from its excessiveness; we have added "Norton's" to distinguish it more particularly, having received it from a gentleman by that name, (Major REUBEN NORTON., of Bloomfield.) It is about medium size. Form, inclining to conical, and slightly ribbed. Stem one half to three quarters of an inch in length, in a pretty deep hollow. Calyx usually closed, and set in a smooth regular basin of considerable depth. Skin smooth and glossy, exceedingly thin, and of light red color, with stripes and blotches of crimson next to the sun, and of a pale delicate flesh color in the shade. Flesh white as snow, tender, breaking, fine flavored, and sprightly; juice very abundant, as much so as in a luscious peach. In use from November to April."

This fruit has lately been described in Hovey's Magazine, and it is there stated to be "ripe in September or October." This is an error, as we have had them from Bloomfield in the middle of March, in the highest perfection.

Mr. HOVEY says:—"It is, in our opinion, very superior, with a flesh remarkably tender

and juicy, and a flavor strongly partaking of the Melon from whence probably its name. It is a large fruit,* and of a peculiarly bright and handsome appearance. It is in some respects like the 'Northern Spy,' and comes from the same source, as will be seen by Mr. Smith's letter which we copy."

Mr. SMITH says, in the letter alluded to, addressed to the Massachusetts Horticultural Society:—"I take the liberty of forwarding to thy address a few specimens of an apple known here as the 'Water Melon,' though noticed in a Rochester Nurseryman's Catalogue, as 'Norton's Melon,' for what reason, I am not informed."

Mr. SMITH, it appears, was not aware of the description of this fruit, three years ago in the leading journal in the state devoted to any degree, to pomological matter—otherwise he would have sent the fruit under the name then given, being a perfectly proper and appropriate one. "Water Melon" is the name of another excellent variety of apple which has been cultivated around Rochester upwards of thirty years. We have sent specimens at various times, to eastern fruit growers, to identify it if possible, supposing it might be an old variety, but in vain. It may yet, however, prove to be so; but until then, it must, under the rules of Pomology which we publish in this paper, and to which we solicit the careful attention of fruit growers, retain the name of Morton's Melon.

* It is not a large fruit. Mr. Hovey's outline is the size of rare specimens.

FRIEND EARLE of the New England Farmer is somewhat alarmed lest some of his constituents should "be disposed to go extensively into the cultivation of Swan's Orange or Onondaga Pear, before its character is fully settled." He says, "This is probably one of the varieties which are usually of ordinary quality, but which by extra cultivation in a peculiarly favorable season may be made very fine."

The facts, allow us to say, after seven years culture and acquaintance with this fruit, are just the reverse. The cultivators of Western New York know that, since it has been brought to notice, it has not failed to produce fruit of the first quality, and that in all sorts of seasons and with ordinary culture. Now and again a specimen may be wanting in flavor, and so will it be with any, and particularly after being packed and sent a journey after they are ripe—as those sent east the past season have been.

While at Boston, last fall, we put in our trunk a dozen or two of Andrews, in the finest eating order, and when we arrived at Rochester their flavor was entirely gone. So has it been with specimens sent us from Salem and other places. Fondante d'Automne, Paradise d'Automne, DLX, and others, of the first quality, were as insipid as water; so that there is not the least reliance to be placed upon judgment formed in such cases.

The temperature in which ripe and ripening fruits are placed in, has a great effect on the flavor. Cold and moisture will, in many cases, destroy it completely. We know that the finest peaches become sour in rainy, cold weather.

TOMATO.—It appears by a communication of E. Whittlesey, published two years since in the Western Reserve Magazine, that the tomato has been used in some part of Illinois, and in the neighborhood of Vincennes, for more than fifty years.

HE that hath more knowledge than judgment, oftener benefits others than himself.

The New Japan Lilies.

THESE Lilies are, we think, without exception, the richest floral gems that modern zeal and research after novelty has brought to notice. Combining the most striking and beautiful combination of colors, with an exquisite perfume, and at the same time being of the most easy cultivation, either in the open border, or in pots in the house, they must become universal favorites. In the winter of 1846 we obtained from Col. WILDER, of Boston, the President of the Massachusetts Horticultural Society, who has the finest collection in this country, a few bulbs of several species, (*album*, *punctatum*, and several of his own *hybrids*), and although the bulbs were small, and had made some growth when they were taken out of the pots and sent us, yet we had a splendid show of flowers in July and August. The novelty and beauty of these flowers excited the surprise and admiration of all who saw them, and has done something towards introducing them in this section. The high price of the bulbs as yet prevent many from purchasing; but, being easily propagated, in a variety of ways, and from the competition that exists among commercial growers, we may expect the price, in a few years to be greatly reduced. The following excellent remarks on their character and culture, from the pen of Col. WILDER, appeared in the first number of the current volume of the Horticulturist:

THE LILY, from time immemorial, has been the theme of the poet, and the subject of sweet allusions by men of taste and learning; frequently and beautifully is it referred to in the Scriptures, for its exquisite fragrance and loveliness, and for *magnificence*, Divine authority has declared "that SOLOMON, in all his glory, was not arrayed like one of these."

It is not my purpose, at present, to inquire whether the species or variety thus sublimely spoken of, was the *Lily of the Valley*, belonging to the genus *Convallaria*, as some have supposed; the *Lilium candidum*, of Pliny, or the splendid tribe with which this chapter is introduced to the notice of your readers.

Of the many remarkable plants imported into Europe, within the last half century, few can claim such a pre-eminence for beauty as the Lilies discovered by Dr. VON SIEBOLD, during his researches in Japan, in the years 1831 to 1833; and it is no exaggeration to state, that none have since been introduced, more deservedly popular, or more highly attractive.

Dr. VON SIEBOLD informs us, in his *Flora Japonica*, that he brought with him from Japan, more than twenty kinds of Lilies, the most conspicuous of which, however, are the *Lilium speciosum*, (sometimes called *rubrum*,) the *L. lancifolium album*, and the *L. lancifolium puncta-*

tum, or *roseum*. All these have reflexed petals, and may be briefly described as follows:

LILIAM SPECIOSUM.

Showy Crimson Japan Lily.

Flower, ground color, clear rose, shading to white, covered with numerous projections of bright crimson, and which gives it the appearance, as Dr. LINDLEY remarks, of being "all rugged, with rubies and garnets and crystal points;" a plant of two to three feet in height.

LILIAM LANCIFOLIUM ALBUM.

White Lance-leaved Lily.

Flower, pure virgin white, crested with the same peculiar projections as the former species, but these are without color, and which may be compared to frost work and snowy stalactites; grows to the height of three or four feet.

LILIAM LANCIFOLIUM PUNCTATUM, OR ROSEUM.

Spotted Lance-leaved Lily.

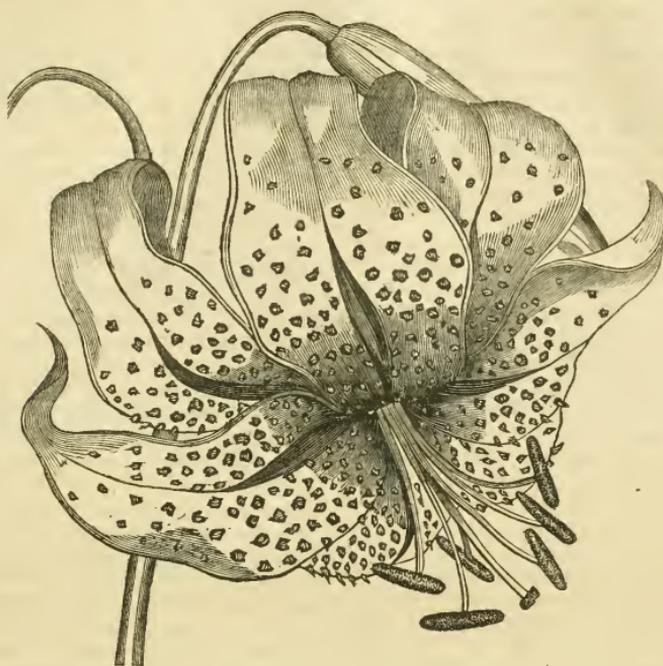
Flower large, white; the petals studded with pale rose or blush projections, and beautifully spotted with rose-color. The plant is of more robust habit than either of the sorts named above, often attaining to the height of four or five feet.

The virgin whiteness of the *album*, the roseate leopard-like spotting of the *punctatum*, and the jewel-like brilliancy of the *speciosum*, all redolent with the fragrance of Arabian spices, will ever render these, objects of especial favor and admiration, and place them among the very choicest plants of the conservatory or flower garden.

Hybrids.—The strong development of the stamens and pistils of the Lily tribe, almost directly invites the skill of the cultivator to cross impregnations. A multitude of seedlings have been produced in this way, from these Japan Lilies. In my own collection, I have now about 150 in bud, from which it is hoped some good and distinct varieties may be obtained. Of the seedlings that have already bloomed, those raised from *L. speciosum*, fertilized by *L. L. Album*, and from *L. L. album*, by *L. speciosum*, have been almost identical in character with the former red species, varying only in the petals displaying a clearer delineation of the white. All efforts to interbreed these with *Lilium candidum*, (common white Lily,) *L. tigrinum*, *L. Philadelphicum*, *L. superbum*, and *L. Canadense*, have proved abortive.

Soil.—In cultivating these new Lilies, the following soil will be found thoroughly adapted: Two parts from an old hot-bed, composed of leaves and horse manure, at least two years old; one part rotten sods, or any good mellow loam; one part sandy peat; [if not sandy it will be well to add a little sand.]

Potting and shifting the bulbs.—About the middle of January, these will commence vegetating, when they should be potted in small pots, repotting or shifting them to a larger size every two months, or as often as the pots are filled with



LILIUM SPECIOSUM. (Fig. 7.)

roots—always remembering that perfect drainage, and plenty of it, are indispensable to success.

Propogation.—By *seeds*, which are obtained in abundance in this climate, if the pistils are fertilized. These should be sown as soon as ripe, in shallow pans, in which they may remain for one or two years; they should then be transferred to six inch pots, four to six bulbs around the edges of the same—and finally, singly, in pots for flowering.

By offsets and by young bulbs.—These are formed at the crown of the old bulb, and also at the axils of the leaves. Their growth is accelerated by the placing of pieces of peat around the stem.

By scales, from the outside of the bulb, potted in peat and sand, and subjected to a slight heat; these do not vegetate rapidly, but eventually make good bulbs, and those scales may be divided longitudinally into two or three parts with the knife, each one of which will form at the bottom a new plant.

Hardiness and adaptation to the open ground.

—That the Japan Lilies and their offspring, may become tenants of our gardens, and sufficiently hardy to endure our climate, is much to be desired. The scarcity and high price of these have, until recently, been a hindrance to much experience in this respect. I can, however, state some facts, which give great reason

to expect that they or their hybrids will prove so. Soon after the introduction of the *L. speciosum*, a bulb stood the winter perfectly well, protected only by a pot, in the garden of a gentleman in this city—and I learn that one of the same sort has, for two or three years, remained uninjured in a garden in the city of New York. My own experience is quite encouraging. Eighteen bulbs were planted in the open ground last November, in a bed of Tree Pæonias, between the rows; these were covered with four inches of peat, and when the ground closed up, about the same depth of sea-weed was added to the covering; *every bulb* is alive, and now making vigorous growth. It is sufficiently evident, that if the Japan Lilies prove hardy, their culture in the open ground, and in a deep rich border, will be of the easiest description.

General treatment.—I am now supposing the course of in-door culture. The dormant bulbs having been potted, they should be placed in a forcing pit, with a little gentle heat, removing them as near to the light as possible, as soon as the leaves begin to unfold themselves; water must be given sparingly during the first period of growth, or until new roots have been formed; after which, it may be administered plentifully whenever the surface of the soil becomes dry, remembering the good old rule that the supply of water must always be in proportion to the supply of solar light.

A flue in the green-house will do very well, provided the pots are kept constantly moist. In the early stages of their growth, a warm, humid atmosphere is particularly favorable to a vigorous start; this will be seen by the mesh of white roots emitted on the surface of the soil, and which, with those below, are the greedy recipients of any reasonable quantity of richness that may be administered in the form of liquid manure or guano; under these influences and judicious shiftings of the bulbs to larger pots, the luxuriance is truly astonishing, strong bulbs throwing up thick, robust stems of three or four feet, covered with a dense white bloom, alike significant of the adaptation of the soil and temperature in which they delight to revel.

When the flower buds are developed, the Lilies should be removed to the temperature of the green-house, the nearer the light the better. The bloom being past, the plants should be watered more sparingly, and when a disposition for dormancy is evinced, by the waning yellow foliage, this may be entirely dispensed with—the stalks cut down, the pots removed to the potting bed, or a place where they are dry or protected against frost, there to remain until the appropriate season for recommencing operations. In this state of rest, the bulbs should not be taken out of the pots, but it is well to examine them once a month, and if very dry, give them a careful watering. Of the ultimate hardness and adaption of the Japan Lilies and their offspring to our gardens, I intend to satisfy myself, by experiments, the ensuing year.

Yours,

M. P. WILDER.

The Rules of American Pomology.

POMOLOGY, as far back as we can remember, has been one of the most confused and unintelligible of all subjects—perplexing alike to the professional and amateur cultivator. It would be difficult indeed to estimate the amount of vexatious disappointment, and the actual hindrance which has resulted from this confusion. During the past few years a great degree of increased attention and interest has been excited on the subject of fruit culture, out of which an active rivalry has grown up in the production of new varieties. This has induced many uninformed persons to herald forth, through some channel or other, old well known varieties as new and rare productions of wonderful merits, with new and high sounding names. This evil has latterly become so extensive as to be no longer tolerable. Every issue of an Agricultural or Horticultural journal would announce some new sort, that in a few weeks or months would prove an old common variety. But a short time ago the *Yellow Bellflower* was sent us, by a well meaning, tasteful amateur, as a new and fine fruit named “*Excelsior* ;” and but a few months ago the *Summer*

Bonchretien Pear, and the *Green Gage* Plum—two of the oldest and most geneally known fruits of their class among all the varieties cultivated either in Europe or America—were, by zealous, ill-informed persons, published as new varieties under new names, in one of the leading journals.

Surely such evils in relation to a subject so interesting to a very large portion of the people of this country, needed a reform—and right heartily do we rejoice that a reform is in a fair way of being made. What reason is there why the introduction of new fruits should not be treated with the same exactness, and be submitted to rules and tests as are new discoveries in other sciences, and improvements in the arts? This has at length become the general and settled conviction of all who have given serious attention to the subject, and who wish to see the science of Pomology placed on such a basis as will enable it to claim its proper rank among sciences. To this end a grand step has been taken by the Massachusetts Horticultural Society—the most enlightened and influential institution of the kind in America—in the adoption of a code of rules which we think cannot fail to secure, after a time, uniformity and accuracy in nomenclature, prevent the introduction of old or indifferent fruits as new ones, and guard generally against the evils to which we have alluded.

The Societies of Philadelphia, Cincinnati, and some other places, have already adopted these rules, and we have no doubt but that every society in the country will, in a short time. The Rules are as follows :

1. No new seedling fruit shall be entitled to a name, or to pomological recommendation, which is not at least equal if not superior to any similar varieties of the first rank already known; or which, if only of second rate flavor, is so decidedly superior in vigor, hardness, or productiveness, to varieties of the same character already known, as to render it well worthy of cultivation.
2. The originator, first grower, or he who first makes known a new native variety of merit, shall be entitled to suggest a name for such variety, which name, if a suitable one, (i. e. coming within the rules of nomenclature,) shall be adopted by the writer describing the fruit for the first time. But if the name proposed is inappropriate, or does not come within the rules, then the describer shall be at liberty to give a name.
3. No new native fruit shall be considered as named until the same has been accurately described, in pomological terms, by some competent person conversant with existing varieties, some pomologist of reputation, or the standing fruit committee of some established horticultural society.
4. The description shall embrace the following particulars: 1st. The form and exterior color, the texture and color of the flesh, and the flavor of the fruit, with the addition in stone fruits, of the size of the stone, adherence or non-adherence of the flesh, form of the suture, and the hollow at the stem; and in kernel fruits, of the size of the core and seeds, the length, position, and insertion of the stalk, and form of the eye. In peaches, the form of the leaf glands and size of blossoms; in grapes, the form of the bunches; and in strawberries, the character of the blossoms, whether staminate or pistillate; and also where there is any marked character in the foliage, growth of the young wood, or bearing tree, the same shall be given.
5. The name of the new variety shall not be considered as established until the description shall have been published in at least one horticultural or one agricultural journal, having the largest circulation in the country, or some pomologist

logical work of large circulation, and acknowledged standard character.

6. In giving names to newly originated varieties, all harsh, vulgar, or inelegant names shall be avoided, such as "Sheepnose," "Hogpen," etc.

7. No new names shall be given which consist of more than two words, excepting only when the originator's name is added.

[Thus all unnecessarily long titles, such as "New Large Black Bigarreau," "Beurre gris d'Hiver nouveau," will be avoided.]

8. Characteristic names, or those in some way descriptive of the qualities, origin, or habit of fruit or tree, shall be preferred. They may be either of intrinsic properties, as "Golden Sweeting," "Downer's Late," etc.; or of local origin, as "Newtown Pippin," "Hudson Gage" of the season of ripening, as "Early Scarlet," "Frost Gage" of the form and color, as "Golden Drop," "Blue Pearmain," or which commemorate a particular era, place, or person, as "Tippecanoe," "La Grange," "Baldwin," or any other titles which may be significantly applied.

9. All superfluous terms shall be avoided; thus, instead of "Thompson's Seedling Beurre," it is better to say "Thompson's Beurre," or simply "Thompson's Pear."

10. Before giving a name to a new fruit, its qualities should be decided by at least two seasons' experience; and no new fruit can be safely recommended for general cultivation, until the same has been tested and found valuable in more than one locality.

11. When two persons have named or described a new native fruit, then the name and description first published, if according to the rules herein indicated, shall have priority.

12. No person introducing new fruits from abroad, shall be allowed to re-christen the same, or give them his own name; but shall submit the same to some competent pomologist to ascertain the true name.

13. In deciding the names of fruits already described, the latest edition of the "Catalogue of the London Horticultural Society" shall be considered the standard European authority, and the latest edition of Downing's "Fruits and Fruit Trees of America" the standard American authority.

Fruit Culture.

WE have been favored with a communication touching upon various branches of Fruit Culture, by a practical fruit grower, who has done some service in introducing to his neighborhood fine varieties of fruit—Mr. STEPHEN HARRIS, of Canandaigua. At present we give but an extract below—reserving that portion on budding, &c., till a more seasonable period:

"I have often asked myself and others why it is that the fruit growing interests are so much neglected in some parts of the country. It appears to me it arises mainly from carelessness, or a mistaken notion in reference to financial interests. For, not only does the cultivation of good fruit afford much pleasure, and its use promote the health of a family, but will as amply repay the little outlay of time and money as most other kinds of husbandry. But to make this business profitable, persons need, as in other pursuits, to exercise some little patience. Here, however, is the difficulty: many 'cannot bear the idea,' as they say, 'of waiting several years' before they can realize the fruit of their labor. But, by proper attention to other farming interests, they may receive a reasonable income, and under ordinary circumstances, find opportunities of bestowing much labor, each year, on the cultivation of fruit, and by which means they may soon have a quantity of the best in the country,

fit for any market, which will yield them a rich remuneration for all their expenses. Again, the notion that few only can learn properly to cultivate fruit, is a mistake; for those who can easily familiarize themselves with other parts of husbandry, can as readily learn this—the work is very simple.

"What is more pleasant to the farmer than for him to take his friends through the finely cultivated fruit gardens, and have them see and taste the almost endless varieties, at such times as each in their order are suited to the taste? We will introduce them first to the well arranged rows of cherry trees, with fruit ripe and nice, commencing with the fine May Biggareau, at a time when one unacquainted with them would hardly think them out of blossom; from thence, down through to the Tartarians, Eltons, Yellow Spanish, White Hearts, and August Bigarreau. We come next to the different classes of Apricots—the Breda, Black, Large Early Moorpark, Musk, Orange, Scuylers, &c., all of which are about one month in ripening, and are, I think, the finest quality of early fruit, which often demands a price of four dollars per bushel. Soon in our wanderings we stand among the trees of choicest plums, some of which are, the Washington; Bolmar; Orleans; Golden Drop; Imperial Gage, Red, Yellow, and White Egg Plums; and the Purple Gage, excellent for drying—all of which will sufficiently recommend themselves to the sight and taste when once brought within the reach of these senses. But we will not stop here, for there are others more healthy and richly flavored; and of this class are the peaches, which, among other qualities they possess, are ever to be prized for their variety, and the length of time they may be enjoyed, being some three months in ripening; but the great value of the peach is so well known that farther description is unnecessary. Besides all the above named, there are the pears, growing high above most others, as if to express their superior quality, which make them worthy to grace a royal banquet.

"Perchance now our friends are weary, and we retire with them to the arbor, cool and refreshing, thickly shaded with the verdent foliage, and weaving vines of the grape, with purple and golden clusters protruding through the lattice, the peculiar taste of which, is suited to revive the lapsed energies, and give a pleasure to this place of retirement. And now, while the merry warbling of the feathered songsters with the hum of the industrious bees are borne to the ears, and the balmy breezes from aromatic shrubbery and flowers are inhaled, the mind is filled with wonder and delight in contemplating the munificent exhibitions of Providence, to make the abode of man pleasant in the earth."

A NOTICE of the colored edition of DOWNING'S "Fruits and Fruit Trees of America," prepared for this number, is unavoidably deferred until next month.

Answers to Correspondents.

TILLOTSON PEACH.—THORNS.

MR. P. BARRY—Dear Sir: I take the liberty of proposing to you the following queries, which I hope either you or some of the Horticultural contributors to your valuable paper will please answer, viz: What rank does the *Early Tillotson* peach take among other early varieties? How much earlier does it ripen than the *Early York* and the common *Red Rareri* of the country? Where can the *Crataegus crus galli*—the thorn recommended in the August number of your paper—be obtained?

I wish you would examine and let me know the names of the apples I send you.

By answering the above queries you will oblige a subscriber.

A. W. WHELOCK.

Leicester, Oct., 1847.

The Tillotson Peach was introduced to general notice, we believe, by JOHN J. THOMAS, of Macedon, through whose commendation mainly it has for a few years past been considered the *very best early peach*—ripening two weeks before the *Early York*. We had it bear the past season in our own grounds; but the tree was in a crowded situation, and the season was unfavorable for ripening early varieties. We had Cole's *Early Red* and *Early Purple* of this region ripe before it. It will ripen in good seasons here early in August, while the *Early York* and *Red Rareri* ripen the latter end of that month.

We have been lately informed by a person who has bestowed much attention to the comparison of fruits raised in different parts of the country, that our *Early Purple* is the *true Early York* of DOWNING; and that our *Early York* is the *Large Early York* of New Jersey; that the *Honest John* of some growers here, an early yellow peach, is not known elsewhere by that name, but that the *Honest John* of New Jersey is our *Early Purple*, or the *true Early York*. There is confusion, existing undoubtedly in regard to the names of these varieties, (*Early York* and *Early Purple*;) which we hope another season will clear up. We have also heard doubts expressed about the Tillotson being a distinct sort. It may possibly prove synonymous with some old sort, but we are inclined to think not.

We presume the *Crataegus crus galli* might be obtained at some of the nurseries, and may be found growing in the woods and fields abundantly throughout the country. It usually forms a low flat headed tree, with small scarlet fruit, which ripen in September and October. It is easily distinguished from the yellow fruited thorn, which is somewhat similar in habit, but not near so showy either in flower or fruit.

Of the apples sent several are quite new to us; and, although good, are not equal to other well known standard sorts. No. 1, *Yellow Bellflower*, a fine fruit; No. 2, *Streaked Gilliflower*, large and showy, but dry and poor; No. 4, *Porter*; No. 6 we suppose to be *Winter Penmain*, quite distinct from the *Wine*, which you say it has been called by your committee; Nos. 14 and 16, both *Esopus Spitzenberg*; No. 17, *Baldwin*; No. 18, *Vandervere*. The others unknown. No. 7 is not the *Maiden's Blush*; has the same handsome coloring, but more round in form, will keep longer, and is quite as good. No. 9, which you call a first rate fall sweet, is not, to our taste, equal to No. 12, *Chilicothe Sweet*, or No. 13, *Red "Pumpkin Sweet"* (1). No. 10 is a large, fine, productive apple, cultivated by many as the 20 ounce pippin; No. 11, *Groveland Russet Seedling*, is a high flavored rich little fruit, resembling the old *Nonpareil*.

ADVANTAGES OF FALL PLANTING.

J. S., Collins. We have, in previous numbers of this paper, alluded to the advantages of fall planting—which are, that if planted early in the fall, say middle or latter end of October, the trees get fixed comfortably in their new position, the earth is settled around them, and in many cases they will have emitted new rootlets before winter. When spring comes they are ready to start and will grow vigorously under favorable circumstances; whereas, in spring planting, trees are not generally moved until the sap is partially in motion, and then the check is more severely felt, so that they do not usually recover in time to make any considerable growth that season, and more particularly if dry weather sets in during May, as not unfrequently happens. It is easy to guard against their being misplaced by

"frequent freezing and thawing," by simply throwing up a hillock of earth around the base of the tree to the height of 12 or 18 inches, which can be leveled down in the spring. This has been illustrated in our last volume.

We never advise fall planting, even of *hardy* trees, in wet clayey soils, or in very cold situations in the more northern sections of this country, or Canada, where they would be subjected to extreme degrees of frost likely to kill the tops.

B. W. S., Raisin, Mich. *Mountain Ash*.—The berries should be gathered in autumn as soon as ripe; the seeds immediately washed out of the pulp and sowed in light mellow soil, with a covering of an inch and a half or two inches deep. They will, as a general thing, vegetate freely the following spring. They will do so, with more certainty, however, if soaked an hour or two in hot water before washing out.

Pine, Spruce, White Cedar, Arbor Vitæ, &c.—The cones of all these should be gathered in the autumn, and kept for a while in a dry place, when the seeds will come out easily. They should be sown in the spring in a light, mellow, well prepared soil. The beds should be made as smooth as possible before the seed is sown, and the covering should be finely pulverised and not over half an inch to an inch in depth. As soon as the seed begins to vegetate, the beds, if not in a shaded cool situation, on the north side of a tight fence or a belt of trees, should be carefully shaded during mid-day, as our hot sun burns off the young plants as soon as they appear above ground. They will also require careful watering in dry weather.

The raising of the pine family from seed, in the cool moist climate of England and Scotland, requires an experienced hand, being considered one of the nicest operations of nursery culture. Our frequent drouths and powerful solar heat render it much more difficult here; and it is, in our opinion, doubtful whether it will ever be successfully practised on a large scale. It has not yet, to our knowledge, been attempted; but very good success may be had with small beds, managed according to the above method. The plants may remain in the seed bed two years before transplanting; if too close, a portion may be thinned out after the first season's growth. A covering of leaves will be necessary the first winter, to prevent their being drawn out by the frost.

Answers to your other inquiries can not find space at present, but will be given next month.

A. EATON, Benton Center, N. Y. We do not know how the seeds of the *Paradise* apple, and *Mirabelle* plum, can be obtained. The former we propagate by layers or cuttings, and the latter by buds or grafts.

The *Ailantus* seed can be obtained here plentifully, if application be made early in the autumn. We do not know of any here at present; we presume it could be had in New York. Seedlings of one year can be had here, by the 100 or 1000, for a mere trifle.

L. P. C., Brookfield, N. Y. You probably mean the *Pawlonia Imperialis*, which would require protection with you for the first two or three years after planting; and it is doubtful if it would stand your climate then. Another year or two will enable us to judge of the success of this tree in such latitudes as yours.

THOS. STRATTAN, Esq., Webster. The apple you sent us looks like the *Gloria Mundi*; but it is quite mealy, and we cannot judge correctly.

SEVERAL communications, inquiries, &c., were received too late for insertion or answer in this number. They will receive proper attention in our next.

A STORY WORTH RELATING.—A gentleman from Chester informs us that Mr. JOSEPH ROBINSON, of that town, has an apple orchard, planted and raised by himself, covering but two acres of land, the product of which this year is *nine hundred bushels*, exclusive of a second picking of inferior quality. Mr. ROBINSON has sold four hundred bushels for cash down, at \$1 per bushel, reserving five hundred bushels for a future sale. The entire income this year will not be below \$1000, and at far less labor than is bestowed upon a small farm.—N. H. Statesman.

LADIES' DEPARTMENT.

Curing Bacon.

In order to have good bacon, the hair should be *burnt* off, not *scalded*; the flesh will be more solid and firm, and it will keep better.

A bacon trough, or tray, should have a deep indenture round its edges, to drain off the brine which would otherwise soak in, and spoil the meat. The inside (or flesh side,) of each flitch, must be well rubbed with salt, and placed above each other in the tray; once in four or five days, the salt should be changed. It should be suffered to *melt* and *sink*, but not to lie *too long*; and the flitches removed, the lower flitch brought to the top, *at least once a week*. One quarter of a pound of bay salt, and half a pound of saltpetre, with one pound of very coarse sugar, should be rubbed into every *two* flitches the first week.

As for the time of curing the hog, it depends upon the state of the weather, size of the animal, &c. One month in moderate weather, will be sufficient for a hog of twelve score. The place for salting should be cool and very airy; if in the midst of winter, it should be in the cellar, to be kept secure from frost. Smoking bacon, is much better than merely drying it. In order to do this, completely, after draining the brine from the trough in which the flitches are placed, they are, at the end of a week, to be rubbed well on the flesh side with bran or saw dust, mixed with a little *unslaked lime*; then hang them in a smoke-house, out of the way of rain, and not near enough to the fire to melt, or burn. A month's smoking will do. The flitches should hang until *quite dry*, but not long enough to be *hard*. To preserve them from hoppers, place some clean dry ashes at the bottom of a chest, or box, long enough to hold the flitches; lay in one flitch, cover with six or eight inches of the ashes, then another, and another, in the same way, until the box is nearly filled. A little straw at the top, will complete the process, and the bacon thus cured and secured, will keep fresh and sweet for two years.

AN ENGLISH FARMER'S WIFE.

Ogden, N. Y., Nov. 1847.

CORN MEAL CAKES.—Excellent breakfast cakes can be made in the following manner: Mix two quarts of corn meal, at night, with water, and a little yeast and salt, and make it just thin enough to stir easy. In the morning stir in three or four eggs, a little saleratus, and a cup of sour milk, so as to leave it thin enough to pour out of a pan; bake three quarters of an hour, and you will have light, rich honey-comb cakes—and with a good cup of coffee and sweet butter at breakfast, one finds with Hamlet, "increase of appetite to grow with what it feeds on."

TO HAVE GOOD COFFEE.—Few things so often test the skill and attention of the housewife, as the *quality of her coffee*. The proverbial excellence of French coffee is owing to its being roasted (or scorched) *slowly* over or near a moderate fire, thus concentrating the aroma or essential oil, instead of rapidly burning the berries, thereby evaporating its high flavor. To make good coffee, when it is boiled, and not percolated through a biggin, "it should boil up once only, and then it should be suffered to stew [simmer] in a close vessel or pot on the hob—the longer the better—until wanted, when it will seldom require fining; for which purpose, however, a little pounded isinglass is the best. In France, and most other countries, the berries are mostly fresh scorched or roasted, just before being required, which, in nearly all families, is performed in the frying-pan (rarely in a roasting machine) over a slow fire of charcoal, the berries being kept moist by the addition of a little fresh butter or lard, which prevents all possibility of its burning. They are turned out, when finished, on flannel, and rolled up closely till cold."

Then it should be made *very strong*, and drank half coffee, half cream or boiled milk. Some ladies barely *color the water*. That may do for children, but not for those who know "what's what," and that's what the great Pinkney said General Ridgley knew, when he wanted to praise him and his knowledge of what was *comme il faut*.

THE PARROT SYSTEM.—A gentleman the other day, visiting a school at Edinburgh, had a book put into his hand for the purpose of examining a class. The word "Inheritance," occurring in the verse, the querist interrogated the youngster as follows: "What is inheritance?" Answer: "patrimony." "What is patrimony?" Answer: "Something left by a father." "What would you call it if left by a mother?" Answer: "Matrimony."

MAKE THYSELF FRIENDS.—Endeavor to gain thyself friends; for they are good in places, times, and chances, which thou wouldst never have thought of; and though this maxim may be of the vulgar, yet none can thoroughly consider the value thereof but he who hath chanced, in his need, to feel it by experience.

FEMALE FARMER.—The premium for the best farm in Litchfield county, Conn., was awarded to Mrs. VESTA HAWKINS. The farm contains 160 acres and has been under the management of Mrs. H. for the last ten years.

TO OLD BACHELORS.

COLD weather is coming, a delicate hinter,
If taken in nature's legitimate sense,
To those who intend to get married this winter,
No matter how soon they jump over the fence.

CHEMICAL ANALYSIS OF TEA.—In the memoirs of the London Chemical Society there is an interesting paper by Mr. WARRINGTON, on the analysis of tea, in which he states that he has not only removed the whole of the coloring matter, or glazing, from green tea, but he has been able to analyse the matter removed, and to prove it, by chemical evidence, to consist of Prussian blue and gypsum principally. So that in fact the drinkers of green tea, as it comes to the English market, indulge in a beverage of Chinese paint, and might imitate the mixture by dissolving Prussian blue and plaster of Paris in hot water. The Chinese do not themselves drink this painted tea; they only sell it.—*Gardners' Chronicle.*

THE GENESEE FARMER.—We have received the December number of this periodical, which close its eighth volume, and have perused its contents with pleasure. It is gratifying to learn that its publisher is receiving that support which his untiring efforts to make it of high practical value to the American farmer should secure for him. It has now a circulation of FIFTEEN THOUSAND. If its subscription list amounted to more than three times that number, the fact would afford greater satisfaction, as evincing a growing disposition on the part of our farmers to treat Agriculture as a science, to keep up with the discoveries and improvements of the day, and avail themselves of the great benefits which are derived from the adaptation of chemistry to Agricultural purposes.

The Genesee Farmer is published at Rochester, N. Y., by D. D. T. Moore, and edited by Daniel Lee, M. D. The Horticultural Department is ably conducted by F. Barry, Esq., of the Mt. Hope Gardens. The paper is afforded at the low price of fifty cents a year, and surely no farmer could make a more worthy or profitable investment.—*Buffalo Courier.*

"This excellent Agricultural Journal is published in Rochester, by D. D. T. Moore, and edited by Daniel Lee, M. D. Its horticultural department is conducted in an able and interesting manner by F. Barry, Esq., of the firm of Ellwanger & Barry, of the Mount Hope Gardens. The paper is afforded at the low price of fifty cents a year, and no farmer can make a better investment."—*Le Roy Gazette.*

GENESEE FARMER.—The number for December is before us. We make copious extracts from its valuable contents for our agricultural department to-day. We cannot better express our opinion of this work, than by copying the following from the Rochester Democrat:—

"The Farmer, since it passed into the hands of the present industrious and energetic proprietor, has more than doubled its circulation; and now takes rank, deservedly, among the first agricultural periodicals of the day. Its ample pages are filled with matter of great interest to the farmer. Almost every question appertaining to practical agriculture is discussed with ability.—The proprietor devotes his whole time to the work, and employs the best talent. Dr. Lee still contributes to its columns. Barry conducts the horticultural department, while a host of contributors employ their pens to enrich its pages."

Published at Rochester, by D. D. T. Moore, at 50 cents per annum.—*Orleans Republican.*

EACH SUBSCRIBER AN AGENT!—The price of the Farmer is so low that we are obliged to depend, to a great extent, upon voluntary agents. We hope that each subscriber will consider himself an agent, and act accordingly. Reader, can not you extend the circulation of our journal in your neighborhood? It is not a dangerous nor incendiary publication; but on the contrary will probably benefit all who become its readers. If you desire to aid in promoting its usefulness, now is the time. Don't delay—call on your neighbors, and obtain the subscriptions of those who wish to commence with the present volume. You can do more among your friends and neighbors than a dozen traveling agents. We can supply back numbers to all who may hereafter subscribe.

Monroe County Agricultural Society.

The Annual Meeting of this Society, for the election of Officers, &c., will be held at the Office of the *Genesee Farmer*, in Rochester, on the second Saturday (the 8th day) of January 1848, at 10 o'clock, A. M. A punctual attendance is requested.

Dec. 14, 1847.

JAMES H. WATTS, Rec. Sec'y.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat, -----	\$1 25	Pork, bbl. mess	10 00	11 00
Corn, -----	50	Pork, cwt., ---	4 00	4 50
Barley, -----	56	Beef, cwt., ---	3 50	4 00
Oats, -----	30	Lard, lb., ---	7	8
Flour, -----	5 75	6 00	Butter, lb., ---	14 15
Beans, -----	62	83	Cheese, lb., ---	5 6
Apples, bush.	19	25	Eggs, doz., ---	14
Potatoes, -----	37	50	Poultry, -----	6
Clover Seed, ---	4 00	4 50	Tallow, -----	7 8
Timothy, ---	1 25	2 00	Maple Sugar, ---	—
Hay, ton, ---	10 00	12 00	Sheep Skins, ---	75
Wood, cord, ---	2 75	3 50	Green Hides, lb	3 1/2
Salt, bbl., ---	1 38	1 50	Dry " " " " "	7 8
Hams, lb., ---	7	8	Calf Skins, ---	8

Rochester, Dec. 30, 1847.

New York Market.

[By Magnetic Telegraph.]

New York, Dec. 30.—7 P. M.

ASHES.—Pots firm; 125 bbls. sold at \$5.50; Pearls are \$7 and dull.

FLOUR and MEAL.—There has been a moderate demand to-day for flour, market firm. Sales 3000 or 4000 bbls. including 1200 bbls. western for shipment at \$6. There is a demand for filling vessels at this rate. The range of the market for the trade has been \$6.12 1/2 a \$6.25 for good brands western, and \$6.25 a \$6.37 1/2 for Genesee. There were also settlements of contracts to the extent of 4000 or 5000 bbls. at \$6 a 6 1/2. For Meal there is some inquiry at \$3.25 a \$3.37 1/2 for Jersey, and 1000 bbls. for March at \$3.37.—Sales 100 bbls. Rye Flour at \$4.25.

GRAIN.—Sales 1000 bush. Genesee Wheat at \$1.36, and 1400 bush. inferior Southern at \$1.10.

CORN is in moderate inquiry, and steady. Sales 12,000 to 15,000 bush. at 67 a 70 cts. for new, including white Southern and Northern yellow; 73 a 74 cts. for mixed old; 75c. for flat yellow.

RYE offered freely at 87 cts. in the slip.

OATS 50 cts. for canal, and in moderate demand.

PROVISIONS.—Pork market dull; sales about 500 bbls. at \$7.75 for old prime; \$11 for mess, and \$11.87 a \$12 for new, the latter Baltimore. Considerable arrivals of Pork to-day. In Beef there is nothing of importance doing; market quiet at \$5.50 a \$6 for prime; \$8 a \$9 for mess. Ohio Butter 10 a 12 1/2c; State 14 a 22c. Sales 930 casks Cheese, State, 6 1/2 cts.

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Vol. 9.

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No. 2.

THE GENESEE FARMER:

Issued on the first of each month, at Rochester, N. Y., by

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DANIEL LEE & D. D. T. MOORE, Editors.

P. BARRY, Conductor of Horticultural Department.

FIFTY CENTS A YEAR:

Five copies for \$2, and any larger number at the same rate, if directed to individuals. Eight copies for \$3, if only directed to one person—and any larger number, addressed in like manner, at the same rate. All subscriptions payable in advance, and to commence with the volume. $\text{\$3}$ —Back numbers supplied to new subscribers.

All the back volumes of the Farmer (except the 2d) may be obtained of the Publisher. Price 50 cents each, substantially bound. The only volumes published in octavo form, uniform with the present, are the 6th, 7th, and 8th,—for 1845, 1846, and 1847.—These volumes can be furnished bound or in numbers.

Letters containing remittances, or making inquiries for the benefit of the writer, must be *post-paid* or *free* in order to receive proper attention. Address the Publisher.

[Editorial Correspondence of the Genesee Farmer.]

Southern Agriculture and Customs.

Our readers will hardly credit the story that potatoes are now brought to market which have grown in Georgia within the last three months, in open air. Yet such is said to be the fact, and a matter of no uncommon occurrence. Farmers plow, plant, sow, and harvest, more or less every month in the year. Barley, oats, peas, and young clover are now growing in the middle of January. How they contrive to escape death by hard freezing, I do not understand. Every day brings out some strange novelty. At first it seemed very odd to see men driving oxen with bridle bits, head-stalls and lines, precisely as horses are driven at the north. In some cases ropes are tied to the horns of either ox to pull him to the right or left. At Columbia, the capital of South Carolina, I was amused to witness several very small oxen harnessed each single in a cart, and driven with bits in mouth 20 miles to market, with two or three hundred pounds of corn stalks and a few eggs. One need not go out of the Union to find a people quite as primitive in the management of cattle as old Jacob, who contrived to breed so many that were "ring-streaked and speckled." These animals fare so hard at the south that they are mere dwarfs, and generally very poor at that. Sheep have long legs and tails, long necks and precious little wool. To prevent its total loss in the thorny bush wood, sheep are sheared or shorn twice a year and never washed. Their fleeces are mat-

ted with burrs, and worth next to nothing. Indeed they are kept for mutton, not for their wool.

There are, I believe, more goats than sheep in Georgia, and more dogs than goats and sheep put together. Every negro is ambitious of being the master of a dog, as he can not be of himself. I have visited a good many plantations, seen women plow, chop, grub trees, and how field laborers eat, drink, and sleep in their huts. This is a branch of domestic economy, however, which can no more be discussed than my "Laconics," or the rights of labor in the free States. The regular labor and wholesome food of slaves, and the absence of all care about providing for themselves and offspring, cause this class to multiply with greater rapidity than any other in the world. They will soon number ten millions in the United States. Nor can you prevent their rapid increase, except by the most inhuman mutilation. It is the whites, the physically inferior race, not the blacks, who are the sufferers by the importation of so many wild people from Africa, by the commercial traders of Old and New England, previous to the year 1808, when the slave trade was abolished.

Compare the condition of the natives now in Africa with the negroes of the South, and every one must see that the latter have gained immeasurably by being transplanted from a land where civilization has not advanced one inch in four thousand years, to the heart of a Christian nation. The great truth is not to be denied that no other people have advanced so much in an equally short period as have the children of the men and women who were stolen from Africa, many of whom are still living to teach their masters and the children of the latter, an *African dialect*. In a rural population where there are seven negroes to one white person, and the blacks nurse the whites as well as their own offspring, what language, think you, the child will learn from its nurse and playmates?

It is the European, not the African race that have, and must long continue to suffer by the presence of 3,000,000 of negroes, who, being at the bottom in the scale of humanity, must unavoidably pull down to their level the smaller number with whom they associate, unless the latter draw them up to a common platform.

The great and crowning evil in all so called Christian nations is "the love of money." In that regard there is not a particle of difference between slaveholders and non-slaveholders which I can discover. All are alike willing to chew and smoke slave-grown tobacco, eat slave-grown

rice and sugar, and wear slave-grown cotton, if these things are only sold a little cheaper, so that the consumer divides with the planter the profits of unrewarded labor! The constant cheapening of productive toil in the free States, in Europe, and the slave States, I regard as a wrong which a just God will not fail to punish. But those that think they profit by getting from their fellow beings more than they give in exchange, will not tolerate a discussion of the rights of labor in any country, so I dismiss the subject.

It is much to be regretted that agriculturists do not travel more and see how their brother farmers manage things in distant quarters of this nation of thirty States. Travel will cure a thousand prejudices and errors which every man unconsciously falls into. It will enable the best informed to impart most valuable information to those who are farming precisely as their great grandfathers did a century ago. Some of the implements used by this class of cultivators are truly curiosities. Railroads and steamboats ought to mingle the citizens of every State with those of all the others.

This is a good country for poor northern men, if they are only steady and industrious. Labor is not looked upon as disreputable. On the contrary, white laboring men are more esteemed here than at the North. Mechanics are scarce, and command high wages. I have heard more said in favor of home manufactures at the south than I ever did in Rochester and Buffalo. The spirit of improvement has taken a strong hold of the public mind, and great and salutary changes will soon be witnessed. Any people can achieve almost any amount of good, if they will. All should aim to improve their system of farming a little every year. The planters of the south beat the farmers of the north in ditching side-hills. These ditches go around the hill at a small inclination, (six inches in a rod,) by which all surface water after rains is carried off gently so as not to wash plowed land. On pretty steep hills the ditches are more than 40 or 50 feet apart. They are not crossed in plowing.

Considering their long life, and their powers of endurance, mules are far more economical for farm work than horses. Here, too, northern farmers might take a useful lesson in this region.

Augusta, Ga., Jan., 1848.

Scientific Notices, &c.

Urine of Herbiferous Animals.—The urine of the hog contains 1 part in 100 of phosphate of potash, which neither the cow or horse produces—while the cow contains 16½ parts and the horse 4½ parts of the hippurate of potash, the urine of the hog contains none. The horse contains 10½ parts of lime; in all the other valuable qualities the cow excels. The only reason why the manure of the hog is found the most valuable

is that it is produced from richer food and in a more concentrated state.

Artesian Wells.—The deepest bored well in the world is at Mondrof; it is 2200 feet deep and still progressing; its waters are 95° Fahrenheit—within 3 degrees of blood heat. The well of Grenelle, at Paris, is 1794 feet deep, mostly through a chalk bed. Its temperature is 72° F. It discharges 20 barrels of water per minute, and rises 50 feet above the surface. It is difficult to account for the rise of the water in these bored wells; inclined strata of rocks having a source higher than the issue, is generally supposed to be the cause; but water is as readily procured on high as low lands. Condensation of steam, and the great pressure from central heat, has also been suggested.

Potato Disease.—This disease has been known for several years at Bogota, in South America, (where they are indigenous,) especially in rainy seasons.

Electricity applied to Plants.—It seems by a carefully conducted set of experiments, that artificial or increased electricity, or the electro-magnetic fluid, has not the remotest effect on the vegetable tissue, neither increasing or retarding growth, and that the reports on the subject are one of the humbugs of the day.

Carbon from the Lungs.—An adult person expires every hour from his lungs 174 grains; from the pores of the skin near 6 grains; amounting in 24 hours to 9 ounces of solid charcoal or carbon. This article is elaborated by the animal economy from the food, and dissolved by the oxygen we inhale in the atmospheric air, and is thrown off in the shape of carbonic acid or fixed air.

Atmosphere of the Moon.—Astronomers for a long period have not admitted that the moon possessed an atmosphere, but from late improvements in astronomical instruments, it seems to be settled that, that luminary has a slight and very rare atmosphere, of about one quarter of a mile in height, capable of supporting (according to the calculations of Prof. Loomis, of the Cincinnati observatory,) about the 45th part of an inch of mercury—while our atmosphere supports 30 inches. It is so rare that it exceeds the most perfect vacuum that can be produced by the air pump. An European astronomer maintains, that its reflected light contains an appreciable quantity of heat; for he was able, by concentrating the rays through a 3 foot concave lens, to effect a most delicate and sensible thermometer.

Nutritive quantity of Dry and Green Fodder.—It is generally supposed that there is more nutriment derived from grass in a green state, than there is after it has been cured. A young heifer was carefully weighed, and fed 10 days on green food, while an equal weight was nicely cured, when she was again weighed and fed with dry

food. The experiment was tried three times, with the same result, which was a trifle each time in favor of the dry food—not enough perhaps to pay the labor of curing, but sufficient to show there was no loss in nutriment, and only in the water of vegetation.

Grain in Russia.—A traveler in northern Russia, finds that summer rye and barley are cultivated with success; where the average temperature is only 26, (ours is over 50,) and where the earth at 7 feet depth is continually frozen and never thaws. The season is only from 2½ to 3 months from plowing to harvest. In this neighborhood, but on a plateau of much higher land, the shaft of a mine was sunk through 175 feet of frozen earth. The springs that this high land produced ran the whole year at a temperature of 36, only 4 degrees above freezing.

Gleanings from Foreign Journals.

A RECENT experiment made with the following substances, makes their constituent values for nutriment as follows: 107 parts of Wheat, 111 of Rye, 117 of Oats, 130 of Barley, 895 of Potatoes, and 1,335 of Turnips, are equal as to nutritive power.

Trotting.—The knowing ones in England have been nicely taken in, by a trotting horse taken over from this country by an eastern company. He was backed to perform 18 miles within an hour upon a mile course, at the Belle Vue Gardens—which he performed, and a half mile over, wanting 60 yards. The rider not hearing the pistol at the expiration of the hour, put him round the course once and a half more, and until they had to interfere to stop him. There is nothing on the English trotting records to equal it, and it is certainly a most extraordinary performance, as the horse was not at all distressed and came out quite fresh. The horse, owner and rider are all American, and with this single race bagged a fortune.

POTATOES.—In digging the crop of potatoes in the land attached to the Darlington Workhouse, the production was found to be at the rate of 450 imperial bushels per acre. The potatoes were of the kind denominated "Green Tops." They were set with salt and ashes, and when taken up were sound, and the earth quite moist. *Note.*—We have an instance in a field near this city, which had a large handful of ashes strewn upon the seed before covering, that almost entirely escaped the rot.

DRAINING.—It is worthy of notice, to attest the estimation in which thorough draining is held, that one individual in England has had cut on his estate upwards of *fifty miles*, or 16,000 rods of drain within the last twelve months. It is confidently asserted that the top and under-drain

system now pursued in the flat and retentive soils of that country, and the introduction of the turnip culture, has doubled its agricultural productions in the last twenty years.

LIVING THRESHING MACHINE.—A man of 58 years of age, by the name of CARTEW, threshed for Mr. RULE of Cambourne, 920 sheaves of barley in 11 hours actual labor, and offers to undertake the same task on a wager, for six successive days. He last year threshed at the Manor of Coppenhouse 400 sheaves of wheat in 12 hours—cleaning up over 30 bushels of seed.

ADULTERATING FOOD.—A respectable corn dealer, of Glasgow, Scotland, has been sentenced to 4 months imprisonment, and £300 (\$1500) fine, for wilfully adulterating the Oatmeal intrusted to his care for distribution among the poor of the Highlands by a charitable society of Glasgow. Served him right.

THICK AND THIN SOWING.—The Society of Arts in England, have offered their *Gold Iris Medal* for the best Essay on "*thick and thin sowing*," to be tested on not less than 5 acres, side by side, for a series of years, with a description of soils, manner and time of getting in, &c. *Note.*—This is a subject which has excited much speculation among the wheat growing community. Three pecks when *dibbled* in, or planted one seed in a hole, at exact distances, have produced 70 bushels per acre. If one kernel will produce one head, and that 40 kernels, which is an average, then one bushel sowing, without any tillering or side shoots, should produce 40 bushels per acre; and yet we mostly sow 1½ bushels, and get from 15 to 30 bushels. Where is the loss? Our opinion is, that one bushel sown the first of September, is as good as two bushels sown very late.

ARTIFICIAL SILK.—It is stated in an English paper that old pieces of silk, dissolved in *caustic ley*, (strong solution of potash, or concentrated ley of wood-ashes,) and cotton thread immersed in it and allowed to dry, has a coating of the animal matter of silk deposited on every fibre, and so complete is the deception that it is woven into lace and other fabrics, without detection.

THE value of the merchandise, the growth and produce of the United States, exported for the year ending 1st of July, 1847, was 150,687,464, of which \$97,747,130 was exported to England, and \$19,277,992 to France. The value of the importations was \$115,298,572. We received from England for the six months ending 1st July, 1847, goods to the amount of \$54,797,468. from France, \$14,388,742; from Spain, \$12,617,113.—From these tables it would appear that balance of trade in our favor for the past year, amounted to \$35,368,892. The number of American vessels which entered the United States, was 7,759; tonnage, 2,101,359. Foreign vessels, 6,499; tonnage, 1,220,346.

In Wayne Co., Indiana, out of an adult population of 9,349, there are but 42 that cannot read and write. This is owing to the influence of the "Friends," of whom there are many in that country.

Grasses.

It is often necessary that one should go away from home to appreciate, at their true value, things with which he has been most familiar all his life. Raised in one of the best grazing counties in the State of New York, the writer has had to live over forty years and spend a winter in the Southern States, to learn how greatly Providence has favored all the northern portion of the Union, from Maine to the western bounds of Iowa, in the production of *grasses*. Their value is far above all computation. By skilful culture, and judicious feeding, they can easily be transformed into the best food and clothing consumed by civilized man. Once, we regarded the labor of seeding, manuring, mowing, curing, housing, and foddering out grass, as a great tax on northern husbandry. This was a serious mistake, the extent of which our friends at the North would soon learn, did the earth for one season only, refuse to bear any of the cultivated grasses. A very intelligent correspondent of the Southern Cultivator truly remarks that, "the great secret of the *astonishing resources* of the frozen regions of the North, lies in its grasses, of which clover is the chief."

Much can yet be done to increase the products of pastures and meadows of the farmers who read this journal. There are thousands of acres which need *draining* to root out wild plants, sweeten the soil, and enable timothy, red top, and clover to flourish in their places. An excess of water, particularly standing water, is most deleterious to all grazing lands. No standing water should rise to within three feet of the surface of the earth, if you would have it yield sweet nutritious hay, or pasturage. There are many old meadows and pastures which will be greatly improved by sowing more grass seed, and scarifying them with a light, sharp harrow. We have seen good meadows of tame grass formed in Illinois by burning the prairie, sowing seed on the black turf, and harrowing the ground, without any previous breaking of the sod. Make it a point to raise more grass seed and to sow more every year. All the southern cities are supplied with northern hay; and most of the producers of hay on the Hudson river and along the Atlantic coast make great use of leached ashes, lime, and salt, to fertilize their annually cropped meadows.

Kind reader, would you not rejoice to add 50 per cent. to the grass that now annually grows on your pastures and meadows? If so, the thing is quite attainable at a trifling cost. Perhaps it may be advisable to break them up first. If so, plow deep, and cultivate the earth most thoroughly to obtain one or two first rate preliminary crops. Use a plenty of grass seed and manure, so far as you have it. If it is possible to *irrigate*, by all means give your grass lands the benefit of running surface water several times during a

season—shifting the little streams every week or so. Irrigation might be far more practiced both north and south than is now done. Probably a mixture of equal parts of slaked lime and leached ashes will do more to augment the growth of grass than any other application of equal cost.

Care should be taken not to turn cattle, sheep, or horses, on fields too early in the spring. We have seen great injury done in this way. Better keep cattle on dry, clean cotton, as many do in this city; i. e., let their cows steal it to keep them from starving. Cotton is about as nutritious as clean pine wood saw dust, being nearly pure woody fibre. Yet, strange to say, we have seen many a bale where the sack was open with a hole eaten into it by cows. They pick up every scattered lock they can find.

Undoubtedly, many of the native grasses of this region might be mown and cured for hay. But who has a scythe, and who can use it? An intelligent planter told me yesterday that he made some hay in his corn fields, but he cut it all with the *ho*.

When the mowing machine, invented by Mr. KETCHUM, of Buffalo, shall be generally introduced, the cost of cutting and curing hay will be much diminished. We saw this machine in New York and regarded it as a valuable affair. So long ago as 1840, the hay crop of the Empire State was estimated by those that gave in the census, at *thirty millions of dollars*. This product may be doubled, without materially lessening any other. Very few acres in pasture or meadow in any State have reached the maximum return.

Augusta, Ga., Jan., 1848.

Manuring and Stimulating Seeds.

A GOOD deal was said, a few years since, on the subject of causing the seed to absorb and become impregnated with some soluble salt, whereby its productiveness was greatly increased. It originated in Germany, and so sanguine was its discoverer, that he often said the time would come when a man would carry the manure for an acre of land in his breeches pocket.

We observe in the London *Mark Lane Express* the advertisement of BICHE & Co., who have obtained a patent, and offered to prepare seeds of every description, warranting it to save five pounds sterling per annum in the cost of manuring an acre. Their notice is accompanied by many certificates of celebrated farmers, bearing testimony of its efficacy; also with a tariff of prices per bushel for preparing the seeds, which varies from one to two dollars. For clover seed fifteen cents per pound, or nine dollars per bushel, for preparing only.

One of the certificates states that the turnips produced a much larger leaf, almost lost their indentations, and become round, with a great in-

crease in product. Another statement, speaking of wheat, says it causes a great increase of tillering, a longer and heavier head, and more straw than the ordinary process.

It is almost inconceivable to us, what virtue could be communicated to a seed so small as the turnip, even if the most concentrated essence of any thing, that would cause an increase of any amount of its products. The advantage gained by this process of *sleeping*, as it is called, must accrue to the plant in its younger stages, before the fertilizing power of the seed is lost, to give strength and early vigor to the young plant,—causing its roots to throw out abundantly and strong—whereby its ability to procure nutriment, is greatly increased, as all seeds are entirely decomposed long before the maturity of the plant. We presume the phosphates and sulphates of ammonia are among the secrets of these preparations, as they are well known as great stimulants and excitants of vegetation, and perhaps combined with some material that renders these salts of difficult solubility, until decomposed by the peculiar processes of the vegetable economy. *

Natural Science.

ONE of the most interesting series of lectures recently delivered, is that by Professor AGASSIZ, in New York city, upon Natural Science.—These lectures have been published in the journals as they were delivered, and exhibit the most profound researches into the depths of nature. Animal life is traced in all its various forms and changes, to the present geological period, when the types and forms reached their present perfection. The conclusions are directly at variance with the ingenious author of the *Vestiges of Creation*, whose theory of development or evolution of more perfect types out of the next inferior, which theory tended to infinite progression, has occasioned so much discussion. Professor AGASSIZ thinks that the whole view of animal life upon our globe proves that the great and beautiful and harmonious plan of the Creator has been carried out and finished; that it is a complete whole, and that no further or higher types or developments of animal life should be looked for on this globe. Among the interesting facts brought to view was the limitation of different species of animals to particular locations on the earth.—Man's dwelling place is on every portion of the earth's surface, and he traverses every sea; but there is no other specimen of animal life which extends generally over the earth or through the waters of the oceans. They are all confined to limited fields, whose bounds they never pass. Each continent and the different portions of continents have each their peculiar species of animals, which are unknown in other portions of the earth. They all seem to remain upon the field where they were created; and the fossil

remains in the different strata of the earth's surface show that this law has always prevailed.

In New Holland there are species of animals entirely different from any others found in the world, and the fossil remains of the same species are found in the different strata in New Holland, and nowhere else on the earth. What seems more remarkable is, that fishes, which appear to have no barrier to locomotion round the globe, obey the same law, and remain always in the same oceans and the same fields. There is a family of fishes around the islands between New Holland and Southern Asia, differing from any others found in the world. They never leave these waters except for a short distance into the Indian Ocean. The fishes on the Atlantic shores of Europe are entirely distinct from those on the Atlantic shores of North America till we get far north, where the mean temperature is thirty-two degrees, and the two continents approach each other. They never migrate, even along the coast, beyond certain limits. A very interesting summary of these lectures has appeared in the *National Intelligencer*. The professor, who has but recently arrived here, is but forty years of age, and the cultivators of natural science have yet much to hope from his labors.

Shrinking of Pork—Lunar Influence.

MESSRS. EDITORS:—I observe an inquiry in the December number of the *Farmer*, asking the reason or a remedy for the shrinking of pork when boiled. What little experience I have had proves to me that the following is a remedy—and of course when you see the remedy you will know the reason. Now I care not whether your hogs are very heavy, or whether very fat or not, the whole mystery is here—kill your hogs in the new of the moon, as near the full as you can, and when the moon is rising—any time when it is between east and south—but better the nearer the moon is to the south.

The moon governs the tide; when the moon is rising the tide is rising, and the nearer the full the higher the tide—and as soon as the moon is south the tide begins to ebb. Therefore your pork will shrink or swell with the ebbing or flowing of the tide, and wane or wax of the moon. Try it, and then you will know for yourself.

WM. L. VAN DUSEN.

Henrietta, Ohio, Jan. 1848.

REMARKS.—We give the above for what it is worth. We shall not, at present, attempt to disprove the statements and conclusions of our correspondent, although we do not adopt his faith in lunar influence. We alluded to the main question at some length, in our January number.

KEEP your heart always ready for some misfortune.

Meteorological Observations for Rochester, N. Y.

BY LEANDER WETHERELL.

Summary of the Meteorological Observations made from Jan. 1, 1847 to Jan. 1, 1848. Also, for comparison—from Jan. 1, 1846, to Jan. 1, 1847.

ROCHESTER is situated on both sides of the Genesee river—7 miles from its entrance into Lake Ontario : Latitude, 48° 8' 17" ; Longitude, 77° 51' ; elevated 506 feet above tide water.

Monthly mean temp. of Jan.	1847, 24.63 ;	do. 1846, 27.56
" Feb.	25.31 ;	do. " 22.79
" Mar.	28.44 ;	do. " 34.80
" April	41.42 ;	do. " 47.36
" May	58.27 ;	do. " 60.24
" June	61.94 ;	do. " 64.45
" July	71.76 ;	do. " 69.87
" Aug.	67.31 ;	do. " 69.86
" Sept.	58.48 ;	do. " 65.71
" Oct.	47.36 ;	do. " 47.39
" Nov.	41.05 ;	do. " 42.67
" Dec.	32.23 ;	do. " 29.41

Annual mean temp. of the year " 46.64 ; do. " 47.44

Highest degree, " 95.00 ; do. " 96.00

Lowest " 0.00 ; do. " 1.00

Greatest range, " 95.00 ; do. " 95.00

Warmest day, " July 19 ; do. " July 13

Coldest " Feb. 23 ; do. " Feb. 26

Winds. North, in the year, " 14 days ; do. " 23 days

" Northeast, " 32½ " do. " 43½ "

" East, " 8 " do. " 14 "

" Southeast, " 30½ " do. " 38½ "

" South, " 33½ " do. " 13½ "

" Southwest, " 68 " do. " 47½ "

" West, " 68 " do. " 75½ "

" Northwest, " 102½ " do. " 109½ "

Prevailing wind of the year " N. W. ; do. " N. W.

Number of fair days in " 166½ ; do. " 163

" cloudy days in " 193½ ; do. " 202

" days on which rain fell " 119 ; do. " 99

" " " snow " 56 ; do. " 65

" " " rain & " 33 ; do. " 13

Rain Gauge for 1847, 33.99 in. ; do. 1846, 37.13 in.

First frost in autumn of " Sept. 16 ; do. " Oct. 3

First snow " Oct. 11 ; do. " Oct. 17

Robin first heard " Mar. 22 ; do. " Mar. 18

Maple (acer rubrum) in bloom, in 1847, April 9

" " " " " 1846, May 24

Plum, peach, cherry, and apple in bloom, in 1847, May 15

" " " " " 1846, May 1

of sleighing during this month—and this within the last half of it. The weather was very mild the last three days—on the last day of the month and of the year, the thermometer was 45 in the morning, 53 at noon, and 52 in the evening. The buds of the maple very much enlarged.

The aurora borealis was unusually frequent the past year. The one of March the 19th was remarkably splendid. Its brilliancy and extent far exceeded any thing of the kind that I have seen since 1836 and '37. From the arch which was formed, shooting upward toward the zenith, were numerous spires or beams of light chasing and succeeding each other in rapid succession. These were beautiful and grand—beyond the power of description. The undulations, called "merry dancers," were uncommonly fine and dazzling. The light proceeding from these pyramidal spires seemed to float in successive flashes in mid-heaven, resembling the flashes produced by igniting alcohol or gunpowder, more nearly than any thing else that occurs to me for comparison ; or, to use a sublime comparison, resembling what we might fancy to be the appearance of the conflagration of the world. At 11 o'clock this phenomenon had passed the zenith toward the south. The wind was easterly—the sky cloudless—the thermometer 29. It has been remarked that the northern light is the "sign" of a gale or storm. The following morning the thermometer 29 at sunrise—dark clouds in the horizon—a little rain about 8 o'clock A. M., succeeded by a pleasant day.

Destruction of the Wire-Worm.

MESSEURS. EDITORS:—I noticed in the November number of the Genesee Farmer, an inquiry from a correspondent in Clarkson, N. Y., relative to the extermination of the wire-worm, with a request that some correspondent would answer the inquiry, through the Farmer. I have long considered the wire-worm to be the greatest pest of the farmer, in those soils where they abound. I have found that in a mucky, or a black sandy soil, and in fact any soil where there is found much muck or mold, they seem to be the most troublesome. Yet I have found them so abundant in parts of a lot, that was almost exclusively gravel, (but surrounded by mucky land,) that they destroyed almost entirely wheat or corn when sowed or planted on it. But I do not think that they will do much injury to crops on such land, unless in the immediate vicinity where muck or black sand predominates in the soil.

It is no easy matter to eradicate the wire-worm from soils that seem to be natural for them, when once they have become numerous. I have tried various means: One season after the wire-worms had destroyed full half of my corn, as soon or before it came up, I was told that if I put a little salt, ashes, or lime in each hill, when I

I have thus placed in juxtaposition a summary of the meteorological and other observations of the last two years. The careful reader will observe in comparing any two corresponding facts given in the abstract above, the difference between the two years ; for example : the annual mean for 1847 is 46.64—that of the preceding year is 47.44—difference of only eight-tenths of a degree. So again of the rain gauge : difference between the two years, one inch and eighty-six-hundredths ; so of the corresponding facts generally—the difference between them is slight.

The prevailing wind here is northwest.

The season of the past year was not as forward as that of the preceding year. Native plants and the garden fruit trees were about one half a month later in blossoming. The summer though quite productive was dry, especially the months of June and July, and but little rain in May.—During the autumnal months we had a great abundance of rain—river very high most of the time during this part of the year ; so through the month of December. We had only ten days

planted it over, that they would not trouble it.—Accordingly I did so, on a part, and made a composition of all three of the above named articles, and put a little into the hills of the rest; but all to no purpose, they destroyed as bad as before.

The most effectual means I have found, from my own experience, and the experience of others, is to plow as late in the fall as possible, and then sow to buck-wheat two seasons in succession, which will almost entirely destroy them. But when a farm is nearly covered with them—as I do not consider a buck-wheat crop, when raised to any extent, very profitable—my practice has been to plow late in the fall, as above; and then summer-fallow thoroughly the ensuing season, not allowing even a weed or spear of grass to grow; which is literally termed plowing, or, starving them out. It would not, it is true, eradicate them so effectually as by sowing buck-wheat, as recommended above; yet I have found it more profitable, from the fact that starving them out, by thorough tillage, would destroy so many of them, that the wheat crop would suffer but little from what was left—and by not seeding down to clover or grass, but cropping alternately, by plowing and fallowing as above described, I would so far succeed in getting clear of them, that I would not suffer loss to any great extent.

But if the land be seeded to clover or grass, and lay over, as it should, in order to keep up the land, so that the soil remains in good heart, they will soon become as great a pest as ever. Even when fallowed the ensuing season by plowing in June, or as late as possible, in order to get as much benefit from the clover as possible, in point of feed for stock, and a good coat to turn under—which, by the way, I am much in favor of, others to the contrary notwithstanding—I have found them so bad on my best wheat-land, after a few years, as almost entirely to destroy the wheat crop.

I have spun this communication much beyond what I at first intended, but if you should deem it worthy of an insertion in the Farmer, it is at your disposal.

W. H. H.

Wheatland, N. Y., Dec., 1847.

Quantity of Seed to an Acre—Experiment.

MESSRS. EDITORS:—At the winter meeting of the Yates County Agricultural Society, the following account of an experiment tried by me was read, for which the Society gave a premium, and voted unanimously to have it published in the Genesee Farmer:

On the 23d of September, 1846, I sowed four diagrams with wheat in a summer fallow that had been plowed five times during the summer. The ground was prepared in the following manner:—After the soil had been finely pulverized with a hoe and rake, I then accurately measured off four diagrams, each two feet square, leaving

a small space between each of about six inches. The squares were then numbered and subdivided as follows: No. 1, in squares $1\frac{1}{2}$ inches each way; No. 2 in squares of 3 inches; No. 3 in those of 4 inches, and No. 4 in squares of 4 4-5 inches, including the outside lines of each large square. I then, with the thumb and finger, carefully planted one kernel of wheat in the corner of each small square.

Now for the yield. On the 19th of July last, I carefully gathered the 4 parcels, keeping each by itself; shelled each by hand, and counted the grains of each diagram separately—the results of which are given in the following table. On the 17th of August I took said wheat and had 4 ounces carefully weighed by sealed scales, and by counting all the grains weighed, I found there were 780 grains in one ounce, from which I have made an estimate of the different yield, and also the rate of the different amounts of seed per acre—for which see the table.

	No. 1	No. 2	No. 3	No. 4
No. of grains planted.	289	81	49	36
No. of grains that grew.	203	60	40	30
No. of heads.	286	136	112	104
Average number of grains per head,	26	35	39	42
Whole number of grains.	7458	4765	4452	4399
Yield per acre in bushels.	108	69	64	63
Seed per acre in bushels and pounds.	5 lbs. 12	6 lbs. 10	6 lbs. 4	6 lbs. 3

It may be proper to add that the soil was a clayey loam, which had never been manured, and had been kept for pasture during the preceding six years. Should the ground be well prepared and sowed with a drill, it is probable from the foregoing experiments that the yield would be greater than if sown broadcast.

ADAM CLARK.

Milo, Yates Co., N. Y., Jan., 1846.

QUALIFICATIONS FOR MATRIMONY.—The clergy of Iceland have the authority conferred by law, to refuse to marry a woman unless she can read and write. The power is given upon the sound principle, that a woman must first be qualified to instruct her offspring before she be permitted to marry. This principle, says an exchange paper, fully and universally acted on, would advance the world more rapidly in its career of improvement than any other cause within the range of possibility. Were all women instructed and educated according to their capabilities, there would be an extent and degree of domestic education that would influence more favorably the character of a people, than the best organized school systems. The latter indeed cannot have their full effect without the former. What is effected partially by law in a primitive community like Iceland, can be effected much more largely in communities more cultivated and artificial by moral influence and public opinion.

Ashes on Corn.

IN copying the letter of Mr. VAN DUSEN, published in the December number of the Farmer, giving the results of his experiments with ashes on corn, into the Southern Cultivator, Dr. LEE makes the following remarks:

We have seen a larger gain than the above, but that is abundant for our purpose. Let us analyze the subject a little. Two bushels of ears will make a trifle over one of merchantable shelled corn. The net gain of 115 on five acres, we suppose to be fully equal to 60 of grain, or 12 on each acre. Cut up at the ground, and cured as corn fodder is at the North, the gain of "one fourth" was equal to the value of 17½ bushels of ashes, and the trouble of applying them to the crop. Ashes are worth about ten cents a bushel in Western New York, where Mr. V. D. resides, so that their value was \$1.75. An acre of corn fodder is worth three times that sum.

We greatly desire the plain, unlearned farmer to look into this matter, and see the whole natural process by which 3½ bushels of ashes do add to the crop 23 bushels of ears of corn, and a like gain to the straw of maize. During the three or four months, in which time this crop was made out of something—matter which certainly came from somewhere—probably not more than a half bushel of the ashes were dissolved, and entered the growing corn. Of the solubility of ashes in rain water, we will speak at another time. A bushel of merchantable corn, which weighs 56 pounds, will lose 6 pounds of water, if dried at 212 degrees. Twelve bushels then will weigh 600 pounds. Grind this grain and burn it up, and you will have but 6 pounds of ashes. If you add to this, the ash which the cobs in 23 bushels of ears would make, and the ash which the quarter's gain of stems and leaves would yield on an acre, and you will have altogether, not over half a bushel. But Mr. VAN DUSEN applied seven half bushels within reach of the roots of his needy crop; one seventh of which being dissolved and entering into the circulation of the plants, supplied those alkaline earths, without which we have proved, time and again, carbon, nitrogen and water cannot be organized into this bread producing vegetable.

All the organized matter that made the whole gain in the crop—23 bushels of ears, and a like gain in stalks and blades—existed within reach of the corn plants as well before as after the ashes were applied. Providence supplied in earth, air and water, full 95 parts in 100 of the elements which combined to make the addition to the crop—the ashes yielding less than 5 per cent. Science taught the practical husbandman the important facts: first that without phosphate of lime, and salts of potash, soda, iron and magnesia, soluble and available in the soil, no corn can possibly grow. Secondly, that the supply of these substances in ordinary corn lands, is less than is required to make 50 bushels on an acre.

In conclusion, we put the question to the common sense of practical men, whether in truth there is any thing more mysterious in making a hill of fat corn—an average of two good ears on each stalk—by feeding the living plants just what they need, than there is in making two fat pigs in one pen, by giving them a plenty of good food during their whole life time? Upon a pinch, a hungry pig can trot round over 100 acres to find his breakfast. But alas, no famishing corn plant can travel a single rod to get the materials which make the solid bones of all animals that live on corn, and have the power of locomotion. Corn will send its roots into the *subsoil* in search of bone earth, gypsum, potash, soda and magnesia, if you will only break it up so that said roots can penetrate the compact mass.

AMERICAN APPLES.—The London Sun says—"The arrival of apples from the United States of America are beyond precedent in extent, and the quality is remarkably fine. In several instances vessels arriving from New York have brought as many as nearly one thousand packages of this fruit, of the excellent description of the New-town pippin."

Cobs as Fuel.

MESSERS. EDITORS:—Do the thousands of your readers who raise their hundreds and their thousands of bushels of corn, consider that they are raising so many bushels of excellent fuel? Only think of a ten acre lot yielding not only a good crop of corn, fodder, and pumpkins, (if the bugs do not destroy the latter,) but six month's or a year's fuel! Half if not more of my last year's fuel has been cobs. They are best for summer, when a fire is not needed long at a time; but they are excellent in winter, and nothing that I have tried will heat a room quicker in a cold morning.

The only objection to them is they are very combustible, and need a tight-air stove to regulate the heat. They should be placed on a floor convenient to the kitchen, and require a light shovel of tin or sheet iron to handle them, else the ladies will take exceptions. The corn should be removed with a sheller, as that will leave them nicer than when threshed by hand or horses—though that is not important.

I would not recommend the use of cobs for fuel in a country where wood is so plenty that it is an object to get rid of it; but in old sections where wood is scarce and high, and especially in the great west, where a cob is as long as a stick of stove wood, (not very definite,) and where, especially in many parts, wood will always be scarce and corn abundant, there it will be an object not to be overlooked. I might mention other advantages from their use, such as the ashes as manure for the coming crop, their cheapness, &c., but I will not obtrude longer on your patience at present.

Yours truly,

P. PARKS.

Victor, N. Y., Dec., 1847.

SUGAR BEETS.—I brought from my garden a Sugar Beet weighing 11 lbs. It was the handsomest, but not the largest, being a true taper from the centre to the point of the tap root, perfectly solid, and eighteen inches long, with very fine lateral roots. More than one farmer has asked me "what sort of a root it was," thus bringing to mind the assertion of SAVARY, that when he was viewing some of the ruins of Egypt, a native Shiek asked him in all simplicity, whether the English or the French made these ruins! S. W.

AGRICULTURE.—Nothing can more fully prove the ingratitude of mankind than the little regard which the disposers of honorary rewards have paid to agriculture; which is treated as a subject so remote from common life by all those who do not immediately hold the plow, or give fodder to the ox, that there is room to question, whether a great part of mankind has yet been informed that life is sustained by the fruits of the earth.—Johnson.

Smut in Wheat.

MR. EDITOR:—In your November number is a communication from N. SIMONS, relative to Smut in Wheat. I cordially agree with the writer, in the importance of sowing clean seed.

Four years ago we sowed clean seed wheat, near the middle of October, after potatoes. Some of it winter-killed; that which was alive in the spring grew a very thick, strong straw, with very long heads. But the rust struck it, and it was shrunk and very smutty.

My neighbor, Mr. BARNEY, told me early in September, he would not sow his wheat until October, if it was not for smut. He said he would rather have half a crop of good clean wheat, than a full crop with three bushels of smut to the acre.

Our experienced farmers here say that if wheat is sown when the land is very wet the crop will be quite smutty. JOSEPH CARPENTER.

Prairieville, Wis. Dec. 1847.

The Orange Carrot.

MESSRS. EDITORS:—Herewith I enclose you \$5 for ten copies of your invaluable agricultural paper; and, for the benefit of those who grow the Orange Carrot, I send you a brief account of my success in its cultivation.

Finding the Carrot one of the most abundant and nutritious, and therefore one of the most profitable of the root crops, I have been accustomed to cultivate a small plat, each year. The last season I raised *sixty bushels* from a piece of ground 36 by 48—equal to about 15 or 1600 bushels per acre. About the 25th of May I sowed upon this highly cultivated plat, four papers of Shaker Seeds in drills 16 or 18 inches apart.

Yours, &c.,

O. L. BARNUM.

Gouverneur, N. Y., Jan. 1, 1848.

ANTIDOTE TO POISONS. — Animal charcoal (freshly prepared ivory black) is an antidote to poisons, especially those belonging to the vegetable kingdom. Thus strychnia and nux vomica, and other poisons of this class, when taken mixed with charcoal are perfectly harmless provided the charcoal is administered in doses proportioned to the quantity of the poison. Three or four grains of strychnia are neutralized by 1 1-2 or 2 ounces of charcoal. Even the effects of arsenic, are greatly diminished by a speedy administration of charcoal. Corrosive sublimate is more surely rendered inert by white of eggs. Dogs, that have been poisoned by nux vomica, may possibly be cured by charcoal, though it is quite important that it should be administered early, and in large doses, not less than 1 1-2 or 2 ounces. In the absence of animal charcoal administer freely fine fresh charcoal from the fire place.—*Sel.*

Seneca Co. Agricultural Society.

The Annual Winter Meeting of the Seneca County Agricultural Society, was held at Waterloo, on Tuesday, January 11th. The officers of the ensuing year were elected to wit:

President—JOHN DELAFIELD.

Treasurer—JOHN D. COE.

Secretary—WM. R. SCHUYLER.

Vice Presidents—John L. Bigelow, Junius; Jason Smith, Tyre; Charles E. Mynderse, Seneca Falls; Sylvester L. Stringham, Fayette; Edward I. Judd, Varick; Thomas J. Polwell, Romulus; Andrew Dunlap, Jr., Ovid; Wm. F. Coan, Lodi; John Canada, Covert; R. P. Hunt, Waterloo.

Delegates were appointed to visit the autumnal fairs of the adjoining counties—Ontario, Yates, Tompkins, Cayuga and Wayne—with a view to examine and report every improvement that may be deemed useful to the farming interests of this county.

A resolution was unanimously passed soliciting the attention of the Legislature to the care and protection of the Agricultural Associations of the State, as the most sure and important source of our national wealth and prosperity.

Notwithstanding the severity of the weather the meeting was well attended, members being present from the extreme points of the county.

Interesting discussions took place, more especially upon the subject of *Draining*. The vast importance and large benefits of draining were pointed out, and seemed to have been extensively tested by several members present.—The introduction of tile drains occupied the attention of the Society, and measures were suggested for an economical production of tiles of various patterns.

Among other matters it appeared that many members then present had raised heretofore forty bushels of wheat to the acre, and even more, and from the better attention now paid to the cultivation of the soil, with the intended introduction of the drains, great confidence was expressed in the future products being restored to the point heretofore attained.—*Seneca Observer.*

GREAT IMPROVEMENT IN FENCE MAKING.—Take any kind of timber for stakes that will make good rails, (black ash is best.) Get out your stakes 7 feet long—lay up the fence 4 rails high—place the caps across the corners so that each pair of stakes will be on the same side of the fence with the large end up. Then squeeze in 3 or 4 rails to each length, and place a flat stone under each stake to keep it from the ground; and if your rails, caps and stakes are as strong as they should be, you may sleep soundly without fear of horses or cattle visiting your crops. S. H.

Batavia, Jan. 1, 1847.

Pigeon Weed, or Red Root.*

Prize Essay, by CHARLES M. STARK, Yates county.

It seems in this day and generation, that to make any subject interesting enough to gain attention, it must be shown that to practice it is a matter of pecuniary interest, and consequently in my effort to show the best method of destroying red root, I shall keep *this* interest of the farmer continually in view.

There can be no farmer in Yates county, that does not know that the average yield of the wheat crop is seriously lessened by the presence of this weed, and the expense of harvesting and threshing very materially increased by it. Just so far as this is true, time and money may be profitably expended in its destruction. Chemistry has demonstrated that grains of all kinds are made up of certain earths, salts, &c., and though in the growth of all plants a large proportion is taken from the atmosphere, still the minute particles which are taken from the soil in the formation of the stalk and grain must be present; for, if but one of the many parts necessary be absent, though there may be an abundance of all the others, failure is certain. It seems to be a peculiar characteristic of this weed, that it appropriates everything that it needs in the soil to perfect itself, without reference to anything else that may claim a share with it. When growing with wheat, if there be food enough for both, then both may be perfected; if not, the wheat must suffer. It is not so with the Canada thistle; this plant strikes its root to a great depth, and brings up food; and with the thistle there is a division of the spoils, and wheat is often larger in the midst of them, than where it is free from their presence. But this grasping, miserly weed, appropriates everything to itself, until, if wheat follow wheat for two or three successive crops, it remains in the entire possession of the soil. Thirty years since, red root was unknown in Yates county, and now, such is the small amount of successful effort against it, that hundreds of bushels of the seed are purchased at the Yates county oil mill, and if it were worth 8s. instead of 1s. 6d., these hundreds would be thousands. It is very generally considered that the production of two and a half or three bushels of clover seed from an acre, after all the acknowledged benefit derived from the roots, is a heavy tax upon the soil. If this be true, how great an exhauster must pigeon weed be, with its roots penetrating but a little way beneath the surface, more than double the seed produced, and a hard woody stalk perfected. It may seem to some a waste of time and words to attempt to prove what may justly be considered an axiom, viz: that the presence of red root is "evil, only evil, and that continually;" yet it is my opinion that if we

could, by a chemical analysis, see the hidden mysteries of this destructive plant, we should be surprised at the record of the amount it is stealing from us, and would look about for a way of escape from its blighting presence; and farther than this, the startling fact would be evident to us, that we must exterminate the nuisance, or see *it* exterminate our wheat crop.

When we take into consideration the fact, that it requires a united and continued effort to destroy it, (*united*, because if one farmer raises it, his neighbor *must*, as neither the gizzard of a fowl, nor the stomach of an ox can destroy its germinating power; *continued*, because it will lie in the ground for years,) we might almost despair of its destruction, were it not that despair is a word not found in the farmer's vocabulary.

There can be but one way to get rid of this wide spread and growing evil; and though we may theorize upon other subjects, this is, in agriculture, a matter of fact. We may in other cases, apply scientific knowledge, feeding one plant and starving another; but in respect to the weed under consideration, this is impossible, for when it has taken *all*, like the leech, its cry is still, "give, give." If a farmer wishes and *determines* (for wishing will not effect the object) to exterminate this plant, he must make up his mind to two things: first, never to sow any of the seed; secondly, never to allow any that is in the ground to arrive at maturity. This may be done by pulling up the weed while in blossom; mowing will not accomplish it, because it ripens its seed below the reach of the scythe. I will here remark, that I know of but three farms in Yates county, upon which this method can be fully and profitably practiced. Upon *these*, I believe, there is no red root, except that which is carried on by birds; (I speak of its being propagated in this way, not from absolute knowledge, but from the fact that it generally makes its appearance under the shade trees.) It is well known to all scientific and practical farmers, and I think disputed by none, that a regular system of rotation is the only correct manner of farming; and I wish to show that by this very method, this weed can be subdued with more certainty and at a less cost than in any other way. The first thing to be considered, is the fact, that red root is a biennial plant, that will not germinate to any great extent in the spring, it being its nature to come up in autumn, and can not therefore be eradicated without fall plowing. I would recommend the following practice: The first crop, wheat; the ground to be plowed but once, at least eight inches deep, which should be done in July, after which it should be thoroughly pulverized with a cultivator, to the depth of four inches. My reason for preparing the ground in this way, is this: the most of our land is seeded down after wheat, and of course receives its red root seeding at the same time, consequently a very large

* Sometimes called *Steen Crout*, *Lithospermum*, *Stony Seed*, *Wheat Thief*.

proportion of the seed lies near the surface. If this be turned under to the depth of eight inches, but a very small proportion will germinate, and the wheat will be to a certain extent free from its pernicious presence; if plowed twice, the seeds are mostly thrown back to the surface, which is admirably adapted to the increase of the pigeon weed, while once plowing is found to be at least as good, and I believe, decidedly better for the wheat. If it be possible, the red root should be pulled out of the wheat, but if the quantity be too great for this purpose, a more protracted effort must be made to destroy it.

The wheat stubble should be plowed in the fall, just as deep as it was for the wheat, and well harrowed. In the spring, the ground may be plowed, (as shallow as possible,) but I deem it decidedly better to use the large cultivator with steel teeth, as not one spear can escape if it is thoroughly cultivated, and the ground will be in better order for the crop, which may be barley, oats, or spring wheat, but in my opinion, should be peas. The ground should be again plowed and harrowed in the fall. In the spring let the operation with the cultivator be repeated, and the ground planted to corn. If this be placed three feet apart each way, and tilled with a cultivator, no weed of any kind need be grown among it. This crop should be planted as early as the season will admit, to give time for another plowing in the fall, when the ground should be harrowed as before. In the spring, the same thorough use of the cultivator is necessary, and the land may be sown to barley, peas, or oats, which must be decided by the crop raised the second year. If peas, then barley or oats may follow, but in no case should the same crop be grown in the rotation. I think it the better way to sow flax, for the seed, because I consider it as profitable as any other summer crop; and as the ground should now be seeded with timothy or clover. I believe flax is the best summer crop that grass seed can be sown with. Flax should be sown early; twelve quarts to the acre. I think this rotation must destroy the seed in the ground, as all that germinates in three successive years dies, without the possibility of leaving seed. If any yet remains in the earth, the quantity must be so small that it may be easily pulled. We might now sing a requiem over departed pigeon weed, and read the burial service over red root, were it not that Phoenix like there is vitality in its very ashes. Though death and decay may surround it, yet in its stone tenement it is safe, and with patience it awaits the day of its resurrection, which will as surely come as the manure is removed from the barn-yard to the field.

The destruction of the seeds carried to the barn with the wheat is the most difficult part of the subject, and in order to effect it, no pigeon weed must go into the barn; for if it be carried

there, it will be taken back again, and no system of rotation or anything else will ever subdue it. I feel very diffident about advising any farmer to burn his straw, but in this case, I think the benefit derived from the destruction of the seeds of this weed, would be at least an equivalent for the straw destroyed (or rather decomposed, for nothing *can* be destroyed.) It is the decision of agricultural chemists, that a large proportion of wheat straw is taken from the atmosphere, and that every particle derived from the soil may be found in its ashes. As this has been proven by actual experiment, there can be no real loss by such a conflagration. The proper method is, to stack the wheat in the field, and as it is threshed burn the straw, on as small a space as possible, as all the heat that can be obtained from it is necessary to destroy the vitality of the seeds of the pigeon weed. I believe it would be profitable in many cases to mow the stubble and burn this also. The ashes should be gathered up and housed until they can be used in the compost heap, or otherwise returned to the soil. It may be thought that this system is too great a tax upon the land, there being no return made in manure; but this is a groundless objection; for any farmer, following the rotation, may apply artificial or barn-yard manure to either or all the crops raised, as his judgment may dictate. The soil will receive the manure made from the peas, oats, barley, and corn, and clover seed may be sown with either of these crops, except the last, and the clover be plowed under in the fall (a practice, by the bye, I would by no means recommend.)

The manure that has already accumulated in the barn-yard should be drawn out upon a sward, and the ground planted to corn, with the following rotation: 1st, corn; 2d, peas, barley, or oats; 3d, flax; 4th, wheat. The pigeon weed should be pulled from the wheat, if possible; if not, the first rotation may be applied after the ground has lain two years in clover.

It should be borne in mind, that the presence of pigeon weed is a positive tax upon the farmer, and that every dollar successfully expended in its removal (to the full amount of this tax,) is to him an absolute gain. I would remark in conclusion, to the gentlemen of the committee, that I have not given a history of this plant, for the simple reason that I do not know it myself; and although I have looked through all the agricultural and botanical works within my reach, I have been unable to glean anything from them upon this subject, beyond the fact, that like many other things among us, *animal* as well as vegetable, the red root is a worthless exotic.—*Trans. N. Y. State Ag. Society.*

* MONEY skilfully expended in drying land, by draining or otherwise, will be returned with ample interest.

Saxon Sheep.

[Continued from page 17, January number.]

The means adopted to improve the wool of the Saxon breed so much beyond the Merinos of Spain consisted for the most part, originally, in the system of breeding *in-and-in*, and a great degree of care in management, which is briefly but imperfectly, detailed by several writers, as follows:—the first remarks are by Mr. GROVE :

"The Germans keep their sheep under comfortable shelter during the winter. By this means they do not require, in the first place, so much provender; secondly, the tip ends of the wool do not get weather-beaten, which is an injury; thirdly, a great quantity of manure is saved. They hurdle their sheep during summer for the purpose of manuring the land, which makes it more productive. They raise large quantities of roots, such as ruta бага, potatoes, mangel wurtzel, carrots, round turneps, &c., to feed out during winter. Combined with straw it is considered an economical mode of wintering sheep. They enrich their land, moreover, by this course of management, which enables them to keep still more sheep and cattle, and raise more grain. Many farmers in that country keep their sheep from nine to ten months of the year in the yard; some only part of their flock, and others their whole flock. For this purpose they sow red and white clover, lucerne, and espartete, which is mowed and fed to them in racks, three times a day, and in wet weather a foddering of straw. It follows, as a matter of course, that the stable and yards are well littered with straw every day. It is considered that an acre, thus managed, will maintain double the number of sheep or cattle that it would to turn them out to pick for themselves. By this course of management they are enabled to keep large numbers of sheep, without infringing much on their grain growing, and enabled to come in competition with the wool-growers of other countries. As there are no fences in that country, the sheep are attended by dogs. One shepherd with his dog, will manage from five hundred to eight hundred in the summer, all in one flock."

Mr. CARR, an English gentleman farmer, but now a resident of Germany, states the following in the Journal of the Royal Agricultural Society of England."

"These sheep (Saxons) cannot thrive in a damp climate, and it is quite necessary that they should have a wide range of dry and hilly pasture, of short and not over-nutritious herbage. If allowed to feed on swampy or marshy ground, even once or twice in autumn, they are sure to die of liver complaint (rot) in the following spring. They are always housed at night, even in summer, except in the finest weather, when they are sometimes folded in the distant fallows, but never taken to pasture till the dew is off the grass. In the winter they are kept within doors altogether, and are fed with a small quantity of sound hay, and every variety of straw, and which is varied at each feed. Abundance of good water to drink, and rock salt in their cribs, are indispensables."

Baron GEISLER has been many years one of the most successful breeders of Saxon Merinos, and for a long time (on the authority of Dr. BRIGHT) "he has exercised unwearied assiduity by crossing and recrossing, so that by keeping the most accurate register of the pedigree of each sheep, he has been enabled to proceed with a mathematical precision in the regular and progressive improvement of the whole stock. Out of seventeen thousand sheep, comprising his flock, there is not one whose whole family he cannot trace by reference to his books; and he regulates his yearly sales by these registers. He considers the *purity of blood the first requi-*

site towards perfection of the fleece." Dr. BRIGHT makes a few remarks on management.

"For fourteen days before the coupling season the rams should be daily fed with oats, and this food should be continued not only during that particular period, but for fourteen days after; and one ram will thus be in a condition to serve sixty ewes, if other proper attention have been paid to him previously.

"During the lambing period a shepherd should be constantly day and night in the cote, in order that he may place the lamb, as soon as it is cleaned, together with its mother, in a separate pen, which has been before prepared. The ewes which have lambed should, during a week, be driven neither to water nor to pasture; but low troughs of water for this purpose are to be introduced into each partition, in order that they may easily and at all times quench their thirst.

"It is also very useful to put a small quantity of barley meal into the water, for by this means the quantity of ewes' milk is much increased. When the lambs are so strong that they can eat, they are to be separated by degrees from their mothers, and fed with the best and finest oats, being suffered at first to go to them only three times a day, early in the morning, at mid-day, and in the evening, and so to continue till they can travel to pasture, and fully satisfy themselves."

Although rigid attention is bestowed on these sheep during winter, yet they are not quite the *hot-house* objects which, from the remarks of Mr. CARR, the reader would infer. On the authority of Mr. YOUATT, although the sheep in Saxony and Silesia are housed at the beginning of winter, yet they are turned out and compelled to seek, perhaps under the snow, a portion of their food, whenever the weather will permit; and the season must be unusually inclement in which they are not driven into the yards at least two or three hours in the middle of the day. The doors and windows are also frequently opened, that the sheep-houses may be sufficiently ventilated. This is done as far north as Sweden.

Very great care is taken by the Saxon flock-master in the selection of lambs which are destined to be saved in order to keep up the flock :

"When the lambs are weaned, each in his turn is placed upon a table, that his wool and form may be minutely observed. The finest are selected for breeding, and receive a *first* mark. When they are one year old and prior to shearing them, another close examination of those previously marked takes place; those in which no defect can be found receive a second mark, and the rest are condemned. A few months afterwards a third and last scrutiny is made; the prime rams and ewes receive a *third* and final mark, but the slightest blemish is sufficient to cause the rejection of the animal. Each breeder of note has a seal or mark secured to the neck of the sheep, to detach or forge which is considered a high crime, and punished severely."

Before the introduction of the Merinos into Saxony, the indigenous sheep consisted of two distinct varieties, one bearing a wool of some value, and the other yielding a fleece applicable only to the coarsest manufactures. Both of these breeds have been most extensively crossed with the Saxon Merinos, and very many mixed flocks now exhibit fleeces little inferior to the best and purest *Escuria!* sheep.

According to Mr. CARR, the *Infantado* Merinos are also cultivated in their purity, and are described by him as having shorter legs, and heavier rounder bodies than the *Escuria!* Saxons, with heads and necks comparatively short and

broad. The wool is often matted upon the neck, back and thighs, and grows upon the head to the eyes, and upon the legs to the very feet. The grease in their fleece is almost pitchy, so as to render the washing very difficult. He describes the mode of washing as follows :

"A warm, mild day, without harsh or drying wind, is indispensable. A marl-pit, with a depth of from eight to ten feet of clear water is a favorite washing place. The sheep are thrown in from a stage in the evening, and made to swim the whole length of the pond (twenty or thirty yards) between rails, with boards on one side, from which women or boys assist them through their bath, by placing wooden rakes or crooks under their chins, and so passing them onwards. When the water has dripped from their fleeces for an hour or two, the sheep are put into a house for the night, as close together as possible, in order to cause the greater evaporation, and the next day they are swum three or four times through the pond, and they are kept in the house (well supplied with clean straw) on dry food, for three or four days, until the wool, by sweating as it is termed, has recovered its characteristic softness. The fleece of this species is generally thick, closely grown, and abundant. Ewes average two and a quarter to three and a quarter pounds, by careful feeding (*which, however, must never approach to feeding to be fat, else the wool becomes wiry and hard,*) and rams and wethers vary from four pounds to even six pounds."

The Escorial Saxon breed have long, tapering necks, small heads, with little wool upon them, round carcasses, with rather narrow, yet deep chests, and when in good flesh, generally well proportioned. Indeed, specimens may be selected from the best flocks, which rival in symmetry of form any sheep in the world. Compared with other breeds, they are small, and consequently their fleece are proportionably light; but being comparatively free from gum, is one of the prominent causes. The average weight of the ewe fleeces is from one and a half to two and a half pounds, and full grown wethers and rams from two and a half to four pounds. The finest and purest flocks yield heavier fleeces than those engrafed on common stock.

Extraordinary care is observed in washing the sheep before shearing (another cause of the fleeces weighing light,) which is manifested by the little loss when subjected to the manufacturer's process of cleansing.

The shearing is conducted in the most skilful manner, each shearer, generally, being limited as to the number of fleeces he is to clip per day, in order to ensure a greater degree of care in his work. Thus, the skins of the sheep are not mangled as in our country, and otherwise presenting a slovenly appearance, from unevenness of the clippings.

After the shearing season is past, the wool is bought of the small proprietors by agents of wool merchants, and transported to Hamburg, Breslau and Leipsic, where it is sorted, and resold for exportation and home manufacture. The annual wool Fairs of Leipsic are wonders in their way, millions of pounds often exchanging hands in a single day. The large proprietors of pure flocks effect their sales by samples, subject to sorting, which is an art nowhere better understood than in Germany. The fleeces of

the same quality are opened and spread flat against each other, when packing, and each bale is made to contain from four to five hundred pounds. The amount of German wools (which includes Prussian, Saxon and Austrian) annually exported is enormous, England receiving annually from 20 to 30,000,000 of pounds; the amount taken by France is also many millions of pounds.

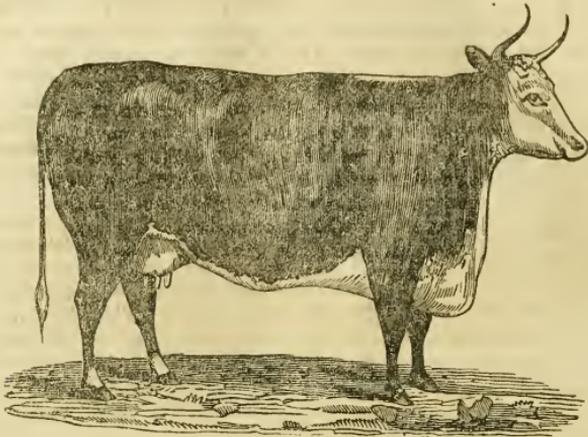
Few Americans are aware of the superiority of German woollen fabrics, as, from the great pains and therefore expense involved, in their manufacture, few specimens comparatively reach our shores. The Germans make no haste in doing anything, but all their performances are conducted with skill, and with an eye to durability; and thus German cloths are unrivalled in strength, the brilliancy and permanency of their dyes.

WINTER MANAGEMENT OF SHEEP. — Sheep suffer in our long winters for want of green food. Give them roots of various kinds, such as potatoes, carrots, beets, parsnips, and turneps. For a month or so before yearing, they should not have roots, or only a few, as they will produce a premature flow of milk, and cause it to cake in the bag. At this time, they may have a very few roots, to keep the bowels open, and prevent their faltering for want of access to the ground. Carrots are best, as they do not produce so large a flow of milk as other roots, but tend in part to keep up the condition. Do not feed too high before the yearing season.

Give sheep, in winter, as condiments, salt, wood ashes, clay, and pure earth. Give them also as salutary or medicinal food, cedar, pine, spruce, hemlock, fir, and other boughs. And by all means give them a good supply of pure water. As they eat dry fodder they will drink often and freely. They cannot satisfy their thirst by eating snow, any more than a man can by devouring snow, or sucking an icicle. We have kept sheep and cattle about the same distance from water, say seven rods, and the sheep would go and drink twice as often as the cattle. They would not eat more than an hour in the morning, before they would all run and drink. They will go a considerable distance for this purpose, if kindly invited at first, by a lock of hay, or something else to entice them, instead of frightening them with dogs and noisy boys, in the vain attempt to drive them.

When sheep have been long from the ground, they will often do as well to let them out in spring as soon as the ground is bare, feeding them also with the best of hay, and with roots and provender.

Clover hay is the best for sheep; we have known flocks to do well and raise fine early lambs, when their feed during winter has been nothing but excellent clover hay, and pure water, to which they had access in the yard.—*Cole's Vetr'n.*



PORTRAIT OF A HEREFORD COW. (FIG. 3.)

Hereford Cattle.

AFTER discussing the merits of the Devons, and the Short Horns, or Durhams, the author of "Domestic Animals," (R. L. ALLEN, Esq.,) notices the *Herefords* as follows :

This is the only remaining pure breed, which has hitherto occupied the attention of graziers in this country. Like the Devons, they are supposed to be one of the most ancient races of British cattle. Marshall gives the following description :

"The countenance pleasant, cheerful, open; the forehead broad; eye full and lively; horns bright, taper, and spreading; head small; chap lean; neck long and tapering; chest deep; bosom broad and projecting forward; shoulder bone thin, flat, no way protuberant in bone (?) but full and mellow in flesh; chest full; loin broad: hips standing wide, and level with the chine; quarters long, and wide at the neck; rump even with the level of the back, and not drooping, nor high and sharp above the quarters; tail slender and neatly haired; barrel round and roomy; the carcass throughout deep and well spread; ribs broad, standing flat and close on the outer surface, forming a smooth, even barrel, the hindmost large and full of length; round-bone small, snug, and not prominent; thigh clean, and regularly tapering; legs upright and short; bone below the knee and hock small; feet of middle size; flank large; flesh every where mellow, soft, and yielding pleasantly to the touch, especially on the chine, the shoulder, and the ribs; hide mellow, supple, of a middle thickness, and loose on the neck and huckle; coat neatly haired, bright and silky; color, a middle red, with a bald face characteristic of the true Herefordshire breed."

YOUATT further describes them as follows :

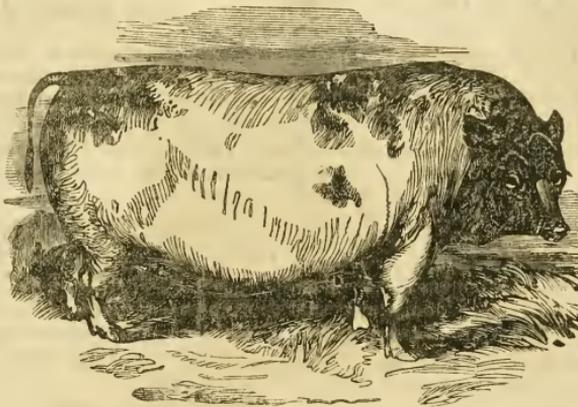
"They are usually of a darker red some of them are brown and even yellow, and a few are brindled; but they are principally distinguished by their white faces, throats and bellies. In a few the white extends to the shoulders. The old Herefords were brown or red-brown, with not a spot of white about them. It is only within the last fifty or sixty years that it has been the fashion to breed for white faces. Whatever may be thought of the change of color, the present breed is certainly far superior to the old one. The hide is considerably thicker than that of the Devon, and the beasts are more hardy. Compared with the Devons, they are shorter in the leg, and also in the carcass; higher, and broader, and heavier in the chine; rounder and wider across the hips, and better covered with fat;

the thigh fuller and more muscular, and the shoulders larger and coarser.

They are not now much used for husbandry, although their form adapts them for the heavier work; and they have all the honesty and docility of the Devon Ox, and greater strength, if not his activity. The Herefordshire ox fattens speedily at a very early age, and it is therefore more advantageous to the farmer, and perhaps to the country, that he should go to the market at three years old, than be kept longer as a beast of draught.

They are not as good milkers as the Devons. This is so generally acknowledged, that while there are many dairies of Devon cows in various parts of the country, a dairy of Herefords is rarely to be found. To compensate for this, they are even more kindly feeders than the Devons. Their beef may be objected to by some as being occasionally a little too large in the bone, and the fore-quarters being coarse and heavy; but the meat of the best pieces is often very fine-grained and beautifully marbled. There are few cattle more prized in the market than the genuine Herefords."

There have been several importations of the Herefords into the United States, which by crossing with our native cattle, have done great good; but with the exception of a few fine animals at the South, we are not aware of their being kept in a state of purity, till the importation of the splendid herd within the last six years, by Messrs. CORNING & SOTHAM of Albany, N. Y. These Herefords are among the very best which England can produce, and come up fully to the description of the choicest of the breed. Mr. SOTHAM, after an experience of several years is satisfied with the cows for the dairy; and he has given very favorable published statements of the results of their milking qualities, from which it may be properly inferred, that YOUATT drew his estimates from some herds which were quite indifferent in this property. They are peculiarly the grazier's animal, as they improve rapidly and mature early on medium food. They are excelled for the yoke, if at all, only by the Devons, which, in some features, they strongly resemble. Both are probably divergent branches of the same original stock.



CHINA HOG. (Fig. 9.)

Breeds of Swine.

The breeds cultivated in this country are numerous, and like our native cattle they embrace many of the best, and a few of the worst to be found among the species. Great attention has for many years been paid to their improvement in the eastern states, and nowhere are their better specimens than in many of their yards. This spirit has rapidly extended West and South; and among most of the intelligent farmers who make them a leading object of attention, on their rich corn grounds, swine have attained a high degree of excellence. This does not consist in the introduction and perpetuity of any distinct races, so much as the breeding up to a desirable size and aptitude for fattening, from such meritorious individuals of any breed, or their crosses, as come within their reach.

The *Byfield*, some 30 years ago, was a valuable hog in the Eastern states, and did much good among the people generally. They are white, with fine curly hair, well made and compact, moderate in size and length, with broad backs, and at 15 months attaining some 300 to 350 lbs. net.

The *Bedford* or *Woburn* is a breed originating with the Duke of Bedford, on his estate at Woburn, and brought to their perfection, probably, by judicious crosses of the China hog, on some of the best English swine. A pair was sent by the Duke to this country, as a present to Gen. WASHINGTON, but they were dishonestly sold by the messenger in Maryland, in which state and Pennsylvania they were productive of much good at an early day, by their extensive distribution through different states. Several other importations of this breed have been made at various times, and especially by the spirited masters of the Liverpool packet ships, in the neighborhood of New York. They are a large,

spotted animal, well made, and inclining to early maturity and fattening. They are an exceedingly valuable hog, but are nearly extinct both in England and this country, as a breed.

The *Leicesters* are a large, white hog, generally coarse in the bone and hair, and great eaters, and slow in maturing. Some varieties of this breed differ essentially in these particulars, and mature early on a moderate amount of food. The crosses with smaller compact breeds, are generally thrifty, desirable animals. *Other large breeds* deserving commendation in this country, are the large *Miami White*, the *Yorkshire white*, and the *Kenilworth*, each frequently attaining, when dressed, a weight of 600 to 800 lbs.

The *Chinese* is among the smaller varieties, and without doubt is the parent stock of the best European and American swine. They necessarily vary in appearance, size, shape, and color, from the diversity in the style of breeding, and the various regions from which they are derived.

The above engraving, (Fig. 9,) represents the pure China pig, and is a striking likeness of many of the imported and their immediate descendants that we have seen in this country. They are too small an animal for general use, and require to be mixed with larger breeds to produce the most profitable carcass for the market. For the purpose of refining the coarse breeds, no animal has ever been so successful as this. They are fine boned, short, and very compact, with bellies almost touching the ground, light head and ears, fine muzzle, of great docility and quietness, small feeders, and producing much meat for the quantity of food consumed.

From the rapidity with which generations of this animal are multiplied, the variety of other breeds on which they are crossed, and the treatment to which they are subjected, it is not surprising that their descendants should rapidly assume distinct features. They furnish not only a

strong dash of blood in the best class of large breeds, but in such of the smaller as have any pretensions to merit, they constitute the greater part of the improvement. Such are the *Neapolitan*, the *Essex half-black*, the *Grass breed*, and some others.

The *Berkshires* are an ancient English breed, formerly of large size, slow feeders, and late in maturing. Their color was a buff or sandy ground, with large black spots, and the feet, lower part of the legs, and tuft on the tail, buff. The latter color has given place in most of the modern race, to white in the same parts. This variation, with the more important ones of early maturity and good feeding properties, are by Professor Low ascribed to a Chinese cross, which has added the only characteristic in which they were before deficient.

They were first introduced and reared as a distinct breed in this country by Mr. Brentnall, of Orange county, and Mr. Hawes, of Albany, N. York. In their hands, and those of other skilful breeders, their merits were widely promulgated. No other breeds have been so extensively diffused in the United States, within comparatively so brief a period as the *Berkshires*, since 1832, and they have produced a marked improvement in many of our former races.

They weigh variously, from 250 to 400 lbs. net, at 16 months, according to their food and style of breeding; and some full grown have dressed to more than 800 lbs. They particularly excel in their hams, which are round, full, and heavy, and contain a large proportion of lean, tender and juicy meat, of the best flavor.

None of our improved breeds afford long, coarse hair or bristles; and it is a gratifying evidence of our decided improvement in this department of domestic animals, that our brush-makers are under the necessity of importing most of what they use from Russia and Northern Europe. This improvement is manifest not only in the hair, but in the skin, which is soft and mellow to the touch; in the finer bones, shorter head, upright ears, dishing face, delicate muzzle, and mild eye; and in the short legs, low flanks, deep and wide chest, broad back, and early maturity.—*Allen's Domestic Animals.*

SHORT CROPS.—When a farmer complains of short crops, and lays the blame to the season, or the worms, it is at least *prima facie* evidence that he is a bad farmer. JOHN JOHNSON, of Fayette, Seneca County, and ARCHIE MACUMBER, of Springport, Cayuga County, rarely ever complain of the worms or the season. Their crops are always good. For obvious reasons, the soil of each farm is, super first-rate, and comparatively speaking, the men are more than first-rate farmers. S. W.

Waterloo, N. Y., Dec., 1847.

State Agricultural Society.

THE following is a list of the Premiums awarded at the recent Annual Meeting of the N. Y. State Agricultural Society. The names of the officers elected are given on next page—and a notice of the Fruits recommended for cultivation will be found in our Horticultural Department.

ON FARMS.—1st premium to Jno. Delafield, Oakland farm, Seneca co., \$50; 2d, Peter Crispel, Jr., Hurley, Ulster co., \$30; 3d, James Pendil, Batavia, Genesee co., \$20; 4th, L. V. V. Schuyler, Watervliet, set of Transactions.

DRAINING.—1st, A. D. Spoon, Troy, Rensselaer co., \$10; 2d, E. J. Woolsey, L. Island, set of Trans.; 3d, E. C. Bliss, Westfield, Chaut. co., Transactions 1846.

DESIGNS FOR FARM BUILDINGS.—*Farm House*—Mrs. Sanford Howard, Albany, \$20. *Piggery*—S. W. Jewett, Weybridge, Vt., \$10.

CHEESE DAIRIES.—Alonzo L. Fisk, Cedarville, Herkimer co., statements of management of Dairy, \$50; Newbury Bronson, Warsaw, Wyoming co., \$20.

BUTTER DAIRIES.—Benj. A. Hall, New Lebanon, Columbia co., \$50.

FIELD CROPS.—*Indian Corn*—Geo. Vail, Troy, (2 acres, 67 bush. per acre,) \$20. *Spring Wheat*—Robert Eells, Westmoreland, Oneida co., (2 acres, 20½ bu. per acre,) \$8. *Barley*—Benj. Enos, De Ruyter, Madison co., (2 acres, 39 bu. per acre,) \$10. E. C. Bliss had not sufficient land for premium. *Oats*—Chas. W. Eells, Kirkland, Oneida co., (2 acres, 85 25-32 bu. per acre,) \$10; Benj. Enos, De Ruyter, Madison co., (71 bu. per acre,) \$8. *Beans*—E. C. Bliss, Westfield, Chaut. co., (1 acre,) \$8. *Flax*—Wm. Newcomb, Pittstown, Rensselaer co., (half acre,) \$5.

ROOT CROPS.—*Potatoes*—Daniel Newcomb, Pittstown, Rensselaer co., (1 acre, 405 bushels,) \$10; Martin Springer, Brunswick, Rensselaer co., (360 bushels,) \$8. *Ruta Bagas*—Joseph Hastings, Brunswick, (1 acre, 1,317 2-5 bush,) \$10. *Carrots*—Wm. Risley, Fredonia, Chaut. co., (half acre, 557 bushels,) \$8.

COOKING FOOD FOR CATTLE.—The November number of the Albany Cultivator, contains a very elaborate article on the comparative merits of feeding cattle on cooked and uncooked food.—The facts are derived from Scotch authority, and are based upon experiments which appear to have been judiciously conducted. The results of these experiments seem to justify these conclusions: that though in some instances cooked food does produce a greater gain than the same amount of raw food, yet the advantage of the former is not sufficient to defray the expense consequent upon the cooking of food. In feeding hogs, however, especially where grain of any kind is used, the advantage of cooking seems to be generally admitted: that there may be advantage in partially cooking some kinds of food for cattle—such as corn stalks, chaff or straw, they being thereby rendered more palatable, the nutriment they contain more soluble and more easily assimilated.—*American Farmer.*

THE examples of early rising, industry, and punctuality, in a farmer, never fail to inspire his hands with ambition, and to increase their exertions.

WE have had no sleighing, in this section, since the 20th of December.

EDITOR'S TABLE.

TO CORRESPONDENTS.—Communications have been received, during the past month, from O. L. Barnum, Adam Clark, C., David Thomas, B. W. S., L. Wetherell, H. Y., Gurdon Evans, S. H., W. L. Van Dusen, W. S., H. Wendell, M. D., L. P. Clark, Joseph Carpenter, An Observer, E. S. Bartholomew, Wm. Allen, Jr., Livingston, The Boquet Miller, E. S. Buck, H. C. W.

OUR present number is not, in some respects, as complete as we intended. In consequence of the illness of our engraver, the illustrations are different, and inferior to those we designed to give. The number contains some valuable extracts from books, &c.—the publication of which, however, has compelled our printer to defer several original papers from correspondents.

THE AMERICAN JOURNAL OF AGRICULTURE AND SCIENCE commences the year and volume with much vigor, under the editorial management of C. N. BEMENT, Esq. The new editor is an able and ready writer, as our readers well know from his valuable contributions to this and other journals, and we heartily welcome him to a post in which we doubt not he will render efficient service to the agricultural community.

The Journal is published monthly, at \$2 per annum, in advance. Each number contains 48 octavo pages. Address C. N. BEMENT, Albany, N. Y. We will cheerfully forward the subscriptions of any persons in this section.

WESTERN LITERARY MESSENGER.—The *tenth* volume of this literary periodical is to commence on the 5th of this month. "It will appear in an entirely new dress and with an increased list of able contributors; and the publishers are determined to make it second in value to no family news and literary paper in the country. They will aim to render it alike the delight of the fireside, an ornament to the center table and an honor to Western Literature." We commend the Messenger to the attention of our friends, with many of whom it is already, and deservedly, a favorite.—Published weekly—16 pages octavo—at \$1.50 per annum, in advance. Address JEWETT, THOMAS, & Co., Buffalo, N. Y.

EDITORS of weekly papers, who receive the Farmer, will oblige us and perhaps benefit their readers, by noticing it editorially—stating size, terms, &c. Our journal is the cheapest of its kind published in the United States, and gives such general satisfaction in other respects, that we think our friends can safely recommend it as worthy of extensive patronage.

"GIVE UNTO SCISSORS THE THINGS WHICH ARE SCISSORS'."—The Southern Planter copies an elaborate article from this paper on "*Milk—Its Properties and Production*," without credit; while the one it does credit, on "*The bad economy of burning Green Fire-wood*," is so full of typographical errors as to destroy the whole sense, and in justice to the writer, ought to have been anonymous too. The article on "*Good Butter*," taken from the Farmer, and written by our friend T. C. PETERS, also copied into the same number of the Planter, is correctly printed, and should have been credited. There are other contemporaries who often forget to "give unto scissors the things which are scissors'."

FARMERS and dealers in Scythes are referred to the advertisement of R. B. DUNN, Scythe Manufacturer, of North Wayne, Me., published in this paper. There is no humbug about Mr. D.'s blades, as many of our readers can attest, and we confidently recommend them to our agricultural friends. Dealers will find in the gentlemanly agent of this establishment, (Mr. H. C. WHITE, of Frankfort, Herkimer county, N. Y.,) an even tempered and honorable man in all transactions.

MERINO SHEEP.—Those of our readers desirous of improving or adding to their flocks of sheep are referred to the advertisement of Mr. T. H. CANFIELD, of Williston, Vt., given on page 63 of this paper. Mr. C. assures us that he can give undoubted guarantee as to purity of blood, &c.

LAW CHANGES.—By one of the acts passed by the recent legislature of the State of New York, all persons are admitted to practice as Attorneys in the Courts of the State without examination or other requirements. By another provision, parties to a suit may be summoned to testify thereon, at the option of the opposing party—an important and organic change in the law.

N. Y. STATE AGRICULTURAL SOCIETY.—The Annual Meeting of this Society was held in Albany on the 19th ult. BUFFALO was selected as the place for holding the next Annual Fair. We annex the list of officers for the present year:

President—LEWIS F. ALLEN, of Erie.

Vice Presidents—1st district, Ambrose Stevens; 2d, John A. King, Queens; 3d, E. P. Prentice, Albany; 4th, Samuel Cheever, Saratoga; 5th, Geo. Geddes, Onondaga; 6th, Geo. W. Buck, Chemung; 7th, Allen Ayrault, Livingston; 8th, James C. Ferris, Wyoming.

Recording Secretary—Benj. P. Johnson Albany.

Corresponding Secretary—E. Emmons, Albany.

Treasurer—John D. McIntyre, Albany.

Executive Committee—Luther Tucker, Albany; John J. Viele, Rensselaer; Joel Rathbone, Albany; John T. Bush, Erie; Theodore C. Peters, Wyoming.

The premiums awarded are given on another page.

MONROE COUNTY AGRICULTURAL SOCIETY.—At the Annual Meeting of this Society, held on the 8th ultimo, officers were elected for the current year, as follows:

President—WILLIAM BUEL, of Gates.

Vice Presidents—ALFRED FITCH, Riga; WILLIAM OTIS, Gates; JOSEPH FARLEY, Irondequoit.

Recording Secretary—JOSEPH ALLEY, Rochester.

Corresponding Secretary—D. D. T. MOORE, Rochester.

Treasurer—JAMES P. FOGG, Rochester.

GENESEE COUNTY AGRICULTURAL SOCIETY.—We are requested to state that a meeting of this Society will be held at the American Hotel, in Batavia, on the 8th of this month, at 10 o'clock A. M.—for the purpose of framing a new Constitution and By-Laws, and to adopt a premium list for 1848. A general attendance is requested.

THE annexed notice was received too late for insertion among our advertisements. As its publication would be comparatively useless, if deferred until next month, we give it in this department:

Grand River Institute.—The next term of this *Manual Labor School* will commence on the 23d of February, 1848. This Institute is situated at Austinburg, Ashtabula Co., Ohio. It embraces an English and a Classical Course, each of four years. Charges for Tuition, \$15 a year.—Board, \$1 a week. The usual extra charges for instruction in Instrumental Music, Drawing and Painting. No additional charge at present for Vocal Music. Address R. M. WALKER, Principal, Austinburg, Ohio.

TO ADVERTISERS.—Several advertisements intended for insertion in this number of the Farmer were received too late—after our advertising pages were "made up." Our paper is issued promptly on the first of each month, and frequently goes to press a week or more previous to the day of publication. To secure insertion, advertisements, notices, &c., should reach us *ten days* previous to the time of publication.

MINT OIL.—The Detroit Advertiser says, the manufacture of mint oil is becoming an important branch in the products and exports of Michigan. In several places in the State, mints are cultivated largely, and we understand, profitably, for the manufacture of mint oil. In St. Joseph's county, it is carried on largely by Ex-Gov. Barry. The value of oil shipped from there last fall, of his make, amounts to nearly \$25,000.

THE CORN CROP of the United States, for the year 1847, is estimated at 600,000,000 bushels; in 1845, it was 417,897,000 bushels. The yearly exports from 1791 to 1819, several times rose above a million bushels, sometimes over two millions, but from 1819 to 1845, they did not in any one year amount to a million. In 1845, the exports were 1,326,068 bushels of corn, and 293,385 bbls. corn meal. In 1847, the exports have arisen to the enormous quantity of 17,272,815 bushels corn, and 945,039 bbls. meal.

SMOKED MUTTON.—The editor of the Tennessee Farmer declares his preference for the ovine over the bovine or the swinish race. He says on his knowledge of physiology, which none will dispute, that a pound of lean tender mutton, can be procured at half the cost of the same quantity of fat pork; and that it is infinitely healthier, in summer especially; and that those who feed on it become more muscular, and can do more work on it with more ease to themselves. He knows of nothing more delicious than smoked mutton hams.—*Boston Cultivator.*

SPIRIT OF THE AGRICULTURAL PRESS.

In furtherance of our desire to make the present volume of the Farmer more valuable than any of its predecessors, we introduce a new feature in this number. Under the heading of *Spirit of the Agricultural Press*, we hope to give, with the aid of pen and scissors, much valuable and important matter, in a condensed form and brief space. We shall endeavor to present, in one or two pages of each number, (by judicious selection and the use of small type,) the substance of articles which would occupy much more space if given in the usual detailed manner. Proper credit will be given when we condense or extract from original articles; but we frequently find extracts in our exchanges, having no evidence whereby their paternity may be ascertained—and in such cases we cannot, of course, add the authority.

PREVENTING THE POTATO ROT.—*Early Planting.*—We have heretofore mentioned the importance of *early planting* as a preventive of the potato malady. (see page 63 and 84 of our preceding volume,) and we now give some additional evidence on the same subject. The *Cultivator* says: "An intelligent farmer of a small scale, has tried a remedy for several years, which though not new, has been attended with such uniform success, as to deserve mentioning. He cultivates the Mercer, a variety well known to be unusually liable to the rot. The crop is planted *very early*, almost as soon as the snow disappears in spring, so that the potatoes are fully matured by the end of summer. In the latter part of the eighth month, (Aug.) the potatoes are dug, and immediately housed in as cool and dry a place as possible. By this means he has never lost a bushel, although his neighbors who live close at hand on either side, and who plant and harvest their crops later, have suffered abundantly."

On the same subject, a Norfolk paper remarks; "A gentleman farmer of our acquaintance tells us, for three years he has planted potatoes at three different periods, viz., early in April, late in April, and in May.—Every year the early potatoes have been sound and firm, the middle part unsound, and the late ruined. He says it is early planting which protects the potato against the epidemic. We recollect in a great many accounts of the rot that the early potatoes were sound."

The editor of the *Farmer's Monthly Visitor*, (Ex-Gov. HILL,) copies the latter extract, and adds his testimony as follows: "Our own experience for the three last years confirms the above statements; in none of the potatoes planted previous to the tenth of May, have we found any difficulty from the rot."

MENTAL IMPROVEMENT OF FARMERS.—Professor MEACHAM, in his address before the Addison County (Vt.) Ag. Society observes: "In making provision for your family, you should provide something to *read*, as well as something to *eat*.—You have little reason for congratulation in improving land and stock, if the mind about you is going to waste. Every farmer has more time in the year for gaining general knowledge than any professional man in the active pursuit of his profession. But it does not depend on time so much as on inclination. WEBSTER says that 'even in matters of taste and literature, the advantages of a man of leisure are apt to be over-rated. If there exists adequate means of education, and the love of learning be excited, that love will find the way to the object of desire through the crowd and pressure of the most busy society.'"

WATERING CATTLE.—Many farmers suffer a loss by not providing good and sufficient water for cattle. An animal that is compelled to go half a mile over a slippery road, and chased perhaps by dogs, cannot gain in flesh by the operation. If a cow has to travel twice a day half a mile to water, and return, she travels two miles a day; or ten cows perform twenty miles of traveling per day, and two thousand miles each winter.

FALL AND WINTER PLOWING.—Plowing late in the fall and during winter, may, in some instances, be beneficial; in others, injurious. As a general rule, the principal reason that can be given in favor of the practice, is that the work can be performed at a time of leisure, and the farmer is relieved from the pressure and hurry which would attend the crowding of all his plowing into a few days of spring. Loose sandy and gravelly lands are not, probably, injured by late plowing; but compact soils, if plowed in fall, are sometimes so beaten down by the heavy rains of winter and spring, that more labor is actually required to bring them into suitable condition for crops than if they had not been touched till near the time of sowing or planting.

The idea that any thing is gained by the decomposition of sward by late fall plowing, is, we are convinced, a mistake. On the contrary, every one who has had the opportunity of observing may have seen that sward, which is broken up after the weather has become warm, and the grass somewhat started in spring, rots much sooner than that which was plowed in fall or winter.

Clayey soils, which have been well drained, may be greatly improved by fall plowing, if it is done in the right way. The ground should be thrown into narrow ridges, which should run in such a direction as will most readily turn off the water from the field. Let two furrows, as deep as can well be plowed, be turned together in the form of what are called "back-furrows," and the whole field be plowed in this way. This will expose a large portion of the soil to the action of the frost and air. The ridges will be dry, and the soil being frozen and thawed while in this state, it will become loose and friable, and on cross-plowing the ridges, when the proper time arrives for seeding, the soil will be mellow and in excellent condition for a crop. This course has produced good crops of grain and vegetables on land which would yield little or nothing in any other way.—*Alb. Cultivator.*

KEEPING FARM ACCOUNTS.—Let any farmer make the experiment, and he will find it as interesting as it is useful to know from year to year the actual produce of his farm. Let every thing, therefore, which can, be measured and weighed; and let that which cannot be brought to an exact standard, be estimated as if he himself were about to purchase or sell it. Let him likewise, as near as possible, measure the ground which he uses, and the manner in which he applies it. The labor of doing this is nothing, compared with the satisfaction of having done it, and the benefits which must arise from it. Conjecture, in these cases is perfectly wild and uncertain, varying often with several different individuals almost a hundred per cent. Exactness enables a man to form conclusions, which may most essentially, and in innumerable ways, avail to his advantage. It is that alone which can give any value to his experience. It is that which will make his experience the sure basis of improvement; it will put it in his power to give safe counsel to his friends, and it is the only ground on which he can securely place confidence in himself.—*Norristown Herald.*

IMPROVED HORSE COLLAR.—The Providence Journal describes a horse collar which has been invented in England which must be regarded as a very great improvement. It consists of a tube of India rubber or other suitable substance, inflated with air like a life preserver. Its advantage is that it fits the horse exactly, easily, and without undue pressure upon any part, and leaves the least and the joints of the fore legs free from galling and sudden pressure to which the common collar subjects them. "The merciful man is merciful to his beast," and we hope that this improvement will be generally adopted.—*N. Y. Farmer.*

COMPOSITION FOR SHOES.—Two parts of tar, two of beef's tallow, and one of bees-wax, make a good composition for boots and shoes. Apply it quite warm, and warm the leather that it may penetrate. As farmers are frequently exposed to wet, they should be careful to keep their feet dry and warm, for on this their health and comfort in a great measure depend. There are various compositions that are good to resist water and preserve leather, and the proportion of the above may be varied. Tar and tallow will answer alone, so will tallow and bees-wax.

USEFUL TABLE.—An acre of ground will contain 160 fruit trees, 16½ feet apart each way, 4,843 hills of corn 3 feet apart each way, 174,240 stalks of wheat six inches apart each way, 6,272,540 blades of grass one inch apart each way.

THE LAST WHEAT CROP OF MICHIGAN.—A. FINNEY, of Lenawee Co., Michigan, writes to the *Cultivator* as follows: "Our crops here have been good this season, and prices fair. My son's wheat last year averaged thirty-four and a half bushels to the acre. This year his and mine together averaged thirty bushels and one pound to the acre, notwithstanding the unusual severity of the winter. This quantity is rather above the average of the farmers generally in this vicinity. Much depends upon the manner of getting in—the time—the kind of wheat, and quantity put on the acre. We use a trifle more than one and a half bushels, and think we shall increase it to one and three-fourths to the acre. Our time is from the 8th to the 20th of September, and we use the *Soule's* wheat only, having carefully noticed since its introduction here, that it has stood the rust and winter better than any other variety."

LARGE YIELD OF CORN.—Writing to the editor of the *Massachusetts Ploughman*, (under date of Nov. 1847,) JOHN DAY, Jr., of West Boxford says: "Last fall about the 20th of September, I ploughed and subsoiled two acres of rather tough, swarded gravelly land, and in the spring I spread on seventy cartfuls of manure from the barn cellar, and ploughed it in. After cross ploughing I harrowed it well, and furrowed it both ways, three feet and a half apart, and put twenty-seven loads of good compost manure in the hill; I planted it the 12th and 13th of May. I hoed it well twice. This fall gathered it and husked it out, and had enough for 217 bushels of good corn."

WINTER-KILLED WHEAT.—WM. LITTLE, in the Ohio *Cultivator*, says that his late sown wheat on corn ground, was much "winter-killed," that is thrown out by frost, which is chiefly remedied by using a heavy roller, pressing the half-killed roots into the ground, which caused them again to vegetate. Such wheat yielded about 20 bushels per acre.

IRRIGATION.—The wonderful fertility of Egypt is, perhaps, more universally recognized than that of any other portion of the globe. For more than three thousand years the lands inundated by the annual overflow of the Nile have continued to produce the usual crops without any perceptible impoverishment or diminution of fertility.

If a meadow is rather dry from its soil or situation, loam may be applied with profit, and if very dry, clay is preferable. In some cases clay has been used with great advantage. In many cases wet lands will not admit of access excepting when frozen; therefore farmers should embrace the favorable opportunity to attend to this business during winter.—*Bost. Cultivator.*

IMPROVE WET LANDS.—The winter is a convenient time for removing wood, trees and bushes from wet lands, and for hauling sand, gravel, loam and manure on to them. Where there is a large quantity of peat or mud, gravel is preferable to sand or loam, and sand is the next best ingredient. Gravel and sand contain a large portion of silex, which is necessary to give firmness to the stem of grass or grain; they are necessary even if there is an abundance of vegetable mould and manure. Without gravel, sand, or loam containing a large portion of sand, grass and grain will not have sufficient firmness to stand upright, but will fall to the ground.

FAT ANIMALS AND LARGE CROPS RESULT ALIKE FROM ABUNDANCE OF PROPER FOOD.—The profits of crops as well as of cattle, depend mainly upon the return they make for the food and labor bestowed upon them. The man who grows a hundred bushels of corn, or makes a hundred pounds of meat, with the same means and labor that his neighbor expends to obtain fifty bushels, or fifty pounds, has a manifest advantage; and while the latter merely lives, the former, if prudent, must grow rich. He gains the entire value of the extra fifty bushels or fifty pounds. This disparity in the profits of agricultural labor and expenditure is not a visionary speculation—it is a matter of fact, which is seen verified in almost every town. We see one farmer raise 30 bushels of corn on an acre of land, with the same labor, but with more foresight in keeping his land in good till, and feeding better his crop, than his neighbor employs upon an acre, and who does not get 40 or even 30 bushels. This difference results from the manner of feeding and tending the crop.—*Vt. Chronicle.*

It is not known where he who invented the plow was born, or where he died; yet he has effected more for the happiness of man than the whole race of conquerors.

RULES FOR MILKING.—A writer in the *Maine Farmer* gives the following rules for milking cows: Having milked more or less, every season since I was a boy, and having seen it done so poorly as to injure the cow. I purpose to give a few rules for it which I have learned from my own and other's experience. They are as follows:

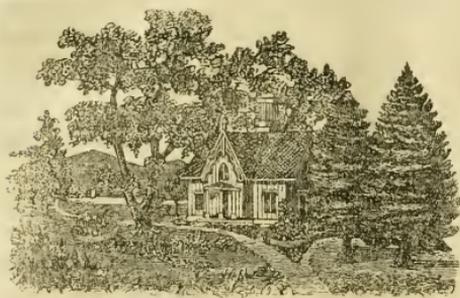
1. Have a good stool to sit on.
2. Have all your finger nails pared short and smooth.
3. Sit down and clean the bag, and wet the teats with the first stream of milk.
4. Then set your pail under, and milk as fast as you can conveniently, the faster the better. A cow will give more milk when milked fast than when milked slow.
5. Milk as though the teats were full to the last, otherwise it makes them long to "strip in a little while."
6. Never scold or strike a cow for running about the yard or kicking. It generally does more harm than good.
7. If she runs about, have patience, talk kindly to her, and tie her up as a last resort till she is not afraid.
8. If she kicks, sit forward far enough for your knee to come forward of her leg, and she cannot easily hurt you or spill the milk.
9. If she switches you with her tail, in "fly time," fasten it by parting her hair and tying it round her leg. Use a string, if the hair is not long enough.
10. If she holds up her milk, butt with your hands. What else does a calf butt for, but to make the mother give milk down!

A GOOD BANK.—We are not particularly in favor of banks as a general thing for certain reasons of our own, but we have somewhere read of a bank that we would vote for; the vault should be *mother earth*, secure and always profitable, the exchanges the *transplanting of the nursery and the garden*, always natural and therefore equal in value. The deposits should be *happiness, sobriety and noble independence*, a reliable source of investment; the assets would be *smiling fields waiving with golden harvests* to gladden the holders' hearts, the liabilities would be unavoidable yet agreeable *indebtedness to God alone*, while dividends would be *health, wealth, and honest joy*. This is a bank worth sustaining, and one that may have a million of branches and still the business would never be overdone.—*Farm. & Mech.*

MAPLE SUGAR.—Every man who can conveniently attend to it should make maple Sugar. It can be done when the farmer has little else to do, so the labor should not be reckoned high. In some sections fuel is of little consequence, and where it is high, strict economy should be practiced as to the mode of boiling. For catching sap, birch buckets answers a temporary purpose, and the cost is a mere trifle. Troughs made of light soft wood cost but a few cents each, where timber is cheap; and they will last long if housed, or turned upside down, in a pile and sheltered from the sun and storms. But the most convenient and cheapest vessels in the end, are buckets with iron hoops.—*Bost. Cultivator.*

FOUNDER IN HORSES.—A writer in the *S. W. Farmer* says that he rode a hired horse 99 miles in two days, returning him at night the second day. In the meantime he had been deeply foundered, but so effectually cured that the owner would have known nothing of it, if he had not been told. In other cases he was nearly as successful. This is his method of cure:—Bled him immediately in the neck, according to the severity of the founder—in extreme cases, as long as he can stand. Then draw his head up, and with a spoon put back on his tongue salt enough till he has swallowed a pint. Let him drink moderately. Then anoint the edges of his hoofs with turpentine, and he will be well in an hour. The salt operates as a cathartic, and with the bleeding, arrests the fever.

IRON FENCES.—Iron wire is now used in the construction of fences, and the Westminster, (Md.) Carroltonian gives the following description of the manner in which it is adapted to this purpose:—The posts are about one half of the ordinary size, planted firmly at the distance of ten feet apart, with nine strands of wire drawn tightly through a half inch auger hole, and tightly plugged at each hole; the wire is of the size of that used for a Yankee bucket, and to combine them more firm, wire of a lighter description is wound through the middle, which prevents the hogs from separating them and creeping through. The whole expense of this fence does not exceed twenty-five cents per pannel, and for neatness and durability cannot be surpassed by anything in timber.



HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

Pomological Rules.

WE are indebted to HERMAN WENDELL, M. D., of Albany, for a copy of "Rules of Pomology" adopted by the State Agricultural Society at their late meeting. They are more concise, but substantially the same as those published last month; the main difference (a somewhat important one, to be sure,) is in the alteration of the 5th Rule, and the entire exclusion of the 13th and last of the Boston code.

That part which forms Rule 5th has been modified by the State Agricultural Society, and we understand even by the Massachusetts Horticultural Society, to read as follows:

The name of the new variety shall not be considered as established until the description shall have been published in at least one horticultural or one agricultural journal, or some pomological work of large circulation and acknowledged character.

This, it will be seen, gives other journals than those having the "largest circulation" the privilege of publishing the description of new varieties; and the exclusion of the last Rule gives committees and individuals a right (which they would always exercise at any rate,) of choosing their own authorities. So far so good. Rules are necessary, absolutely so, and ought to be stringent where stringency is necessary, but liberal where liberality is safe and allowable.

It is suspected, in various quarters, that the provisions excluded or discarded by the State Agricultural Society were quietly and cunningly devised by the proprietors of certain journals, with a view to attract patronage to themselves, and to promote their own exclusive interests. We can hardly believe this was the case; but if so, the results will prove as unsuccessful as the attempt was selfish and contemptible.

The subject of Pomology on this continent gives scope enough for many journals and many pomologists to exercise their talents, and it would be as impracticable as unwise for societies to vote its entire control and management to one journal or one man. In Europe it is not an uncommon

thing to see a mere opinion, right or wrong, of an individual, quoted over the whole continent as standard authority. If a florist in any part of Great Britain, France, Belgium, or elsewhere, happens to produce a new seedling flower, if it were but a simple little pansy or heart's-ease, he must first of all send to London for "Dr. KNOWALL's opinion." If favorable, it is appended to his advertisement, and his flower is as current as gold. Hence, when we cast our eye over the advertisements of some of the English journals, one would almost doubt the existence of more than one man in Europe competent to pronounce on the merits of a new plant. This is owing, in part, to the commanding influence which a thoroughly cultivated taste, sound judgment, and a free, unbiased expression, will always exercise and is duly entitled to; but the slavish looking extreme to which it is carried grows out of the want of general intelligence and independence of thought and action among the mass of cultivators. In this country no one need hope to become such an oracle. There are those who have fond dreams of attaining such a position; they speak it out audibly sometimes, but if they would avoid disappointment, they will *prune* their ambitious notions to suitable and becoming proportions, and rest satisfied with the influence that will be spontaneously yielded to their genius and talents.

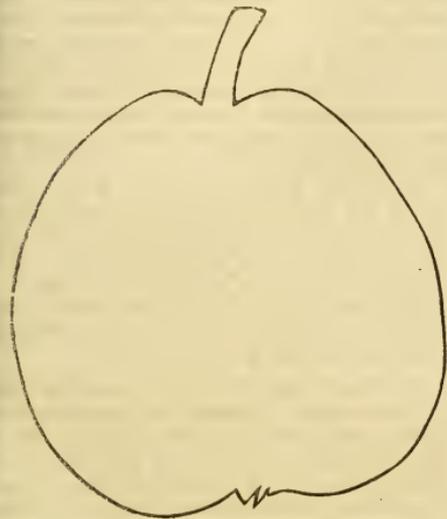
The Oswego Beurre, or Reid's Seedling Pear.

This excellent new variety originated within a few miles of Oswego village, and was first brought to notice through the Horticulturist, about a year ago, by J. W. P. ALLEN, Esq., of Oswego. Its history is thus given by Mr. A., as obtained from Mr. REID's family.

"Twenty-two or three years ago Mr. REID had a very rich pear given him, that had but three seeds, which he saved and planted between the roots of a stump; two came up, one was destroyed by the cattle, and the other stands now where it was originally planted—it bore fruit when it was but six years old—it has borne a fair crop every year since it came into a bearing state, and has produced sixteen bushels in one year. In the year 1834, when other varieties, growing an equal distance from the lake, were nearly or totally destroyed by frost, it bore a full crop. It holds its fruit in severe gales of wind better than any other variety of large pears known to them, (REID's family,) and it was equally fine in cold and short seasons, when other varieties were indifferent." It is supposed, from its appearance and other qualities, partaking of the White Doyenne and Brown Beurre, the two prevailing sorts in the gardens of Oswego, that it is a hybrid between them.

Last autumn, when at Oswego, we were favored with a few specimens of this fruit from Mr.

ALLEN. They were unripe, but they matured well in the house, and in eating two or three weeks afterward, proved first rate. It is undeniably a fine fruit, and considering its hardness and productiveness, will be valuable in the smallest collections. We find that it grows



Oswego Beurre, or Reid's Seedling Pear. (Fig. 10.)

freely on the quince stock, and have no doubt it will bear well, as both its supposed parents do. Size rather above medium. Form, oval obovate. Skin smooth, greenish, sprinkled with russet. Stalk stout, about half an inch long, occasionally inserted in a flattened end, generally in a deepened cavity, as shown in the outline. Calyx small, partially closed, in a smooth shallow depression. Flesh greenish white, buttery, melting and juicy, with a rich vinous flavor, like the Brown Beurre. In use in October, and may be kept in perfect eating order till the 1st of January, if proper attention be paid to retarding the ripening process.

Report of the Fruit Committee of the State Agricultural Society.

At the annual meeting of the New York State Agricultural Society, held at Albany last month, the *Fruit Committee*—composed of LEWIS F. ALLEN, Esq., of Erie Co., HERMAN WENDELL, M. D., and E. EMMONS, M. D., of Albany—recommended the following varieties as the best for general cultivation, taking into consideration the varied soil and climate of the State. It will be remembered that last year the committee reported a select list of apples which was published in the transactions of the Society.

PEARS.—*Summer*: Bloodgood, Citron des Carmes or Madelaine, Dearborn's Seedling.—

Autumn: Fondante d'Automne, Bartlett, Seckel, White Doyenne, Swan's Orange or Onondaga, Stevens' Genesee, Louise Bonne de Jersey, Beurre Bosc, Doyenne gris, Washington.—*Winter*: Beurre d'Areberg, Winter Nelis, Vicar of Winkfield.

PLUMS.—Jefferson, Huling's Superb, Schenectady, Catherine, Reine Claude, Bleecker's Gage, Peach Plum, Columbia, Imperial Gage, Coe's Golden Drop, Deniston's Red, Lawrence's Favorite, Prune d'Agen, for prunes.

CHERRIES.—May Duke, Florence, Black Tartarian, Yellow Spanish, Holland Bigarreau, Downer's late, and Elton.

PEACHES.—Early Tillotson, Crawford's Early, Grosse Mignone, George IV, Red Rareripec, Cooledge's Favorite, Morris' White, Malta, Yellow Rareipe, Bevoort's Morris, Royal George, Red Cheek Malocoton.

GRAPES.—Isabella and Catawba.

STRAWBERRIES.—Earley Scarlet, Hovey's Seedling, Swainstone Seedling.

The committee is to be continued and report annually to be added to the lists such fruits as may, after sufficient trial, be considered, by them, worthy of general cultivation.

[The committee has presented an undeniably good list of fruits; but to our taste it would be improved by the addition of—*Pears*—Osband's Summer or Summer Virgalieu, and Belle of Brussels, two of the finest of all summer pears we know of. *Cherries*—Bigarreau de Mai or Bauman's May, Knight's Early Black, and Large English Morello—indispensable. *Peaches*—Cole's Early Red, Haine's Early, Large Early York, Jacques' Rareripec—all productive, hardy varieties, large and fine flavored. They are unsurpassed here, and we have no doubt will succeed well in every part of the State. We would also add the *Clinton Grape*, an uncommonly hardy, prolific variety, usually ripening several weeks before the Isabella or Catawba.—Ed.]

TRANSACTIONS OF THE MASSACHUSETTS HORTICULTURAL SOCIETY.

An elegant and interesting volume has been published under this title, with beautiful letter press and highly finished colored plates of the two seedling camellias raised by Col. WILDER, President of the Society, that have attracted so much attention both at home and abroad. Also plates of the *Van Mon's Leon le Clerc* pear, *William's Favorite* and *Baldwin* apples. GEN. DEARBORN, A. J. DOWNING, and J. E. TESCHEMACHER are among the contributors of able and valuable papers.

The committee of publication are dissatisfied with *chromolithing*, and will abandon it. The future plates will be far superior, and the present ones are to be reproduced.

We did not receive a copy until our paper was just going to press, or we should have given a more satisfactory notice. We will refer to it again. D. M. DEWEY can supply it in Rochester.

We have received several other books, notices of which we are unable to give in this number.

A notice of the colored edition of DOWNING'S "Fruits and Fruit Trees of America" is given in another page of this paper.

New England Apples.

THROUGH the kindness of S. W. COLE, Esq., of the *Boston Cultivator*, we have had the pleasure of examining several varieties of apples, most of which have been recently brought to notice. At present we will notice some of the best.

1. *Eustis*.—This we believe originated on the farm of JAS. EUSTIS, Esq., of Southboro, Mass. It was brought to our notice three years ago by Mr. COLE, who then sent us specimens of the fruit. It is in size about equal to an Esopus Spitzemberg, of an oval form, yellow, partially streaked with red. Flesh firm and juicy, with a rich and pleasant flavor. Nov. to Feb.

2. *Muther*.—A first rate new apple, said to have originated in Boston, Worcester county, Mass. We have seen this fruit noticed favorably at the exhibitions of the Worcester Horticultural Society. It is of an oblong form. Skin yellow, nearly covered with bright crimson.—Flesh somewhat crisp, juicy, and high flavored. Ripe Nov. and Dec. The tree is said to be a good grower and bearer. Mr. COLE says "this fruit is of surpassing excellence."

3. *Leland Pippin*.—This apple is much cultivated around Worcester, Mass., where it is sometimes called "New York Spice," or "Leland Spice." It is a fine looking, medium sized, oblong apple; beautiful bright scarlet, on a yellow ground. Our specimens were past their prime. The New England Farmer says of it:

This is another late fall and early winter apple, of superior excellence and great beauty, which has been shown for a few seasons at our Horticultural exhibitions. It is large, fine in form, very fair and smooth, oblong, tapering toward the eye, yellow, considerably covered with red, especially on the sunny side, and both colors quite bright; flesh tender, juicy, fine, slightly sub-acid, with a high strawberry-like flavor. It is of the Spitzemberg class. It is a good grower and a free bearer on alternate years. It follows the Porter in season, and brings a higher price in the market than even that favorite variety. Being a red apple it should not be called a pippin.

It may not be proper to call it a "Pippin;" but it appears to us the impropriety must consist in something else beside the *color*. All Pippins are not yellow. The Ribston Pippin, King of Pippins, Kerry Pippin, and we might add a multitude of other Pippins with more or less red.—For what reason, Mr. EARLE, is a red Pippin inadmissible?

4. *Magnolia*.—"Here," says Mr. COLE, "you have one of the most beautiful names and with it one of the handsomest and best of apples. Tender, very juicy, with a pleasant and high flavor."

It is in size medium, roundish, tapering slightly to the eye. Color yellow, with streaks of bright red. Its season is Sept. and Oct. Our specimens were too ripe, and we consequently can not speak decidedly of its merits; but from what we have heard we entertain a favorable opinion of its merits. It comes in just before No. 2.

5. *Minister*.—This is a fine New England Apple—originated in the town of Rowley, Mass. It is rather above medium size, oblong, tapering to the eye, like the well known Yellow Bellflower. Skin pale yellow, nearly covered with stripes of light and dark red. Flesh yellow, rather acid, but juicy and high flavored. MANNING says this is one of the very finest apples which New England has produced. Nov. to Feb. We do not consider this apple, though good, at all equal to Norton's Melon or old Nonsuch, (Red Canada,) or Seek-no-farther, for winter dessert use.

6. *Holden Pippin*.—A large yellow apple, which Mr. COLE says "outgrows and outbears the Fall Pippin in New England. The fruit generally fair, but the Fall Pippin is not." This may be called a good apple but it is inferior to the Holland Pippin of this region, which continues in use through January, and for which the retail dealers give the highest price.

7. *Seaver Sweet*.—This is an excellent winter sweet apple. Greenish, with a brown cheek, tender, juicy, and agreeable. Nov. to May.—Mr. COLE says "it is about as good as Danvers Winter Sweet." We consider the Green Sweeting a better keeper and a more agreeable eating apple than either—perhaps not so rich as Danvers.

The Early Tillotson Peach.

We are much obliged to our esteemed friend and correspondent for the following item of intelligence, timely given, in reply to inquiries in the last number of the Farmer.

P. BARRY—*Dear Friend*: Some inquiries were made in the last number of the Genesee Farmer, respecting the *Early Tillotson Peach*, which perhaps I ought to answer. I have had this variety about thirty-five years, having procured the cuttings from a nurseryman in Aurora, but who had no particular name for it; so after many years, I imposed the one it now bears. This was done in justice to the *Tillotsons*, of Genoa, in this county, among whom it was said to have originated.

In our heavy loam, the fruit has always been very fine, when the ground has been well cultivated; and earlier than any other valuable sort in my collection, except the *Early Ann*, which ripens three or four days before it. After harvest, however, like other cut-leaved varieties, the *Early Tillotson* is subject to mildew, and from this cause its growth is neither so rapid as some others, nor the twigs quite so hardy in severe winters. On this account, perhaps, the climate of Virginia suits it better than ours, as the following extract of a letter from T. S. PLEASANTS, near Petersburg, would seem to indicate.

"Amongst a great many fine varieties, there is none, take it altogether, that I esteem so highly as the *Early Tillotson*, which I received from thee several years ago. It is of full, medial size; in flavor scarcely to be surpassed; and in the time of ripening, it is earlier than any other peach of merit that I am acquainted with. Had I only known of its excellence in time, and planted it as extensively as I might have done, it would have yielded me this season, a large sum."

Very respectfully,
DAVID THOMAS.
Near Aurora, Cayuga Co., 1 Mo., 1848.

REMARKS.—Is it a fact that the "cut-leaved" varieties are more subject to mildew than others? and if so, how can it be accounted for?

The slower growth of the *Tillotson* is not entirely owing to its liability to mildew. The past season, we had a bed of some 3,000 trees, on which there was scarcely a trace of mildew visible, but they did not attain to more than five-sixth to seven-eighth the dimensions of *Crawford's Mclocoton*, growing beside them in the same soil. Like the *Early Ann*, the *Nutmeg*, and many others, the *Tillotson* is, aside from disease or accident, of rather slow growth. And this, in the first place, may have rendered it more susceptible to mildew, from its weaker powers of respiration and perspiration, inducing a somewhat unhealthy condition and flow of the sap. We know that the more vigorous rapid growing sorts are seldom or very slightly attacked by this disease, and that all plants in houses or in the open air, are less subject to it while in a healthy vigorous state of growth than when feeble and languishing. Such varieties, should therefore, be kept in a vigorous condition by good culture, and always placed in an open, airy exposure.

The French cultivators of the peach generally consider the mildew a constitutional malady, and incurable. A multitude of palliatives are suggested in their books, such as washing the leaves, and various modes of pruning and training. We think the most effectual remedy will be found in furnishing the tree with proper nourishment at the roots, a warm dry soil, kept mellow by culture, and frequent dressings of wood ashes.

In another place will be found an article extracted from the London Gardener's Chronicle, which may serve to give those of our readers who have not given this common vegetable malady much attention, some idea of what it is.

FLOWERS FROM MEXICO.—Major WILLIAMS, of this city, has some flowers received in a letter from Monterey, picked in the garden of Gen. ARISTA. We noticed *Convolvulus tricolor*, *Coreopsis Drummondii*, *Nemophylla*, *Cypress vine*, and *Achimenes*, all well known florists' flowers here. We would rather see these simple beautiful flowers, than the trophies of war.

Diseases of Plants.—Mildew.

COMMON as are the productions which it now comes to our turn to examine, and notorious as is their noxious influence on vegetation, the history of their development is but imperfectly known. They consist of little globules changing from a more or less deep yellow to black, springing from a floccose web, and filled with sacs containing the reproductive organs, and at a certain stage of growth putting out from all parts of their circumference long variously formed fibres, which lift them up from the surface of the leaves in which they grow, and imbibe their juices; and they are always preceded by delicate threads which are mostly white, but occasionally grayish, consisting of little bead-like joints, of which the uppermost fall off and, it is believed, like so many germs, vegetate, and thus quickly gain possession of the infested plant. These mealy patches are called by botanists, according to their degree of development, *Oidium* or *Erysiphe*, and are too well known to cultivators under the general name of mildew.

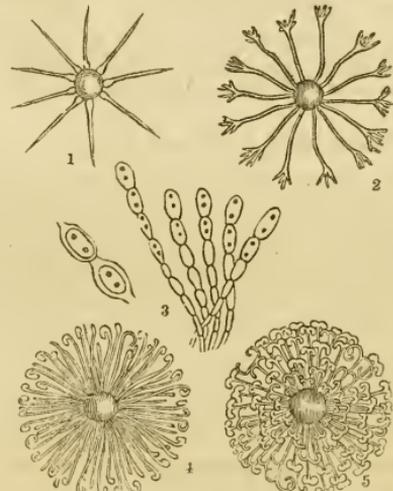


Fig. 1, *Erysiphe guttata*; 2, *E. penicillata*; 3, *E. Graminis*; 4, *E. adunca*; 5, *E. bicornis*; all after Corda.

It has not, indeed, been positively proved that the *Oidium* is an early stage of the *Erysiphe*, but the one so constantly precedes the other, that it is more than probable that they are merely different stages of growth of the same thing. The peach, especially, suffers from the attack of such a parasite, and is only very lately that the second or more perfect form is developed. If, however, the young shoots be examined late in the season they will be found coated with a thin floccose web of the same nature as that which succeeds to the mildew of the Rose, known to the French under the name of "*Blanc de Rosier*." The peach mildew is a well-known pest not only of forced peaches, but of those grown on exposed walls, even in the most favorable aspect, and when once it gains possession of a spot it is not often that it is extirpated. Various plans are resorted to by gardeners to hinder the growth of this troublesome parasite, of which, perhaps, the most general is flowers of brimstone, at the best a very doubtful remedy.—Where it grows upon the fruit probably more is done by the action of rubbing it on than by the brimstone itself, which, in the shape of a crude powder, can scarcely have much effect, and possibly the best remedy next to taking care that the trees are flourishing from proper attention to soil, and as free an admission of air as consistent with the object in view of early produce, is washing the walls with something which may either destroy or cover the minute spores, or, as recommended by a German writer, syringing the whole plant well with a strong solution of brown soap. Where trees have been destroyed by mildew, it is quite useless to plant another in the same position without some such precautions. We have seen three generations in succession destroyed by mildew, in the course of a few years.

It is not, however, peach trees alone that suffer from this cause. There is scarcely a natural order of plants in our temperate climate which is not affected by it. In tropical countries, the genus has not at present been detected, unless, indeed, a very anomalous production on the leaves of *Jacquinia arnifloris* be justly referable to it, which we have from Jamaica. Beds of seedling Whitethorn, and it is said *Pansies*, are often much injured by it. Its effects on *Pea* crops are too visible to escape notice, the whole plant being soon clothed with it, as if coated with a cinerose wash. Hops, too, are notoriously affected by a similar plague, and during the last year scarce a field of wheat was free from the attacks of *Erysiphe graminis*, but probably from some favorable turn in the season did not seem to suffer from it. It is not probable that a sure remedy will ever be found for such a universal pest, to the development of which all seasons seem favorable, and which is alike produced in the most sheltered and exposed aspects, and if, as is certain, though many true species exist, one or two forms are perfectly indifferent as to the plants on which they grow, it would be quite hopeless to attempt a remedy. We have exhibited one or two of the principal forms in one figure, from which it will be seen that the species are beautiful microscopic objects. The whole subject is well worth the attention of any one who has leisure to make the necessary observations.—*M. J. B.*, in *London Gardeners' Journal*.

Buds—their Origin and Office.

The greater number of perennial plants in cold climates commence the growth of each year, from scaly protuberances called buds, which begin their development during the preceding year. Usually the buds are quite prominent, and they differ so materially, both in size and in shape, that an experienced gardener finds but little difficulty in recognizing almost any tree by its buds alone. It is said that the Indian is accustomed to count the scales in the buds of certain trees, in autumn, to determine whether the coming winter is to be mild or otherwise, an unusually large number indicating a severe winter. Scientific men, less contented with their philosophy than the simple native with his, have indulged in various conjectures respecting the particular point from which buds have their origin.

PLINY and MALPIGHI thought buds sprang from the pith. Some botanists, among whom is KNIGHT, suppose the descending fluids to be capable of sending out buds wherever the economy of vegetation demands them. Yet, very little is positively known about it, except that they commence their development in the latter part of summer, and usually make their appearance at the extremity of the branches, or axil of the leaves. In the Sycamore, *Platanus Occidentalis*, the buds appear directly under the foot of the leaf stalk, or petiole. In some trees they appear between the branches, and seem to observe but little regularity; in this case they are called *adventitious*.

The cause of the appearance of buds while vegetation is yet in its full vigor, is still a matter of speculation. Some have thought that the rapid flow of sap to the leaves at that time required freer access to the air than the leaves afforded, and therefore new ones were commenced in the form of buds. Cold weather coming on, however, the demand for more leaves ceases, and hence their growth for that season is arrested. But the minute young leaves are kept well protected in the bosom of the bud, ready to burst forth and unfold, at the bidding of the first warm days of spring-time. A process, quite similar to this, goes on when the young leaf of spring is destroyed by late frosts. As soon as the weather becomes mild again, new buds may be seen to shoot forth and speedily develop themselves into leaves. These only differ from common buds in not having their growth arrested by a winter's cold. The resources for renewing the leaf, whether it decays after having reached its natural term of existence, or is destroyed by some casualty, appear to exist alike in the internal economy of the vegetable. It is a fact somewhat remarkable, that the rudiments, even of the flower and fruit, begin in many instances to be developed during the autumn months. I have before me, December 29, the buds of the lilac, *Syringa vulgaris*, in which are distinctly to be seen, after removing about twelve scaly leaflets, the cluster of flower buds complete in all their parts, even the petals, stamens, pistils, and germ, can be easily distinguished. The scales of the bud serve an important office in protecting the young flowers and rudimentary leaves from the severe cold

of winter, being as they are, lined with a fine down between each scale, and coated entirely with a resinous varnish, not very readily soluble in water, thus excluding severe frost and moisture. Much more of this varnish is deposited upon the buds of some trees than others. The Horse Chesnut, *Aesculus Hippocastaneum*, and Balm of Gilead, *Populus Candicans*, are very liberally supplied, as may be seen by digesting a handful of these buds in warm water for a short time; the resin will be melted and float upon the surface.

The fluids of some trees, particularly the peach, and some fine garden shrubs, are much more sensitive to the vivifying influence of the sun than others. Thus it is well known to farmers and horticulturists that a few warm days in the latter part of winter are apt to prove very destructive to the peach. In this case, the fluids are warmed, the circulation commences, and the flowers beginning to grow, burst through their scaly covering. Thus exposed to the influence of colds and moisture, they are liable to be killed by subsequent damp and frosty weather. The flower bud not being renewed, as is the leaf bud, the crop of fruit is a failure. In some small ornamental shrubs, this disaster may be prevented by winding them from top to bottom with a straw rope, or by protecting them from air, light and heat—the conditions necessary to vegetation—in some other way. To ensure perfect success, this should be done soon after the leaves have fallen.

But the peach is too large a tree to receive such treatment, and it seems more difficult to protect it against this misfortune. Many experiments have been resorted to, and among the most successful is the practice of placing about the roots, straw, leaves, or whatever may prevent the earth from thawing readily, and thus warming the fluid of the root. Probably a layer of fine manure is preferable to any thing else, as in that case the tree would receive the benefit of it during the next season. *a*

This unseasonable development of the buds is somewhat retarded by setting the tree deep at the time of transplanting, but when this is done the fruit will ripen a few days later, and the tree is not apt to attain quite so large a size. I believe, however, it is usually longer lived. *b*

GURDON EVANS.

Analytical Laboratory, Yale College, Dec., 1847.

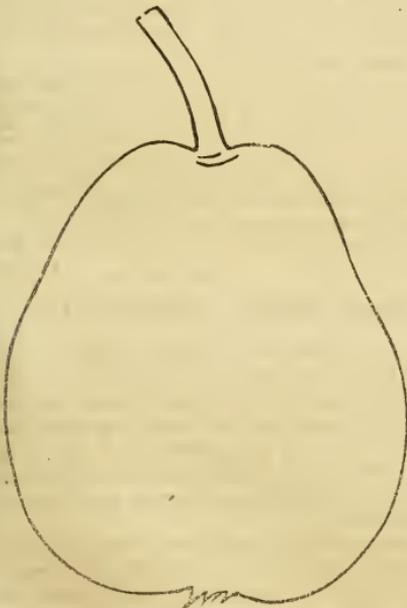
a We have heard of snow being trodden firmly down in large quantities around the roots of trees to retard vegetation; but we consider this, and all other operations of the kind, based on false principles. The sap first begins to flow freely in the *tops* of trees, through the influence of atmospheric heat, and if the top of the tree be excited into an expansion of buds by the surrounding heat, while the roots are kept nearly dormant, by a low temperature, it must tend to a derangement of the vital functions, that can not fail to be attended with evil results. Nature provides a warmer medium for the roots than the top, and we must be careful how we reverse her decrees. The best method of avoiding the effects of spring frosts, where they are prevalent, is to plant peach and other trees most susceptible of injury from them, in north and west exposures, on hill-sides, &c. Wall and dwarf trees can be effectually guarded in most cases by screens of matting or cloth.

b In no case should deep setting be resorted to; it is complete ruin to all fruit trees. Instead of promoting longevity, it does just the reverse, according to all experience. The reason is obvious from what has been said about the respective temperature of the air and the soil around the roots. This will be apparent to our correspondent, if he will next give his attention to the *Roots, their Origin and Office*.

If the leaves of trees are permitted to consume food, the roots must be placed in a situation to absorb it. This it cannot do effectually when buried deep in the earth.

The Petre Pear.

DURING the past season we have had several opportunities of testing the qualities of this famous native fruit, and cordially give it a place among the first class sorts. It originated in the celebrated Bartram Botanic Garden, on the Schuylkill, a few miles from Philadelphia, where the parent tree still exists. The seed which produced it were sent to the elder BARTRAM by Lord PETRE, from London, in 1735. It is supposed to have been from seeds of the White Doyenne, or Butter Pear as they call it at Philadelphia.



Petre Pear. (Fig. 16.)

The size is medium, to large obovate, skin smooth, yellow, with green and brown dots and patches of russet, and occasionally a dull reddish tint on the sunny side. Stalk an inch long, planted occasionally in an abruptly sunk cavity, but more frequently as in the outline. Calyx small, in a smooth, very shallow depression. Flesh fine grained, buttery and melting, with a rich aromatic flavor, not surpassed by the finest Seckel. Ripe in October, and by early picking may be kept till December. The tree is a rapid grower, and a most prolific bearer.

THE FRUITS AND FRUIT TREES OF AMERICA: By A. J. DOWNING. Colored Edition.

The colored edition of this work has at length made its appearance, and is truly one of the most complete and beautiful volumes ever issued from the American press, on Pomology. In addition to all the matter contained in the

common editions, it has 35 colored portraits of the choicest fruits—at least those, we presume, considered so by the author: 17 of apples; 22 of pears; 17 of plums; 22 cherries; 2 apricots; 3 peaches; 1 raspberry; and 1 strawberry. Considering the difficulty of having to send these plates abroad to be colored, it would be unreasonable to expect perfection; but it is evident that the greatest possible pains have been taken to insure faithful coloring, and with a great degree of success. Many of the plates have shades of color some lighter and some darker than we have been in the habit of seeing them—but allowance must be made for the difference of color, in various parts of the country, and in different specimens.

We regret not finding some of the more recent and celebrated varieties that, at present, occupy much attention among cultivators. For our part we would gladly exchange some pears that are given for such as the *Louise*, *Bonne de Jersey*, *Swan's Orange*, *Dix*, *Dunmore*, *Napoleon*, *Rostiezer*, *Van Mons' Lion le Clerc*, *Queen of the Low Countries*, *Ne plus Meuris*, and some others. And, among apples, we would like to have seen the *Summer Pearmain*, *Bononi*, *Dutchess of Oldenburg*, *Fameuse*, *Hubbardston Nonsuch*, *Northern Spy*, and the *Fall and Holland Pippins*.

The lists of plums and cherries are very full, comprising most of the fine sorts. We should, for the gratification of our readers, give the entire list of colored fruits, if space permitted, and may at another time.

We are struck with the difference between the portraits of Mr. HOVEY and Mr. DOWNING. So great, indeed, is it, in all the specimens we have compared, that they possess hardly a feature in common. In the instance of the *Glout Morcean* pear, particularly, both outline and color is different. That of Mr. DOWNING is quite green, while Mr. HOVEY's is yellow, sprinkled with red. We have before us specimens of this fruit ripe, grown both on pear and quince stocks, and we cannot say that either are correct, from this comparison: Mr. DOWNING's outline, we think, is more natural than HOVEY's, but the color is too green—while Mr. HOVEY's outline does not show the normal form, and his coloring is too bright. We have no space for farther comparisons at present.

Mr. DOWNING's volume will be a gem in the library of any one who has the taste and means to purchase it. D. M. DEWEY, E. DARROW and other Rochester booksellers have it for sale. Price \$15.00.

Answers to Correspondents.

Two years ago, a kind correspondent sent me bulbs of the lance-leaved *Japan Lily*, but they have not succeeded in any of the soils in which I have tried them. It is well known that our limestone soil is deleterious to many plants (such as the *Kalmias*;) but these lilies have not prospered even in such as I thought contained no lime. Please say what I ought to do. D. T.

REMARKS.—Your soil would probably be modified to suit the wants of the *Lily*, by adding leaf mold and sand liberally. We have no experience yet in their out door culture; but we have been very successful with them, in pots, in a compost of about one-half rotted turf from an old grass border, one-fourth leaf mold, and one-fourth sand. The Boston growers have been quite successful with their culture, in ordinary garden soil. It should be remembered that the roots of these *Lilies* are perennial, and should be carefully treated in removal. Your failure may be attributable to some mismanagement in this respect.

Last September, Mr. GROOM, who is the most extensive grower of these plants in England, exhibited before the London Horticultural Society two plants of *Lilium lancifolium speciosum*, each a single stem bearing upwards of 40 flower buds. They had been lifted out of the open border, and were sent to show how well these beautiful *Japan Lilies* succeed out of doors in the common garden soil, which was stated to have been well broken up, but not manured. It was mentioned that the bulbs were planted in the end of November, in a bed, 15 inches asunder, and that they were covered 3½ inches deep with light soil. They were not protected in any way, but after the stems died down, the soil was carefully removed down to the bulbs and replaced by fresh material.

Answers to several other inquiries, in type, but deferred for want of space until next month.

LADIES' DEPARTMENT.

Turning Over a New Leaf.
OR, HOW TO GET A HUSBAND.

MESSRS. EDITORS.—I was much pleased with the dramatic sketch of "Turning Over a New Leaf," in your January number. If you think the following story worthy of being a sequel to it, please publish. It is a true tale, and happened in the neighborhood in which I was born. I have heard my mother relate the circumstances "many a time and oft," and I personally knew the family well.

Mr. W— had by industry and economy accumulated a large property. He was a man of rather superior mind and acquirements; but unfortunately became addicted to habits of intemperance. Naturally fond of company, and possessing superior conversational powers, his society was much sought, and he eventually became a sot. His wife was a feeble woman, without much decision of character; but an only child, a daughter, was the reverse, illustrating one of those singular laws of nature, that the females oftenest take after the father in character and personal peculiarities, and the males after the mother.

MARY, for so we will call her, was well aware of the consequences that would be the inevitable result of her father's course, and had used every exertion of reason and persuasion in her power, to induce him to alter his habits, without avail; his resolutions and promises could not withstand temptation, and he pursued his downward course, till the poor girl despaired of his reform, and grievously realized what the end must result in.

JOHN D—, was a young man from the east, possessed of a good common education, as a son of our New England boys are, and the most indomitable industry and perseverance—was working on the farm of a neighbor by the month.

MARY, on going on some errand to the next house, met him on the road with the usual salutation—

Mary—"Good morning, Mr. D—."

John—"Good morning, Miss W—. How is your health?"

Mary—"Well, I thank you—but, to tell the truth, sick at heart."

John—"Pray what is the trouble—what can effect a cheerful, lively girl like you, possessing every thing to make you happy?"

Mary—"On the contrary, every thing conspires to make me miserable. I am almost weary of life—but it is a subject I cannot explain to you, and yet—I have sometimes thought I might."

John—"Any thing that I can do for you Miss W—, you may freely command."

Mary—"That is promising more than you may be willing to perform; but to break the ice at once, do you want a wife?"

John—"A wife I well, I don't know—do you want a husband?"

Mary—"Indeed I do, the worst way.—I don't know but you will think me bold, and deficient in that maidenly modesty that becomes a young woman; but if you knew my situation, and the afflictions under which I suffer, I think it would be some excuse for my course."

John—"Have you thought of all the consequences—my situation.—I am poor—you are rich—I am a stranger, and—"

Mary—"Indeed I have, till I am almost crazy. Let me explain—you and every one else know the unfortunate situation of my poor father. His habits are fixed beyond amendment, and his property is wasting like the dew before the sun. A set of harpies are drinking his very heart's blood, and ruin and misery stares us in the face. We are almost strangers it is true; we have met in company a few times, but I have observed you closely, your habits, your industry, and the care and prudence with which you manage your employer's business has always interested me."

John—"And yet, my dear young lady, what can you know of me, to warrant you in taking such an important step."

Mary—"It is enough for me that I am satisfied with your character and habits—your person and manners. I am a woman, and have eyes. We are about of the same age; so if you know me and like me well enough to take me, there's my hand."

John—"And my dear Mary, there's mine, with my heart in it. Now when do you desire it to be settled?"

Mary—"Now, this minute, give me your arm, and we will go to Esq. B—'s, and finish the bargain at once. I don't want to enter our house of distress again, till I have one on whom I can rely, to control and direct the affairs of my disconsolate home, and support me in my determination to turn over a new leaf in our domestic affairs."

John—"But not in this old hat and shirt sleeves."

Mary—"Yes, and in my old sun bonnet and dirty apron. If you are content, let it be done at once. I hope you will not think I am so hard pushed for a husband as that comes to, but I want a master; I am willing to be mistress, but to be master is more than I am equal to; I will then take you home, and introduce you to my parents as my own dear husband, signed, sealed and delivered."

John—"So be it—and permit me to say that I have always admired you from the first minute I saw you, for your beauty, energy, industrious habits and amiable deportment."

Mary—"Now John if that is sincere, this is the happiest moment of my life, and I trust our union will be long and happy. I am the only one my poor father will hear to; but, alas, his resolutions are like ropes of sand. I can manage him on all other subjects, you must take charge of his business and have the sole control; there will be no difficulty, I am confident in the result."

They were married, and a more happy match was never consummated. Every thing prospered, houses and barns were repaired, fences and gates were regulated, and the extensive fields smiled and flourished like an Eden. The unfortunate father in a few years sunk into a drunkard's grave. MARY and JOHN raised a large family; he was for many years a Justice of the Peace in his town, and they both still live, respected and wealthy—and all from an energetic girl's resolution, forethought and courage, and the prudent use of the young lady's privilege of putting the initiatory question during the maiden's jubilee of Leap Year. H. Y.

Domestic Economy.—Buckwheat Flour.

MESSRS. EDITORS:—As flour brings a larger price than usual, just now, and it is not as easy for a poor man to buy a barrel, as when it was but \$4 per barrel, is it not the duty of every man to do all he can to smooth the rough path of the poor man? I am of that class, and it is my aim to live as comfortably, and yet as economically, as possible.

I believe that it is sufficiently well known that buck-wheat flour is a very desirable substitute, in many ways, for wheat flour. Every one knows that buck-wheat flour makes better griddle-cakes than wheat flour. Not only are they preferable for taste, but I believe nothing is less liable to injure the health when taken into the stomach than buck-wheat cakes. It is rather light food, it is true—that makes it healthy; but it is sufficiently hearty for a man who has his regular meals.

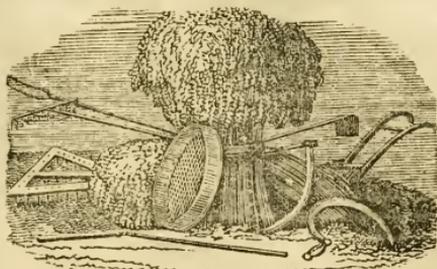
I have very recently ascertained that it is far preferable to wheat flour for *minute pudding*.—When made in the same manner that wheat flour minute puddings are made, they are *light*, (not in color,) and make decidedly a rich dish.

Corn is already served up in a variety of ways; but almost every week some *new manner* is brought to light. A very rich pudding may be made of corn meal by adding a tea cup full of dried berries (black raspberries are preferable) to three pints of water, and make as a hasty pudding. It is very cheap, and when served up

with sauce made of butter and sugar, of the consistency of porridge, and seasoned with nutmeg, &c., it makes a dish fit for an alderman.

I know not but these may both be found in some "Domestic Cookery" or other book, but if they are they do not come where they belong, (before the mass of the people,) as they would in the Farmer.

The poor man can live on meal and buck-wheat flour, when the latter can be bought for half the price of wheat flour by the pound; and I doubt not the rich man would like a second one were he to try a pudding made in either of the above manners. C.



ROCHESTER SEED STORE.

[The first Seed Store established in Rochester, 1831,—No. 4 Front-street, near Buffalo-street.]

BY JAMES P. FOGG.

The subscriber again offers for sale a choice lot of *Garden Seeds*, cautiously selected, and comprising all the kinds required for a good vegetable garden. They were mostly grown by an experienced gardener, (Mr. C. F. Crossman,) and I can confidently recommend them as *fresh and pure Seeds*. During the last five years that the subscriber has been connected with this establishment as proprietor, the business has increased from one thousand to four thousand boxes, put up and annually distributed throughout the United States and Canada. This is sufficient evidence of the general satisfaction these seeds have given the public.

The subscriber is fully sensible of the important relation which the seedman holds to the whole farming community, and that on his honor and veracity the crop and profit of a season in some measure depend.

Flower Seeds—A large assortment put up from seeds of the growth of 1847.

For the Potato Rot—The best remedy within the reach of any farmer.—Plant from one to five acres with Beets, Carrots, Ruta Bagas and Turneps. Owing to the almost entire failure of the crop of carrot seed in this country last fall, the subscriber will receive from London in February and March, a large supply of *Carrot, Ruta Baga and Turnep Seeds*, which will enable him to supply the already great and increasing demand for these seeds.

The subscriber has on hand 75 bushels of *Field Beet Seed*, for stock, raised the past year by Mr. Crossman.

Also, 100 bushels of *Early June Peas*, raised in Canada, and free from bugs.

100 bushels of perfectly clean *Timothy Seed*, &c. Also, Birds, Bird Seed, Bird Cages, Canary and Hemp Seed, Cuttle fish bone, Rape seed, &c., with almost any article usually to be found in a Seed Store.

Rochester, Feb. 1, 1848

[4]

JAMES P. FOGG.

Pure Blood Merino Sheep for Sale.

THE Subscriber being about to retire from the farming business, offers for sale his entire flock of *MERINO SHEEP*, which have been bred with the greatest care, from the best flocks in the country. Of these, 75 are ewes, now with lamb, by a buck from the recent imported flock of John A. Taintor, Esq., of Hartford, Conn.; 25 Bucks one year old last spring, from the above ewes, sired by the Rambouillet buck *Chancellor*; and 50 Lambs, the increase of last year, sired by the celebrated Rambouillet Buck, *Grande*, now owned by the Rev. L. G. Bingham, of this place. As to purity of blood, fineness and weight of fleece, and strength of constitution, they are excelled by no Merinos in the country. The Buck purchased from the recent importation of Mr. Taintor will also be offered for sale.

To those wishing to improve their sheep, or those wishing to start a new flock, the present offers a rare opportunity, and they will be sold without reserve.

Communications addressed to the subscriber will receive immediate attention.

THOS. H. CANFIELD.

Williston, Vermont.

[21*]

Williston, Vt., January 7, 1848.

Steel Cultivator Teeth.

THE subscriber hereby informs the public that he still continues to manufacture *ROGERS' PATENT STEEL CULTIVATOR TEETH*, at *SENeca FALLS, N. Y.*, where he will keep constantly on hand and for sale at wholesale, or retail, these Teeth, of lengths varying from 10 to 16 inches, to suit the purchasers. For the reputation of the article reference is had to the following certificates, which is but a few of thousands that might be obtained.

DAVID B. ROGERS.

Seneca Falls, N. Y., Jan. 1848.

We, the undersigned farmers of the Genesee Country, earnestly recommend to our brother farmers throughout the country the use of the cultivator, not only for corn raising, but also for other spring crops, and more especially for wheat raising. We are fully convinced that the cheapest and best for the land, and less liable to winter kill, is the once plowing deep and thorough, and then go immediately on with the cultivator for further preparing and seeding our fallows, having either tried it ourselves, or seen it tried side by side with the old way of plowing three times. And we further recommend the above steel teeth, having used them more than any other for the last two years, and do cheerfully say that they are the best kind now in use.

NATHAN CASH,
JACOB BUSHMAN,
JOHN LATHROP,
BENJAMIN CHESLEY,

JOHN TWING,
NOBLE DANIELS,
GERMAN LATHROP,
JESSE H. FISKE,

HARRY LATHROP.
I concur fully in the sentiments contained in the above certificate in relation to Rogers' Patent Steel Teeth Cultivator. I have used it extensively, and find it emphatically the best farming implement in use for the destruction of the Canada Thistle, and other weeds which too often spring up on our summer fallows, and while it is accomplishing this work in the destruction of weeds, it will at half of the labor of the harrow, give a finer tilt to the soil, and work the ground deeper and more usefully for the wheat crop.

I find it in many respects equally beneficial in preparing the ground for spring crops.

G. V. SACKETT.

[21*]

Seneca Falls, N. Y., Jan. 12, 1848.

Cranberry Plants.

THE subscribers have been appointed the agents of an extensive grower in Massachusetts, and now offer for sale fine *CRANBERRY PLANTS*, suitable for transplanting, and in lots to suit purchasers. Circulars giving directions for cultivation, and containing certificates of the quantity that has been raised upon an acre can be obtained upon application. *POST PAID*, to

BISSELL & HOOKER.

J. W. BISSELL.

Or upon personal application to
February 1. [2-2] No. 8 Arcade Hall, Rochester.

Rochester Commercial Nursery, MAIN-STREET, ONE MILE EAST OF COURT HOUSE, Rochester, N. Y.

THE subscribers offer for sale the present spring, at Wholesale or Retail, a large quantity of *VERY THRIFTY FRUIT TREES*, comprising the very BEST VARIETIES of

APPLES,

PEACHES,

PLUMS,

CHERRIES,

PEARS, &c., &c.,

cultivated by ourselves, and warranted correctly named. Our nursery grounds now comprise 50 acres, and we think we can offer to purchasers inducements which will induce them to buy, provided they see our trees.

☞ We have a few extra sized trees.

BISSELL, HOOKER & SLOANE.

At the Nursery.

OR J. W. BISSELL.

February 1, 1848.

[2-4]

No. 8 Arcade.

Twelve Competent Agents Wanted,

TO sell either by the Month, or on Commission, *PATENT SPRING TOOTH HORS E PLANKS* in the counties of Wayne, Monroe, Cayuga, Onondaga, Seneca, Yates, Niagara, Erie and Cattaraugus. Agents living in the county where they are to sell will be preferred. Services wanted from about the first of July to the middle of August, either with or without team. Good prices or commission allowed. Satisfactory reference given and required. The highest recommendations of the utility of the article will be furnished.

Any of the above named territory, except Wayne County, will be sold on a reasonable terms. All communications on the subject will be promptly answered if addressed *post paid*, to the subscribers at Walworth, Wayne Co.

P. S. Those who wish to make engagements will do so soon.

E. & T. G. YEOMANS.

Dated, Walworth, January 20, 1848.

[2-17]

To Competitors for our Premiums.

In accordance with our promise, we give below the names of about fifty persons who are, thus far, the most successful competitors for the premiums offered for subscribers. The names are given in proper order, beginning with the name of the person who has obtained the highest number. The list was taken from our books on the 25th of January. We presume we shall be obliged to make several changes in it next month, as many whose names are not given have sent us very respectable lists, and are continuing their exertions.

Wm. Lyman,	B. & G. M. Copeland,
J. H. Stanley,	Wm. Chamberlain,
H. Mes Eames,	Reeve Corwin, } tie.
H. Frisbie,	Jas. Perkins, }
F. J. Eastman,	W. T. Hastings, }
E. C. Bliss,	Thomas Riddle, } tie.
Laton Runyan,	E. M. Foot, }
H. C. Kimberly,	J. S. Squires, }
Erastus Hurd,	D. M. Smith, } tie.
C. H. Carter,	J. B. Wilbur, } tie.
J. Swain,	J. Hutchinson,
I. R. Trembley,	B. Billings,
Dr. O. Reynolds,	S. G. Sears,
D. A. Ogden,	Jno. Lewis,
H. H. Gould,	Mrs. E. R. Perry,
E. W. Lawrence,	Robert Evans, }
L. D. Smith,	R. O. Milten, }
E. S. Bartholomew,	J. Wykof, } tie.
K. Sears,	Hiram Shays,
J. B. Lowell,	J. N. Mead,
D. D. Cole,	B. Farr,
J. A. Carpenter,	Sam'l E. Norton, } tie.
C. Nye,	C. C. Slocum,
B. Spaulding, } tie.	

The premium offered for the highest number of subscribers previous to the 1st of January, (\$5 in Ag. Books,) was obtained by Wm. LYMAN, Esq., of Leicester, Livingston county, N. Y.

THE GENESEE FARMER.—We have received the December number of this periodical, which closes its eighth volume, and have perused its contents with pleasure. It is gratifying to learn that its publisher is receiving that support which his untiring efforts to make it of high practical value to the American farmer should secure for him. It has now a circulation of FIFTY THOUSAND. If its subscription list amounted to more than three times that number, the fact would afford greater satisfaction, as evincing a growing disposition on the part of our farmers to treat Agriculture as a science, to keep up with the discoveries and improvements of the day, and avail themselves of the great benefits which are derived from the adaptation of chemistry to Agricultural purposes.—*Buffalo Courier.*

Valuable Wheat Farm for Sale.

SITUATED in the town of Pittsford, seven miles east of Rochester. The Farm contains 411 acres—including 20 acres of black ash, located 5 miles from the main farm.—This farm has been, and can again be, divided into three farms—having three houses (two frame, and one part log and part frame,) and three good barns.

The Main or Center farm contains 170 acres, and has a good frame house, barn, carriage and corn houses, &c., all painted.—The yards are enclosed with good picket fence, also painted.

The South farm contains about 180 acres. The buildings consist of a frame house and good barn.

The North farm contains about 90 acres;—house part log and part frame; good frame barn.

This farm is only one mile east of Pittsford—and about three-fourths of a mile from the rail-road and canal. The soil is well adapted to the raising of wheat—being gravel and sand, the most of it originally oak openings, approximating to timber. There are four good orchards of grafted fruits—two on the centre portion, and one each on the north and south portions. Each portion has also a lot of good timber, suitable for building or sawing.

The Ironquoit Creek passes through the farms; also, several other streams. Near the barn on the centre farm, is a never failing watering place, from a living spring. Also, a good well in the yard of the same barn.

The whole farm will be sold together, or divided, according to the above divisions Terms—One fourth of the purchase money will be required, and the balance made easy.

Also—About 375 acres of timber land, (pine, chestnut, and oak,) situated in the town of South Bristol, Ontario Co.—together with a half acre equal interest, of a good saw mill on the premises. This property will be sold on liberal terms, or exchanged for good Western Lands, or other property.

Apply to Geo. HART, Esq., No. 7 Arcade, Rochester, or to the subscriber on the premises. J. E. MARSH.

Pittsford, Jan. 1, 1847. [1-14]

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,.....	\$1 25	Pork, bbl. mess	10 00	11 00
Corn,.....	44	Pork, cwt.,...	4 50	5 00
Barley,.....	56	Beef, cwt.,...	3 50	4 00
Oats,.....	30 35	Lard, lb.,.....	7 8	
Flour,.....	5 75 6 00	Butter, lb.,.....	14 15	
Beans,.....	62 88	Cheese, lb.,...	5 6	
Apples, bush.	18 25	Eggs, doz.,.....	14	
Potatoes,.....	37 50	Poultry,.....	6	
Clover Seed,...	5 00 5 25	Tallow,.....	7 8	
Timothy,....	1 50 2 50	Maple Sugar,...	—	
Hay, ton,....	10 00 13 00	Sheep Skins,...	75	
Wood, cord,...	2 75 4 00	Green Hides,lb	4	
Salt, bbl,....	1 38 1 50	Dry ".....	7 8	
Hams, lb,....	7 8	Calf Skins,...	8	

Rochester, Jan. 23, 1843.

New York Market.

[By Magnetic Telegraph.]

ASHES.—Pots firm; and occasionally \$6 is given. The bulk of the sales are \$5.87½. Feeds are \$7 and dull.

FLOUR AND MEAL.—The rain of the morning prevented operations, and the transactions of the day have been quite moderate; the trade buying moderate, and shippers appeared to be in market only for parcels to fill up vessels. Sales reach 3500 bbls \$6 for Livingston, and \$66 12 for Western and Western New York and \$6 18 for pure Genesee. In meal there is not much doing. Market dull. Sales of Jersey at 3 12 13. Rye flour at 4 12.

GRAIN.—For good samples of wheat for milling there is fair inquiry. Market not firm. Sales 1,200 bu. Genesee at 1 25 for the east, and 1000 do. Long Island and New Jersey, 1 25 11 26. Corn dull. Shipping demand not active. About 10 or 12,000 bu. sold at 65¢ 66¢ for New Orleans, 65¢ 66¢ for New Northern and unsettled. Sale Rye at 90c. In barley nothing doing. Oats untraded. 48¢ 50c.

PROVISIONS.—Market for pork less active, and quotations less firm. 3 or 400 barrels have been sold nominally at \$6 67, and 10 37 for old, and \$7 87 88, and \$11 50 for new. In beef there is some movement. 500 bbls. sold at \$83 75, 87 for mess, \$5 25 65 75 for prime. Sale 100 barrels Beef Hams at 10 10 25. Lard is in fair inquiry. Butter steady, fair demand. Cheese heavy.

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THE GENESEE FARMER:

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DANIEL LEE & D. D. T. MOORE, Editors.

P. BARRY, Conductor of Horticultural Department.

FIFTY CENTS A YEAR:

Five copies for \$2, and any larger number at the same rate if directed to individuals. Eight copies for \$3, if only directed to one person—and any larger number, addressed in like manner, at the same rate. All subscriptions payable in advance, and to commence with the volume.  Back numbers supplied to new subscribers.

[Editorial Correspondence of the Genesee Farmer.]

American Agriculture.

WE are in the receipt of all the agricultural journals published in the United States; and it gives us great pleasure to mark the new and able correspondents, and the increased editorial ability and spirit which they display.

We rejoice at this evidence, that the noble work of advancing American Agriculture will command, in the year 1848, the best service of more talent, more science, more learning, and more of invaluable practical research and experience, than it ever did before. From the energy, skill, and indomitable perseverance of so much American Mind, we anticipate, at no very distant day, vast and auspicious results. Compared with the length and breadth of the field now ready for the harvest, the laborers are indeed few. Better, however, than seed sown in good ground, they will achieve improvements, such as the world has never witnessed.

We are a *peculiar* People; and Providence in its wisdom has given us a *peculiar* country. Its very vastness, embracing almost every variety of climate, soil, and minerals—its immeasurable capacity to feed, clothe, elevate and render happy, civilized man, fill us at once with amazement at the grandeur of our prospective power, and with fear and trembling at the greatness of our present responsibility. To the Farming Interest of our country, its patriot sons ever look for a stable, conservative influence to sustain its dignity and honor, in the most trying emergencies. Confined to the mixed and impulsive population of commercial cities and manufacturing towns, the sovereignty of the people would be lost in anarchy and end in despotism. But a free and independent yeomanry, well versed in the theory and practice of a representative government, and far outnumbering the whole urban

population of the nation, will, for many ages to come, control and shape the destiny of North American institutions. Nor will the Agricultural Press be wanting in power, for good or for evil.

From our boyhood up we have watched the signs of the times. They have been pregnant with mighty events. The period of quickning has arrived, and the day of delivery is not far distant. Agricultural education, imparting thorough mental training, and sound scientific attainments to the intellects of all that cultivate the earth, are measures next in order in American history. To this end agricultural reading must be more varied, and rendered more attractive to young and ardent minds. An effort should be made to build up a *rural literature* of our own. We are emphatically a reading people. Alas, what of good can we say of our most popular reading? A vile decoction, made by steeping a single grain of virtue in a thousand grains of vice and folly. This should not be, in a land of moral and intelligent parents. All editors of agricultural works, and their contributors, should aim to interest as well as instruct popular mind. Take the whole United States together, and not one farmer in thirty reads any agricultural paper whatever. Give each but one journal, (and thousands already take several,) and every publisher might increase his list of subscribers *thirty fold!* There can not be far from four millions of adult males engaged in agricultural pursuits at this time, in the Union. How few of all these see anything, or learn anything of the recorded experience of the thousands in this country and Europe, who write for the Press! That large class of farmers who never see an agricultural book or paper in their lives, or if they do, never study them, deserve more attention at our hands than they have yet received. While considering their position in this progressive age, and the poor advantages of their children, we often wish to have a fortune that we might appropriate its annual interest to the publication and gratuitous circulation of agricultural tracts, for the perusal of the million. We expend hundreds of thousands to circulate political tracts, and aid in putting down one party, and setting up another. If Congress and each administration would give a tithe of the money annually expended for party purposes, to aid in diffusing a knowledge of agricultural science among our whole rural population, it would add immensely to the wealth and improvement of the country.

The soundness of the policy of imparting instruction to the popular mind may be regarded

as settled. It is an open question, however, *in what way* all needful information in matters of science and learning shall be conveyed home to the understanding of the whole community.—There are over three millions of farmers who greatly need that knowledge of the laws of nature which agricultural journals and books are capable of imparting. But hitherto no effective means have been used to accomplish the object. At this time the Smithsonian Institution has over \$700,000 invested, the principal of which was given “to diffuse useful knowledge among men.” If a portion of its large income should be expended in published cheap tracts on rural topics, to be gratuitously circulated over the whole Union, and especially where few or no agricultural papers are read, great good might unquestionably be done. Considering how plenty paper, ink, presses, and type-setters are, surely all that can read should not lack for any useful information which the art of Printing can furnish. Let its light shine in every log house in the land.

There are millions in the United States who have yet to acquire the habit of reading any thing more than the Bible, Pilgrim's Progress, or something of the kind. There are more still, who read—to no useful purpose, except to amuse themselves in an idle hour. The study of Agriculture and Horticulture in Common Schools, by the most advanced pupils, would do much to create a general taste for rural pursuits and improvements.

“As the twig is bent the tree's inclined.”—All Common School Libraries should possess a fair proportion of books on rural affairs, and agricultural science. The friends of the cause should look to this matter. Nor should they forget to procure subscribers for agricultural journals. Without the earnest co-operation of its readers, there is not a periodical of the kind in the country which could stand two years.—Men are apt to think that “the little which I can do is of no sort of consequence”—forgetting that the great Mississippi is made up of little rills all running together. The true course is for each person to do all that he conveniently can to improve agriculture and elevate the profession, throughout the length and breadth of the Republic. We must all work harmoniously together.

The spirit of improvement is beginning to move in earnest at the South. Our friends at the North must be up and doing, or their brethren in this quarter of the Union will overtake and pass them in the noble race? Who shall finally win the honor of being the best farmers in thirty States? We brag on those of our much loved Western New York. May the tillers of her fertile soil never be forgetful of their duties, their many advantages, and ever distance all competitors in the culture both of Mind and of Matter.

Augusta, Ga., Feb., 1848.

Theory of Population.

A RECENT English writer on this subject has brought forward facts and reasonings that have heretofore been entirely overlooked by writers on political economy, and which, from their self-evident truthfulness, will forcibly strike every thinking mind that he has arrived at the solution of those laws that govern the increase and diminution of the human race. He assumes that if any species, animal or vegetable, receives an immoderate supply of nutriment, or becomes plethoric, it does not produce itself but sparingly if at all—that if very moderate aliment be administered, they become prolific and re-produce themselves.

It is a familiar and well known fact, that over stimulation, by an excess of manure, causes most of the grains to fail in producing seed, and to cause the single flowering plants to become double, by a transformation of stamens into petals, in which case they are always seedless. It is exceedingly rare that you can find poor, healthy, and laborious parents without an excess of offspring; indeed, “children, the poor man's blessing,” has become an adage. Look into the by-ways and alleys of towns and cities, and into the mansions of the wealthy and high livers, and the indications of this theory are palpable.

On this assumption the decrease of the Peerage and Baronetage of England, is at once accounted for. How often it occurs that the large estates of the oldest families become extinct in the direct line, and some discarded offshoot, perhaps once a poor emigrant to this country, succeeds to the honors and hoarded millions of an ancient and time-honored name.

The Quaker families in England are found to be diminishing in numbers. They are almost exclusively, from their peculiar tenets, that enforce prudence, industry, and economy, either wealthy or above want—and consequently never find it necessary to buffet the storms of poverty and adversity, and from the necessity of inter-marriage among themselves, increase the influence of non-productiveness.

Look at poor, famished, starving Ireland, evidently the most prolific country on the globe; their immense emmigration, disease, and starvation, does not keep pace with the births. The same reasoning applies to the blacks at the south; the whole navy of the United States could not remove and colonize them as fast as they increase. China is overstocked with population, merely from the want of food, or from their inability to procure a rich and generous diet, or even plenty of any kind.

The whole animal creation is subject to the same laws. Every farmer knows that a pampered, high fed and fat animal, which requires no exercise to procure its daily food, is not in a fit state to produce its kind; in fact, it is barren.

These facts all go to prove that constant labor, and a stinting of nutritious food, even to a state bordering on destitution, are favorable to the reproduction of all organized beings; and the opposite state, of high and generous living, where the palled appetite is provoked with the most pungent provocatives, or any state approaching to it, is unfavorable and often fatal to that desire of offspring that is inherent in every human breast.

Let our readers compare this theory with the facts within their knowledge, and observe if it sustains this view of the subject.

Hints for March.

MARCH is usually a rather unimportant month as to farming operations, but the careful and prudent husbandman can always find something to do, to keep him from rusting. From the great lack of snow this winter, we are induced to expect more than usual of boisterous and falling weather. If March possessed any personality, a dose of chloroform, from its tranquilizing effects, would have a happy effect on the sourness of its temper, as it proves a wonderful quiver of scolding women. But as the tree falls so it lieth, and we must grin and bear it as we do the curtain lectures of our wives.

Procure your Clover and Timothy seeds. If you design to lay down a field for a permanent meadow, or for a term of over two years, sow the large kind of clover, as it ripens the same time as Timothy. If for a three years rotation for wheat, use plenty of the medium variety—say six to ten pounds per acre, and four quarts of Timothy. For a permanent meadow, if not too wet, four pounds large clover, and from four to six quarts Timothy. It is difficult to insure the seeding of Timothy in the spring, especially if May is dry. The only secure method is to sow it with wheat in the fall.

It is best to sow clover after some slight fall of snow during this month, as it can readily be seen when evenly distributed. Be sure and sow it before the hard spring frosts are past, as on the heaving and rising of the earth depends its deposit beneath the surface.

If there is any snow this month, improve every hour in getting home rails, wood, and lumber of all kinds, particularly for farm gates. We observe a great improvement in the country in getting rid of what one of your correspondents calls the *devil's warping bars*. It is a grand desideratum; we read of the gates of Paradise but not of bars—they belong legitimately to the *other place*.

As soon as the fear of heavy frosts is past, open potato heaps, and spread them on a dry floor if any rot appears, for as soon as dry the disease is suspended. It is conclusively settled that the infection is not propagated by the tubers:

it is a disease of the leaf, the lungs of the vegetable economy; therefore the sooner the rot is arrested the more root and eyes are saved for planting.

There is great danger of extensive injury being inflicted on the wheat crop by continual freezing and thawing, especially to the late sown. On those fields that are injured past resuscitation, sow the Italian bearded spring wheat, and drag it in thoroughly; it will not injure, but benefit any sets of the winter shoots that may be alive. Look well to the furrows and ditches of your wheat fields, and have them well opened before the sun gets sufficient power to scorch it in wet places.

Keep your manure under cover, or in heaps as much as possible, to avoid leaching by spring rains, and don't draw it out until you are ready to use it. A housewife that would scatter her ashes, intended for soap-making, over the yard, would not be considered a fit candidate to wear the breeches;—so with manure—the cases are analagous.

See that your animals have their tea and sugar regularly, (water and salt)—an ear of corn a day will not hurt them; it is better for their hair than Macassar Oil. If you have any hay that is not very palatable to your cattle, litter your horses freely with it, and they will eat it voraciously.

You may sow this month, if the weather is favorable, Peas, Spring Wheat, Oats and Barley. Don't try to raise peas on very light, sandy soil—for it is no go; they require a strong clayey loam and early sowing. Clover takes well with spring wheat, rye and barley, but badly with oats and peas; but if oats are mowed down previous to the starting of the seed stems, clover will often do well—otherwise the foliage is so heavy that it shades and chokes it.

Overhaul and assort your apples as the warm weather comes on; one rotten one affects all it touches, and destroys the flavor of a whole barrel.

Cut your scions for grafting immediately; keep them in the cellar on the ground. When the weather becomes warm they should be kept in a dry cool place, excluded from the air. Set Cherry and Plum grafts early; Apples and Pears at any time till June, if the scions are fresh.

Now, kind reader, we do not pretend that our hints are very prolific with valuable information to old cocks like you; but they may be of benefit to some of the unfledged young birds, that have not summered and wintered as many years as you have. So, in all humility, we trust you will take the will for the deed, and it being *Leap Year*, when the ladies rule, we acknowledge the corn, in partaking of the premonitory symptoms of effeminacy, under the sway of our beautiful new lords of creation. *

[Editorial Correspondence of the Genesee Farmer.]

Agricultural Geology.

ALL soils are formed by the breaking up into fragments, by frost and other mechanical agents, and the solution and chemical decomposition of rocks. Hence, if we would understand the true character and capabilities of any cultivated earth, we must study the parent rocks from which the soil was derived. Indeed, so general is this law that alluvium, or bottom lands, form no exception to the rule. The broad flats of the Savannah, which are occasionally flooded at high water, furnish a case in point. Compared with the ordinary uplands of Ontario, Monroe, Orleans, and Niagara counties, in Western New York, these beautiful river bottoms in the neighborhood of Augusta are poor land. Why is this? The subject is one of much interest in an agricultural point of view.

Judging from their appearance, one would say that the flats of the Savannah are quite equal to those of the far famed Genesee in fertility. The soil of the former contains a plenty of organic matter, and a due proportion of sand, clay, and iron. A superficial farmer would say that is enough—the land must be productive. Compared with the very sandy, sterile pine lands of South Carolina and Georgia, it is. But, compared with the ordinary uplands on the Niagara and Caledonia limestone rocks, or those on the Onondaga salt group and Genesee shales, these granitic river flats are poor indeed. They need a good deal of manure, and that very often.

Give to a skilful agricultural chemist a gallon of the water of the Genesee river at Rochester, when running perfectly clear, and a like quantity of the river water which flows in a stream about as large as the Hudson at Troy, by this city, (Augusta,) and he could, without knowing anything of either country, say that the former drained a fertile and the latter a comparatively poor agricultural region. The salts of lime, magnesia and soda found in the water of the Genesee, would inform the analytical chemist and geologist very correctly of the character of the soils and rocks through and over which the rains from the clouds had passed, before their converging waters arrived at the falls in Rochester. If all the fertilizing constituents of wheat and other cultivated plants that flow annually into the basin of lake Ontario, could be equally spread over the soils in the Atlantic States, which lack the sulphates, phosphates and chlorides of lime, magnesia, soda and potash, their productive power would be double what it now is.

I have taken a lively interest in studying the rocks and soils in this quarter of the Union.—The celebrated "sand hills," near this city, have a base of rock equivalent to the Potsdam sandstone in St. Lawrence county, N. Y. As one goes north it becomes micaceous, and gradually

changes to a hard felspathic rock. Above this lies a large mass of hornblende, surrounded by syenite; and farther up (some eight miles from Augusta at the head of the Rapids,) we reach hard crystalline granite, in the bed of the river and in islands. It is only in isolated patches that the latter rock has been forced up from below, by some prodigious volcanic effort, at a remote period in the world's history. As all sedimentary strata, like the rocks in Western New York, Ohio, Indiana, Michigan, and Illinois, are formed of disintegrated and dissolved igneous* rocks, it is useful to study the latter to learn the origin and properties of the former.

Igneous rocks are unstratified, and very various in their outward appearance and chemical constitution. The abundant are known by the names of granite and syenite. The former is a compound of the minerals quartz, mica and felspar. Syenite differs from the above in having no mica, but hornblende in its place.

When granite rocks are decomposed, the quartz forms the vast tracts of sand which may be seen to good advantage south of the Alleghanies, in North and South Carolina and Georgia. Felspar makes a tenaceous clayey soil that usually abounds in iron. This mineral forms the "red lands" in the States named. The parent rock out of which they are mostly made has the following composition:

Silica,	66.75
Alumina,	17.50
Potash,	12.00
Per oxide of Iron,	2.50
Lime,	1.25
	100.00

While slowly weathering and decomposing, felspar loses a large share of its potash, which is readily dissolved in rain water, as it falls from heaven, and washed away. Many of the red soils and a portion of the sandy ones in this region abound in mica. They are termed "ising glass lands," Mica has the following composition:

Silica,	49.38
Alumina,	23.66
Potash,	15.29
Per oxide of Iron,	7.31
Lime,	6.13
	101.77

It is proper to remark that, some mica contains magnesia in place of lime, and some felspar soda in place of potash. Such felspar is called *abbite*, from its white appearance.

Hornblende contains the following constituents:

Silica,	45.69
Magnesia,	18.79
Lime,	13.38
Alumina,	12.18
Iron,	7.32
Manganese,	0.92
Fluoric acid,	1.50
	99.53

* Igneous" from *ignis*—fire. Rocks which were once melted like lava, are called "igneous," and usually crystallize like ice and granite on cooling.

These analyses are not minute enough to show the small portion of sulphuric and phosphoric acids, and chlorine which the rocks contain.

Soils in the neighborhood of granitic and syenitic mountains usually lack the salts of lime, soda, potash, and magnesia, in a peculiar degree.—They are dissolved and borne into the ocean to render that salt, and to aid in building up such marine aqueous rocks as the limestones and shales in the rich valleys of the Genesee, Ohio, Wash, Illinois, and Missouri.

Look out for a soil formed of rocks which had their origin in the bed of an ocean or lake that abounded, as all such waters do, in myriads of living animals and plants, the remains of which you can see in all unchanged marine and lacustrine formations. The bottom of old ocean is ever rich in most fertilizing materials, not unlike guano—the well known dung of sea-birds. Wherever Providence elevates lands from the depths of the sea into islands and continents, and hardly breaks the crust of sedimentary rocks, or preserves these on the exposed surface of the earth, there look for choice farming lands. But where rocks are forced up from the fiery regions of old Pluto, having been melted and crystallized like glass, keep an eye out for thin, poor soils which need a constant stream of manure on them.

There are interesting beds of green sand and cretaceous marl in Georgia that possess valuable agricultural properties. I will speak of these at another time, and of stock raising, and doing business among the gold mines of this State.

Ashes—Manure—The Wire-Worm.

DR. LEE—Dear Sir: Will you be so kind as to answer the following inquiries in regard to Manures: Is it cheaper to sell unleached ashes at one shilling per bushel, and buy leached ashes for two shillings per load? How would you manure land consisting of a deep, black mucky loam?

I have some 3 acres of land in this village, for which I paid \$100 per acre. It is a rich black loam (intervale.) It has been much troubled with wire-worms for the last two seasons, and I have tried every experiment to get rid of them. If I have no better way I shall try hog manure, and put it in the hill; but it is difficult to get it in sufficient quantities. Some of my neighbors having tried it, have been amply rewarded for their trouble.

Very respectfully,

LUCIUS P. CLARK.

Brookfield, N. Y., Jan. 1848.

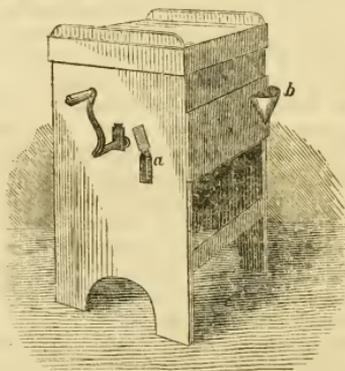
REMARKS.—It would be better to sell unleached ashes at 12½ cents a bushel, and buy leached ones at 25 cents a load, if you had but a short distance to haul the latter.

Keeping land constantly under the plow will soon run out the wire-worm. If we had such a bit of land (and we regret that we have not,) we should try to raise 80 bushels of corn on one acre, 300 of potatoes on another, and any quantity of onions, beets, cabbage, peas and beans on the third. We should apply on one acre ten bushels of lime and five of salt, which would aid in killing the worms, and be likely to benefit much our crop. On another we would gladly apply hog manure, mixing a little gypsum with it to fix the ammonia. On the third acre

ten bushels of good ashes, with a few loads of night soil or any other manure, should be applied. Plow deep and fine, and permit nothing but your crops to grow. Take great pains to catch and kill the worms after the corn is planted and begins to come up.

Crowell's Thermometer Churn.

OF all the patent Churns we have examined, we give this a decided preference. The principle is undoubtedly correct—and the testimony of those who have long used the churn proves that it works well practically. The annexed engraving, and extract from the proprietor's directions for using this Churn, will give the reader an idea of its merits:



Crowell's Patent Thermometer Churn. (Fig. 17.)

"The part that contains the milk or cream to be churned should be managed as in other churns, by putting in water before the cream is put in; if cold weather, warm water; if warm weather, cold water. If the milk or cream is not the right degree of heat when put into the churn, which you can ascertain by the thermometer (a) which is placed under the plate on the end of the churn, which is marked at 62 degrees; if too warm it will stand above it, if too cold below the 62 degrees marked; if too warm apply cold water; if too cold, warm water, in the chamber, or space below the cream, by means of a tunnel (b) at the side of the churn, which will readily bring it to the right degree of heat; if it becomes too warm or too cold after the application of the water, draw off a part or the whole of it, by means of a tube in the bottom of the chamber."

The patentee has received a diploma from the N. Y. State Agricultural Society, and also the first premium and a diploma from the American Institute. We understand that Messrs. RUGLES, NOURSE & MASON, of Boston, are manufacturing a large number of these Churns. They are also being introduced into Western New York, in the principal towns of which we presume they may soon be obtained. The owners of the patent right (Messrs. A. & Wm. A. CROWELL,) reside at Lyme Rock, Conn.

Gleanings from our Foreign Exchanges.

AMERICAN VS. ENGLISH IMPLEMENTS.—A Mr. SLOCUM has taken over to England a variety of our Improved Agricultural Implements for a trial against their far-famed articles.—Plows, Fanning Mills, Scythes, Cradles, Rakes, &c.—and the trial by a Committee eventuated as follows: the best Northampton and Howard's Champion Plow required to turn a furrow on a clay soil 5 inches deep and 11 inches wide, a draft of 420; the American Plow 5 inches deep and 14 wide, 364. The next trial was at 8 inches deep, and 11 wide; the English Plow required 644 lbs., the American 598 lbs. The triers remarked: "In justice to the American plow, we must say, they cut and turned their furrows quite as well as the others, breaking the land to pieces; indeed they are the most simple, light, strong, efficient Plows that it is possible to conceive."

The Fanning Mills were equally as superior. They say, with the exception of cleaning out white caps they "are quite equal to our best machines, and one man is able to fill more chaff into it, than two can put into any of our machines; but its greatest recommendation is its cheapness, simplicity, efficiency and expedition." —Mr. SLOCUM's Hand Machines are the strongest, lightest and most perfect articles that ever came under our notice."

This result is rather creditable to the ingenuity, and good judgment of the "Universal Yankee Nation." It is what the boys would call, in common parlance, "teaching their granddaddy's how to suck eggs."

MANURES.—The *Girardin des Fumiers* says: It would certainly be very useful, if the specific properties of every kind of manure were carefully studied, so as to acquaint us with the quickness, the strength, and the duration of the action of each, in order that we might apply to every soil and every crop exactly, and without hesitation, that which is most suitable. What has hitherto retarded the acquisition of this knowledge is the universal custom of throwing pell-mell, all the manure of the farm-yard into one receptacle, under the idea that this mixture of manures is best for all kinds of soil. This practice is well enough in an alluvial soil, where all fields are of the same character; but in general practice, especially upon large farms, where more varied soils come under one cultivation, I would advise not to mix the manures, but to apply to each field that manure which is most suitable to it. In the present state of our knowledge, it seems advisable to recommend the application of the cattle manure to dry sandy, warm situations, and horse and sheep manure to cold, damp soils.

FRESH VS. DECAYED MANURE.—The Pharmaceutical Times says:—"M. KOERTE, professor at the Royal Academy of Agriculture, at

Marglin, in Prussia, made some years ago, a series of experiments to ascertain whether it is more economical to use fresh or decayed manure, regard being had to the relative proportion of each. I subjoin the principal results of his experiments. 1. Manure exposed to the influence of the atmosphere, in heaps or layers, continually loses its fertilizing principles, and its bulk diminishes in a corresponding proportion. A hundred loads of fresh dung are reduced at the end of 81 days to 73.3 of its first bulk, or loss of 26.7; 254 days, to 64.4 of its first bulk, or loss of 35.7; 384 days, to 62.5 of its first bulk, or loss of 37.5; 493 days, to 47.2 of its first bulk, or loss of 52.8. 2. The loss was much more considerable in a certain time, at the commencement of its decay, than at after periods of this change, as Gazzeri had previously ascertained. 3. Less loss is sustained when manure is spread in layers on the land, and well pressed, than when in small heaps; so that it is advantageous to spread it in layers on the land, and roll it, when it cannot be immediately plowed into the soil. 4. Although it is impossible to state exactly the loss of bulk of manure when allowed to lie for a long time in the heap, we shall not be very far wrong in stating that in common circumstances it is at least one-fourth of the whole: so that 100 cart-loads are reduced to 75. M. KOERTE concludes from his investigations, both on a small and large scale, that it is more advantageous to carry the manure at once, in its fresh state, to the land, (and this is more particularly the case with sheep dung,) than to wait until it has decayed; and this rule should be invariably followed, taking at the same time into consideration the nature of the land."

SHEEP FEEDING.—A series of experiments on sheep-feeding and wool-growing have just been made in Germany. The following are the results which have been deduced:—1st. The feeding property of the Swede turnip, as compared with the potato, is as 7 to 2; and for the growth of wool, the relative value of these two substances, 20 to 17. 2nd. That the temperature is of much more importance than generally imagined, both with regard to quantity of food consumed and the benefit derived from it. To ascertain this fact, one lot of sheep was fed in warm (though well ventilated) sheds, and the rest were fed in the open air, exposed to the weather. The latter required more food in proportion as 30 to 22; and yet the former have increased weight as 3 to 1. 3rd. It was tried whether lambs, or 2½-year-old sheep, gave the most increase of weight with similar food, and it was found that the increased weight was equal; though in the former case it was principally carcass weight, and in the latter case it was wool. The writer concludes the very long and carefully written account of his experiments with the following remarks:—"These experiments have

shown most distinctly that sheep are exceedingly sensitive of any sudden change, either in food or temperature; and that these circumstances, as well as any disturbance, are very disadvantageous to their feeding. If it is wished to secure the full benefit of their food, and the greatest profit of their keep, we must *avoid exposure to the changes of the weather.*"—*Sprengel's Jour.*

We are not aware that the practice of feeding sheep in warm folds has ever been extensively acted upon in this country, though the subject has been frequently noticed. Throughout the whole of Prussia and Northern Germany, it is now almost the universal practice. It must however, be remembered that the winters there are much more severe, and the snow deeper, than in this country. It is also one of the maxims laid down by Liebig, in his "Animal Chemistry," that warmth is favorable to fattening; and it is at all times interesting to see the theories of science borne out in practice.—*Trans.*

FEAR OF INNOVATION.—An article is given by Sir WALTER SCOTT, very pleasantly, of a fanning mill introduced into Scotland over a hundred years ago, and the objections to its use:

"Your ladyship and the steward has been pleased to propose, that my son Cuddie should work in the barn wi a new fangled machine for dighiting the corn from the chaff, thus impiously thwarting the will of Divine Providence, by raising wind for your ladyship's own particular use, by human art, instead of soliciting it by prayer, or waiting patiently for whatever dispensation of wind Providence was pleased to send upon the sheeling him."

This fanning mill, it seems, was introduced from Holland in the year 1710, by Fletcher of Saltour, and its use was publicly denounced from the pulpit, as impious. But innovation is not so much feared now; and to see a farmer plowing in the same furrow, his grandsire turned, is not so common as it was thirty years ago.

Improvement of Stock.

THERE is perhaps no one thing pertaining to the farm that more needs improvement, and which could be pursued by its owner with more pleasure and profit, than the improvement of his stock. That there has been some advances made within a few years, we admit—yet how little is done by the generality of farmers in comparison to what should be. Almost every one knows, (or should know,) who keeps perhaps a dozen cows, as farmers generally do, without much regard to selection, that two of his best cows yield him as much clear profit as three of his poorest. Now this should not be. It is a needless throwing away of the expense of raising and keeping one cow without any benefit whatever. A cow that will make 12 or 14 lbs. of butter per week can

be kept at as little expense as one that will make but 6 or 7 lbs.; and there are many cows kept by farmers that will not do even this, in their best milking season. Only think of it farmers.—Those of you that now keep 12 common cows might realize as much clear profit from 6 or 8 superior cows as you now do from your 12—or, by procuring 12 first rate cows, your income might be increased one half or one third. Are not such stock worth the trouble and expense of procuring? But the first cost is the great hindrance to improvement; \$50 or \$60 seems a great price to pay for a cow; and so it is, unless of the improved breeds. But a cow that is *worth* the \$60 is cheaper in the end for a farmer to buy than one that is worth but \$20.

We will suppose that two farmers have just commenced farming. A buys the \$60 cow—B buys the \$20. At the end of ten years they each have four cows, and one two year old heifer—the remainder being bull calves, have all been slaughtered or sold. How would stand the account at the end of the 10 years with each.

A has 4 cows, at \$60 each,.....	\$240
“ 1 two year old heifer, say.....	30
	<hr/>
	\$270
Deduct \$40, the cost of A's cow more than B's,....	40
	<hr/>
	\$230
B has 4 cows, at \$20 each,.....	\$80
“ 1 two year old heifer, say.....	15
	<hr/>
	95

Balance in favor of A, in stock alone,.....\$135

In the mean time A has sold his bull calves for more than enough to pay the extra trouble and expense of getting the use of a good bull, which perhaps has cost him \$5.00 per year—while B probably has "deaconed," his, which, for one, we should consider no very pleasant recreation. Then compare the amount for which A has sold his butter and cheese, during the 10 years, with that of B's, and you would find this nearly double. B's cow has merely paid her keeping, while that of A has yielded him annually quite a profit. We might still add to the above account several head of valuable young stock descended from A's 4 cows, and compare them with B's. But we trust we have already written enough to set farmers thinking, which is our main object in writing this article. The \$60 and \$20 are perhaps both high prices for the cows supposed; but you may take them at any other prices, and you will always find the cow that is *worth most* the cheapest and most profitable.

For one we long to see the stock of our common farmers advancing more rapidly in improvement. Let all awake to their interest, and procure such stock as they will take pleasure and pride in viewing themselves and showing to their neighbors and friends. Sell off those "raw-boned," "slab-sided," almost good for nothing animals, and replace them with good ones; or, if they are something near what they should be,

let three or four neighbors (if one does not feel disposed to buy alone,) join together and purchase a good bull of some of the improved breeds, and by this means improve upon the stock they already have. Great advances may thus be made by crossing our native stock with good thoroughbred bulls, and this is probably the means that is destined to affect the greatest improvement in the shortest time throughout our country.

With regard to the breed of cattle it is best to resort to for improvement, we are not prepared to decide. Great improvement might be made in a few years by selecting our very best native cattle as breeders, but for our own part we prefer resorting directly to some of the already improved breeds. They all have their favorites and are doubtless all good. The Durhams have our preference, probably from being more acquainted with them than the other breeds—but we also greatly admire the Devons and Herefords.

What about the farm can give its owner greater satisfaction than a beautiful herd of thoroughbred cattle?—and what looks more noble, as they stand quietly ruminating in the shade of some verdant trees in a hot summer's day, seemingly conscious of their own worth and superiority? Look at that beautiful head, those clear waxy horns, that fine neck, deep and full brisket, round barrel, straight back, and broad loin; is there not something there worthy your admiration?—and then what a loose mellow skin, fine silky hair, and a countenance, too, that looks all mildness. They need but to be seen to be admired—and to be possessed, to be rightly appreciated.

But I have already written more than I intended and will only say get good cows, breed them to good bulls, though it cost you some trouble and expense, and then raise your calves as though you thought them worthy your care and attention—and in a few years you will find your stock improved and your pockets filled with money.

S. P. CHAPMAN.

Clockville, N. Y., Feb., 1848.

To Destroy Willows, Elders, &c.

MESSRS. EDITORS:—One of your correspondents last summer requested to be informed of the best method to extirpate willows that grow in marshes, or along the banks of creeks. There are several ways resorted to of digging them out, more or less expensive, according to the thoroughness of the work done. But the most simple, economical, and certain method of disposing of them with which I have become acquainted is as follows. The willows should be cut in the spring and burnt immediately, even to the smallest twig; taking care to cut close to the ground as convenient, and burn the heaps where the roots are most exposed. In a few days the roots will begin to sprout, except in

those places that have been strongly heated; when these shoots, or the major part of them have attained the height of from six to twelve inches, they must be pulled off by hand; in about two months this process must be repeated, and then again as occasion may require.

This may look to some like a vast labor; it is so, but the work must not be trusted to boys, as the writer had occasion to know the past season. If they are cut close to the ground there will be fewer shoots and the after work will not be so bad for the hands as if left higher, (gentlemen operators may wear gloves, though I prefer to do without them,) and if the first pulling is performed before the hard wood forms, the operation is easy; and if it is *well done*, the second pulling will be a light job; and if this is well done, the cases are rare, that would require a third operation.

I do not say this is the best method; there are others doubtless as good, but I know it is effective. Now gentlemen readers of the Farmer, if any of you try it, and cut the stumps about knee high, and let the shoots grow two feet in length, please let me know when you are to commence the pulling operation; I will attend with a third person, some given over dyspeptic, or horror ridden incorrigible; and if you work right faithfully, I will guarantee a speedy renovative to suffering humanity. Depend upon it, sirs, pulling heart-strings is but child's play to it. So don't blame me, or "book-farming"

I learned the above practice of an old gentleman of nearly four-score years, together with his manner of getting rid of Elms, and Sweet, (or by some called white) Elder. The former should be cut high from the ground, say three or four feet, they soon sprout around the top of the stump, but these shoots rarely live through the winter, and if they should are easily knocked off with an old axe in the spring. The elder is in some sections of the country a perfect nuisance, overrunning whole fields in a few years after seeding. His method of getting rid of them is to let them alone until Autumn, when their season of growth is passed, then with an old axe or billhook slash them down—do anything to them—only get them down—they will never start up again.

MIL0.

South Hartford, N. Y., Dec., 1847.

GREAT CROP.—The Prairie du Chien (Wisconsin) Patriot, says:—Mr. JOSEPH ATHERTON, residing about five miles from this village, has thrashed two hundred and fifty bushels of wheat, the product of five acres of land; being an average of FIFTY bushels to the acre. The wheat is of an excellent quality.

THERE are some farmers in Poland who collect annually more than 200 barrels of fine honey, each barrel weighing from 400 to 500 pounds, exclusive of the wax.



ICELAND SHEEP. (FIG. 12.)

Iceland Sheep.

WE copy the above illustration, and following description of Iceland Sheep, from *Morrell's American Shepherd*—a valuable work, which we have frequently commended to our readers:

“The sheep of Iceland are of two kinds: the first, termed the native breed, is small, in color from dun to almost black; the second is larger, the fleece white and supposed to have originated from more southern regions. The fleece of these breeds consists of hair externally, with a thick, close layer of wool within, impervious to cold and wet; it is worthless for manufacturing, and is used for horse collars, and more or less is exported and appropriated to this purpose.

The principal peculiarity about the native sheep is the number of their horns, many individuals having four and five, and instances have been known of eight. These hardy animals propagate without the care of man, and seek refuge from storms among the caverns of the coast during the winter season.”

Information Wanted.

MESSRS. EDITORS:—By the request of a number of your subscribers, I take the liberty to beg a small space in the *Farmer* for the following inquiry—hoping and believing that some one among your thousands of subscribers will not delay to furnish the desired information.

Whereas our country abounds in elegant and pleasant sites for erecting dwelling houses, many of which are unoccupied, neglected or abandoned on account of the uncertainty of ever obtaining

a supply of water by digging, drilling or boring—and many, after having spent much time, money and hard labor, have obtained but a miserable, scanty, precarious supply, and some none at all: and whereas, we hear from Ohio and other parts of the country of their dispensing with well water entirely, and using cistern water for drink and all culinary purposes, after it has been filtered; how is this done? is the question we want answered. How many and how large cisterns would be necessary for one family? Through what substances must the water percolate to become pure and soft? In short, we want to know the whole process and all about it, (if it will infringe on no one's patent right,)—which knowledge we hope to obtain in the April number of the *Farmer*, if consistent.

This subject may have been illustrated in a former number of the *Farmer*, but if so it has escaped our notice. If we can dispense with digging wells, as well as with building large heavy chimnies, it may prove a great saving.

SIMON PIERSON.

Le Roy, Gen. Co., Feb. 1, 1848.

WE hope some correspondent will furnish the information desired, in time for our next number.

THE NOBLEST PRODUCT.—A stranger passing through one of the mountain towns of New England, inquired, “What can you raise here?”—The answer was, “Our land is rough and poor; we can raise but little produce—and so we build school houses and churches, and raise men.”

EGYPT.—By the late census this ancient division of the world is found to contain about five millions of inhabitants.

Lunar Influence. — Shrinking of Pork, &c.

MESSRS. EDITORS:—The February number of your paper came to hand punctual "as ever," filled with "choice bits" from many experienced and able writers. The "Editorial Correspondence" was read with interest, and also the "Gleanings from Foreign Journals." The article on "Grasses," brought to light new facts, (cows eating cotton for instance,) and was followed by Professor Agassiz' views of "Animal Life." Wm. L. VAN DUSEN then settles the mooted question of *Boiled Pork*, to his entire satisfaction; but, with your permission, I will convince him he has not satisfied all.

By way of introduction let me here remark that I am a farmer, and have never enjoyed the advantages of a liberal education; and if I am occasionally a little uncouth in expression, you must excuse me. Your correspondent's premises are wrong, hence his conclusions amount to nothing. "The moon governs the tide." Ever since the creation of the world, philosophy has assumed very obscure causes to explain the most simple effects, for the purpose of exciting the attention of the vulgar, who scarcely ever admire any thing but what they do not understand. The most learned men have, throughout all time, been puzzled to account for the tides of the ocean, and until a late period their movements have been a perfect mystery. The Newtonian system is received by many as truth not to be questioned, and for want of a better is now taught in our public institutions of learning. Still many of the most scientific men of our day doubt its correctness, yet acquiesce with the popular feeling because they have no substitute to offer.

I am afraid, sir, of trespassing upon your patience if I write a lengthy article to sustain my position, so I will merely observe that the phases of the moon and tides of the ocean are mere coincidences. In consequence of this coincidence a most powerful agency is attributed to a secondary planet, which is as false in fact as it is absurd in theory. Let me here ask, why place such an important force in a secondary planet, at a distance of 240,000 miles, when it could have been lodged in the primary itself? The law of gravitation is the grand principle which governs all the motions of the heavenly bodies. Hence nothing can be more deserving of the attention of the friends of science than the developments of the results of this universal law. The effect of gravity is in exact proportion to the quantity of matter the mass contains, and not in proportion to its bulk. The volume of the moon is 1.49 that of the earth. Her density is nearly 2.3 the density of the earth, and her mass is about 1.80. It is now admitted that the moon by the force of attraction causes the tides to rise in Boston 11 feet; in Bristol, England, 40

feet; and in the Bay of Fundy 70 feet. I ask what would be the effect of the earth's attraction upon the moon, for we must suppose the action to be reciprocal. I ask, in the name of common sense, if there could remain a single vestige of the art of man or God upon that planet? Nay, more, could the moon itself revolve around us? I can imagine nothing more ridiculous or absurd, nothing more contrary to the general simple laws of nature. Why is there little or no tide under the equator? The surface of the earth is much nearer the moon under the equator than in high northern or southern latitudes, and the attractive force of the earth much less, and it would naturally seem to follow that owing to the convexity of the earth, and other causes above mentioned, the tide should be much the highest. But the REVERSE is true. Why does not the moon exert a perceptible influence upon the Mediterranean and Caspian seas? Why do they undergo intermittent movements and retardations of two or three days? Surely they are of sufficient size to be subject to the influence of the moon, if any existed. The same remark might apply to the large lakes upon our northern frontier. Lake Geneva, in Switzerland, ebbs and flows daily, and it is not near as large as many of our northern lakes, which exhibit no tide. Why do the tides ebb and flow on the west of Florida once in THREE hours, on the east once in TWELVE hours, in the city of New York once in six hours, and in Arabia only in the NIGHT time? Why does the water rise in the Pacific at Panama 13½ feet higher than the Atlantic at Chagres, and then in 12 hours be the same number of feet lower, although the two places are less than sixty miles apart, and the tide occurs at the same hours?

The point and significance of these questions are not to be evaded and turned aside by the usual reference to the opinions of great men. They disdain to dwell on simple observations, if they tend to level to every capacity the mysteries of nature's works, which so generally accord with the reasoning faculties of man. If, then, the theory of the tides is thus inconsistent and absurd, what must we say to the sage conclusions of your correspondent? What proof have we that the moon affects the animal kingdom? None. With equally the same reason might we contend that the earth in different positions of its orbit would have an influence in producing fools and maniacs in the planet Saturn, or exciting insurrections and wars among the inhabitants of Uranus, as to suppose "your pork will shrink or swell with the ebbing or flowing of the tide, and wane or wax of the moon."

J. WILSON DICKINSON.

Avon, N. Y., Feb., 1848.

MESSRS. EDITORS:—In your February number I see a short article in regard to the influence

of the moon in preventing the shrinking of pork. Now it seems preposterous to me that the moon should have any such influence whatever. What possible theory can be adduced to explain this supposed phenomenon, I cannot imagine. It appears the least plausible of all the various ridiculous notions in regard to the influence of that luminary. I know that these visionary notions are widely spread among all classes of the community, but especially the agricultural portion. It is a fact, however, that they will not stand the test of scientific investigation, and are not believed by enlightened men, who have tried numerous experiments to settle the question. I do not, of course, allude to the influence of the moon in producing the tides of the ocean, for this theory is in perfect accordance with the known laws of nature, and has been established by scientific observation. But, take for instance, its supposed influence on vegetation. Vegetables, plants and trees are thought to grow more rapidly when the moon is increasing in size, and many therefore make it a point to plant, prune and graft at this particular time. It is thought, too, that wood should be cut during the decrease of the moon, because its fibres shrink, and become more consolidated, and is therefore more valuable for building or fuel. If pork shrinks in this manner, it is none the less valuable. Now many scientific European Agriculturists, by numerous experiments and observations, have clearly proved that the increase or decrease of the moon has no perceptible influence on vegetation.

It is very unfortunate for the mind to imbibe superstitious ideas in regard to agriculture, for it is productive of much inconvenience and loss of both time and money, besides being an obstacle to further improvements. Fearing that I have already trespassed too much on your valuable columns,

I am yours,

H. S. CHASE, M. D.

Woodstock, Vt., Feb., 1848.

HOME.—No marvel that poets have chosen home and the native land, as grateful themes of song. In themselves, the words are full of melody; in their associations they form exquisite music. It is a blessed thing to have a haven of rest, where love lights its beacon and keeps its vigils to greet the returning wanderer, weary of a cheerless pilgrimage by flood or field. God help those for whom every country wears a foreign aspect, who avert their steps from the dwelling of their fathers, banished by the clouds of discord, or the rank weeds of desolation.

THE President of the Massachusetts Horticultural Society at its late annual fair, laid on its table, one hundred and sixty different sorts of pears. Think of that, boys; one hundred and sixty varieties of pears from one garden.

Progress among Farmers' Sons and Daughters.

VALENTINES.

AT our Post Office the other day, I saw a number of beautiful colored *billet doux*, yclept, valentines, which had been deposited for distribution by sundry farmers' sons and daughters, who live on the fat alluvial farms in our vicinity. Certain young dandies present were making odious comparisons, between the embossed margin, and that spider-like superscription between, which in their eyes disfigured these unique missives. Fie, boys, said I, it is but the other day, when not one of you could write straight with the help of ruled paper; yet now you have the hardihood to set yourselves up for critics in chi-rography. I confess that I only saw in these crude superscriptions, one more corroborative proof that progress was abroad among our rural population. "Men must be poets before they are philosophers," and we all know that these rustic missives are redolent of poetry; crude and indifferent if you please, but giving promise of better things to come, and an earnest of a better, a more civilized and intellectual life—a life of progress which leads to that science and philosophy in farming, without which the farmer has no friend or guide to lighten his labors, or to exalt his understanding.

But to return to Valentines. THOMAS MILLER, the "basket maker," in his *Beauties of Country Life in England*, gives some reminiscences of these sports. "Well do I remember," said he, "our stealing softly up the garden, and looking for some crevice in the cottage door, depositing the messenger of love under the chink, or between the window shutters. Others more daring, would throw open the door, and hurl the love-breathing document into the center of the family. Then there was a shouting of fathers, and hobbling of old mothers, to see who it was that had selected their rosy daughter for his Valentine. But the youth generally was too nimble, and ere they had crossed the threshold, he was over the garden and away across the fields, hidden in darkness. When the candle was snuffed the blushing girl to whom it was addressed, after many entreaties, drew it from her bosom, and allowed them to look at the picture; and altho' the female face was hideously drawn, with a nose projecting like a buttress, and an eye horribly black with ink, and a patch of pigment red on the cheek, still the mother declared it was the very likeness of Mary. And if she is fortunate enough to wed the youth who is the donor, she will have her Valentine set in a frame after marriage, and the callow Cupid, and the painted tree, the red hearts, and two figures with blotches for legs and feet, will grin at each other under a glass for many a day." S. W.

PROVIDE properly for all domestic animals.

Dr. Underhill's Theory.—The Soil's Influence on the Decomposition of Manures.

MUCH has been said of late about Dr. UNDERHILL'S theory of trenching manure deep in the soil. There can be no doubt but that on a light sandy or gravelly loam, manure thus applied will be more lasting and beneficial to crops, than it would be if distributed nearer the surface. But the same mode of application will not produce the same result on a clay loam, as here the compact surface soil would not have the benefit of the mechanical aid of the manure to keep it loose and friable—a quality inherent only to light or gravelly soils. And besides, if manure is placed deep under clay, the oxygen of the atmosphere is precluded by the tenacious surface from uniting with the hydrogen of the manure, covered deep beneath it.

The only way that a maximum yield of Indian corn can be obtained from a heavy clay loam, is by a thorough application of manure, well mixed both with the surface and sub-soil. Manure superficially applied to a loose soil, will undoubtedly give a greater stimulus to early vegetation, but so rapid is the combustion of the manure, owing to the ease with which the atmosphere penetrates the loose surface, that all its nitrogen, carbon, and water forming power is exhausted before the crop begins to mature. On the other hand on a clay soil, the full stimulus of manure is only seen when it begins to fail on the light soil—for the reason that the alluminous quality of the clay soil prevents the too rapid combustion of the manure, by which its ammonia and carbonic acid is saved to feed the extra demands of the maturing crop, and its water forming process is also postponed to meet the exigencies of both heat and drouth, so common to our midsummer. To have manure thus available late in summer, on a loose soil, it must be put so deep as to ferment slowly during the first summer months. Hence Dr. UNDERHILL'S theory is true in the abstract, and strictly true in practice, when applied to all loose inadhesive soils, provided always that the subsoil is relieved from surplus water.

The above opinions are founded on actual experiment, often repeated in a small way.

Waterloo, N. Y., Feb., 1848. S. W.

Wire Fence.

MESSRS. EDITORS:—Being a practical farmer and a subscriber to your valuable paper, I desire to contribute something to aid the farming interest, by making a few suggestions on the subject of wire fence, for the consideration of the tillers of the soil, which I can not but hope may lead to some practical results that may prove highly beneficial to many who are engaged in the

noblest pursuit that ever occupied the mind of man.

The writer of this, having lately learned that posts and wires have in some places been substituted for other materials for fence, has taken some pains to ascertain the comparative value of making it, which may be done as follows: First set one post of common size firm in the ground, and place in it a long screw or small windlass, with a small rag wheel at or near the top where the upper wire is designed to be. Then fasten one end of the wire to the screw or windlass, and extend it to the other end of the fence, whatever the distance may be. There set another post, to which fasten the wire as at the beginning; then turn the screw or windlass at each end, until the wire is as tight as desired, when it will be ready to receive as many intermediate posts as may suit the fancy—which posts, it is believed, need not exceed two inches square of *hard wood*, which can be sharpened and very easily driven into the ground, on a line with the wire, to such depth as may be necessary. Extend as many wires as desired to accomplish the object. Let each wire be fastened to each intermediate post with common tenter hooks, with the hook part so bent over as to fully secure the wire in its place. Four wires, it is believed, will be sufficient to secure sheep, as they do not get over a fence unless they can first jump on to it. The wire may be of such size as best suits the fancy. No. 16 is no doubt sufficient—which, for each rod of fence of four wires, will not cost, at the wholesale price, more than 9 or 10 cents; and such posts as above described will not cost more than one cent each, and one to a rod will be sufficient, as the whole line of fence from one end to the other will be all united to resist any pressure against it, and for that reason the posts may be small and set but lightly in the ground.

Such a fence could not be disturbed by the wind, and should the posts be raised by the frost it would be but a small matter to drive them down to their proper place. If any fear exists that the wires may contract in cold weather, and break, it will be very easy to turn the screws or windlass at the approach of frost, and leave all secure. Fences may be made on the same plan to secure any other kind of animals, but for the larger kinds it is not unlikely that it will be advisable to place a cap board on top of the posts. How durable such a fence may be remains to be known hereafter; but it is highly probable that the wire would endure for many years, if placed on the sun side of the post, even without paint, which can be applied if necessary. Such a fence could be more easily moved than any other; all that would be necessary would be to unfasten each end of the wire, and wind them on a reel, and remove the posts to any place desired, which could be very speedily accomplished.

Yours, &c.,
H. C. W.
Auburn, N. Y., Jan., 1848.

Making Maple Sugar.

As the manufacture of Maple Sugar is "in order" at this season, we copy from the Transactions of our State Ag. Society, the following report of a committee on sugar—including the statements of the two competitors who received premiums, giving their modes of manufacturing, &c. There is much need of improvement in the process of sugar making, at least in some sections—and perhaps the annexed article will be useful to many who do not properly understand the business.

REPORT ON SUGAR.—The committee to award premiums on Maple and Corn Stalk sugar would respectfully report: That no corn stalk sugar has been presented to them for examination. There were nine samples of maple sugar of at least 25 pounds each, exhibited; that each is of good quality, and that three of them are of very superior (rectified) quality, very nearly equal. The committee were hardly able to determine which should take the preference; but after examination with a magnifying glass of the respective crystals, they awarded the first premium of \$10 to Benjamin Gauss, Jr., of East Bloomfield, Ontario county.

To Moses Eames, of Rutland, Jefferson county, the second premium of \$5.

BENJAMIN GAUSS', JR., STATEMENT.

In regard to the Manufacture of Maple Sugar.

The parcel of maple sugar herewith presented, is a part of that manufactured by me the last spring. I tap about 300 trees annually, and make usually about 800 pounds. Much pains is taken in cleansing the buckets, and in having the whole apparatus perfectly clean. The sap is boiled in sheet-iron pans, placed on an arch; after it becomes syrup, it is taken to the house and cleaned with milk and the white of eggs. It is then boiled in a kettle until it will grain, and then placed in pans to cool. When cool it is put in boxes to drain. The boxes converge to a point, so so that the molasses settles to the bottom. On the surface of the sugar in the boxes, damp flannel cloths are placed, and these cloths are washed every day in clean cold water, to extract whatever of coloring may be absorbed from the sugar. This process is continued until the coloring matter is extracted, and the sugar becomes as white as the specimen herewith exhibited.

BENJAMIN GAUSS, JR.

East Bloomfield, Ontario Co., N. Y.

MR. EAMES' STATEMENT.

First, the plan and manner of tapping the trees in this town is very nearly the same; that is with a half-inch or five-eighths auger, and a spile inserted in the hole, and a pine tub to catch the sap from each tree. I gather my sap to one large reservoir once in 24 hours; then it is boiled each day to syrup, which is about half the sweetness of molasses; it is then taken out and strained through a flannel cloth, and put into a tub or barrel to cool and settle for 12 hours. (I use a sheet iron pan set in an arch of brick; the pan is made of Russia iron, eight feet long, four feet wide, and six inches deep.) It is then taken out, and I am careful not to move the bottom where it has settled, and place it in a kettle and heat it to 98 degrees. I then add (for 100 pounds) the whites of four eggs, two quarts of milk, and one ounce of saleratus, (the eggs well beat up, and the saleratus well dissolved,) and stir the whole well together in the syrup; and when the scum has all risen, it is to be taken off, and be sure it does not boil before you have done skimming it. Then it is boiled until it is done, which you will know by dropping some into water; which, if done, will form a wax. It then must be taken from the kettle, and placed in tin pans to cool and form the grain; and as soon as the grain is sufficiently formed, I then pour it into tunnel-shaped boxes to drain. and after 24 hours I place a flannel cloth on the top, and take the plug from the bottom, and let it drain. The flannel cloth I keep wet from day to day.

MOSES EAMES.

Rutland, Jefferson Co., N. Y.

New York State Agricultural Society.

WE annex a sketch of the proceedings, at a meeting of the Executive Committee of this Society, held on the 12th of February.

The following extract from a letter received at rooms, will show the interest that is being taken on the subject of agriculture:

"It is gratifying to notice the growing demand for the State Society Transactions in this county—and I am pleased to add that in this vicinity our farmers are interested in a course of lectures now in progress. The lecturer, himself a farmer, makes no pretensions to any depth of science, but in a plain way has by experiments analyzed the atmosphere and water, exhibiting them separately and explaining their properties respectively, and their valuable agency upon our crops."

Facts like these show that the attention of the farmers is aroused in some measure to the importance of their profession, and if we can continue on with a steady hand, there can be no doubt of our final success in the great work of agricultural improvement.

Extracts from letters on the subject of Western Butter were read, showing that well made butter from the west will keep as well in hot climates as Goshen butter or any other.

One letter says:—"The butter made in the county of Chemung is equal to that made in Orange county, and will stand the Southern climate as well; also butter made in Tompkins county is well suited for shipment south, and stands the salt air as well as any butter received here (New York.) I find the best Western dairies sell as well as the best "Goshen" butter when sent south, and in many cases better, as it has more color."

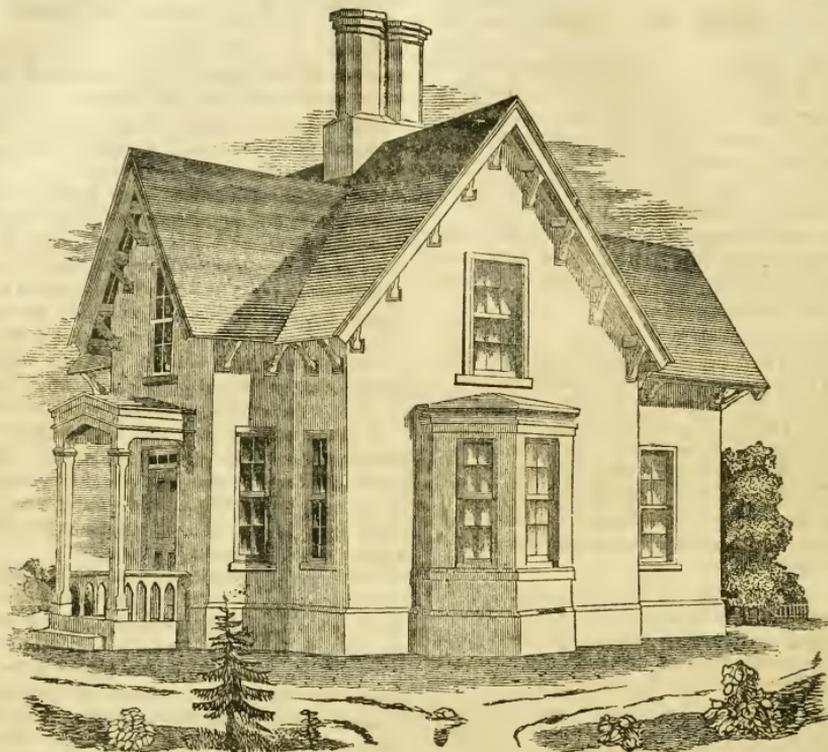
The following resolutions were adopted, and the Secretary directed to forward a copy of the same to the Senators and Representatives in Congress from this State:

Whereas a bill has recently passed the United States Senate, renewing, for the term of seven years, the patent of Jethro Wood for improvements in the cast-iron plow, and imposing a tax of fifty cents on every cast-iron plow manufactured in the United States during that time; and whereas for the following reasons such an act would be manifestly improper and unjust, viz:—1st. That the patent of Jethro Wood has, as we are informed, almost entirely passed out of the hands of his heirs, and is now mostly held by persons who have conferred no particular benefits and have therefore no special claims on the public; and 2d. That the improvements originated or formerly claimed by said Wood are now in many instances combined with other and later improvements, which have rendered the plow much more perfect than it could be made on the basis of his invention alone. Therefore

Resolved, That in the opinion this Society, the patent of Jethro Wood ought not to be renewed; he having enjoyed, in the period of twenty-eight years, for which his patent has been granted, a full equivalent for every improvement that may have been made by him in the cast-iron plow.

Resolved, That in the opinion of this Society, the passage of such a bill into a law, would be an act of gross injustice to the Farmers and Planters of the United States.

Resolved, That this Society respectfully but earnestly tenders to the Congress of the United States, its remonstrance against the passage of the bill renewing the patent of Jethro Wood.



ENGLISH COTTAGE—BY R. RANLETT. (FIG. 19.)

Rural Architecture.

[WE extract the following article from a recent number of the American Journal of Agriculture and Science. It contains some valuable suggestions; and as the subject of Rural Architecture is receiving much attention at the present time, we think it will be perused with interest by many of our readers.]

A SUBURBAN residence combines, to some extent, the advantages and pleasures of city and country life, but does not contain either to the full. A country residence affords, to the intelligent mind and diligent hand, pleasures and profits which are unknown in exclusive city life.

For the last eight or ten years a decided taste has been manifested in rural architecture. The newly built cottages that meet our eye in almost every direction, tell us in plain language that our countrymen have given some thought on the construction of their dwellings; and instead of consulting the nearest carpenter for a plan, architects of known taste and skill have been employed, and the consequence is, a taste for beauty of style has been engendered of a most happy character.

How much of the beauty of a country, and of

the ideas of the comfort and happiness of its inhabitants, depends on the appearance of its houses, and cottages, every person is aware. The difference between the best and the poorest is sufficiently striking; and the ideas of wealth, comfort, order, and symmetry is every where conspicuous.

Utility is a beauty of itself, but there are higher degrees of that sentiment excited by the appearance of convenience, of design, or intelligence in contrivance, as displayed in the elevation and general effect, and by classical imitation or picturesque form in masses and details.

We have been favored with a copy of the first volume of "The Architect," by WM. H. RANLETT, containing a series of designs for domestic and ornamental cottages and villas, &c. The want of a work of such a nature has long been felt. It will be found useful and convenient to those persons who design to build, as well as the professional architect and citizen.

The volume consists of ten numbers, and contains twenty-one original designs of rural residences—cottages and villas—accompanied with remarks on rural architecture, origin of style, with plans and descriptions of all the parts in

detail and the expenses, varying in construction from \$900 to \$12,000. There are sixty plates—nineteen of them beautifully and elegantly tinted, in a splendid style of lithography.

The beautiful cut of a cottage, in the English style, which heads this article, is a copy of one of Mr. RANLETT's elegant lithographic prints, in the fifth number of this new and useful work, from which we make the following extracts.

"The great number of cottages," says Mr. R., "which have been erected in the suburbs of London, in latter years, has afforded the finest opportunity for the application of improved taste and skill in cottage architecture, and the result is a vast amount of rural scenery, comprising in great harmony, highly improved gardens and yards with their requisite flowers, shrubs and vines, constituting views which are admired by visitors from all countries. One of the chief sources of the beauty of these rural residences, is the position of the houses on the lots, which are back sufficient to afford front yards for the cultivation of plants and vines, which are arranged and trained in graceful combinations with the architectural features, thus heightening the general effect by promoting the influence of the various parts. This style is well adapted to a large portion of the United States, especially in those parts in the higher latitudes." * *

"The general characteristics of a residence must be determined by the tastes, habits, and circumstances of the family who are to occupy it. There is very properly, a great variety of styles and dimensions in rural residences. Cottages and small villas are the most appropriate dwellings for those who aim at competence and comfort in the simple independence of American country life. Cottages or houses, one story, or one and a half high, may be erected in any style, and possess all the desired accessories, such as porches, verandas, balconies, pediments, &c."

"A cottage indicates a disposition in the proprietor to live within his income and to appropriate his means rather for the convenience and comfort of his family than for show which he is ill prepared to sustain. The style and finish of any house denote the intelligence and taste of the proprietor."

"A situation should be selected with due respect to the employment of the proprietor, and the intended style of architecture, if it has previously been determined. Health is the most important consideration in the selection of a situation. Low situations should be avoided on account of fogs and humidity. Soil is an item of some importance, especially where gardens and pleasure grounds are contemplated; but a good subsoil is more important, being essential to the vigorous growth of trees, and incapable of improvement, while the soil may be improved to any extent by artificial means."

"The scenery around a dwelling is well worthy of particular attention. It is important that a situation should have as much of natural beauty as possible—a natural scene may, however, be greatly improved by art, and materially changed by much time and expense. Trees are very desirable for shade, and the beauty of their composition with the architectural features of the scene; but they should not be so thick as to produce dampness, nor so situated as to prevent a distinct view of the edifice. In improving the ground, care must be taken to have pointed trees, so that they may harmonize with the prevailing high roofs, acute angled gables, to give harmony to the scene."

"The construction of dwellings is a department of enterprise and investment, which involves various considerations of vast amount. It should be remembered that a dwelling is constructed for the accommodation of a family—Sound philosophy and good taste require that the site, form and character of a building should be suited to its use and the expression of its destination. A grove affords to a house a natural protection, both in summer and winter."

Design for a Farm House.

MESSRS. EDITORS:—I noticed in the January number of the Farmer an engraving of a farmhouse designed by me, and first published in the last year's volume of Transactions. Although it is a correct copy of that engraving, it is not exactly like the one I designed. In the first place, the basement or cellar was entirely omitted. This I very much regretted, as I considered it very conveniently arranged. It contained a spacious kitchen, opening into the wood-house; a large pantry or store-room at the foot of the kitchen stairs; a cistern; arch; oven; storage-room for wood and ashes; sink and drain.

A door was also omitted between the library and sitting room, which would be indispensable, if used either as a library or a part of the hall—and a sink placed in a corner of the upper kitchen or dining room where there was only space for a door, which I had designed in the basement kitchen directly beneath.

The windows in the ground plan should have been enclosed with lines, corresponding with those of the chamber. This I think, however, an omission of my own.

MRS. JAMES M. ELLIS.

Onondaga Hill, N. Y., Jan. 1848.

YOUNG FARMERS, consider your calling both elevated and important—never be afraid of the frock and the apron. Put off no business for to-morrow that can be done to-day.

AN hour's industry will do more to retrieve your affairs than a month's moaning.

Preparing Sandy and Light Soils for Wheat.

[From the Transactions of the N. Y. State Ag. Society.]

As these are truly the days of improvement in the various sciences, it is somewhat surprising that agriculture should be so far in the back ground. There are some encouraging appearances, and inquiry begins to pervade the public mind, to see if there cannot be some improvement in this all important branch of public industry also. I would therefore offer my mite to my brother farmers, on preparing fallows for wheat.

Some nine or ten years since, I adopted a new method of preparing fallows for wheat, which was *one plowing*—and this I follow whether I plow in June, July, or August. I apply the cultivator as often as necessary, to prevent any vegetation from growing, and the land is thus kept perfectly clean for the seed. Should the land be quite hard it makes no difference, but is all the better, if you can obtain sufficient loose soil to cover the seed.

When I first commenced this mode of farming my neighbors laughed at the idea of obtaining a crop in this way. In the course, however, of two or three years, they became convinced, by observing that I raised the best wheat, according to the quality of the soil, and I am happy to say, that very many in this region, have adopted the same plan, and I do not know of one who has had occasion to regret it, for in every instance that has come to my knowledge, it has succeeded well. My land is what may be called coarse sand and gravel, sandy loam and some rather stiff sand. Whether the same practice would answer on a hard and clayey soil or not, I cannot tell.

I sow my wheat generally between the 10th and 25th of September. When the wheat is sown the cultivator is passed over the land but once, which covers the wheat better than two or three times with the harrow. By the above plan, about one-half the usual labor on fallows is saved, and a more bountiful crop may be anticipated than from the former method of plowing three times, and using the harrow two or three times. It is a well known fact, that a stiff, hard clay soil, provided the ground has been well prepared, will grow more wheat to the acre than can be grown on a sandy or loamy soil. Now the question is, why is this so? To me it is obvious; the wheat plant grows most luxuriant on a hard soil, and that is the reason that one plowing on these sandy soils, is preferable to three, and that land thus prepared will produce more wheat to the acre. The one plowing leaves the ground hard compared with three plowings, which, in these soils, leave the land loose, open, and spongy, unsuited to the plant. This has been tested often in this neighborhood within the last few years.

The practice which I have adopted, is confirmed by a statement given by HENRY COLMAN, Esq., in his account of the culture of wheat in

England. He says: "The soil preferred for wheat is a strong soil, with a light proportion of clay; but experience has of late years, contrary to early and strong prejudices, determined that even the light and loamy soils are capable of bearing heavy crops of wheat, provided they can be sufficiently consolidated. This is often done by driving sheep over the land after sowing, and by an implement called a *presser*."

"This implement passes over the land in the direction of the furrow, and it forms on the furrows two deep drills at a time, the two rollers being eight or nine inches apart, and the blade of the roller, if it may so be called, or the rim being thin at the edge, and growing wider above the edge; and forming as it revolves, two furrows, hardened by its weight, into which the grain drops as it is sown; and when it comes up, it appears as if it had been regularly sown in drills of eight or nine inches apart, according to the width of the revolving pressers from each other. The steam-presser is in fact an abstract of a drill roller, consisting of but two cylinders of cast iron, which following the plow in the furrows, press and roll down the newly turned-up earth.

"I believe the soil for wheat cannot be too deep; though, as I have already stated, it may be too loose at the top, and in such cases requires shallow plowing and treading, or pressing on very light soils, in order that the roots may be firmly fixed in the soil, and the dirt not liable to be blown away from them."

I use a two horse cultivator for putting in all seeds such as wheat, rye, oats, barley, and best of all for peas. This covers about six feet at a time. I use a smaller one for corn, having given up entirely the use of the plow. I have given above my views with regard to the proper management of sandy and light soils for wheat; and if it shall prove advantageous to the farmers of New York, I shall be satisfied.

Yours respectfully,
ELIAS COST.
Oaks Corners, Ont. Co., N. Y., 1847.

Swamp Muck as a Fertilizer.

WE have received several inquiries in regard to the value of Swamp Muck as a fertilizer. Muck *alone* applied to uplands, and mixed with the soil previous to sowing or planting, is worth something, but not much, judging from the results in several cases which have fallen under our observation. Mr. McVEAN, of Wheatland, has tried it pretty thoroughly, and we desire him to favor our readers with his experience in the matter. Made into compost with lime and ashes, and this compound rotted with fermenting manure, would render it far more available as food for plants. *Dry* muck makes good bedding for cattle, horses, pigs and sheep. By absorbing their urine, which readily ferments, it can be made to enlarge the dung heap in a cheap and profitable manner.

EDITOR'S TABLE.

TO CORRESPONDENTS.—Communications have been received during the past month, from S. P. Chapman, Mrs. James M. Ellis, J. Wilson Dickinson, H. S. Chase M. D., S. W. J. W. Sprague, Wm. Hanford, Jr., Lewis Skoke, Elias Bacon, O. S. Granger, Wm. H. Smith, Allen Payne, S. B., Thos. S. Bryan, S. M. Starling, Pliny L. Evans, N. S. Smith, S. S. Crocker, Jas. Aldrich, and N. B. R.

ACKNOWLEDGMENTS.—We are indebted to Hon. Messrs. E. B. HOLMES, DIX, DICKINSON, PALFREY, and other members of Congress for valuable public documents.

—To M. B. BATEHAM, Esq., for a copy of the "Report of the Ohio State Board of Agriculture, for the year 1847." From a hasty examination of its contents, we observe that the Report contains much valuable and interesting information. Many of the most enterprising farmers of Ohio have put their shoulders to the wheel, and the car of Improvement is making good progress.

—To unknown friends for valuable agricultural addresses, pamphlets, &c.

THE FARMER AND MECHANIC is among the best of our exchanges. It is ably edited by W. H. STARR, Esq.,—and devoted to Agriculture, the Mechanic Arts, Science, &c. It is worthy of extensive patronage. Published weekly—8 pages quarto—at \$2 per annum. Address the Editor, New York City.

HOVEY'S MAGAZINE OF HORTICULTURE.—We have received the two first numbers of Vol. 4, new series, of this excellent Horticultural Journal. It has now entered on the 15th year of its existence, and shows in its style and matter, a determination to sustain its well earned character. The January number contains an interesting review of horticultural progress during 1846—a beautiful engraving of *Lilium Speciosum*, in a pot, with full directions for the culture of this charming tribe of plants—beside much interesting miscellaneous matter. The February number contains several notices of new fruits, and is otherwise well filled. C. M. HOVEY, Editor. Published monthly, at Boston, Mass.,—48 pages octavo—\$3 per annum.

THE OHIO CULTIVATOR.—The first four numbers of Vol. 4 are received, and give evidence that the editor has not deteriorated since leaving bachelorhood. Friend BATEHAM calls for an increase of patronage, because he has assumed the responsibility of a husband. If this is necessary now, what appeals may be expected hereafter? However, so long as the spirit and interest of his excellent journal is sustained, we trust it will receive abundant support;—and if more substantial reasons can be assigned, we shall rejoice, and certainly offer no objection! The Cultivator is published semi-monthly—8 pages quarto—at \$1 per annum, in advance. Address M. B. BATEHAM, Columbus, Ohio.

THE PRAIRIE FARMER, published at Chicago, Illinois, commences the new year and volume with its usual vigor. The pages of the Farmer exhibit industry and talent on the part of its editors and correspondents. Edited by J. H. WRIGHT and AMBROSE WIGHT.. Monthly—32 pages, octavo—\$1 per annum.

A GOOD EXAMPLE.—J. A. CARPENTER, Esq., of Waukesha, Wisconsin,—through whose influence, directly and indirectly, we have received from his vicinity, nearly a hundred new subscribers, within a few weeks past—says: "When I go from home, I put the latest number of the Farmer in my pocket, and act the same as a constable who is ordered to take every man he comes near, friend or foe. I ask all my neighbors, friends and acquaintances to subscribe. But you must depend principally upon Post Masters and young farmers for the circulation of your valuable and interesting journal." Mr. C. is one of the most efficient friends of the Farmer—and his system of obtaining subscribers is worthy of imitation by all who desire to aid in sustaining agricultural and other useful publications.

ANOTHER EXAMPLE.—In forwarding a number of subscribers, a Tompkins county friend says:—"I think I am doing my neighbors a kindness in persuading them to take the Farmer, although I have not succeeded very well. I am a new beginner at farming—last year being the first. I do not know how I should have got along, if I had been without the Farmer; but as it was I raised, on poorer land, as good crops as my neighbors, with the help of Ashes, Plaster, Salt, &c."

CHLORIDE OF LIME AS A MANURE.—Mr. H. BARKER, in a late number of the Scientific American,—a very valuable paper published in New York, and devoted to the Mechanic and Scientific Arts,—says that, from his trials of this substance, it will supercede Guano, Poudrette, and all the Salts and Acids, and that it can be afforded at \$30 per ton, or 14 cents per pound. It is a deliquescent sub-salt, having a strong affinity for water, and sparingly soluble. He promises the particulars of his experiments, of which we will advise our readers.

THE IOWA FARMER'S ADVOCATE is the title of an agricultural journal commenced during the past year, at Burlington. The numbers we have received give evidence of enterprise, and we trust the paper will be well sustained. Our Iowa friends should lend the aid of both pen and purse to the Advocate, if they desire to have a journal which shall be alike beneficial and creditable. H. GATES, Editor. Monthly—16 pages quarto—at \$1 per annum.

WHO IS IT?—Some one writes us from Cleveland, Ohio, (dating Dec. 23, 1847,) as follows: "Enclosed is \$1, in payment for the Genesee Farmer for the years 1848 and 1849." The order has no name attached, and for that reason we cannot forward the Farmer. Can any of our Cleveland subscribers enlighten us on the subject? We don't want the dollar unless we furnish an equivalent; neither do we wish to be supposed at fault by the person who neglected to give us a very important item of information—his NAME.

INFORMATION WANTED.—A subscriber at Elba, N. Y., writes us as follows: "Can there be a mill invented to clean clover seed by hand, so that we common farmers can afford to buy them? I have some on hand, and there is not a mill in town to clean it."

We have inquiries of the same import from other sections. Do any of our readers know where the desired article can be obtained? If not already invented, we presume the demand for the article will soon be supplied by some inventive genius—who would certainly prove a benefactor to the farming community.

THE POTATO ROT HEADED?—perhaps.—We have recently received several communications on the subject of the potato Disease, but they generally embrace no new facts or arguments. Mr. ELIAS BACON, of Gaines, Orleans Co., N. Y., writes us as follows:

"The Potato Rot is Headed!—the cause is ascertained! A partial remedy is at hand, and the rot made a blessing, or an advantage to me, instead of a curse.—That I have raised good potatoes the past season is beyond doubt, as I am able to bring as good men as there is in this county to substantiate the fact. If I should live I can do it again. Application will be made to some Government, for a small remuneration of my services to the public, before the facts are disclosed."

On the same subject the P. M. at Gaines, (J. HUTCHINSON, Esq.,) says: "One thing you may depend on—Mr. BACON'S potatoes are sound and good, whereas we have lost most of ours by rot."

LARGE IMPORTATION OF TREES.—The Express of WELLS & Co., brought to this city a day or two since, for ELLWANGER & BARRY, of the Mount Hope Gardens, eleven immense packages of trees, weighing over eleven thousand pounds. These trees were shipped from France and England in January last, and are said to be in most perfect order. Messrs. E. & B. are making extensive preparations for spring business, and will be found to have on hand every thing in their line which can be procured at any similar establishment in the state.—Rochester Daily Advertiser.

EDITORS who notice the Farmer will oblige us by mentioning its location, in addition to size and terms. We are under great obligations to our friends for their very favorable notices; but we almost daily receive papers which speak in high terms of the Farmer, without mentioning ROCHESTER, N. Y., as the place of publication.—Such notices, particularly in papers published in distant sections of the Union, are of little or no benefit. In noticing even the most popular journals, we always state the proper address of the publishers. We can appreciate its importance to others, from our own experience—as we frequently receive orders for the Farmer which were first directed to some other place. The name of our journal is familiar to thousands who do not know where it is published. Therefore, gentlemen, please give us a "local habitation," as well as a NAME.

SPIRIT OF THE AGRICULTURAL PRESS.

CHEESE MAKING—Knowing How.—The advantage of skill and exactness in cheese making are well set forth in an address by Col. A. Petrie, before the Herkimer (N. Y.) Agricultural Society :

"Some farmers make less than 300 pounds of cheese per cow in a season, while others exceed 600. Perhaps some of this difference may be accounted for by the inequality of advantages, but I am assured by gentlemen in whose skill in the art we have the highest confidence, that there is a great difference in the product per cow, when all advantages are equal. One case I will mention : A gentleman who had for four years made more than 600 pounds per cow in a season, from a dairy of 25 cows, let out his dairy to a tenant, whose reputation as a common cheese maker was of the highest order. He observed that the tenant's cheese was smaller and lighter than they should be, and suspecting the cause, watched the mode of making them, and found it to be like that of nearly all the cheese makers in the county—by guess. The milk was tempered, and set, the curd scalded without a thermometer, and less care was taken in other parts of the process than he was accustomed to. He attempted to teach the tenant, who was rather prejudiced to "book farming"—reminded him of his reputation: the landlord, however made a few cheese himself and the tenant looked on. These were found to be larger and heavier than the cheese made by tenant. The tenant then adopted the improved mode, and he could make as large a cheese as his friend. Both gentlemen now agree, that the improved mode increase the amount 10 per cent. Now the tenant was evidently more than an ordinary cheese maker, for he would have made over four hundred pounds per cow during the season, but by the improved mode he made over six hundred."

MILCH COWS.—Those who may desire their milch cows to furnish their supplies of milk, cream, and butter, must provide them with nourishing slops, fodder, and hay, as dry provender alone, and that of the coarsest kind, is but an indifferent substance to excite the milk vessels into action.—The secretion of this delicious fluid cannot be carried advantageously on unless the cows be generously fed. In the latter case they never fail to repay their provender in a grateful measure. Warm, dry lodging and clean bedding are great helpers to the cow in her efforts to fill the udder.

CORN COBS.—A friend who had read an article in some paper recommending corn cobs, ground or unground, as constituting a valuable feed for stock, undertook to test the truth of the statement for himself. He had a large quantity on hand, and after providing himself with a proper vessel—(half hoghead tub,) he filled it with cobs, and then with a solution of salt in water. In this steep the cobs were suffered to remain till they had imbibed a sufficiency of the fluid to render them soft. In this condition they were fed out to his stock—half a peck to a full grown cow or ox in the morning, and the same quantity at night. He remarks that all his animals are extremely fond of them, and that they consume a much less quantity of hay and grain than before he commenced giving them cob feed. Neither do they require salt in its natural state. He has also ground several bushels of cobs, and finds the meal an excellent article for making "mush." The most economical mode, however, of appropriating corn cobs, is to grind them with the corn. The corn should be first crushed in a mill constructed expressly for the purpose, and then ground into meal, the same as corn when shelled.—*Maine Farmer.*

A READY RULE FOR FARMERS.—A "quarter of wheat" is an English measure of eight standard bushels—so if you see wheat quoted at 56 shillings, it is 7 shillings a bushel. A shilling is 24 cents—multiply by 7, and you have \$1.68 per bushel.

In Kentucky corn is measured by the barrel, which is five bushels of shelled corn. At New Orleans a barrel of corn is a flour barrel full of ears. At Chicago, lime is sold by the barrel, and, measured in the smallest sized cask of that name, will pass muster. A barrel of flour is seven quarters of a gross hundred, (112 lbs.) which is the reason of its being the odd measure of 196 lbs. A barrel of tar is 20 gallons, while a barrel of gunpowder is only a small keg holding 25 pounds, and this reminds me of cotton, a bale of which is 400 lbs., no matter in what sized bundles it was sent to market.

NEW HEMP-BRAKE—Important Invention.—The last number of the Maysville Herald gives a long and most interesting account of a new hemp-brake invented and put in operation in that place by Dr. O. S. Leavitt, recently of this city. The machine breaks unrutted hemp, and, in the opinion of the editor of the Herald, who has seen it in operation, it is destined to bring about at once a great and most important revolution in the hemp business of the west. He has seen it at work for hours, and, by his description of it, it is certainly a wonderful machine, breaking and cleaning at the rate of 2,300 pounds of hemp in 24 hours.

Dr. Leavitt, who is a gentleman of great inventive and mechanical genius, has devoted all his thoughts and all his labors for the last three years to the subject of the breaking and spinning of hemp. In the prosecution of his investigations he visited England, Scotland, and Ireland, and we think we do not speak too strongly when we express the opinion, that, in thorough knowledge of the whole subject, he is not surpassed by any man living. His labors have been unwearied, and we are rejoiced to hear that they are at last crowned with triumphant success. No man was ever more worthy of success.

Feeling a warm interest in Dr. Leavitt personally and in the result of his important enterprise at Maysville, we shall visit that city in a few days, and we will then endeavor to give our readers a full description of the machine and its achievements.—*Louisville Journal.*

GETTING ON THE RIGHT TRACK.—Mr. Magruder, a planter of Columbia county, Ga., communicated to us, verbally, the following interesting facts :

First, That his plantation is badly worn under the old system of cropping or planting alone.

Secondly, That by manuring, subsoiling, and planting corn in rows three feet apart, and allowing one stalk a space of 18 inches in the row, he has grown the past season 84½ bushels of shelled corn on an acre, and 79 bushels the year before on the same ground.

Thirdly, He sells all his butter in Augusta at 25 cents a pound, and finds that by keeping up his cows and cooking their food, he gets twice as much milk and butter as he formerly did. We say, from our own experience, that one half of his milk will pay all the expense, leaving him a net profit of 100 per cent., while the annual improvement of his neat stock, by their superior keep, will, should he have 50 cows, amount to a handsome sum.—*Southern Cultivator.*

CURING BEEF.—By most of the modes now in use, the beef becomes too much impregnated with salt, and is not as a consequence so fine for eating. By the following process this difficulty is prevented and the beef will keep till the following summer : To 8 gallons of water add 3 lbs. of brown sugar, 1 quart of molasses, 4 oz. of nitre, and fine salt till it will float an egg. This is enough for 2 common quarters of beef. It has been repeatedly tried and found very fine ; a famous beef eater says it is the only good way.—*Id.*

ARTIFICIAL STONE.—It is said that a process has been patented in England for making artificial stone of every quality, from artificial granite to statuary marble. The invention is stated to be founded on a chemical analysis of the natural varieties of stone. It is made of flinty and siliceous grit, rendered fluid by heat, and poured into moulds till cooled and hardened. The artificial stone has, as is stated, already been used for coping stone for variegated pavements for halls and rooms, stone ornaments—such as mouldings for friezes ; also for grind-stones and hones. The invention is thought to be particularly applicable to the lining of cisterns and water-pipes—its vitreous qualities insuring cleanliness. The process of manufacture is said to be easy and cheap.—*Cultivator.*

SCIENTIFIC LIBERALITY.—The Massachusetts Agricultural Society has ordered from Paris, at a cost of about \$800, the figure of a horse of full size, so constructed as to admit of all the pieces being taken apart. These pieces represent the muscles, blood vessels, heart, lungs, and other organs, of their natural size and appearance. Such objects would be admirably adapted to agricultural schools, and would afford the pupils accurate and useful information, scarcely to be obtained in any other way.—*Id.*

POULTRY.—There was received at Albany during the month ending the 31st December, per Albany and Schenectady Railroad, 254,089 pounds of poultry, as follows : during the first two weeks, 81,809 pounds ; third week, 73,156 lbs. ; and fourth week, 99,124 lbs.

MORGAN HORSES.—The following extract from a letter lately received from Mr. Benjamin Thurston of Lowell, Mass., is deserving attention. Mr. T. has had great opportunities for observation in regard to horses.

"Twenty-two years since, I bought several of the old (first) Morgan colts. They were raised by Mr. Goss, of Vermont, who was at one time the owner of the old horse. I found they showed traces of better blood—their action was finer, they moved more easily and gracefully, and could endure more than most of those I have had since. They had a bony head, with sharp ears, and were close, but *pointed* horses. The difference between the former and many of the present Morgans, I attribute to the French blood in some of our males, from which the latter have come. I have noticed that *Black Hawk's* progeny, when there has been French blood in the dam, have not quite that simplicity of action which those have whose dams have better blood.—Some of those partaking of the French or Canadian blood, have, as I think, a little too much action—or rather a *labor-ed* motion, which is apt to make them leg-weary in a long day's drive.—*Cultivator.*

TIME OF PUTTING COLTS AT WORK.—The common practice on this point is pretty generally wrong. It is not unusual to find colts put to harness at two years; and at three, many consider them fully fit for steady work. A colt is not fitted for this at four; and his strength should never be tasked at three. The breaking process should be commenced before he is weaned, by accustoming him to the halter, and to handling. This should never be intermitted; but the animal should always know and be accustomed to his master. If this is attended to, he will never be otherwise than gentle, and will never give trouble in breaking.

If he is not put to work too young, with fair usage, the horse will be as good at twenty years of age as he is commonly at fifteen. One year's delay of work when a colt will be compensated by three or four when a horse.—*Prairie Farmer.*

CLAY HOUSES.—A gentleman from McHenry county informed us some time since, that in his neighborhood this sort of building had become already quite common; and that the top soil from the barrens was used instead of clay; and that it was found to answer an excellent purpose.

Instead of mortar of the same sort, lime mortar is there used for laying them up; and when this is done, no difficulty is found in getting the cement used for covering to adhere.—*Id.*

ONIONS.—J. W. PROCTOR, Esq., President of the Essex county (Mass.) Ag. Society, states that, from inquiries made, it appears that the average yield of onions in the town of Danvers the past year, (where 200 acres were cultivated,) was 180 barrels, or from 400 to 500 bushels per acre. That the average value for several years has been \$1 per barrel. That the average cost of cultivating an acre of onions, does not exceed \$75—leaving a net income from the land of \$100 per acre.

JUST THE CHEESE.—An establishment in New Orleans, has received a cheese from New Jersey, weighing 1,700 pounds—a regular mill-stone affair.

FARMING AND READING.—Do you take and read an agricultural paper? Strange that a farmer, or planter, should think of doing without one. The merchant surrounds himself with his shipping lists, price currents, and all the means that can communicate information and ensure success; the lawyer's shelves are loaded with law journals, law reports, law commentaries, and law precedents, for he is sensible that without understanding what others have done, he can not hope for triumph at the bar; so with the other professions, they must and do read, if they hope for eminence or usefulness. All are anxious to understand their own business, the farmer excepted, and too many of these are content to follow on in the beaten path, never reading, scarcely thinking, and showing no anxiety to know what science is doing for them, and what discoveries and improvements are making to aid and accelerate their progress. No man needs extensive, varied knowledge, more than the farmer; none can turn it to more profitable account. The whole growth of a plant from the germination of the seed to the ripening of the fruit, is purely a chemical process, and one that may be understood and known. The farmer is admirably situated to study and to interrogate nature. Let him read, observe, compare, reflect, and practice accordingly. Never act without system, nor do a thing because others have done it.—*Cult. Almanac.*

SEE WHAT THE GIRLS OF THE BAY STATE DO.—We have received the statistics of the various branches of industry in Manchester, for 1845, taken with the State census for that year. To show our young ladies that it is no disgrace to work in the Pilgrim land, we give them the particulars of the straw bonnets and hats, and straw braids, and palm leaf hats, made there in one year:

	NUMBER.	VALUE.
Straw bonnets and hats,	1,047,954	\$1,057,892
Value of straw braid,		102,367
Palm leaf hats,		480,337
		\$1,640,596

All this by females, mostly farmers' daughters. Worcester, Hampshire, and Franklin counties, do the most.—Are not such industrious girls worth going after. Instead of street yarn, they care for dollars and cents. They don't constantly bother their parents or husbands with teasing for a new dress or \$40 shawl. They have the money in their purse, from their own industry. There are lots of rosy cheeks who have their hundreds deposited in banks, from the straw braid employment. We once knew two sisters who bought a farm for \$4000 for their parents, from the savings of braid.

BITE OF THE RATTLESNAKE.—Dr. Lee, of Hartford, Ct., who has practiced extensively at the south, states that he has treated five cases of rattlesnake bite successfully. His remedy is alcoholic liquor—either rum, brandy, or gin—given in large doses. A half pint in every fifteen minutes, making a quart in an hour, is not too much, to be given as soon as possible after the bite. This remedy has been used at the south to a great extent, and has never been known to fail of a cure. The liquor absorbs or deadens the fatal virus, and never intoxicates the subject as long as the virus of the reptile is in the system.

THERE IS A VIOLENT WAR rising between Ohio and Kentucky, as to which can raise the biggest hog. Ohio seems to get rather the best of it—but there is such a squealing and grunting, that one can hardly tell which is the biggest hog. Ohio puts down one of 939 lbs.

THEY HAVE industrious cows in Pennsylvania. Something over a million gallons of milk go over the Pittsburgh railroad, annually.

OHIO WHEAT CROP.—The Ohio Cultivator of Feb. 15 says: In a trip to Cincinnati via Xenia, and back via Portsmouth and Chillicothe, we noticed that the wheat fields presented generally a healthy appearance, giving but little evidence, as yet, of injury from the winter.

FARMERS AND THEIR CHILDREN.—One of the first duties of the agriculturist is, to endeavor to elevate himself and the class to which he belongs. And this can be done only by intelligence and faithfulness to all his duties. No idea is more injurious to the best interests of the farming population than that of educating some one child for what is called a "learned profession," and then regarding him as on this account superior to the other members of the family. Let our farmers endeavor to educate all their children thoroughly, not giving bread to one and stones and serpents to the others.

Let them bear in mind that education is as necessary to, and as much adorns and improves the cultivator of the soil, as the lawyer, the physician, or the minister. The more intelligent the man, the better the Farmer—and, if virtuous, the more respected and useful the Citizen.

ANOTHER REMEDY FOR THE POTATO ROT.—Robert Van Amburgh, of Poughkeepsie, has raised two successive crops of Mercer potatoes, viz: one crop in 1846 and one the present year (1847,) perfectly sound and without any rot. The potatoes planted in 1846, were the small potatoes of the year before, and about the size of a hickory nut, or a trifle larger, and dug when green and before the usual time of digging, and preserved through the winter. Those planted last spring were of the same kind, and were planted without regard to size.

OHIO HOGS FOR CANADA.—The Detroit Free Press says:—We noticed a few days since, a drove of three hundred hogs going across the river into Canada to be slaughtered. They came from Ohio, and are the first of a lot of about three thousand, that have been bought in that State destined for the Canada market.

GATES.—If you have bars at the entrance of your fields, substitute gates for them.



HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

Hints for the Season.

“DO EVERY THING IN SEASON,” and you will be successful, but let the season get ahead of you, so that all your work will be done *Out of Season*, and in vain will you hope for success. Spring—the opening of the ground—brings along a multitude of labors, and whatever can be done before that period, ought to be done *without fail*. The following are a few items that can receive immediate attention, if not already done, viz :

Prune fruit and all other trees and shrubs, grape vines, roses, &c., that require it, either for improving the shape or promoting fruitfulness. See illustrations in last volume.

Cut Scions for grafting, of all the fruits that may be wanted, but only from first rate sorts and healthy trees, and be well satisfied of the genuineness of varieties. Label carefully, and put them away in a cold dry cellar, among sand or earth, or in a pit in the open ground among saw dust.

Prepare Cuttings of grapes, currants, gooseberries, and of such trees, flowering shrubs, roses, &c., as are propagated in that way. Tie in bunches, label, and put away with scions for grafting.

Hotbeds for forwarding cabbage, cauliflower, brocoli, celery, tomato, and other culinary plants for the garden, should now be put in operation. Some hints will be found in last volume, page 48.

Beds of strawberries, raspberries, bulbous roots, half-hardy trees, shrubs and plants, protected during the winter, should be uncovered as soon as the weather becomes mild.

Trellises, Poles, Sticks, &c., for climbing plants should be made ready for use.

Roses, Carnations and other plants in cold frames should be aired on fine days, frequently.

Transplanting ought to be commenced as soon as the ground is thawed and fit for working.

Root Grafting should be finished before the ground opens.

There are many other things such as turning compost heaps, &c., that will suggest themselves to those who have a careful eye to their premises.

Buffalo Hort. Society.—State Fair.

THE annual report and proceedings of this excellent Society, for the past year, affords an apt illustration of the benefits conferred on community by such institutions, when well managed.

The progress of Horticulture in Buffalo is onward. The late President LEWIS F. ALLEN, Esq., may be well satisfied with the result of his labors. W. R. COPPOCK, Esq., a gentleman well known as one of the most zealous, skilful, and tasteful amateurs in the country, has been elected President, and is already in the field urging extensive and timely arrangements for the State Fair, to be held in Buffalo next fall. Not only in an agricultural, but in a horticultural point of view, we expect that exhibition to be the *best* yet made by the Society. Buffalo, herself, in her fine gardens and green houses, has great resources. Rochester and all Western New York must turn out their finest productions in great quantities; so must Cleveland, Erie, and all other places within a reasonable distance. Our Toronto friends must also contribute; many of them have already promised to do so. We are confident that nothing will be left undone by the people of Buffalo, to insure ample accommodations, and hospitable and courteous treatment, to all who may assemble there on that great and interesting occasion.

THE PAQUENCY PEAR.—We described this fruit a year or so ago, in the Horticulturist, and Mr. HOVEY describes it in his Magazine for February last, under the name of “*Payency*”—“*Paquency*” being, he says, “undoubtedly erroneous, as it answers to the description of *Payency* in the New Duhamel, quoted in Prince’s Manuel.” We were aware of this at the time that we described this fruit, and also that a pear under the name of “*Payenchy*” was noticed in d’Alberts work on Fruit Trees, 4th edition, published at Paris, in 1842; still we had no direct evidence that the two were identical. The President of the Massachusetts Horticultural Society, and ourselves, received this pear from France as *Paquency*—and it is found in the catalogue of one of the most extensive and correct establishments on the continent under this name, from year to year, and in no other catalogue, we know of, under any other name. Still, Mr. HOVEY may be right; but we desire more satisfactory evidence than he has given. A mere similarity in name and description is not enough; if the fruit had been received under the two names, and then proved identical, the question would have been settled. We shall, in the course of the coming season, have the matter investigated, through our French correspondents.

Horticultural Matters in Toronto, C. W.

WE are glad to find Horticulture going forward with a sure and steady progress in the city and vicinity of Toronto. Among private establishments that of the Hon. Mr. BOUTLON, late Mayor, takes the lead. His ranges of green houses, forcing houses, grapery, &c., are complete. The fruit and ornamental department out of doors, is receiving every attention. The whole is under the management of Mr. JOHN GRAY, a gardener of well known enterprize and talent, who has superintended the building of the houses and laid out and planted the grounds of several of the finest places around Toronto. He has recently erected a grapery for the Hon. Mr. CAYLEY, adjoining the residence of Mr. BOUTLON. It is 100 feet long, rafter for the vine 19 feet. The border is thoroughly prepared and is to be planted with the best varieties.

We wish the amateurs of our part of the country would move in this mode of cultivating the Grape. A few talk of doing something, but we wish to see them act; it can be made a profitable as well as a pleasant investment.

In the commercial department we found many marks of improvement. Mr. JAS. FLEMING has recently enlarged his houses on Yonge street, and has added to his collection most of the new and popular plants, and has a fine, healthy stock on hand. He carries on vegetable gardening, and does a snug seed business besides. Mr. LOGAN has built a small neat house on Yonge street, and has it filled with plants in good order for market.

Mr. WM. GORDON, a very clever and well known jobbing gardener, who has charge of Mr. WILLIAMSON'S green houses, and many other fine places around the city, has recently purchased the seed business, for a long time conducted by Mr. GEO. LESLIE. Mr. GORDON is an honest, upright man, and with his knowledge of business and his industrious and active habits, he will conduct the seed business in a manner creditable to himself and beneficial to the community. He will continue to lay out and take care of gardens and grounds as heretofore.

GEO. LESLIE & Co., proprietors of the Toronto Nursery, are extending their establishment vigorously. They have now some 14 or 15 acres planted. The stock is fine and managed in the best order. They erected last season another green house, 70 feet long, which is now filled with plants coming forward for spring sales. Mr. L., having disposed of his seed business, will give his entire attention to the Nursery in future.

Mr. TURNER, a very clever gardener, had a fine, promising young grapery destroyed by fire last November. He is about rebuilding it. Mr. T. is an extensive market gardener, and has a beautiful collection of fruit trees in his garden, for bearing. He obtained some prizes at the Provincial Fair.

The culture of vegetables, as we have before remarked in the Farmer, is managed in the best manner by the Toronto gardeners. Their articles are of the first quality. We hope to see them contribute largely at the State Fair at Buffalo, next Sept., so as to 'compare notes' with our folks.

We were glad to hear that the Horticultural Society is about to be revived. It was a shame that petty jealousies and dissensions should have been permitted to dissolve it; but so it was.—We hope for things better in future. We have suffered "some" here, from the same causes; but we trust our trials are over. Gardeners, of all others, should not indulge in angry or jealous feelings; their pursuit is naturally unfavorable to such a state of mind.

We designed noticing several other matters, but cannot find room at present.

Answers to Correspondents.

HYBRIDIZING ROSES.

B. W. S.—*Raisin, Mich.* Hybridising, when done with precision, consists in removing the anthers of the flower you intend to bear the seed, just as it is opening; then with a camel's hair pencil or some contrivance that will answer the same purpose, apply the pollen (which will be in a dry mealy state) of the other plant or plants that you desire to cross with, to the pistil of the one you removed the anthers from. The operation should be performed on a dry day.

Rose seeds.—The hips containing the seeds of Roses usually ripen in October and should be gathered and put carefully away among sand for the winter. Early in spring—as soon as the ground is open—they should be broken, the seeds taken out and planted in a mellow, rich, loamy soil; cover about a half an inch deep. The greater part will not vegetate till the second year after planting.

INSECTS.

T. S. B.—*Hopkinsville, Ky.* The insect infesting your peach trees is a species of bark louse (*Coccus*.) that we have not seen here or elsewhere. You will find their history and habits treated of in "Harris' Treatise on Insects," page 198, &c. He recommends, as the best application for their destruction, "a wash made of two parts of soft soap and eight of water, mixed with lime enough to bring it to the consistence of thick white wash; put on with a brush in the early part of June, while the insects are young and tender." A solution of two pounds of potash in seven quarts of water, or a pickle of a quart of common salt in two gallons of water, is also recommended. We would advise the immediate cutting off and burning of all the small twigs and ends of branches affected, and the application of the above potash solution to the trunk and large branches where the insects may be found.

STOCKS FOR THE PEAR.

W. S.—*Brant, N. Y.* We would not recommend either the English Hawthorn or Apple to be used extensively or at all for stocks for the Pear. For extensive orchard culture procure good healthy seedling pears; for garden culture, use the Portugal or some equally vigorous growing quince.

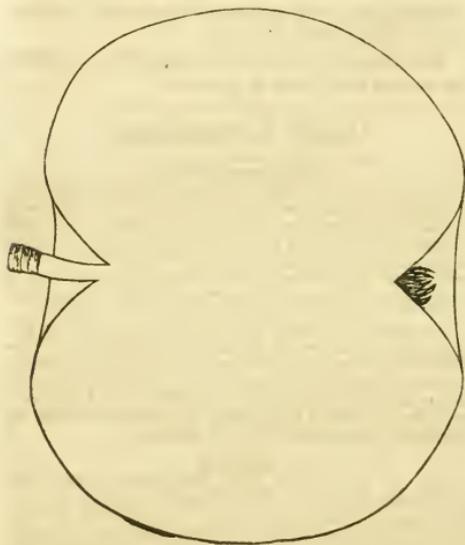
LOCUST SEED.

A. P.—*Portageville, N. Y.* Locust seed should be gathered in the fall, (October,) and may be kept in the pods all winter. Thrash it out in the spring. Soak a few hours in water of a temperate heat, and sow as soon as the ground is dry enough; cover about half an inch deep. Your failure was probably owing to bad seed. Locust seed will not retain its vitality more than two years, if taken from the pods and kept in a dry place, such as the drawers of a seed room. It ought to be kept in the pods till wanted; and if it be desirable to save it for a number of years, mix with dry sand or earth.

PEACH TREES. *N. B. R.*—Your enquiries, and several others, came too late to be answered this month—they will be attended to in our next.

Two Fine Winter Apples.

WE present below, to the attention of orchardists, two really fine and valuable winter apples, combining vigor and fruitfulness in the trees, with size, beauty, and flavor, in the fruits. Neither of them is, to our knowledge, cultivated to any considerable extent in this region. Both are entitled to rank with our best winter fruits, such as the Swaar, Spitzenburg, Melon, Baldwin, Bellflower, Nonsuch, Greening, and others in use up to the month of March or April—after which the Northern Spy, Newtown Pippins, and Russets come in.

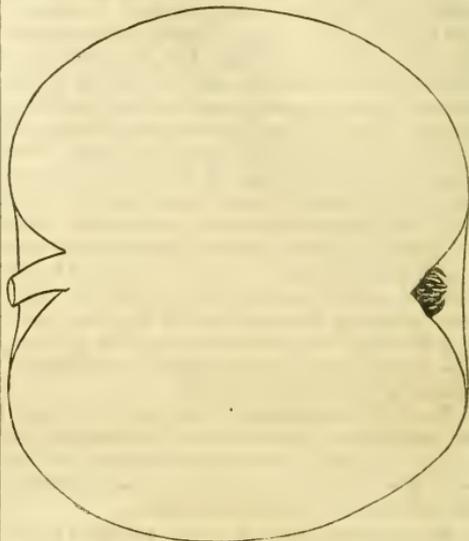


THE DOMINIE APPLE. (FIG. 26.)

From November till April the *Dominie* can hardly be surpassed as a dessert apple, as produced in Western New York. It is supposed to be a native fruit, as it is not found in foreign works on pomology. Fruit about medium size, flat. Skin dull yellow, with stripes of bright red on the sunny side, and sprinkled more or less with brown specks. Stalk nearly half an inch long, rather slender, and somewhat curved. Calyx closed, rather small, in a broad basin, like that of the Rambo, (which is very similar in appearance to the *Dominie*.) Flesh white, exceedingly tender, juicy, and pleasant in flavor compared with "Norton's Melon," described in the January number of the *Farmer*.

Mr. DOWNING says in his *Fruits and Fruit Trees*, that the "young wood is of a smooth, lively, light brown, and the trees are the most rapid growers and prodigious bearers we know, the branches being literally weighed down by the rope like clusters of fruit." The same is said of it by those who cultivate it here. J. W. SEWARD, Esq., from whom we lately received a

basket of fair well-grown specimens, says it is one of the best apples and best bearers he knows. In use from November till April.



PECK'S PLEASANT APPLE. (FIG. 21.)

THIS is another winter apple of the first character which we would strongly recommend to orchardists. It is said to be a native of Rhode Island. We have before us beautiful specimens grown in Penfield, in this county, where it is found to succeed admirably.

Fruit above medium size, or large. Form round and regular, slightly flattened. Skin smooth and glossy, green, changing, as it matures, to clear pale yellow, with a brownish red on the sunny side. Stalk short and stout.—Calyx open, segments quite woolly, set in a pretty deep basin. Flesh yellowish white, fine grained, crisp, juicy, and high flavored.

The appearance of this fruit is somewhat similar to the Yellow Newtown Pippin; but here it is fairer, more uniform in size, and the flesh is much more tender. In use from Nov. till March.

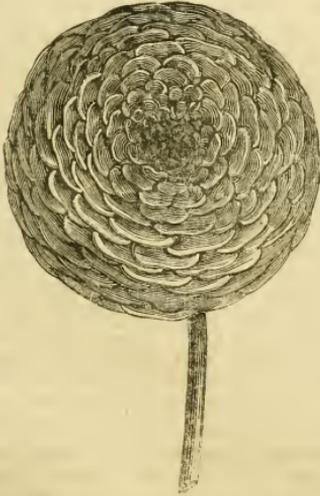
SPRING BUDDING.—It may not be generally known that fruit trees may be budded as well in the spring as in the summer, but such is the case. We have done it with the most entire success.—This fact is of some importance, especially in reference to peach trees, because they cannot be successfully grafted, and, by budding them in the spring, one year's growth may be gained. The cuttings should be taken, the same as for grafting, and carefully preserved till the trees are so far advanced that the bark will slip freely, when the buds may be cut out and inserted in the usual mode. To make success more sure, a slight coating of grafting wax may be used; and the stock should be cut off a few inches above the bud.—N. E. Farmer.

Character of a Fine Dahlia.—Propagation, &c.

THE admirers of that magnificent autumn flower, the DAHLIA, will peruse the following extracts from the London Horticultural Magazine, with pleasure and profit. Next month we shall continue, on the subject of planting and after culture. We do not expect that cultivators, in this country, will discard all the varieties that fall short in the characters given below; we give them in order to show what a really fine *Double Dahlia* is, that growers may know at least what to aim at:

PROPERTIES OF THE DAHLIA.

1. The flower should be a perfect circle when viewed in front: the petals should be broad at the ends, smooth at the edges, thick in substance, perfectly free from indenture or point, stiff to hold their form; they should cup a little, but not enough to show the under surface; they should be in regular rows, forming an outline of a perfect circle, without any vacancy between them, and all in the circle should be of the same size, uniformly open to the same shape, and not crumpled.



A Perfect Dahlia. (Fig. 22.)

2. The flower should form two-thirds of a ball, when looked at sideways. The rows of petals should rise one above another symmetrically; every petal should cover the join of the two petals under it—what the florists call imbricating, by which means the circular appearance is perfected throughout.

3. The center should be perfect, the unbloomed petals laying with their points towards the center, should form a button, and should be the highest part of the flower, completing the ball.

4. The flower should be symmetrical. The petals should open boldly, without showing their under side, even when half opened, and should form circular rows, uniformly laid, evenly opened, and enlarging by degrees to the outer row of all.

5. The flower should be very double. The rows of petals laying one above another, should cover one another very nearly; not more should be seen in depth than half the breadth; the more they are covered so as to leave them distinct, the better in that respect; the petals, therefore, though cupped, must be shallow.

6. The size of the flowers when well grown, should be four inches in diameter, and not more than six.

7. The color should be dense, whatever it be—not as if it were a white dipped in color, but as if the whole

flower was colored throughout. Whether tipped or edged, it must be free from splashes or blotches, or indefinite marks of any kind; and new flowers, unless they beat all the old ones of the same color, or are a novel color themselves, with a majority of the points of excellence, should be rejected.

If the petals show the under side too much, even when looked at sideways—if they do not cover each other well—if the centre is composed of petals pointed upwards, or those which are around the center are confused—if the petals are too deep and funnel-like—if the petals are too narrow, or exhibit too much of their length—or if they show any of the green seal at the bottoms of the petals—if the eye is sunk—if the shoulder is too high, the face flat, or the sides too upright—if the petals show an indenture, as if heart-shaped—if the petals are too large and coarse, or are flimsy, or do not hold their form—in any or all these cases the flowers are objectionable; and if there be one or two of these faults conspicuous, the flower is second or third rate.

If flowers are exhibited which show the disc, or a green scale, or have been eaten by vermin, or damaged by carriage, or are evidently decayed, the censors should reject them at once.

PROPAGATION.

There are several modes of increasing the Dahlia. For an amateur, who does not require many plants from each tuber, it will be enough to put the tubers in a warm stove, or in a slight hot-bed, without planting or potting them, and sprinkle them occasionally with water; this will cause the eyes to start. The tubers may be then separated into as many pieces as there are eyes, each eye having a portion of tuber to it. There is no necessity for a large piece of tuber; it may be cut so as to go into a moderate sized pot, and be grown in the hot-bed stove, or even green-house; but the season at which they are separated must be selected according to the convenience. If there be no hot-house, nor green-house, nor hot-bed, the roots may be kept in a basket near the kitchen fire, and there be sprinkled occasionally, until they are separated, which cannot be done with advantage until the eyes have all fairly started. This plan will generally produce as much increase as an amateur requires. Where there is no convenience for potting, plant them at once in the ground, with the crowns six inches below the surface. Those who desire a larger increase should pot them, and as the shoots get two inches long, carefully break them out, by pressing them backwards and forwards near the bottom; place them one each in thumb-pots, and put them in a hot-bed to strike, which, if kept moist, they will do in a few days, and continue doing this until there are are enough plants; but if a large number is required, let the shoots all grow three inches long, and with a sharp knife cut them off just under the lower pair of leaves, which will cause numerous other shoots to come forward, fit for the same treatment, which may be kept on until any quantity required is secured; but it should be remembered that this could be continued until by excessive and rapid propagation the constitution of the plant would be changed, and very double varieties rendered semi-double, or even single. Nobody, however, who could procure pot-roots, however small, or a piece of tuber with a single eye, should ever use plants; for a piece of tuber with an eye, or a pot-root however small, will make a far better plant than even an early cutting. The cuttings as they are struck, should be put into a frame rather cooler, and by degrees be inured to a cold frame, previous to planting out.

SALT A GOOD MANURE FOR CELERY.—A root and a stalk of Celery weighing fourteen pounds without the leaves, and measuring fourteen inches in circumference, was exhibited at a recent meeting of the Cincinnati Horticultural Society. It was exhibited to show the value of salt as a manure for this plant, the gentleman who raised the article having made the experiment of treating a portion of his plants in the ordinary way, and manuring a part of them with salt. The former were of ordinary size and quality, the latter being both larger and of finer flavor, of which the specimen exhibited was an exemplification.

Pears on Quince Stocks.

WE have lately heard a little on this subject, but I imagine before long we shall hear a great deal more; my own information, you will perceive is very limited, and my object is to draw attention to the subject. I shall also have to name Mr. RIVERS, of Sawbridgeworth, several times, so that I may appear to some to be a commission agent of his; but I beg to say, although I have been in his garden, I have never seen him in my life, and I much fear he would not employ me as his advocate if he needed one.

Before speaking of these beautiful little trees, I would call to your mind the very injurious effect produced upon the soil of gardens, both great and small, by the shade of large old pear trees; in fact, in many instances the ground is rendered almost useless.

Pears are generally many years before they produce fruit, and in small gardens they are unsightly, from being vastly disproportioned to the inclosure, and if any attempt be made at reducing them in size, their productiveness is sure to be destroyed, so that a small garden enclosed by walls is better without standard Pear trees. Under these circumstances the owner is deprived of the most valuable of all dessert fruits, for although the Peach and Nectarine may be more highly flavored, they can be only had for a small part of the year, but the Pear may be enjoyed all the year round.

Apples are also undesirable in small gardens, but they may be bought reasonably; but the finer sorts of winter pears can only be obtained in large towns at large prices. If, therefore, a mode can be shown by which a large quantity of the very finest pears can be produced from trees which, instead of being unsightly and injurious, are not only harmless, but extremely ornamental, a benefit of a very high order is obtained.

If any one doubts whether this can be done, let him send to Mr. Rivers for a few of his root-pruned, Quince-grafted, pyramidal Pear trees, and request him also to send his directions for the mode of managing their roots, as every thing depends on this being done with judgment, and I will venture to say that he will be so pleased that next year he will procure as many trees of different kinds as he has room for in his garden.

These little trees are exceedingly tractable and manageable, and the process is so simple, that although every tree may require somewhat different treatment, yet there will be found no difficulty in deciding upon each case, and the pruning of a hundred of such Pear trees would only be an amusement for a lady, with a small pair of nippers, and the root-pruning under her directions might occupy a laborer half a day in November. The treatment is as follows: Having procured the trees, and if for trial I would leave the choice to Mr. Rivers, plant them up to the insertion of the graft, mulch them, and water diligently from April, until they are thoroughly established, and afterwards in dry weather. I can say from experience the fruit will be found as fine, as large, and as good flavored as from a tree of 10 year's standing in the same ground.

In July, if any shoot grows longer than is consistent with symmetry, shorten it with the nippers or the thumb and finger to its proper limit, and if it produces a fresh shoot where shortened, cut that shoot back in October about the eighth of an inch beyond the place from whence the summer shoot sprung; but if several shoots have required shortening, and have also produced summer shoots, and not many blossom buds have been developed, then the tree requires root-pruning.

It is not a good practice, as recommended by some, to leave all the terminal shoots to draw the superabundant sap from the blossom-buds, because being left growing they also greatly strengthen the roots and enlarge the stem of the tree, whereas if root-pruning be duly attended to there will be no danger in shortening all the shoots in July.

If the tree makes only a few inches of wood, and the terminal buds are blossom-buds, they are not to be shortened, nor are the roots to be pruned. If the tree is not symmetrical, and requires a shoot or two to balance it, make a deep notch over any dormant eye, and it will break next spring.

In shortening any shoot, consider whether you would like the new shoot to be right or left of the pruned shoot, and cut to an eye accordingly; but if the tree is pretty well balanced, any shoot that is shortened should have the last eye downwards, which has a tendency to check luxuriance

by inclining the growth from the perpendicular line. Aim eventually to make your tree about 6 feet high, or 7 feet at the utmost limit, and from 2 to 2½ feet wide at the broadest part, which will be at 1½ foot to 2 feet from the ground in a well proportioned tree, although the branches will begin to grow within six inches of the ground; from the broadest part it should taper regularly to the top.

As soon as this point of growth is attained, root-prune more severely than before, causing the tree to produce nothing but blossom-buds; it will thus become a full-grown, full-bearing, Lilliputian or miniature Pear tree for a century. Is this true? If so, how beautiful and how profitable! If false, let reasons be given why it cannot be effected. It is said it may be done in France, but not in the moist climate of England; but if I can get a tree three feet high, and in six or eight months from the nursery, to produce a full crop of fruit of full size and excellent flavor, merely by transplanting or root-pruning, why not at 6 or 7 feet? because a tree once brought to a full bearing condition, the habit may be perpetuated, provided the means which produced this habit be continued.

I have lately seen a row of Pears on Quince stocks of 16 to 20 year's growth, grafted low, and another row grafted standard height; in both cases the branches are down almost to the ground, but ever since they were planted there has been open warfare between them and the pruner, the tree constantly shooting upwards or naturally, the gardener saying—No, you must grow downwards or unnaturally and so cutting off the upright growths in winter, not daring to do this in summer; this luxuriant growth being thus far indulged, causes proportionate vigor in the roots, and a great increase in the size of the trunk; there are consequently roots and a trunk adapted to a tree of 25 or 30 feet high, whereas the poor tortured thing is never suffered to rise above 7, presenting the unsightly appearance of a kind of Brobdignag dwarf or stump, instead of the Lilliputian, I wish to introduce to you notice and protection.

That these Brobdignags bear fruit I do not deny, but that they bear as fine fruit as a tree with a stem proportioned to its head, and with roots proportioned to both, and growing in a natural form, and with the features of a full-grown tree, requiring little or no pruning, I do certainly disbelieve; and I can safely affirm I had finer fruit from my Lilliputians than I could find on the Brobdignags; but fruit is not the only point, the pleasure of a garden depends as much upon its beauty as its utility; and as these unnatural looking trees are at all times displeasing objects, so the miniature Pear-tree is an agreeable sight even without its leaves, and either in blossom or with a crop of fruit, perfectly delightful; and actually attracts more attention and admiration than even the flower borders.—*London Gardeners' Chronicle.*

HEDGES.—People in all parts of the country are becoming sensible of the beauty and utility of hedges. In the north, English and native Hawthorn seem to be the most suitable; throughout the west and south the *Osage Orange* (*Maclura aurantiaca*), bids fair to take the lead.—This plant is of a rapid vigorous growth, bushy habit, with shining leaves, and strong sharp spines, every way fitted to make a beautiful and powerfully resistive hedge. We do not believe it hardy enough for this section, but in all places as far south as Philadelphia it is found perfectly so. It is doing well in Ohio and other western states, and it is to be hoped that in a few years all the fine gardens, orchards, and farms of the west will be enclosed with *Maclura* hedges.—We are glad to see that a large supply of the seed has been brought into Ohio from Texas.—Our friend BATEHAM, at Columbus, can supply any quantity, as will be seen by his advertisement in this paper.

ANSWER TO S. B., of Lafayette, in our next.

Hort. Society of the Valley of the Genesee.

THIS Society, we are glad to say, is now fairly in the field for another year. The Annual Meeting was held on the 7th of February. Below we give a list of officers and committees, beside a schedule of premiums, which are so liberal as to afford very great encouragement to all the usual productions of the Garden and Orchard.

We hope the friends of good culture throughout the valley will not fail to unite with the Society, and interest themselves in its welfare during the ensuing season. The Constitution and By-Laws, premium list, members names, &c., are published in pamphlet form, and may be had of the Treasurer, J. H. WATTS, Esq., or of the Secretary, J. A. EASTMAN, Esq.

- President—LEVI A. WARD.
- 1st Vice President—Maj. John Williams.
- 2d " " Alfred Fitch, Esq., Riga.
- 3d " " J. Murray, Esq., Mt. Morris.
- 4th " " H. P. Norton, Esq., Brockport.
- 5th " " Asa Rowe, Esq., Sweden.
- Corresponding Secretary—Leander Wetherell.
- Recording " J. A. Eastman.
- Treasurer—James H. Watts.

Committee on Fruits—P. Barry, Chairman; Samuel Miller, Samuel Moulson, J. W. Seward, H. P. Norton, John J. Thomas, Zera Burr and Isaac Hills.

Committee on Trees, Shrubs, and Flowers—George Ellwanger, Chairman; John Thompson, Jr., and Wm. King.

Committee on Vegetables—J. P. Fogg, Chairman; John Rapalje, Solomon E. Alden.

Committee on Botany—L. Wetherell, Chairman; Chester P. Dewey, Henry Pomeroy, James M. Whitney.

Committee on Entomology—Naaman Goodsell.

The following gentlemen were elected Honorary Members of the Society:

- Prof. A. Huidekoper, of Meadville, Pa.; H. Wendell, M. D., of Albany, N. Y.; Alphonso Wood, Esq., of Meriden, N. H.; Asa Gray, M. D., of Cambridge, Mass.; Jacob Bigelow, M. D., F. R. S., do.; Chester Dewey, D. D., Rochester, N. York.

The Rules of Pomology adopted by the New York State Agricultural Society, for the guidance of their Fruit Committee, were also adopted by this Society.

PREMIUMS ON FRUITS.

TO BE PRESENTED DURING THE SEASON.

- Apples—(Not less than three specimens of each variety.)
 - For the best summer apples, prior to 1st Sept., \$3 00
 - For the next best do., 2 00
 - For the best fall apples prior to Dec. 1, 2 00
 - For the next best do., 1 00
 - For the best early winter apples, prior to Jan. 1, 1849, 2 00
 - For the next best do., 1 00
 - For the best long keeper, 3 00
 - For the next best do., 2 00
- Pears—(Not less than three specimens of each variety.)
 - For the best summer pears prior to the 1st of Sept., 3 00
 - For the next best do., 2 00
 - For the best fall pears prior to the 1st of Dec., 2 00
 - For the next best do., 1 00
 - For the best winter pears, prior to last week of Dec., 3 00
 - For the next best do., 2 00
- Peaches—(Not less than 3 specimens of each variety.)
 - For the earliest and best specimens, 2 00
 - For the next earliest and best do., 1 00
 - For the best variety and best specimens of freestones of any season, 2 00
 - For the next best do., do., 1 00
 - For the best variety and specimens of clings of any season, 2 00
 - For the next best do., do., 1 00
- Plums—(Not less than one dozen of each variety.)
 - For the best variety and best specimens, 2 00
 - For the next best do., do., 1 00
 - For the greatest number of varieties and best grown, 3 00

- Cherries—(Not less than two dozen of each variety.)
 - For the best variety and best specimens, 2 00
 - For the next best do., do., 1 00
 - For the greatest number of varieties and best grown, 3 00
- Apricots—Best half dozen, 2 00; second do., 1 00.
- Nectarines—Best half dozen 2 00; second do. 1 00.
- Quinces—Best kind and best specimens, 1 dozen, 1 00.
- Gooseberries—Best quart 2 00; second do., 1 00; greatest number of varieties and best grown, one quart of each, 2 00.
- Raspberries—Best quart of red, 2 00; do. white, 1 00.
- Strawberries—Best quart, \$3 00; second do., 2 00; greatest number of varieties and best grown, 1 pint of each, 3 00.
- Currants—Best quart, 2 00; second do., 1 00.
- Grapes—Best half dozen bunches, native, 3 00; second do., 2 00; third do., 1 00. Best do., foreign, 3 00; second do., 2 00; third do., 1 00.
- Watermelons—Best specimens, 2 00; second do., 1 00.
- Muskmelons—Best specimens, 2 00; second do., 1 00.
- For the best exhibition of the various Fruits during the season, 10 00.
- For the next best do., 5 00.

☐ The premiums for summer apples and pears will be awarded on the first Saturday in September, and on the winter apples and pears on the last Saturday of December. PREMIUMS TO BE AWARDED AT THE ANNUAL FALL EXHIBITION—AT 2 O'CLOCK, P. M., FIRST DAY.

- Apples—Greatest number of varieties, and best grown, 3 00; second do., 2 00; third do., 1 00.
- Pears—Greatest number of varieties and best grown, 5 00; second do., 3 00; third do., 2 00.
- Peaches—Greatest number of varieties, and best grown, 3 00; second do., 1 00.
- Grapes—Greatest number of varieties and best grown, 3 00; second do., 2 00; third do., 1 00.
- Assorted Fruit—Best basket of various sorts, 3 00; second do., 1 00.
- Pears—Best dish, not less than 12 of each variety, 3 00; second do., 1 00.
- Apples—Best dish, not less than 12 specimens of each variety, 3 00; for the next best do., 2 00.

PROSPECTIVE PREMIUMS.

For the most complete and best managed Fruit Gardens, of one-eighth to one fourth of an acre in extent, and cultivated by the proprietor, or his family—to be awarded in 1850, 25 00.

SEEDLING FRUITS.

Gratuities will be awarded for seedling fruits in proportion to their value.

- P. BARRY,
 - SAML MILLER,
 - SAML MOULSON,
 - J. W. SEWARD,
 - H. P. NORTON,
 - JOHN J. THOMAS,
 - ZERA BURR,
 - ISAAC HILLS,
- } Com.

ON VEGETABLES—GARDENER'S PREMIUMS.

(To be Exhibited in the Show Case provided by the Society.)

- Lettuce—(To be exhibited Saturday, April 15.)
- Best six heads, 2 00; second best, 1 00.
- Radishes—(To be exhibited Saturday, April 22.)
- Best three bunches, 2 00; second best, 1 00.
- Green Beans—(To be exhibited Saturday, May 6th.)
- Best quart, 1 00.
- Cucumbers—Best three, 2 00; second do., 1 00.
- Peas—(To be exhibited Saturday, June 10.)
- Best peck, 3 00; second 2 00.
- Potatoes—(To be exhibited Saturday, June 17.)
- Best half peck, 2 00.
- Tomatoes—(To be exhibited Saturday, July 22.)
- Best 12, 1 00.
- For the best display of Vegetables during the season, 5 00
- Second Best, 2 00

ON VEGETABLES—TO BE GROWN IN THE OPEN AIR.

- Asparagus—Earliest and best three bunches, 2 00; second best, 1 00.
- Lettuce—Earliest and best six heads, 2 00; second, 1 00.
- Radishes—Earliest and best six bunches, 2 00; 2d best, \$1.
- Peas—Earliest and best half bushel, 3 00; second, 2 00.
- Cucumbers—Earliest and best six, 3 00; second 1 00.
- Rhubarb—Earliest and best twelve stalks, 1 00.
- Tomatoes—Earliest and best half peck, 1 00.

LADIES' DEPARTMENT.

Farmers' Wives.—Their Duties, &c.

MESSENGERS, EDITORS:—Your excellent publication, the *Genesee Farmer*, is a constant source of gratification to me and my family, and as you kindly allow a small space for the Ladies' Department, I have been seriously considering that we should occasionally exert our talents to afford amusement and instruction to the numerous and various classes of your readers. I was much struck this last month by remarking the amazing progress of feminine capabilities with respect to Agriculture, as exhibited in your pages. One lady in Connecticut, received a premium for her well managed farm, and another lady a premium of fifteen dollars for her admirable design for a Commodious Farm House. It led me to soliloquize upon the different merits and demerits of Farmers' Wives; and I find that a well directed education, and mature judgment are indispensably requisite to form a suitable companion for either the professional man, the farmer or mechanic.

Permit me to represent in a short dialogue, two different classes of Farmers' Wives. Mrs. J. having called one summer evening upon a sick neighbor, a mile distant from her residence, ventured to pay a short visit to her friend Mrs. B., whose house she passed in her way home. This lady being always so encompassed with domestic cares, it was become quite a trial to her to receive any visit from either relative or friend.

Mrs. J. apologized for her intrusion, and seating herself in a chair exclaimed, "How sorry I am, my dear Mrs. B. to see you so fatigued and exhausted by your daily avocations. You rise early, and sit up late, eating the bread of carefulness, and economising in every possible way; but it appears to me that you are a *perfect slave, a martyr to house cleanliness*. I am afraid that you will be, before this time twelve-month, entombed in yonder cemetery. Our maternal ancestors used to think that if they kept the mahogany furniture well rubbed, the oaken floor well polished, their domestic duties carefully arranged, with some spare time for sewing, knitting and spinning, the day was well filled up. The exercise of house-work was enough to keep them robust and healthy, (with an occasional walk into the flower garden adjoining the house)—and they usually lived to a good old age. But their work, 'be it remembered, was in moderation. You, my good friend, are laboring all the day, and yet after all your fatigue, evening comes on and you have still some domestic duty *unperformed*, such as churning, baking, ironing, &c. Now all this disturbs the peace of a husband very much; and I feel assured that you will take it kindly, when I remark that in time your husband's affection will wear out, and his evenings will be spent in the pleasant society of his neighbors, to avoid the confusion of his own dwelling. He is an intelligent man, and he would like you to sit quiet at your work-table, whilst he read to you aloud some useful publication. Or he might, as my husband often does, recount the toils of the day—what improvement he anticipates making, what extent of woodland he intends to clear for the corn crop, what number of acres he intends to prepare for wheat, or what calculations he has made for beautifying or improving the homestead. I enter into this sort of conversation, and it is a satisfaction to him that he can thus confide in me. But if, on the contrary, I was walking to and fro all the evening, engaged in domestic duties, it would seem to him like '*Bachelor's Hall*,' and myself the housekeeper in his employ."

"Well, well, my good friend, Mrs. J., I can hear all you wish to say, and appreciate the motive which prompts you thus plainly to speak; but I really cannot altogether agree with you. I consider that a wife ought to be all-absorbed in her own routine of duties, without disturbing herself respecting her husband's farm. My plan is to leave such masculine affairs to Mr. B., and I depend upon him, also, to examine into the progress made by the children at the District School. My boys are true Yankees, enquiring into the meaning of every thing, even words, which is very perplexing to me, being too busily occupied to be considered their 'walking dictionary,' and I refer them to their father, having little or no time myself to devote to the improvement of my mind. I confess to you that I do not really know whether Mr. B. has 60 or 100 acres of land, whether his farm is barren or fertile, for I have never walked over one acre of it. Nor do I pretend to know how many sheep

he has, or how many horses. The farm, and its concerns, I have nothing to do with; my own house labor is sufficient. I am slow in my movements and cannot get through my work early in the day: but this I will say, that my house is considered as a pattern for the whole neighborhood, whether you think me full of egotism, or not, for saying so."

Mrs. J. finding that she could make no sort of impression upon her plebeian friend, hastened to take her leave, but said she must add a few words by way of advice—"My friend Mrs. B., do not think me officious if I endeavor to impress upon your mind, that by methodically arranging your time, you would leave *nothing neglected* as it regards your household work, and yet prove a judicious and sensible companion to your husband, enlivening him at the close of the labors of the day with pleasant and interesting conversation, and superintending the tuition of your children."

Fearing, Mr. Editor, that I shall occupy too large a space in the Ladies' Department, I withdraw my pen from delineating any further these Portraits from Real Life, but merely make a few comments, viz: that although there are some ignorant prejudiced persons who imagine that literature and accomplishments are highly incongruous in the formation of the character of a Farmer's Wife, and that a good knowledge of housewifery supercedes every thing else, yet in how many instances do we see them united, giving refinement to their family circle, and making home the centre of all their joys. How did the poets Milton, Cowper, Coleridge and Bowles enjoy their evenings spent in female society? How were the evening labors of the great astronomer, Herschell, in viewing the starry heavens and making new discoveries, cheered by the company and assistance of Miss Herschell, his sister, who could descend from the sublimity of constellations and planets to attend the next morning to domestic duties. How many warriors in ancient and modern history have recounted at "dusky eve" their deeds of glory. Among the foremost of these we place Napoleon and his Empress Josephine. The wonderful improvements in arts and commerce of Peter the Great, were made known to his Empress, Catharine II, and he listened to her remarks with avidity.

Why then is it considered by some narrow-minded, imbecile persons, to be incompatible for the farmer's wife to attend to her household concerns, and yet enter into the pleasures of the farm by studying now and then the *Theory of Agriculture*, and reading the works of Sir John Sinclair. *Ogden, N. Y., Jan., 1848.* AN OBSERVER.

PICKLED EGGS.—In some parts of England, pickled eggs constitute a very prominent feature in the farmhouse store-rooms. The mode in which the good dames pickle them is simply this: at the season of the year when their stock of eggs is plentiful, they boil some four or six dozen in a capacious saucepan until they become quite hard. They then, after removing the shells, lay them carefully in large mouthed jars, and pour over them scalding vinegar, well seasoned with whole peppers, allspice, a few pieces of ginger, and a few cloves of garlic. When cold, they are bunged down close, and in a month are fit for use. Where eggs are plentiful the above pickle is by no means expensive, and is a relishing accompaniment to cold meat.

HOW TO MAKE GOOD TEA.—Boil rain water and pour upon your tea, letting it steep from one to two minutes, if you wish to realize the true taste of the "plant divine."—Well, river, or spring water, in many parts of the country, is strongly impregnated with lime, which acts chemically upon the tea-leaf, and greatly deteriorates, or destroys its fine aromatic flavor. In fact, water, containing lime, or much vegetable matter in solution, has more or less effect upon all kinds of cookery. Besides it is highly injurious to the health of some persons.—*Am. Agriculturist.*

HOT WATER should never be poured into glass vessels until they have been moderately warmed with tepid water; as the sudden expansion of the bottom by the heat of the water has a tendency to force it from the sides. Thin vessels are better able to endure sudden extremes of heat and cold than thick ones, because they are sooner heated through their thickness, and consequently expand equally.

SOUSE.—Cleanse pigs' ears and feet and soak them a week in salt and water, changing the water every other day. Boil eight or ten hours till tender. When cold put on salt, and pour on hot spiced vinegar.—*Prairie Farmer.*

Horticultural Advertisements.

Rare and Choice Varieties of Pears.

HOVEY & CO. respectfully invite the attention of amateur cultivators to their immense collection of Fruit Trees, of all kinds, more particularly pears, embracing every variety to be obtained either in Europe or in this country. Their collection is unequalled, both for extent and variety. Upwards of one thousand specimen trees have been planted out in the borders of the walks, extending a mile, a great many of which are already in bearing, affording a fine opportunity for the inspection of the fruit.

They would particularly invite attention to the following kinds, of which they have a fine stock, with the exception of the very rare sorts, of which the number is limited:—

- Swan's Orange, (Or Onondaga).—The finest and largest autumn pear known. Fine thrifty trees, \$2 each.
- Beurre Langelier.—A fine melting January pear. Fine trees of all sizes, \$1 to \$5 each.
- Jersey Gratioli.—One of the richest October pears. \$1 each.
- Vicomte de Spoelberch.—A new and fine winter pear. \$1 each.
- Rostiezer.—A delicious variety, ripe in September. \$1 each.
- Tyson.—A very rich native fruit. \$1 each.
- Parade d'Automne.—One of the finest pears. \$1 each.
- Comtesse de Lunay.—A very beautiful and fine pear. \$1 each.
- Les Canas.—Of the most delicious character. \$1 each.
- Cote.—A new and very fine December pear. \$1 each.
- Grosse Calabasse.—Fruit said to weigh upwards of twenty ounces, and to be eight inches long. Fine trees, \$2 each.
- Doyenne Boussock.—A very large and delicious October pear. \$1.50 each.
- St. Andre.—A new pear from Van Mons, very fine. \$1 each.
- 1482 Van Mons, received by Mr. Manning, a fine pear. \$1.
- 135 Van Mons, another from the same source, extra. \$1.
- Louise d'Orleans.—A celebrated new pear. \$2 each.
- Simon Bourcier.—A new and superior variety. \$2 each.

- Also, 300 VARIETIES OF APPLES,
- 80 OF PLUMS,
- 70 OF PEACHES,
- 60 OF GRAPES,
- PEAR, PLUM & CHERRY STOCKS,

With a most extensive collection of Ornamental Trees, Shrubs, Greenhouse Plants, Roses, Dahlias, Carnations, &c., &c.

Catalogues of fruit trees, ornamental trees, shrubs, roses, dahlias, flower seeds, garden seeds, &c., may be had *separately* or in full sets, by application *post paid*.

☞ Trees packed for safe transportation to any part of the United States.

Hovey & Co., Boston, Mass.
March 1. [Nurseries at Cambridge, 2 miles from city.]

Fruit Trees, &c.

ERIE COUNTY NURSERY,
Buffalo, N. Y.

The large number of trees, &c., propagated at their establishment during the last few years, enables the proprietors to offer on the most liberal terms, almost every desirable variety of Fruit and Ornamental Trees, Flowering Shrubs, Roses, Evergreens, &c.

Our stock is large, and our trees are vigorous and thrifty, embracing the leading and best fruits of the country, propagated mostly from bearing trees, whose merits have been satisfactorily tested.

Situated as our nursery is, at one end of the great lake route, we are enabled to forward trees to any point westward at the earliest moment practicable. Trees, plants, &c. will be labelled and properly packed in bundles or boxes, and forwarded agreeable to order.

☞ Orders accompanied by a remittance, or satisfactory reference, will meet with prompt attention. Descriptive Catalogues furnished gratis on application.

A. BRYANT & SONS.
Buffalo, N. Y., March, 1848. [3-3m.]

Fruit Trees, of Select Varieties,

☞ PROPAGATED only from trees whose genuineness or excellence has been proved by examination of the fruit in bearing, for sale at the nursery of the subscriber.

Persons wishing to set out new fruit Gardens or Orchards, will, if they wish, be furnished with a carefully assorted collection, whether large or small, of Apples; Peaches, Cherries, Nectarines, Apricots, Strawberries, Hardy Grapes, &c., of the best standard varieties, which have been selected, after several years careful personal examination, from several hundred sorts in bearing.

A fine select assortment of Ornamental Shrubs, Herbaceous Perennial Plants, Evergreens, perfectly hardened for transplanting, &c.

☞ Orders with remittances promptly executed, and trees well packed in bundles, so as to be sent with perfect safety by canal or railroad. Catalogues furnished gratis to all applicants. All communications, post-paid, to be addressed

J. J. THOMAS,
Macedon, Wayne Co., N. Y.
[3-21]

To Nurserymen and Others.

THE subscribers, in addition to the large stock of trees of their own raising, have just received large importations from Europe, and are prepared to supply the following article in quantities large or small to suit purchasers. Priced lists will be forwarded to those who may apply stating quantity desired.

STOCKS.

- Pear Stocks, fine strong Seedlings, 1 year's growth.
- Quince Stocks for Pears, strong plants fit to work next summer.
- Paradise Apple Stocks, for dwarfing Apple Trees.
- Plum Seedlings, (St. Julien), fit for working.
- Prunus or Cerasus Mahaleb Stocks for dwarfing Cherry Trees.

SEEDLING ORNAMENTAL TREES.

- Norway Spruce, 1 to 1½ feet.
- Do. 6 inches, fine for hedges.
- European Silver Fir, 1 to 1½ feet.
- Do. 6 inches.
- Norwegian Larch, 1 to 1½ feet.
- Scotch Fir.
- Auracaria Imbricata, (Brazil Pine), strong plants.
- Cedrus Deodara, (Deodar Cedar), strong plant.
- English Elm, 3 to 4 feet.
- Wych do. do.
- Weeping Birch, do.

ELLWANGER & BARRY,
March 1, 1848. Mount Hope Garden & Nurseries, Rochester.

Monroe Nursery,

RIDGE ROAD, NEAR ROCHESTER.

 THE subscriber having owned the above property for the last four years, has been to great expense and pains, (with the assistance of N. Goodsell,) in refitting and restocking the grounds with the choicest varieties of fruit.

He now offers to his friends and the public, a complete assortment of Fruit Trees, of fine thrifty growth, of selected varieties, at the usual nursery prices. All trees warranted correct as labelled.

In connection with the above, he has an extensive Greenhouse, containing some of the choicest Roses and Geraniums that are cultivated; and a quantity of orange trees setting with fruit

A few hundred of the famous Northern Spy, and Red Canada Apple for sale this spring.

All orders and communications, (post paid,) directed to the subscriber, Greece, Monroe Co., will be punctually attended to.

CHARLES POWIS,
Greece, N. Y., March 1, 1848. [3-m] Sole Proprietor.

To all Amateur Pomologists & Nurserymen.

WM. R. PRINCE & CO., FLUSHING, have just issued a supplementary catalogue of Pears exclusively, stating the age, size, and prices; and also which are on pears, and which are on the Portugal quince stock. This will be sent to all post-paid applicants. It is scarcely necessary to remark that such is the scarcity of the choicest kinds of pears, that although found in numerous Catalogues, there exists but few suitable for immediate sales. Having anticipated the demand, we have at great pains and expense concentrated in our establishment, the largest and finest collection of Pears existing either in Europe or America. Those who send orders to us early will be supplied WITHOUT A SINGLE OMISSION, and we urge purchasers to inspect our nurseries and judge for themselves. Of all other Fruit and Ornamental Trees, Shrubs and Plants we have a great supply, and especially of Evergreens, Roses, &c.

TABLE GRAPES.

We now offer the most estimable assortment of Table Grapes ever presented to Amateurs, having culled the choicest from every country. An examination of the Descriptive List in our Catalogue (36th edition,) will satisfy every amateur on this point.

AMERICAN WINE GRAPE.

As our country has begun to develop its appropriateness for Vineyards, we have greatly increased our stock of the kinds of Grapes most suitable for that object, comprising 25 varieties, and will supply them by 100 or 1000 at low rates. We have 30 varieties that are estimable for the table, several of which are equal or superior to the Isabella or Catawba. [3-11*]

Cranberry Plants.

THE subscribers have been appointed the agents of an extensive grower in Massachusetts, and now offer for sale fine CRANBERRY PLANTS, suitable for transplanting, and in lots to suit purchasers. Circulars giving directions for cultivation, and containing certificates of the quantity that has been raised upon an acre can be obtained upon application. *POST PAID, TO*

BISSELL & HOOKER,
Or upon personal application to J. W. BISSELL,
February 1. [2-21] No. 8 Arcade Hall, Rochester.

Fruit Scions.

THE subscriber will furnish Scions from trees of the Northern Spy, Canada Red, and Swain Apples, at \$1 per hundred. They will be cut by Mr. FISHER, who gave the name to the Northern Spy, and also by Mr. Hand, who has grown them superior to any one. Money enclosed by mail with orders, shall be attended to, and Scions sent by express, or mail, as directed.
Rochester, March 1, 1848. JAMES H. WATTS.

To Competitors for our Premiums.

In accordance with our promise, we give below the names of about fifty persons who are, thus far, the most successful competitors for the premiums offered for subscribers. The names are given in proper order, beginning with the name of the person who has obtained the highest number. The list was taken from our books on the 25th of February.

Wm. Lyman,	D. A. Ogden,	} tie.
J. H. Stanley,	A. W. Beach,	
Moses Eames,	E. Howland,	} tie.
H. Frisbie,	J. D. G. Nelson, Ind.,	
Laton Runyan, (Pa.),	D. D. Cole,	} tie.
F. J. Eastman, (Vt.),	L. Strobbridge,	
H. C. Kimberly,	S. G. Sears,	} tie.
E. C. Bliss,	Wm. Chamberlain,	
J. A. Carpenter, (Wis.)	B. Billings,	} tie.
Erastus Hurd,	J. B. Wilson,	
C. A. Knox,	Jno. Lawson,	} tie.
Dr. O. Reynolds,	Reeve Corwin,	
C. H. Carter,	E. M. Foot,	} tie.
I. P. Clark,	T. Riddle,	
Jno. G. True,	D. M. Smith,	} tie.
I. R. Trembly,	W. T. Hastings,	
J. Swain,	J. S. Squires,	} tie.
I. H. Gould,	T. T. Lake,	
L. D. Smith, Mich.,	G. L. Watkins,	} tie.
E. W. Lawrence, do.,	B. Farr,	
E. S. Bartholomew,	J. Hutchinsonson,	} tie.
C. Nye, Jr.,	W. Hadley, Ind.	
R. Sears,	Mrs. R. E. Perry, (Mich.)	} tie.
B. & G. M. Copeland,	J. Harris,	
B. Spaulding, (Vt.)	H. McCarty,	} tie.
J. B. Lowell,	C. G. Tutthill,	

Since the above list was made out, we have received remittances from several of the competitors whose names are given. In our next number we intend to publish a list of all who have sent (or may send us previous to the 25th of March), twenty subscribers or over—together with the number obtained by each individual.

Rochester Commercial Nursery,

MAIN-STREET, ONE MILE EAST OF COURT HOUSE
Rochester, N. Y.

THE subscribers offer for sale the present spring, at wholesale or Retail, a large quantity of VERY THIRTY FRUIT TREES, comprising the very BEST VARIETIES of

- APPLES,
- PEACHES,
- PLUMS,
- CHERRIES,
- PEARS, &c., &c.

cultivated by ourselves, and warranted correctly named. Our nursery grounds now comprise 50 acres, and we think we can offer to purchasers inducements which will induce them to buy, provided they see our trees.

We have a few extra sized trees.
BISSELL, HOOKER & SLOANE.
At the Nursery,
or J. W. BISSELL,
February 1, 1848. [2-4] No. 8 Arcade.

Twelve Competent Agents Wanted,

TO sell either by the Month, or on Commission. PATENT SPRING TOOTH HORSE RAKES in the counties of Wayne, Monroe, Cayuga, Onondaga, Seneca, Yates, Niagara, Erie and Cattaraugus. Agents living in the county where they are to sell will be preferred. Services wanted from about the first of July to the middle of August, either with or without team. Good prices or commission allowed. Satisfactory reference given and required. The highest recommendations of the utility of the article will be furnished.

Any of the above named territory, except Wayne County, will be sold on reasonable terms. All communications on the subject will be promptly answered if addressed *post paid*, to the subscribers at Walworth, Wayne Co.

P. S. Those who wish to make engagements will do so soon.
E & T. G. YEOMANS.
Dated, Walworth, January 20, 1848. [2-4f]

Osage Orange Seed,

THE best article known for Hedges or Live Fences. A large supply of the Seed, fresh from Texas, for sale at the office of the Ohio Cultivator, Columbus, Ohio. Price \$2—a discount at wholesale.

Packages can be sent to any place on important stage routes in Ohio—on the Ohio river, or eastward by express.

M. B. BATEHAM.
Columbus, Ohio, Feb., 1848.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat, -----	\$1 18 1 25	Pork, bbl. mess	10 50 12 00
Corn, -----	40 44	Pork, cwt., ---	5 00 5 25
Barley, -----	50 56	Beef, cwt., ---	3 50 4 00
Oats, -----	30 35	Lard, lb., -----	7 8
Flour, -----	5 50 6 00	Butter, lb., -----	14 16
Beans, -----	62 88	Cheese, lb., ---	6
Apples, bush. ---	18 38	Eggs, doz., -----	10 12
Potatoes, ---	37 50	Poultry, -----	7 8
Clover Seed, ---	5 00 5 50	Tallow, -----	7 8
Timothy, -----	1 50 2 00	Maple Sugar, ---	---
Hay, ton, -----	8 00 10 00	Sheep Skins, ---	75 1 12
Wood, cord, ---	2 00 3 50	Green Hides, lb	4
Salt, bbl., -----	1 38 1 50	Dry " -----	7 8
Hams, lb., -----	7 8	Calf Skins, ---	8

Rochester, Feb. 26, 1848.

New York Market.

[By Magnetic Telegraph.]

NEW YORK, Feb. 26.—7 P. M.

ASHES—Market for pearls is unsettled. Pots \$6.
FLOUR AND MEAL—The flour market very firm, and good brands are scarce. The range is 6.12½ to 6.50 for common and good and favorite western. Very little fair flour can be had below 6.25. Brooklyn \$6 and N. O. \$6. The sales for 2500 to 3000 bbls. The demand is entirely for consumption, and the tendency is still upward.

GRAIN—Good samples of wheat are wanted for milling. Ohio is worth 1.30 for good parcels; Genesee 1.35 to 1.37. Corn is less active, and the quantity offering moderate.—Sales 2,000 bu. at 55 ¢ for new; 57 ¢ for old and prime white new, mostly for shipment. Other grains are quiet. A sale of 1,200 bu. barley was made at 83 ¢. Oats are 46 ¢ for northern.

PROVISIONS—Pork is steady but not active. Beef is in fair demand, at 8.12½ to 8.37, and 5.25 to 5.37. Pickled meats are in good demand, at 66 ¢ for hams. Lard is in fair inquiry at 7½ to 8½. Butter and Cheese are firm and in good demand.

Buffalo Market.

BUFFALO, Feb. 26.

There was a good inquiry for flour yesterday, and we heard of the sale of 80 barrels of "Homer," Michigan, at 4.87½, and about 200 bbls Michigan and Ohio at 4.87½ to 5. There is but very little, if any, good western flour to be had under \$5. Nothing doing in grain. We notice further sales of clover seed at 4.75. Provisions are without change. Mess pork sells at 9.50.—[Express.

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GENESEE FARMER.

Vol. 9.

ROCHESTER, N. Y. — APRIL, 1848.

No. 4.

THE GENESEE FARMER:

Issued on the first of each month, at Rochester, N. Y., by
D. D. T. MOORE, PROPRIETOR.

DANIEL LEE & D. D. T. MOORE, Editors.
P. BARRY, Conductor of Horticultural Department.

FIFTY CENTS A YEAR:

Five copies for \$2. and any larger number at the same rate if directed to individuals. Eight copies for \$3, if only directed to one person—and any larger number, addressed in like manner, at the same rate. All subscriptions payable in advance, and to commence with the volume. ☞ Back numbers supplied to new subscribers.

[Editorial Correspondence of the Genesee Farmer.]

Progress of Agricultural Chemistry.

For the last ten years, during our connection with the press, we have watched with deep interest the gradual progress of agricultural chemistry, and have never doubted its final triumph over all opposition. If our patience has occasionally been pretty severely tried, now and then something pleasant transpires, which greatly strengthens our hope in the future. Of the latter character, is the recent happy conversion of the *Horticulturist* from the dark, uncertain creed of empiricism, to the luminous and sound doctrines of agricultural chemistry. The January, February, and March numbers of that popular journal, bear unmistakable evidence of the fact that, a new spirit has come o'er the dream of its editor.

In the April number of the *American Journal of Agriculture and Science* for 1847, Prof. EMMONS gives the results of the analyses of the earthy elements used by nature in forming the bark, sap and heart-wood of apple and pear trees, grape vines, and of several valuable forest trees. The most useful of these analyses were copied into the June number of this journal of that year, and commended to public notice. We also published our own analysis of Mr. BISSELL's nursery soil, and so clearly pointed out its defects for growing fruit trees, that Mr. B. assured us the knowledge so acquired would have been worth hundreds, if not thousands, of dollars to him, had we analyzed his soil two or three years earlier. He kindly offered to subscribe \$500 toward starting our chemical school. Of course, we do not pretend that the editor of the *Horticulturist* is bound to know what takes place in his line, at the city of Rochester. It is, however, a curious accident (a mere *accident* we suppose,) that he should not see Dr. EMMONS' important analyses until nearly one year after their publication within a stone's throw of the office of the *Horticulturist*; and after the able scientific journal of Dr. E. had passed out of his hands from the want of just appreciation.

In the March number of his periodical, Mr. DOWNING says:—"We find an interest springing up in all parts of the country for *special manures* for fruit trees." A correspondent writing from the city of Washington remarks: "The information contained in the leading article (the one in which Dr. EMMONS' analysis of the ash of the apple tree was copied,) of your *Horticulturist* for this month is worth ten years' subscription to that work [\$30] to any person that has an apple orchard.

This is true; but while the *Horticulturist* and its conductor are reaping a rich harvest of dollars and fame, the man of science—the author of these invaluable researches—is, we fear, shamelessly driven out of the field of agricultural journalism. Rejoicing as we do at the conversion of the *Horticulturist* to scientific principles which have long been taught in the *Genesee Farmer*, and through its pages scattered broadcast over the whole Union, at one sixth of the price of Mr. DOWNING's paper, we can not but regret the loss of one so capable of imparting that instruction in rural science, which American agricultural writers, as well as readers, so much need.

We respectfully submit that, either agricultural chemistry is a humbug, and utterly worthless to the great farming interest of the country; or it eminently deserves legislative encouragement, and should be carefully studied and taught with all the appliances necessary to master the subject. Four years ago the popular branch of the New York Legislature passed our agricultural school bill by a vote all but unanimous, only two members voting against it. It was lost in the Senate by two votes only. The next session it was passed again by the House by a large majority, and lost in the aristocratic branch of the Legislature by *one vote*.

Could our policy have had the countenance of a writer of the reputation of Mr. DOWNING at that time, each one of the old eight Senate districts would this day be reaping all the advantages of a first rate agricultural school. But our humble efforts were too plebeian to meet with favor from a gentleman who has a hereditary claim to be regarded as a learned horticulturist, from the lucky accident of "being born in a Garden." Fortunately, there is no royal road to high scientific attainments. A man who is too indolent, or too regardless of the value of science, to devote his days and his nights to its diligent study, has little claim to its honors.

These remarks are called for by the cool assumption with which the editor of the *Horticulturist*, in the March number, prescribes, as some-

thing new, the use of lime, ashes, iron, bones, and swamp muck, as 'special manures for fruit trees.'

To say nothing of our official reports, which can be seen in the volumes of Transactions of the N. Y. State Agricultural Society, for 1843, 4, and 5, and our writings for this and other agricultural papers, we have taught orally the "formulas" of the Horticulturist, (only with more care and accuracy,) for years, in half of the counties of our native State. Within the last three weeks the writer has delivered three public lectures on agricultural chemistry to large audiences in distant parts of Georgia. The simple, the true, and the sublime doctrine of studying the operations of Nature, and learning how to supply to each living thing, whether vegetable or animal, the precise elements required to form its whole weight and substance, so far as they are lacking, is a doctrine which the Horticulturist, hitherto, has never taught. Admit the soundness of this doctrine, and you yield the whole argument against our plan for the study of agricultural chemistry in all schools where those that till the earth are to be educated. The subject is one of inestimable importance; and therefore we bring out our well matured views once more, and probably for the last time, in the Genesee Farmer.

Speaking of the Rensselaer County Agricultural Society, in the March number of the Cultivator for 1844, the editor says:

"After the delivery of the President's address, Gen. VILE introduced a resolution commendatory of the project of an *Agricultural School and Pattern Farm*; and after some pertinent remarks, introduced Dr. LEE Chairman of the Committee on Agriculture in the House of Assembly.

"Dr. LEE made some very interesting observations on the necessity of scientific knowledge in connection with agriculture, designed chiefly to show the advantages which might be derived from such an institution as had been spoken of—an institution, he said, where should be taught *thoroughly and alike*, the practice, the science, and the profits of agriculture and its kindred branches. He showed that in proportion to the skill and intelligence by which labor is directed, will be its productive earnings. He cited Massachusetts as an example. No where, he said, were the laboring classes so well educated as there. That State contained one twenty-second part of the population of the Union, and produced last year one hundred million dollars worth of property, viz: 39,000,000 of manufactures; 15,000,000 of agricultural products; and 5,000,000 from the sea. If the other States, said Dr. LEE, had produced property in the same proportion to their population, the aggregate would have been *twenty-two hundred millions of dollars!*"

The actual product of the country was seven hundred millions less than that sum.

"Millions of days of hard labor are annually thrown away in New York alone in a vain attempt to transmute *one mineral into another*. Our farmers are searching for some philosopher's stone that will change lime into potash, potash into magnesia, magnesia into flint, flint into clay, clay into sulphur, sulphur into iron, iron into phosphorus, phosphorus into nitrogen, nitrogen into carbon, and carbon into oxygen. When a man can make the half of a thing equal to the whole; then he may raise a good crop of wheat where *his soil lacks one half of the elements of that grain.*"

"Your committee believe it practicable to increase the annual products of our present rural industry 33 per cent. without the aid of one dollar of additional capital; that is, they believe that full one-third of all agricultural labor is *thrown away* by its misapplication. The uniform laws of nature will not vary to accommodate the needless ignorance

of man. Hence, it follows that he must apply his labor in strict conformity to the unerring laws that govern the changes of matter, or toil on through life, *giving two days work for those necessities and comforts, which an understanding of the laws of nature would have secured to him in exchange for one day's work.* The whole doctrine of eternal hard work and penurious living as the best means of acquiring wealth or the comforts of life, your committee deem unsound. The inevitable effect of this popular system is to degrade rather than elevate our race. Mere muscular labor, mere mechanical force, no matter how great its power, without adequate knowledge to guide and direct it, is far more likely to act wrong than right, for the simple reason that there are five wrong ways to do almost any thing, to *one right way.*

"Has not the Creator of man manifested his approbation of human efforts to acquire wisdom, even worldly wisdom, by making the ignorant in all ages of the world the servants of the wise? A knowledge of the arts of plowing, sowing and reaping may do to wear out a productive farm; but something more is necessary to enable its owner to give back annually to each of his cultivated fields, the precise elements removed by the harvest, and that too at the smallest expense."—*Dr. Lee's first Report to the Legislature, in 1844.*

We have found by sad experience since the above was written, that it is the "upper ten thousand," more than the "million," who lack a just appreciation of the value of science when fairly and universally applied to rural affairs. We have ever encountered the opposition of these in our efforts to establish Free Schools, and to secure to honest industry its due reward in the Empire State. Whether successful or unsuccessful paid or not paid, we are bound to advance the cause of human elevation, by every means in our power.

We have never doubted the practicability of adding seven hundred millions of dollars to the value of the annual productive industry of this great Republic. To achieve this result, its intellect must be more fully developed. Its schools must be improved, and teach to our whole rural population, those natural sciences which so clearly and beautifully illustrates the transformation of crude earth, air and water, into choice fruit, bread, meat, milk wool and cotton. The laws which God has made to govern these wonderful transformations of matter must be patiently studied, and not rendered the basis of barefaced quackery. Few are aware how much the community suffers from quacks in statesmanship, quacks in literature and science, quacks in law, medicine and divinity, and quacks in agriculture and the mechanical arts. From sheer selfishness, those that write for the public press are too apt to abstain from censuring what is censurable, and commending what deserves general support. Had the "upper ten thousand" been in favor of granting Legislative aid to Agricultural Chemistry, hundreds of able and influential journals would have given the measure a cordial support. One of these days they will wake up all of a sudden, like the Horticulturist, and come out on our side of this question,—taking good care not to intimate that what they claim as original with them, has been prescribed and advocated for a quarter of a century by others.

Georgia, March, 1847.

D. L.

[Editorial Correspondence of the Genesee Farmer.]

The Food of Plants.

As our associate who is on the ground speaks in the March number of having "large and unexpected additions to our subscription list," we desire to hold a little plain conversation with these new readers on **THE FOOD OF PLANTS.**

All thinking, reasoning men have become satisfied that to form one, two, or three tons of any crop on an acre of land in a season, the vegetable vitality which changes earth, air and water into such crop can operate successfully no further than the supply of matter precisely adapted to the wants of each plant extends. The theory is that no amount of hard work can possibly make corn, potatoes, wheat, or apples, or any other living thing, out of nothing. Nor can it form them by any possibility out of other ingredients than the things which God has appointed for that purpose. Hence, if your soil has 99 parts in 100 within reach of a crop of potatoes or corn, of all that is required to make 80 bushels of the latter and 400 of the former, on an acre, these 99 parts go for nothing, just so far as the other *one part is lacking*. To illustrate: 100 pounds of gypsum have often added 2,000 pounds of clover hay, to an acre; and could you fairly estimate the increase of clover roots, and all below where the scythe clips, the net gain would be 3,000 pounds.

Your reason, kind reader, informs you that 100 pounds of sulphur, oxygen, and the metal called *calcium*, (which are the constituents of gypsum,) never created 29,000 pounds of clover out of nothing. The 2,900 pounds of matter, which with the addition of the *sulphur* and perhaps lime in the gypsum, formed 3,000 lbs. of the plants named, existed within reach of the clover as well before as after the lacking elements were applied. But, as no other element in the world can fill the place which God has assigned to *sulphur* in organizing the living bodies of vegetables and animals, wherever and whenever this substance is lacking, such organizations can not proceed. Any bird which can organize a perfect egg without a particle of sulphur to enter into the composition of its yolk, can create and lay a little world, with all its inhabitants! In 100 lbs. of feathers, wool and hair there is 5 lbs. of sulphur. If clover contained not an atom of this substance, how could the sheep, the cow, the horse, or the pig, subsist on food which lacked an indispensable constituent of its brain and nerves, its flesh and hair, and of the milk designed by the Creator to build up every tissue of its young offspring?

You know, for Heaven has made you a reasoning, intelligent human being, that neither children nor brutes can know whether the plants on which they live—the seeds of maize, beans and wheat—the fruits of the apple, pear, peach,

and the vine—contain the elements necessary to form their bones and their muscles. What then? Only this: that Infinite Wisdom protects their lives and health by preventing your crops from growing—organizing grass roots, tubers, seeds or fruit of any kind—one pound beyond the supply of each constituent element required to make the whole body of a Man. Think of this truth, and remember God has endowed us with high intellectual faculties, for the great purpose that we may study and understand "how wonderfully and fearfully we are made"!

In using vegetable vitality with a view to organize food for man, you have much to learn. All that the writer can do is to give a few hints. Salt this remark down in one corner of your memory: Vegetable vitality alone is endowed with the power to combine those constituent elements of plants and animals, called lime, potash, soda, silicia, magnesia, iron, chlorine, sulphur, phosphorus, carbon, oxygen, hydrogen and nitrogen, into living compounds. A man, a bird, a fish, an insect, a worm—all animals—can alike subsist on a slice of good wheat bread, i. e. they can organize their bones, feathers, scales, flesh, &c., out of the elements already organized by the vitality in the germs of the wheat plant. Mark well the grand natural distinction between *animal* and *vegetable* vitality. Decompose your slice of bread by burning it, or any other means, into its original mineral elements, (*air* and *water* are minerals as much as *iron* in the language of science); and collect all the constituents of the bread in a clean glass vessel. Now, neither man, fish, bird nor insect can form a particle of flesh out of the matter which made the bread; but a young plant, under favorable circumstances of light, warmth, &c., can re-organize all the constituents of the bread into nutritious food for animals. Vegetable life has infinitely greater force than that of animals; but it cannot transmute one element into another—iron into gold, for instance—nor create anew one particle of any element when perchance it shall be lacking and needed this season to organize for you a large yield of sound potatoes. Vegetable life is older than animal life.

That portion of the food of cultivated plants which is most deficient in ordinary soils, viz: bone-earth or phosphate of lime, sulphate of lime or gypsum, chloride of sodium or common salt, salts of potash and magnesia, we find from a great number of analyses, more abundant in the *sub* than in the *surface* soil. This is a fact of much importance as a purely practical question of tillage. It indicates the utility of breaking up, and making fine the *undercrust*, so that all hungry roots may readily penetrate far into the bosom of their mother earth. The subsoil need not be brought to the surface, unless you prefer so to do. Deep tilth and thorough drain-

age are still sadly neglected in all parts of the United States. As an ounce of copperas, alum, or other salt will spoil an otherwise good meal for a hungry man, so a compact subsoil that collects moisture and the salts of iron, alumina and other minerals in excess, may truly poison the otherwise nutritious food of your crops. Too much of a good thing, like too much heat applied to the body in a cold day, may be more suddenly destructive than none at all.

We don't know a farmer in the Union who makes the best known use of lime, ashes, bones, gypsum, stable manure, night soil, marl and other fertilizers, such as green sand, forest leaves, salt, and swamp muck. The food given to each plant, not being adapted to its wants—having some elements in excess, while deficient in others—a large share of it is wasted. If a tanner wastes his hides and bark with which he makes leather, every body calls him a dunce; but an agriculturist may waste any quantity of the substances required to form bread, meat and wool, and yet pass for a wise farmer. Nearly all night soil, in every part of the country, is thrown away. But a small portion of the liquid excretions of man and his domestic animals is ever restored to the fields at the proper season, and in due quantity per square rod.

Augusta, Ga., March, 1848.

Hints for April.

Now begins the battle of life, in which the tiller of the soil has to marshal his host, and commence the onset for the means of existence—against frost and hail, storm and wind, insects, birds and beasts. Winter's icy fingers now begin to relax their hold, and the howling blast is subdued to the gentle winged zephyrs. The sombre tints of the field, and the gray haze of the forest blush into roseate hues, and all inanimate nature puts on the robes of beauty and gladness. Humanity starts from its drowsy period of hybernation, and awakes with all organic life—entering the lists for the blessings of heaven with a joyful hope, that the laborer's toil shall not be unrewarded. Blessings, saith the preacher, only come by means, and the price of success is eternal vigilance, industry and economy. So hearken to the words of the Prompter, whose head is whitened by the bleaching suns and snows of sixty summers and winters.

See that your stock is kept in good heart this month, above all periods, particularly your oxen, horses, and in-coming cows; don't begrudge them an ear of corn a day, nor salt to give them an appetite. Sow your clover and grass seed before the spring frosts are past, and plaster the young clover at any time after it is up, when the weather is so dry that men say "a good shower would do a deal of good." Look to and regulate the fences; stake and rider, or stake and

yoke them, which is preferable, as it saves land and hindrance. Time is money—so down with the bars, and up with the gates.

See that the wheat fields are properly drained, and, if hove out by frost, roll them down the moment the soil is dry enough. Make the yard manure into heaps, before the drenching rains send its virtues to the tombs of the Capulets; and don't draw it on to plowed land, until you want to use it. If for top dressing old meadows, do it at any time, giving a thorough harrowing with a double team; it not only loosens the hide bound turf, but allows the grass seeds of the manure, to catch and renew.

Cut scions immediately, if not done before, and graft cherries and plums as soon as the buds swell on the stock. Cut up and house your fire wood; one cord seasoned under cover is worth two in the weather.

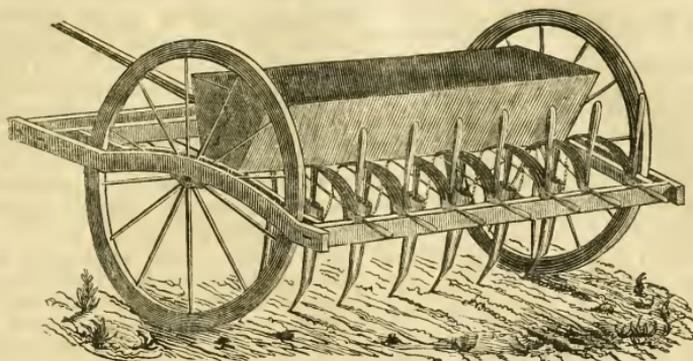
See for the last time, that every implement is in order and in its place; harness sound and well oiled, plows, harrows and trimmings repaired, and ready for work. The moment the soil and weather are favorable, put in oats, barley, spring wheat and peas.

Plant some early variety of the potato, by the middle of the month for family use, and to prevent disease—this is the only specific—the Mercer or Meshonic, Early June, Ash-leaved, Kidney, &c. Plant with from one to two inches of earth, and as soon as they break ground, throw on half a shovel of fresh manure and cover with about the same depth of soil. This process is the *ne plus ultra* of potato cultivation. Sow some lettuce in a warm exposure the moment the frost is out of the ground. Onions cannot be sown too early—neither carrots and parsnips.

If you have not trimmed your grape vines, do it immediately, and cut away all the last year's wood, to from three to five eyes, and thin out thoroughly. Never mind the bleeding; in garden culture a little depletion does them good; the greatest trouble is a redundancy of new wood and foliage.

Now my young reader—for it is no use to talk to the old coveys who know it all, and don't believe any thing they read but their Bibles, and that sometimes is a mooted point;—I say young reader arm yourself for the conflict. A good beginning makes a good ending; for you will often meet chapparals and cane brakes, and Guerillas in your road, but put your shoulder to the wheel, and say with old Rough and Ready, "Gen. Taylor never surrenders." *

THE author of our monthly hints—who, by the way is a veteran contributor to the agricultural press, as well as an experienced farmer—informs us that he is gratified to find his essays considered worthy of being re-published as original by many papers throughout the country. His *Hints for March* have been published in over a dozen of our exchanges, with no credit whatever—and the same may be said of several other valuable articles, in the same number, from our correspondents. "A word," &c.—EDITOR.



PALMER'S GRAIN DRILL AND CULTIVATOR. (FIG. 23.)

Palmer's Grain Drill.

For particular information relative to this implement, an engraving of which is given above, we refer to the last advertising page of this number. It is claimed to be an improvement of Pennock's Grain and Seed Drill, (advertised on same page,) a figure and description of which we gave in the April number of the Farmer for 1847. We are satisfied that Pennock's Drill is a valuable labor-saving article, as we have seen it tested, and known it to work well, even on unfavorable land. If this drill is better, or even as good as Pennock's, it is well worthy of trial by grain-growing farmers.

Fair of the State Ag. Society—Premium List.

In this number we give the List of Premiums to be awarded by the next Annual Fair of the N. Y. State Agricultural Society, which is to be held at Buffalo on the 12th, 13th and 14th of September. The Premiums on Farms, Field Crops, &c., to be awarded at the *winter meeting* of the Society (in January, 1849,) we shall endeavor to publish next month.

Judging from present indications we think the next Fair will be more generally attended by farmers, both as competitors and visitors from other states, than any previous one. The farmers of Western New York are expected to sustain their well-earned reputation, and we have no doubt they will acquit themselves creditably. They *can*, and probably *will*, render the Buffalo Fair the best exhibition of Farm Stock and Staple Products ever held in the State or Union. And, unless we much mistake the spirit and ability of our farmers, our Western friends who may attend will be amply remunerated for their time and expense. We hope to meet, at Buffalo, many of our readers and personal friends who reside in Pennsylvania, Ohio, Michigan, Indiana, Illinois, Wisconsin and Canada—and we trust

that all who can consistently do so will become exhibitors and competitors as well as *visitors*.

Our Buffalo friends are making ample arrangements for the comfort and convenience of strangers who may attend the Fair. We are informed that the voluntary subscriptions for this object already amount to \$3,500. This is a good indication, and we can safely assure our western readers that the Buffalonians will have their "latch-strings out" during the Fair. Their ample hotels, and the hospitality of private citizens, will undoubtedly afford proper accommodations to all visitors.

Growing Clover and Timothy Together.

MESSRS. EDITORS:—A neighbor of mine, a Mr. GLASS, who lives on the top of the Allegheny mountains, in Somerset county, Pa., is in the habit of growing Clover and Timothy in the same field—sowing four quarts of clover and six quarts of timothy seed to the acre—which appears to work well. He sows the large clover, which yields its seed from the first crop which ripens late. When the timothy is ripe he cuts it with a cradle over the top of the clover, rakes and takes it off. When the clover ripens he mows the whole, and when the seed is taken off it makes excellent fodder for cattle or sheep. He says that from 15 acres he got, in 1846, 50 bushels of timothy and 30 bushels of clover seed, which, at \$4 a bushel for the clover, and \$2 for the timothy, would bring him \$220—quite a respectable amount from 15 acres, besides the fodder. He says the last season was not so good as the former, and consequently he obtained 10 bushels less of each seed.

As the above plan was new to me, and I thought would be to many of you readers, I concluded to give you the information, and if you think it worth publishing you can do so.

Yours, &c.,

H. LITTLE.

Stoystown, Pa., Feb., 1848.

Swamp Muck as a Fertilizer.

Messrs. EDITORS:—You desire my experience in regard to the value of Swamp Muck, or Peat, as a fertilizer. I have never used decomposed muck to any extent; and in regard to raw muck ALONE, my experiments have been so recent, that they are of little practical value. Yet having given some attention to the subject, I will offer a few suggestions.

The peat which I applied in the fall of 1845, was taken from a deposit, at the time imperfectly drained, varying in depth from four to eight feet—a peat bog, so far as our excessive climate, and the presence of hard water will admit. It was a dark colored, vegetable matter, coarse and fibrous near the surface; more compact and soluble, and probably much more valuable at a greater depth. There was an occasional slight strata of marl, some recent shells, and rotten wood. This we applied upon five acres, working from four to seven feet in depth, at the rate of one hundred and twenty two-horse loads per acre. It was spread upon an old field of low calcareous clay, subject occasionally to winter-kill—skirted by swells of limestone shales, and clay gravel.

The above would seem to be a pretty heavy dose. But the bog was then in the condition of a saturated sponge, and we managed by digging regular pits with barriers, to get about one half of it below the water level. It has been ascertained, that in this state four-fifths of the weight consists of water; consequently the application was equivalent to thirty tons of dry muck per acre. It was much reduced and dissolved by the winter frosts; and in spring appeared like a rich, alluvial deposit. The clover was unusually luxuriant. It was fallowed as usual, and sowed to wheat in 1846. In the spring of 1847, a severe season, the wheat, like other portions of my crop on like soils, was badly spring-killed, and infested with the fly. It looked miserably. It improved, however, beyond expectation, and beyond other like soils, towards harvest. I estimated the product at 18 bushels per acre, of a quality acceptable to our millers. My general average was $27\frac{1}{2}$, being swelled by the product of more favorable soils. The most visible effect was upon the dry limestone shales; on these the crop was better than usual. This I expected, for this soil devours and converts coarse vegetable matter into food for plants with great rapidity.

So far then, this experiment settles nothing very definitely in regard to the value of muck. And yet I have unabated confidence that it will pay cost, having expected no very apparent immediate results; but that its ameliorating effect would be distributed through twenty years or more—the maximum effect in about ten years. Peat is very insoluble, and decomposes very slow in the air. Yet I cannot doubt that in TIME it

will be consumed by the oxygen of the atmosphere, and decomposed by the natural agents; and that every portion of it will enter into the organization of various plants; be taken up by pasturage, or conveyed into the barn yard, thus increasing the general fertility and circulation. In this case, a better estimate may be formed of its value eight years hence; yet should the result prove favorable, there may be objections to putting out much upon so long a credit; and as its value in the raw state seems not to be well settled, it may be more judicious to use decomposed muck. Respecting the value of this, there appears to be no peradventure. It seems conceded by practical and scientific men here and in Europe, that it is equal, weight for weight, to barn yard manure.

A practical farmer, and member of the New York City Farmers' Club, says, he has always raised fine potatoes, free from rot, by the use of muck, converted by a proper mixture of lime. This corresponds with the fact, that the potatoes raised last season by my neighbor, HUGH McVEAN, upon a reclaimed muck marsh, and manured in the hill, are sound, although late planted, while those raised on uplands are generally diseased.

Probably the best solvent of muck is potash, or unleached ashes. Professor DANA, (I think,) says, that nine bushels compounded with a cord, will make it equal to common manure.—In Europe manure is generally used to decompose it; in fact any thing that enters readily into spontaneous decomposition, communicating the fermentation and heat to the whole compound, will answer the purpose.

The practice of charring or burning the peat, and applying the ashes, about 20 bushels per acre, has been extensively adopted in Europe; and for soils containing much inactive vegetable matter, this may be the most judicious method.

Whenever muck is applied in the raw state, it should remain on the surface as long as may be, exposed to the decomposing influences of the atmosphere. Mixed with the soil, or used as a top dressing, it is very congenial to the healthy growth of fruit trees. For apple trees on dry soils, deficient in lime, marl is better, as supplying the lime, and retaining the moisture beyond any other material.

I have a bog pen near the house, about 10 feet square; in this is put about 4 loads of peat, on which we throw the soap suds and other fertilizing liquids, adding from time to time more peat. In this manner several loads of very fertile compound is made each year, free from weeds, and valuable for garden manure. A chief advantage of this process, is, that the peat totally fixes and neutralizes the offensive and unhealthy affluvia which arises when these liquids are allowed to evaporate. In evidence of the qualities of peat as a neutralizer, it has been stated

to me by a man of science, resident of N. York City, that it is there extensively substituted for charcoal, in the manufacture of poudrette.

I have lately, at trifling expense, reduced the water six feet below the surface by ditching. This gives place to the rain water, improves the material and the pasturage, and makes it accessible and managable at far less cost; and this is the first requisite, in entering upon the use of muck as a manure. In this condition it may be thrown upon the surface to dry and dissolve whenever it is convenient. I know no other deposit of peat so deep as the above. It does not usually exceed one to three feet in depth, and is underlaid by marl.

Respecting the relative value of peat under different circumstances of depth and exposure, I am unable to offer an intelligent opinion. I recollect that a farmer of New England, rejecting the upper fibrous portion as comparatively worthless, found the deeper portion equal in the raw state to common manure. This was attributed to the existence of concentrated humus. An analysis of peat from a depth of six or eight feet would be interesting, as compared with that made by you from the surface of Gen. HARMON'S marsh.

How far the presence of hard water, operates to increase the insolubility of the peat of Western New York, as compared with that where the water is soft, is unsettled; yet I am inclined to infer that to some extent it has this effect.

What is the actual and relative value of marl as manure?—and does the condition of our soils demand its application?—What is the most judicious and economical mode of reclaiming, and what the value, of our marl and muck marshes?—These are questions of practical interest, to numerous farmers of Western New York, upon which I hope to derive information from yourself, or your correspondents.

Respectfully yours,
JOHN McVEAN.

Wheatland, N. Y., March, 1848.

Composts.

It was formerly supposed, that great advantage was derived from the combination of several different substances together, and forming what are called *composts*. The receipts for these compounds are numerous, and go to prove that the discovery of a good compost requires but little scientific or practical skill. When a compost heap is made up of several materials which are all separately good manures, it follows of necessity that the resulting compound must be a good fertilizer. But it is impossible to supply any more manure in this way than if these several ingredients were applied to the soil separately. And a little knowledge of chemistry will show that by this means, no new element can be

generated. Neither can any new property be developed which could be done by their separate action. We see that whenever a substance which has little or no fertilizing power, is in this way manufactured into a good manure, it is done at the expense of some powerful fertilizer which is diluted by the mixture, and consequently loses just as much of its efficacy as the other gains. Thus, although this process serves to dilute and extend manures which are too powerful or too expensive, it absolutely supplies none.

Now, although it is evident that this method does not augment in the slightest degree, our quantity of available manure,—yet it has several advantages. Caustic lime and wood ashes are sometimes too strong for young and tender vegetation; and when this is the case, the object of their use is much better attained by mixing and diffusing them through some other substance, such as sawdust, sand, barn manure or humus, or allowing them to lie in a heap together with any vegetable matters, such as leaves, straw, chaff, rotten wood or turf; or with animal matters; until decomposition is completed.

Another advantage is, that a manure which is valuable and scarce, as guano, poudrette, and some chemical salts, may be extended by mixture so as to be applied to a much larger space than would be practicable if used singly.—Thirdly, this mode enables the agriculturist to spread his manure on the soil more even and uniformly. And lastly, by making compost we are enabled to hasten the final decay of animal and vegetable matters, so as to gain considerable time. By mixing quicklime with barn manure, straw, leaves, &c., decomposition goes on more rapidly, and these substances are transformed to available manures in a comparatively short space of time. But much discretion is necessary in this respect, otherwise some valuable elements are wasted; the object is to fix and retain the volatile elements—and not to dissipate them.—A great objection to composts is, the amount of labor required in making, turning, and transporting them to the fields.

No definite formula can with any propriety be given for making composts, as the agriculturist must determine for himself in each particular case, as to what elements his fields most require, and also his time and the resources at his command. With these considerations, and an adequate knowledge of his business, he will be able to make a more judicious disposition of his manures than by the aid of any prescribed rules which can be laid down in books.

Rochester, N. Y., 1848 M. M. R.

PLOWING WITH ELEPHANTS.—It is stated that in Ceylon elephants are employed in plowing new grounds for the cultivation of coffee, pepper, &c. One of these animals when well trained, it is said, will do the work of twenty oxen; consequently more labor is performed in a given time, and the period is hastened for putting in the crops. The price of an elephant in Ceylon varies from \$50 to \$75.

New York State Agricultural Society.

PREMIUM LIST FOR 1848.

FAIR TO BE HELD AT BUFFALO, SEPT. 12, 13 AND 14.

Premiums on Cattle.

DURHAMS.

Best bull over 3 years old,	\$25	Best cow over 3 years old	\$25
2d best, 15; 3d do	5	2d best 15; 3d do	5
Best 2 years old bull,	20	Best 2 years old heifer	20
2d best, 10; 3d do	5	2d best 10; 3d do	5
Best 1 year old bull,	15	Best 1 year old heifer	15
2d best, 10; 3d do	5	2d best 10; 3d do	5
Best bull calf,	10	Best heifer calf	10
2d do Wash. Letters and	3	2d do Wash. Let. and	3

HEREFORDS.

Best bull over 3 years old,	25	Best cow over 3 years old	25
2d best 15; 3d do	5	2d best 15; 3d do	5
Best 2 years old bull	20	Best 2 years old heifer	20
2d best 10; 3d do	5	2d best 10; 3d do	5
Best 1 year old bull	15	Best 1 year old heifer	15
2d best 10; 3d do	5	2d best 10; 3d do	5
Best bull calf	10	Best heifer calf	10
2d do Wash. Let. and	3	2d do Wash. Let. and	3

DEVONS.

Best bull over 3 years old	25	Best cow over 3 years old	25
2d best 15; 3d do	5	2d best 15; 3d do	5
Best 2 year old bull	20	Best 2 years old heifer	20
2d best 10; 3d do	5	2d best 10; 3d do	5
Best 1 year old bull	15	Best 1 year old heifer	15
2d best 10; 3d do	5	2d best 10; 3d do	5
Best bull calf	10	Best heifer calf	10
2d do Wash. Let. and	3	2d do Wash. Let. and	3

AYRSHIRES.

Best bull over 3 years old	25	Best cow over 3 years	25
2d best 15; 3d do	5	2d best 15; 3d do	5
Best 2 years old bull	20	Best 2 years old heifer	20
2d best 10; 3d do	5	2d best 10; 3d do	5
Best 1 year old bull	15	Best 1 year old heifer	15
2d best 10; 3d do	5	2d best 10; 3d do	5
Best bull calf	10	Best heifer calf	10
2d do Wash. Let. and	3	2d do Wash. Let. and	3

NATIVES AND CROSS BETWEEN IMPROVED & NATIVE CATTLE.			
Best cow over 3 years old	20	Best 1 year old heifer	10
2d best 12; 3d do	4	2d best 8; 3d do	3
Best heifer 2 years old	15	Best heifer calf	3
2d best 10; 3d do	3	2d do Wash. Letters.	3

WORKING OXEN.—Over four years old.

Best team of 20 yoke from any county 50; 2d best	30	Best yoke of Oxen	5
Best team from any town, not less than ten yoke	25	3d do Trans. and	5

No yoke of cattle competing in teams can compete as a single yoke; nor can a single yoke, competing for premium, be allowed to compete in the county or town teams.

STEERS.—Three years old.

Best 10 yoke from any co.	20	To boys under 16, training yoke of steers, the best	3
Best single yoke	10	2d best, Silver Medal.	3
2d best	8	3d do Trans. and	3

STEERS.—Two years old.

Best 10 yoke from any co.	15	To boys under 16, training yoke of steers, the best	3
Best single yoke	10	2d best, Silver Medal.	3
2d best	8	3d do Trans. and	3

1 year old Steers.

Best 10 yoke from any co.	15	To boys under 16, training yoke of steers, the best.	3
Best single yoke,	8	2d best, Silver Medal.	3
2d best	5	3d do Trans. and	3

FAT CATTLE.

Best pair fat oxen over 4 year's old	4	Best pair fat steers 4 years old or under	15
2d best 20; 3d do	12	2d best 12; 3d do	8
Best single ox over 4	15	Best single steer, 4 or under 10	10
2d best 10; 3d do	6	2d best 6; 3d do	3
Best fat cow over 4	15	Best single heifer 4 or under 10	10
2d best 10; 3d do	6	2d best 6; 3d do	3

Animals fattened on hay and grass alone, (after 1 year old.)			
Best pair oxen over 4 years old	20	Best pair fat steers 4 or under 12	15
2d best 12; 3d do	8	2d best 8; 3d do	5
Best single ox over 4	10	Best single steer 4 or under 8	8
2d do 6; 3d do	4	2d best 5; 3d do	5
Best cow over 4	10	Best heifer 4 or under 8	8
2d best 6; 3d best	4	2d best 3; 3d do	5

Applicants for premiums on fat cattle must furnish particular statements of the manner of feeding, and kind, quantity and cost of food, and all the expenses connected with the fattening. Animals exhibited in pairs cannot compete for single premiums.

FAT SHEEP.—Long-wooled.

Best fat sheep	10	2d best 7; 3d do	5
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Middle-wooled.

Best fat sheep	10	2d best 7; 3d do	5
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Statements required as to the manner of feeding, &c.

BEST MILCH COWS.

The cow to be kept on grass only during the experiment and for 15 days previous to each period of trial

The time of trial, from 10th to 20th of June, and from 1st to 10th of September.

Statement to be furnished, containing,

1st. The age and breed of cow and time of calving.
2d. The quantity of milk in weight, and also of butter, during each period of ten days.

3d. The butter made, to be exhibited with the cow, at Buffalo, and the statement to be verified by the affidavit of competitor and one other person conversant with the facts.

Best 10 milch cows from any town 50
Best 5 milch cows exhibited by any person, [he being the owner.] 25.

A statement to be furnished of the milk of each cow for any one week previous to the Fair, with the time of calving of each cow. To be fed on grass only.

HORSES.

CLASS I.—For all work.

Best stallion over 4 years	25	at her foot.]	25
2d best 15; 3d do	8	2d best 15; 3d do	8
4th best,	Yount.	4th best	Yount.
Best brood mare, [with foal]			

CLASS II.—Draught Horses.

Best stallion over 4 years	25	at her foot.]	25
2d do 15; 3d do	8	2d best 15; 3d do	8
4th best	Yount.	4th best	Yount.
Best brood mare, [with foal]			

CLASS III.—Blood Horses.

Best stallion over 4 years	25	at her foot.]	25
2d best 15; 3d do	8	2d best 15; 3d do	8
4th best	Yount.	4th best	Yount.
Best brood mare, [with foal]			

3 years old Stallions and Mares.

Best stallion, 3 years old	15	Best mare	15
2d do 10; 3d do	Yount.	2d best 10; 3d do	Yount.
4th best,	Trans.	4th best	Trans.

2 years old Stallions and Mares.

Best stallion 2 years old	10	Best mare	10
2d best 5; 3d best	Trans.	2d best 5; 3d best	Trans.

1 year old Colt.

Best stallion 1 year old	5	Best mare	5
2d do, Yount; 3d do.	Trans.	2d do, Yount; 3d do.	Trans.

Matched Horses.

Best pair matched horses,	10	2d best 15; 3d do.	10
Diploma and 20		4th best	5

Geldings.

Best gelding	10	3d do	6
2d best	8	4th do	4

SHEEP.

CLASS I.—Long-wooled.

Best buck over 2 years	15	Best pen 5 ewes 2 years or under	15
2d best 10; 3d do	5	2d best 10; 3d do	5
Best buck 2 years or under	15	Best pen 5 buck lambs	10
2d best 10; 3d do	5	2d best.	5
Best pen 5 ewes over 2 years	15	Best pen 5 ewe lambs, 10; 2d 5	5
2d best 10; 3d do	5		

CLASS II.—Middle-wooled.

Best buck over 2 years	15	Best pen 5 ewes 2 years or under	15
2d best 10; 3d do	5	2d best 10; 3d do	5
Best buck 2 years or under	15	Best pen 5 buck lambs	10
2d best 10; 3d do	5	2d best	5
Best pen 5 ewes over 2 years	15	Best pen 5 ewe lambs 10; 2d 5	5
2d do 10; 3d do	5		

This class includes Southdown, Norfolk, Dorset, Native, &c.

CLASS III.—Merinos and their grades.

Best buck over 2 years	15	Best pen 5 ewes 2 years or under	15
2d best 10; 3d do	5	2d best 10; 3d do	5
Best buck 2 years or under	15	Best pen 5 buck lambs	10
2d best 10; 3d do	5	2d best	5
Best pen 5 ewes over 2 years	15	Best pen 5 ewe lambs 10; 2d 5	5
2d best 10; 3d do	5		

Includes Merinos, whether pure or mixed blood.

CLASS IV.—Saxons and their grades

Best buck over 2 years	15	Best pen 5 ewes 2 years or under	15
2d best 10; 3d do	5	2d best 10; 3d do	5
Best buck 2 years or under	15	Best pen 5 buck lambs	10
2d best 10; 3d do	5	2d best	5
Best pen 5 ewes over 2 years	15	Best pen 5 ewe lambs 10; 2d 5	5
2d do 10; 3d do	5		

Includes those denominated Saxons, whether pure or mixed blood.

SHEPHERD'S DOG.

Best shepherd's dog 10 | 2d best 5
Evidence to be furnished of the thorough training of the dog, otherwise no premium can be awarded.

SWINE.—Large Breed.

Best boar over 2 years old 10 | Best breeding sow 1 year old, 10
2d best 5 | 2d best 5
Best boar 1 year old 10 | Best sow six mos. and under 8
2d best 5 | one year 8
Best boar 6 mos. and under 5 | Best lot of pigs not less than 10
one year 8; 2d do 5 | 5, under 10 months 10
Best breeding sow over 2 y'r 10 | 2d best 5
2d best 5 | 2d best 5
Includes Cheshire, Berkshire, Russia, Mackay, Leicester, and their grades.

Small Breed.

Best boar over 2 years old 10 | Best breeding sow 1 year old 10
2d best 5 | 2d best 5
Best boar 6 mo. old 8; 2d 5 | Best sow 6 months old 8
2d best 5 | 2d best 5
Best breeding sow over 2 y'r 10 | Best lot of pigs not less than 10
2d best 5 | 5, under 10 months 10; 2d 5
Includes Neapolitan, Suffolk, Improved China, Chinese, Mocha, and their grades.

General Rules applicable to Animals.

Where there is but one exhibitor, although he may show several animals, in any class or subdivision of a class, only one premium will be awarded—that to be first or otherwise, as the merit of the animal may be adjudged by the committee—and a premium will not be awarded where the animal is not worthy, though there be no competition.

POULTRY.

Best lot of Dorkings, not less than 3, 1 cock and 2 hens 3
Best lot of Poland; do do do 3
Best lot of Large Fowls do do do 3
Best lot of Turkeys, not less than six, 3
Best lot of Muscovy Ducks, not less than 3, 3
Best lot of small ducks do 3
Best lot of Guinea Hens, not less than 6, 3
Best pair Wild Turkeys 5; best pair China Geese, 3
Best pair large Geese 3; best pair Wild Geese, 3
Best lot of Poultry owned by exhibitor, [statement to be furnished and verified] 10
Best exhibition of Pigeons, 3

PLOWS

Best plow for general purposes, diploma and 10
Best plow for stiff soils, do 10
Best plow for light sandy soils, do 10
Best subsoil plow, improved, do 10
Best scarifier, do 10
Best roller for general use, do 10
Best clod crusher and roller combined, do 10
Plows, &c. to be tested by committee.

Farm Implements.—No. 1.

Best Farm wagon dip. & 10 | Best corn stalk cutter dip. & 5
3d best Col. Tour. 2d do Trans.
Best harrow dip. & 5 | Best thrashing mach. dip. & 10
Best cultivator dip. & 3 | 2d do Trans.
Best fanning-mill dip. & 5 | Best drill barrow dip. & 3
2d best Trans. | Best straw butter dip. & 3
Best horse power dip. & 5 | 2d do Trans.
2d best Trans.

Farm Implements.—No. 2.

Best corn and cob crusher dip & 2 | Best general purposes dip & 2
by horse power dip & 5 | Best dozen axes dip & 2
2d do Col. Tour. | Best churn dip & 2
Best clover machine dip & 5 | Best cheese press dip & 2
2d do Col. Tour. | Best 6 milk pans dip & 2
Best flax and hemp dress- dip & 2 | Best potato washer dip & 2
ser dip & 10 | Best grain cradle dip & 2
2d do Col. Tour. | Best 6 hand rakes dip & 2
Best horse-cart for farm dip & 3 | Best 6 hay forks dip & 2
2d do Trans. | Best 6 grass scythes dip & 2
Best ox cart dip. & 5 | Best 6 cradle scythes dip & 2
2d do Trans. | Best 6 manure forks dip & 2
Best horse rake dip. & 2 | Best hay rigging dip & 2
Best ox yoke dip. & 2 | Best lot grain measures dip & 2
Best plow harness dip. & 2 | Best lot of butter tubs and dip & 2
Best wagon do for farm dip. & 2 | firkins dip & 2
Best carriage harness dip. & 5 | Best 6 doz. corn brooms dip & 2
Best saddle and bridle for dip & 10
Best and most numerous collection of Agricultural im- dip & 10
plements, dip & 10
Best and most numerous collection of agricultural im- dip & 10
plements, manufactured in the state of New York, by or under the supervision of the exhibitor, dip & 10

P. S. Persons presenting Agricultural Implements, or articles of Mechanical Ingenuity and Utility are requested to furnish the Secretary with a particular description of the article, the price, and place where it can be had—as it is intended to publish a descriptive list of the articles exhibited at the Show, for the benefit of manufacturers and purchasers.

PLOWING MATCH.

First premium 15 | 4th do Col. Tour
2d do 12; 3d do 10 | 5th do Trans.
Boys under 18 years of age.
First premium 10 | 2d do 5; 3d do Trans.
The competition for plowing open to competitors out of the State.

BUTTER

Best lot [quality as well as quantity considered] made from 5 cows, in thirty successive days, 25 lbs. of the butter to be exhibited. \$25; 2d do 15; 3d do 10.

Compliance with the following rules will be strictly required of those who compete for these premiums, viz:—The cows to be fed on pasture, green corn stalk fodder, or grass cut for the purpose, only. No grain, roots or slops of any description to be fed during the trial. The cows to be owned by the competitors, previous to the first day of February, 1848. The milk drawn from the cows on some one day during the trial to be accurately weighed and measured, and the result stated. A sample of at least 25 pounds of the butter so made to be exhibited at the Show at Buffalo, for the inspection of the examining committee. The particular breed of the cows to be stated, if known, and the method of making and preserving the butter. A certificate signed by the owners of the cows, and at least one other person who assisted in milking and making the butter, detailing the above particulars, will be required. The Ex. Com. believe that few, if any premiums offered on neat cattle, will result in greater benefit to the farming interest, than those on the products of the dairy, providing fixed rules requiring uniformity of feed, be faithfully enforced. Let the regulations be observed and an opinion approximating to accuracy may be formed by the public, which of the several breeds of cows are the best for dairy purposes; and from those that prove the best, further improvements may be made.

Best 25 lbs. butter made in June, 10 | Best 50 lbs made any time 15
2d do Col. Tour; 3d do Trans. 4th do Col. Tour; 5th Trans. 5

The claimants for premiums must state in writing the time when it was made; the number of cows kept on the farm; the mode of keeping; the treatment of the cream and milk before churning, winter and summer; the method of freeing the butter from the milk, the quantity and kind of salt used; whether saltpetre or any other substances have been employed.

The butter offered for premiums must be presented in butter tubs, jars or firkins.

Girls under 21 years of age.

Best lot of butter, not less than 10 lbs., made at any time, Silver milk cup, value 10
2d best, Pair butter knives, " 8
3d best, Tea spoons, " 6

A statement of the manner of making the butter must accompany each sample.

CHEESE.

One year old and over.

Best 100 lb. 20 | 4th best Col. Tour
2d best 10; 3d do 5 | 5th do Trans.

Less than one year old.

Best 100 lbs 15 | 4th best Col. Tour
2d best 10; 3d do 5 | 5th do Trans.

Those who present cheese for the premiums offered, must state in writing the time when it was made; the number of cows kept; whether the cheese was made from one, two or more milkings; whether any addition is made of cream; the quantity of rennet used, and the mode of preparing it; the mode of pressure; and the treatment of cheese afterwards.

SUGAR.

Best 25 lbs maple sugar 10 | 3d best Col. Tour
2d best 5 | 4th do Trans.

The process of manufacturing and clarifying must accompany the samples offered.

SILK.

Best specimen manufactured [woven into cloth or ribbons,] not less than 10 yards, Diploma and \$15; 2d best 10; 3d do 5.

Reeled silk not less than 1 lb.

Best specimen Dip & 5 | 2d do Col. Tour; 3d Wash. Let.

Sewing Silk not less than 1 lb.

Best specimen Dip & 10 | 2d best 5; 3d do Col. Tour

Cocoons.

Best half bushel, 1843, 8 | 2d do Col. Tour; 3d do Trans.

DOMESTIC MANUFACTURES.

Best pair woolen blankets	6	Best double carpet coverlet	5
2d best 4; 3d do	2	2d best 4; 3d do	3
Best 10 yards flannel	6	4th do 2; 5th do	Trans.
2d best 4; 3d do	2	2d best pr. woolen knit stockings	2
Best 10 yards woolen cloth	10	2d best	Trans.
2d best 8; 3d do	5	Best pair of woolen wove stockings	2; 2d best Trans.
Best woolen carpet 15 yards	10	Best pair cotton knit stockings	2; 2d do Trans.
2d best 8; 3d do	5	Best pair cotton wove stockings	2; 2d do Trans.
Best 10 yards linen	5	Best pair linen knit stockings	2; 2d do Trans.
2d best 6; 3d do	4	Best pair linen wove stockings	2; 2d do Trans.
Best 10 yards linen diaper	6	2d best	Trans.
2d best 4; 3d do	2	Best lb. linen sewing thread	2
Best 10 yards kersey	6	2d best	Trans.
2d best 4; 3d do	2	Best pr. woolen fringe mittens	2; 2d do Trans.
Best 15 yards tow cloth	5		
2d best	Trans.		
Best hearth rug 5; 2d do	4		
3d do 3; 4th do 2; 5th do	Trans.		
Best rag carpet 15 yards	5		
2d best 4; 3d do	Trans.		

Articles to be manufactured within the year. Discretionary premiums will be awarded on articles of merit not included in the above list.

MANUFACTURES.

Best piece of black broadcloth, not less than 20 yards	Diploma.
do blue	"
do woolen carpet manufactured in factory, not less than 20 yards	"
do sabbet, 20 yards.	"
do cotton shirting, bleached, 20 yards	"
do cotton shirting, unbleached, "	"
do oil cloth, 10 yards.	"
do prints, 20 yards	"
do mousselin de laines, 20 yards	"
do black broadcloth from American wool, 20 y'ds.	"
do blue, do do	"

Competition open to any part of the United States.

NEEDLE, SHELL AND WAX WORK.

Best ornamental needle work	Dip. and 3
do ottoman cover.	"
do table cover	"
do group flowers	"
do variety worsted work	"
do fancy chair work with needle	"
do worked cushion and back	"
do worded collar and handkerchief	"
do woolen shawl	"
do 2d do	2
do worked quilts	Dip. and 3
do white quilts	"
do silk patch work quilts	"
do port-folios worked	"
do silk bonnets	"
do straw bonnets	"
do lace capes	"
do lamp stand mats	"
do 2d do	2
do ornamental shell work	Dip. and 5
do 2d do	3
do specimen of wax flowers	Dip. and 5
do 2d do	3

Discretionary premiums will be awarded for articles of merit not included in the above list.

FLOWERS.—PROFESSIONAL LIST.

Greatest variety and quantity of flowers	5
Greatest variety	5 | Best 24 dissimilar blooms
Greatest variety	5 | Best 24 dissimilar blooms
Best 10 varieties	3 | Best seedling
Greatest variety and number	3 | Best seedling
Best 12 varieties	2 |
German <i>Asters</i> —Best collection,	3
Best and greatest variety	3 | Best 24 varieties

AMATEUR LIST.

Greatest variety and quantity of flowers	Silver medal.
Greatest variety	Silver medal | Best 12 dissimilar blooms
Greatest variety	Silver medal | Best 12 dissimilar blooms
Best 6 varieties	3 | Best seedling
Greatest variety	3 | Best seedling
Best 12 varieties	2 |
German <i>Asters</i> —Best collection,	3
Best and greatest variety	3 | Best 12 varieties

GENERAL LIST.—Open to all competitors.

Best collection of green house plants owned by one person.	2d best 2; 3d do	Wash. Let.
Best floral design	Silver medal	Best and largest basket bouquet with handle
2d best	"	2d best
Best floral ornament	Silver medal	For the most beautifully arranged basket of fl's
2d best	"	Best floral exhibition by any Horticultural Society
Best hand bouquet "flat"	3	Gold Medal
2d best 2; 3d do	Wash. Let.	
Best hand bouquet "round"	3	

Premiums on Fruit.

APPLES.

For the greatest and best variety of good table apples, 3 of each variety, named and labelled, grown by exhibitor, Dip and 10 Trans. 2d best 5; 3d do Trans. The best 12 varieties table apples 5; 2d do Trans. & 2 The best 6 winter varieties 5; 2d do Trans. & 2 For the best fall seedling apple, for all purposes, with description of tree, history of its origin, &c. One dozen specimens to be exhibited, 5; 2d best. 2

PEARS.

For the greatest number of varieties of good pears, named and labelled, Dip and 10 Trans. 2d best 5; 3d do Trans. For the best collection of first rate autumn pears, named and labelled, Dip and 5; 2d best Trans. & 2 For the largest and best collection of winter pears, named and labelled, Dip. & 5; 2d best Trans. & 2 Best collection of newly introduced pears, with a description, &c., Dip. & 10

PEACHES.

Best 12 varieties labelled, Dip. & 5; 2d best 2 do 6 varieties labelled 3; 2d best 2 do 12 peaches 2; 2d best Trans. do seedling variety, 6 specimens 3; 2d do 2

PLUMS.

Best collection plums, 6 specimens each variety, Dip. & 5; 2d do 3 Best 6 varieties of good plums, 6 specimens each 3; 2d do 2 Best 12 plums choice variety 2; 2d do Trans. Best seedling plums, with description, Dip. & 5; 2d do 2

NECTARINES AND APRICOTS.

Best and greatest number of good varieties, 6 specimens each, labelled, 3; 2d do 2 Best 12 specimens of any good variety, 2; 2d do Trans.

QUINCES.

Best 12 quinces of any variety 3; 2d best 2; 3d do Trans.

GRAPES.

Best and most extensive collection of good native grapes, grown in open air, 5; 2d do 2 Best 3 varieties of native or foreign grapes, grown under glass, 3 bunches each to be shown, 5; 2d do Trans. Best dish of native grapes, 6 specimens of any variety, 3; 2d do 2 MUSKMELONS—Best 6 specimens of any variety, 3; 2d do 2 CRANBERRIES—Best peck of domestic culture, 8; 2d do 5 To be accompanied with a full description of the manner of cultivation, nature of soil, &c.

Any premiums may be withheld in the discretion of the committee, if the samples exhibited are not worthy of a premium. The fruit exhibited for which premiums are awarded, to be at the disposal of the committee.

12 volumes of Downing, common edition, and 12 of Thomas' Fruit Cult., will be awarded by the committee, in their discretion, for choice fruits not enumerated.

VEGETABLES.

12 best stalks celery	3	Best bunch double parsley	3
6 best heads cauliflower	3	Three best squashes	2
6 best heads broccoli	3	Largest pumpkin	3
12 best white table turneps	3	12 best ears seed corn	3
12 best carrots	3	Best half peck table potatoes	3
12 best table beets	3	2d best	3
12 best parsneps	3	Best seedling potatoes	3
12 best onions	3	For the best and greatest variety of seedling potatoes	10
3 best heads of cabbage	3	of approved varieties	
12 best tomatoes	3	Best and greatest variety of	
2 best purple egg plants	3	vegetables raised by exhibitor	10
12 best sweet potatoes	3		
Best half peck Lima beans	3		
Best half peck Windsor beans	3		

Discretionary premiums will be awarded on choice garden products not above enumerated.

PAINTINGS AND DRAWINGS.

Best specimen of annual painting in oil, by American artist,	Dip. & 10
Do do in water colors do	" 10
Best specimen annual painting in oil by foreign artist,	" 10
Do do in water colors do	" 10
Best specimen cattle drawing	" 10
Best drawing, show grounds for society	" 5
Best portrait of some animal of merit of an improved breed (the painting to be the property of the society)	" 25

STOVES.

Best cooking stove for wood fire	Silver medal	5
2d best	Silver medal	5
Best cooking stove for coal	Silver medal	5
2d best	Silver medal	5
Best parlor stove,	Silver medal	5
2d best	Silver medal	5
Best apparatus for warming dwellings and public buildings,	Silver medal	5

MISCELLANEOUS ARTICLES.

Best iron gate for farm purposes	Silver medal	
do ornamental cast iron vase on pedestal	"	
do water pipe of water lime, &c.	"	
do sample drain tile	"	
do drain tile or pipe draining machine	Dip. and 10	
do quarter of acre osier willow and the specimen of product manufactured	Silver med.	5
Best wire bundle fence	Silver med.	5
Best water ram or other hydraulic apparatus	"	

For improvements in machinery useful to the farmer and having valuable properties, discretionary premiums will be awarded.

DISCRETIONARY PREMIUMS.

Will be awarded for articles of merit exhibited by Mechanics, in all the various branches—and it is hoped that a general exhibition will be made.

Plate will be substituted for money premiums in all cases, at the request of the winner.

GRAIN.

Best sample winter wheat not less than 5 bushels,	5	Best sample Indian corn, 5 bushels, 5; 2d do	3
2d best	3	Best sample buckwheat, 1 bushel 3; 2d do	2
Best sample spring wheat 5 bushels, 5; 2d do	3	Best sample flax seed, 1 bu. 3 2d best	2
Best sample rye, 5 bushels, 2d best	3	Best sample hops, not less than 25 lbs. 5; 2d do	3
Best sample oats, 5 bush. 2d best	3	Best sample timothy seed, 1 bushel 3; 2d do	2
Best sample barley, 5 bu. 2d best	3		

TO BREEDERS.

To the breeders of the best bull over three years old in Durham, Hereford, Devon, and Ayrshire classes, each a Diploma

FOREIGN STOCK

Cattle.

Best bull over 3 years of any breed dip & 25	2d do 15; 3d do	10	Best cow over 3 years, dip. & 25	2d do 15; 3d do	10
Best bull 2 years old, dip & 15	2d best 10; 3d do	5	Best heifer 2 years	dip. & 15	5
2d best 10; 3d do	5	Best 1 year old heifer	dip & 10	2d best 10; 3d do	5
Best bull 1 year old dip & 10	3d best 5; 2d do	3	Best heifer calf	dip & 5	3
2d best 5; 3d do	3	Best heifer calf	dip & 5	2d best	3
Best bull calf dip & 5	3				
2d best	3				

Horses.

Best stallion over 3 years diploma & 25	2d best brood mare dip. & 25	8
2d do 15; 3d do 8; 4th, Youatt	2d best 15; 3d do 4th best	Youatt

SHEEP.—Long-wooled.

Best buck, dip. & 10	Best pen 5 buck lambs dip. & 10	
do pen 5 ewes dip. & 10	do pen 5 ewe lambs dip. & 10	

Middle-wooled.

Best buck dip & 10	Best pen 5 buck lambs dip & 10	
do pen 5 ewes dip & 10	do pen 5 ewe lambs dip & 10	

Merinos and their grades.

Best buck dip & 10	Best pen 5 buck lambs dip & 10	
do pen 5 ewes dip & 10	do pen 5 ewe lambs, dip & 10	

Saxons and their grades.

Best buck dip & 5	Best pen 5 buck lambs dip & 10	
do pen 5 ewes dip & 10	do pen 5 ewe lambs dip & 10	

PREMIUMS OPEN TO ALL.—Cattle.

Best bull over 3 years old, dip.	Best cow over 3 years old, dip.	
do bull 2 years old, dip.	do heifer 2 years old, dip.	
do bull 1 year old, dip.	do 1 year old, dip.	
do bull calf, dip.	do heifer calf, dip.	

Horses.

Best stallion dip.	Best brood mare dip.	
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Sheep.

Best long woolled buck, dip.	Best pen 5 ewes, mid. wool. dip.	
do middle-wooled buck, dip.	do pen 5 ewes, Merinos, dip.	
do Merino buck, dip.	do pen 5 ewes, Saxons, dip.	
do Saxon buck, dip.	do pen 5 buck lambs, dip.	
do pen 5 ewes, long wool. dip.	do pen 5 ewe lambs, dip.	

No animals can compete for the premiums in this class, unless entered on the morning of the 12th of September by 10 A. M. This class is open to prize animals who have heretofore taken the first premiums of the Society; and animals can be entered for this class, which are also entered in other classes for competition.

—DIPLOMAS AND MEDALS ARE AWARDED BY THE SOCIETY AS EVIDENCE ONLY OF SUPERIOR MERIT.

Agricultural Geology.

BY J. HALL.

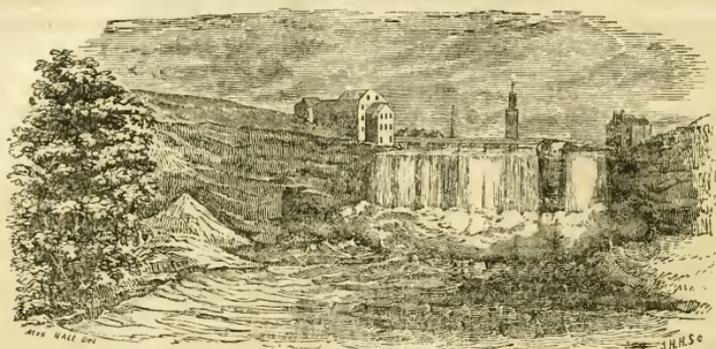
NIAGARA GROUP—*Geodiferous Lime Rock* and *Calcareous Slate*, of Eaton. *Lockport Limestone*, and *Rochester Shale*, of the Annual Reports of the Fourth District.

This group consists of two distinct members, a shale and limestone, which, possessing many features in common, are recognized as the products of one period; during which, however, there was an important change in the lithological products, and a less one in the organic forms.—The shale continues a very uniform deposit throughout the whole extent of the district, while the limestone, from a thin, dark-colored concretionary mass, becomes an extensive and conspicuous rock constantly increasing in thickness in a westerly direction, even far beyond the limits of the State. The Cataract of Niagara is produced by the passage of the river over this lime stone and shale; and from being a well known and extremely interesting point, as well as exhibiting the greatest natural development of these rocks within the limits of the State, this name is adopted for its designation.

The members of this group are: 1. Argillaceous, or (in many localities) argillo-calcareous shale. 2. Limestone, presenting several different varieties.

Niagara Shale.—The lower part of the Niagara group exhibits a great development of dark, bluish shale, which on exposure gradually changes to grey or ashen color, and forms a bluish or greyish marly clay. In this state, it is undistinguishable from the ordinary clays; and its outcropping edges, where long weathered, are often considered as claybeds. This character is well exhibited at Lockport, on the northern slope of the terrace where the canal and railroad have been excavated; and also at numerous localities in Wayne and Monroe counties. The depth of tint in the clay differs according to degree of exposure, the outer portions becoming of the usual yellowish-brown color of the ordinary soils.

When freshly excavated, the mass is tough, and breaks irregularly, some portions only exhibiting a slight tendency to slaty structure.—After weathering for a short time, it cracks in all directions, and soon falls into innumerable angular fragments, when the disintegration goes on till it forms the soft clay. This change seems due to the intimate mixture and decomposition of iron pyrites in the rock; and its presence is also indicated by the production of sulphate of alumina, on decomposition in favorable situations, and upon calcination. In color, aspect, manner of weathering, and other properties, it closely resembles the shale of the upper part of the Hamilton group in the Fourth District.—Neither are micaceous, and both are slightly calcareous, probably from the great amount of



VIEW OF THE UPPER FALLS AT ROCHESTER (FIG. 24.)

organic matter. The Niagara shale, however, is destitute of those spheroidal concretions, which in the Hamilton group are more or less common, and in many places abundant. The only approach to a concretionary form seen in this shale, is in the increased thickness of some layers of impure limestone; and this appears rather due to a greater development of corals or other fossils, around which the mud accumulated more freely than elsewhere. A few such examples may be seen in the banks of the Genessee at Rochester.

The lower part of this shale is mostly free from calcareous bands; while towards the middle and in the upper part, we find numerous thin, wedge-form or continuous layers of impure limestone, mostly composed of corals and other fossils, and their surfaces covered with the same, forming beautiful and interesting specimens for the cabinet. The perfect similarity of these with specimens from Dudley in England, together with the identity of many of the organic forms, renders the conclusion unavoidable that the two are formations of the same age. These layers are from half an inch to two inches thick; and from the decomposition and sinking down of the shale, they are usually found broken into fragments. One of the most striking features of this rock, is the abundance of its fossils. Scarcely a locality can be examined where they do not occur in great perfection.

The higher beds are well developed in the fall at Wolcott Village, and the lower part of the formation can be examined by following down the ravine for a mile. This is the most eastern locality in the district where we find the rock exposed. West of this point, throughout the county, it is seen in all the small streams which flow into the lake.

At Rochester it forms nearly the whole height of the upper fall, and the banks on either side of the river for more than a mile below. This place offers a fine exhibition of the rock, and is one of the best localities in the State for a natural

exposure. The constant undermining of the banks precipitates large masses to the bottom, and their fossil contents are thus made accessible. At this locality, its upper and lower limits are both plainly seen. Above it passes gradually into an impure limestone which forms the beds of passage from the shale to the limestone above. The fossils mostly disappear at this point, and few are found in this part of the mass. Below it terminates abruptly, resting directly on the calcareous beds forming the upper member of the preceding group. There is never any gradual passage from the one to the other, and the peculiar fossils of the shale do not appear till we ascend some distance above the limestone. Nevertheless it is true that two or three of the common fossils of this shale have been found in the limestone below, and at the same time the greater number marking the Clinton group terminate below that rock. It may therefore remain a question, perhaps, whether these calcareous beds should be included in the Niagara group. Since, however, they bear a close analogy to the lower limestone of the Clinton group, and terminate above abruptly without offering any marks of gradual passage to the next higher group, I prefer for the present to include them in the lower, thus presenting a natural lithological assemblage. The presence of a few fossils common to the limestone and shale above would apply equally to all parts of the preceding group, a few forms being common to all parts of both.

The precise arrangement at Rochester is as follows:—The terminating calcareous beds of the Clinton group consists of fifteen or twenty thin courses, each separated by a layer of shale sometimes of equal thickness to the limestone, though generally thinner. The shale separating the lower courses is green like that below, but higher it becomes of the same color and character as that above. The interlaminated shale is in all cases destitute of fossils. The shale is partially exposed in several small streams, and in the lower escarpment which extends westward from

Rochester. In the town of Sweden, that escarpment has become higher, and the shale is in some places well exhibited. One of the best localities is at Marshall's saw-mill, in the town before mentioned, where the small stream (a branch of Salmon creek) has excavated its channel in this rock. The banks scarcely differ in color and appearance from the soil around, and it is only from fossils that the mass is distinguished from ordinary clay. At one point where there has been a fresh exposure, the rock appears in all its character, and contains abundance of fossils.—*Natural History of New York.*

Spring Tooth Horse Rake.

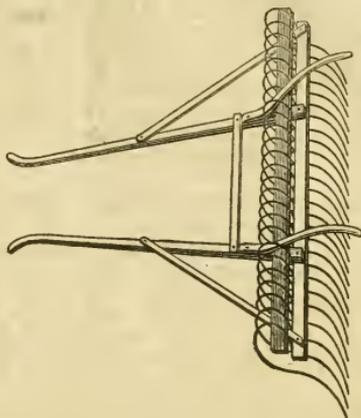
MESSRS EDITORS:—As your paper is a medium through which the farmer expects to receive information in reference to such improvements in agriculture, and agricultural implements as are going on in our country, I have thought proper to present to your readers some account of a very valuable improvement in *Horse Rakes*, which, though not altogether new, has not been noticed to any considerable extent in our agricultural journals, and will no doubt be entirely new to a large portion of the readers of the *Genesee Farmer*.

The following are some of the advantages which the Spring-tooth Rake possesses over all others: They are light, and may be carried with ease by one man all about the farm; the elasticity of the teeth prevents their breaking or fastening to any obstruction with which they may chance to come in contact; they operate on very rough, uneven and stoney ground, doing the work completely where no other horse rake can be used at all; they are exceedingly nice for raking barley, or clover that is cut for seed; they rake cleaner and faster, and shell out less seed than any other, either hand or horse rake, and are in all places, and for all purposes superior to any other Horse Rake in use.

In addition to the foregoing advantages the *Spring-Tooth Horse Rake* is emphatically the *labor-saving and money making machine* when taken into the wheat stubble. It is an ascertained fact that when wheat is harvested in the usual manner, from one to two bushels per acre is left on the stubble, and about 20 or 25 acres may be gleaned in a day with one horse. Thus it appears that nearly enough wheat has heretofore been left on the ground to seed it, or supply the whole county with seed wheat; while some, who are well qualified to judge in reference to it, think that enough has been left on the stubble ground in past years to furnish bread for the entire farming population of the wheat growing districts.

The Rake, as usually made, has a head about 9 feet long, and from 20 to 24 elastic wire teeth.

It does not revolve, but is raised over the winrow with ease and facility, without stopping the horse; the whole rake weighing only about 60 pounds, and the thills being upheld by the horse, the holder has only to lift one end of the rake by



Spring-Tooth Horse Rake. (FIG. 25.)

the handles, and the advance motion of the horse will have carried it over the winrow, while the holder can lift it up and let it down properly. The holder bears down on the handles more or less according to the size of the winrow he wishes to collect, and leaves the winrow when and where he pleases, by quickly raising the handles as before stated.

The accompanying engraving will more clearly convey a correct idea of the construction and appearance of the rake.

Yours, &c., JOHN LAWRENCE.
Wayne Co., N. Y., 1848.

The rake described by our correspondent is manufactured by MESSRS. E. & T. G. YEOMANS of Walworth, Wayne county, N. Y. For further information, and certificates, &c., concerning the utility of the rake, the reader is referred to an advertisement on the second (advertising) page of this number of the *Farmer*.

CATERPILLARS.—An English agricultural paper gives the following method of destroying caterpillars, which was accidentally discovered, and is practiced by a gardener near Glasgow. A piece of woollen rag had been blown by the wind into a currant bush, and when taken out was found covered by the leaf devouring insects. Taking the hint, he immediately placed pieces of woollen cloth in every bush in his garden, and found the next day that the caterpillars had universally taken to them for shelter. In this way he destroys many thousands every mofning.

OBTAIN good seed, prepare your ground well, sow early, and pay very little attention to the moon.

Perservation of Botanical Specimens.

MESSRS EDITORS:—As that season of the year is fast approaching, in which the study of Botany should be commenced, I send you the following (in the absence of better) directions for preserving Botanical specimens.

The study of Botany should be commenced with the first appearance of flowers in the spring, and continued with ardor during the whole season, if we wish to have a complete assortment of plants; and then renewed again the following season.

There are two methods of preserving Botanical specimens, much less laborious than those generally given in our text books, and yet equally good. The student should furnish himself with a good supply of paper. In preserving mine, I used old newspapers. These are generally printed in folio-form. By being folded again they are made quarto. If the papers are of good size, they will be large enough when thus folded. (If the plants are large, use large papers. The papers should always project an inch or two beyond the plants on every side. In these spread the plants, not always placing them in the middle of the sheet, but spread about, so that when placed in a pile, the pile may be of uniform thickness.) In papers folded in quarto I placed my specimens, thus having two thicknesses of paper above, and two below them; so that when placed in a pile, there were four thicknesses of paper between the plants. Having thus placed them, I wrote on the margin of each sheet, the name of the plant, the class, order, &c. I placed the papers in a pile, and subjected them to a moderate pressure, (not sufficient to mash, or bruise the stems,) increasing it a little daily as the drying progressed. Every night I opened the pile, examined each plant, called it by name, or read the name, if I did not recollect it, closed the sheet again, (and so of all the rest,) and spread them all side by side in an unoccupied room, and left them to dry till morning. In the morning I again read the names, &c., piled the papers, and subjected them to pressure, somewhat increased each day. Every succeeding night and morning I went through the same process, and thus learned the names, (both scientific and common,) &c., of my plants, and succeeded in preserving them in a very good state. When the number of occupied sheets is small, empty ones should be placed above and below, sufficient to make the pile one or two inches thick. When the number of sheets is considerable, boards of the size of the sheet should be placed at intervals of one or two inches from each other, to facilitate the operation. When nearly dry, the pressure may be increased *ad libitum*.

Another, and perhaps better, method is, to place the plants between single sheets of white

paper, (common printing paper is best,) and place these between the news papers, (brown wrapping paper will answer in this case,) and having left them under pressure twenty-four hours, (more or less,) transfer the white sheets with the plants to an other set of news papers, place these under pressure, and spread, or suspend, the first set to dry. Proceed thus till the plants have become dry. The press may consist either of weights laid on the pile, or of a lever-press. The latter is preferable; and may consist of a board with a post fastened to one end of it, a lever, a block, for a fulcrum, to be placed on the pile, and a weight.

Fairport, N. Y., March, 1848.

H.

Shrinkage of Meats in Cooking.

MESSRS EDITORS:—This subject promises to be as prolific as the chess question, or the potato rot. It can hardly be so abstruse as to defy investigation, or the arrival at some *rational* of its causes. As to the effects of the moon, it can have no more influence than a big skim milk cheese hung high in the air. Whatever power the moon possesses of attraction, repulsion, or as an alternative, is the same at one period as at another, as the same body of matter is there at all times. Its different ages, which are entirely arbitrary, is not marked by any visible change at its *quarter* more than at its *thirds*, and its increasing light does not by any effects indicate to our senses, or by analysis, but what it is wholly inert and powerless.

Now if some one would take a given number of pounds of pork, and after boiling, again weigh it, it would settle the point, whether there was an actual loss, or whether this shrinkage was from contraction only—in which case it would not be an evil to be complained of. But if there occurred an absolute loss of weight, more than the loss of salt, it must either contain a large quantity of gelatin, or glue, soluble in water, and held in solution in the pot liquor; or from some peculiar formation of the cellular tissues, the oleagenous or fat matter is given out and floats on the top.

It is very possible, from some peculiar constitutional structure or incipient disease, that of two creatures fattened on the same food and killed at the same time, one may shrink in cooking and the other not.

At any rate, if the subject possesses any importance let it be investigated, so that we shall be able to reason sanely, and not be groping in the dark, or in *moonshine* and charging it to Madam *Luna*, or becoming *Luna-tics* ourselves.

Ogden, N. Y., 1848.

H. Y.

WE have received several well written articles on this subject, but are unable to publish others for want of space.

SPIRIT OF THE AGRICULTURAL PRESS.

SWAPPING HORSES.—The editor of the *Mass. Ploughman* talks thus sensibly about "dickering" in horses, &c.

Think twice before trading off a horse that has served you well on the whole though he may have some faults. We have known men to swap off horses that had but one or two faults for others that had a dozen. This generally arises from the bad temper of the owner. A horse refuses to draw before oxen, and he is put off for one that is not willing to draw any where. Another is high spirited and the women can't drive him; he is put off for one that cannot be coaxed out of a walk. Another is not willing to be caught in the pasture; he is exchanged for one that is worthless when caught.

A low horse that hardly keeps your boots from the ground, is put off for one that you cannot mount without a block. A lazy horse is put off for one that has not patience to let you be seated in the chaise before he must go.

On the whole we would not advise farmers to think of changing off any of their stock for slight faults; whether cattle or horses or children or wives. It is better to bear with them than run the risk of faults they know not of.

CHLOROFORM APPLIED TO A PIG.—We are not sorry to see that this new and wonderful pain-destroying agent is likely to come into use for alleviating the sufferings of the inferior animals, in their passage from the midst of life to the salting tub. The Leeds (Eng.) Times informs us that the day before Christmas, Mr. Horace Watson, druggist, of the respectable village of Laceby, near Grimby, wishing to give "his greasiness as little uneasiness" as possible en route to the pork barrel, caused our friend the butcher to administer through piggy's monstrous nostrils *quantum sufficit* of chloroform. "Grunt," naturally fond of sleep, was soon in the land of forgetfulness, when our hero (in the blue frock) very conveniently extracted the requisite portion of vital fluid from the fountain of his existence, leaving the pig, after being scalded, cut up, and salted, apparently not a whit the wiser for what had passed.

IMPROVEMENT IN GRINDING WHEAT.—A new mode of grinding has of late been invented in Maryland, consisting of ridding the grain of its skin or bran before grinding.—This is said to be done very completely, and to be attended with several important advantages. These are, that all the different sorts of wheat, the red as well as white, are rendered equally good, other things being equal, whereas the red wheats are now sold in most markets for several cents less per bushel than the white. All the brown particles are removed effectually from the flour; a saving of from 40 to 50 pounds per barrel is gained; time is also saved to the amount of from 25 to 50 per cent. The flour is greatly improved for hot climates—a very important item to the shipping interest.—*Prairie Farmer.*

AMERICAN PRODUCTIONS AND MANUFACTURES IN ENGLAND.—A London correspondent of the Register, in describing the novelties of the place, states that "it is now no uncommon thing to see posted in the streets, 'American cheese, lard,' &c.; American empty flour barrels; 'Corn bread,' with the corn stalks sticking out of the window, to show that it is the real Simon Pure. Also, 'American boots,' or boots made on the American plan; 'American over shoes,' and 'American clocks,' and last, though not least, 'Baby Jumpers.'"

GROWTH OF COTTON IN INDIA.—Advices from India have been received at Manchester, England, stating, on the authority of the Government collector of the Dharwar district, that there are at present at least 20,000 acres of New Orleans seed cotton under cultivation in that district, and that, had it not been for the deficient fall of rain last monsoon, there would have been at least 60,000 acres under cultivation. The cultivation of cotton is extending fast into the Nizam's country.

CORN MEAL.—F. LAPHAM, Esq., of Egypt, in this county, has presented us with a sample of Indian Meal of a very superior quality. He manufactures it on a new plan for the English market; but he says he knows no reason why Rochester folks may not have an extra article of meal as well as the cocknies!

We have shown Mr. L.'s product to our Rochester millers, who pronounce it capital. And we have tried it by a less fallible 'test,' and have come to a like conclusion!—*Rochester Advertiser.*

GLASS MILK PANS are coming more and more into use in Europe. Their advantages on the score of cleanliness must be obvious. It were to be wished that societies or institutes would appoint a standing committee, and put aside a small portion of their ample funds for the instant importation of sample articles invented abroad, connected with agricultural and rural economy. True it is, that in general, this may be left to the vigilance and rivalry of tradesmen and manufacturers; but many years may elapse before we get the benefit of many things which might at once be profitably introduced. The same reason and policy that prompt the offer of premiums for useful things of home invention, would warrant the introduction of things which have been recently invented and patronized by agricultural societies abroad. Satisfied that glass milk pans (on which the manufacturer should indicate the capacity of the vessel) would be a valuable acquisition to our dairy women, we respectfully suggest the importation of a dozen, and the offer of a premium to the glass manufacturer who shall first produce them in this country at a cost that will justify their being brought into general use. It has been seen in an interesting and valuable "Essay on the Management of Holstein Dairies," published in the Farmers' Library, that there the dairy women are allowed one dollar a year for "pan money," and charged for all they break; yet they always "make by the operation." Let us have glass milk-pans.—*Farmers' Library.*

THE THERMOMETER CHURN, figured and described in the March number of the Farmer, is noticed as follows in the *Massachusetts (Boston) Ploughman*:

A new patent churn is now offered for sale at the establishment of Ruggles, Nourse & Co., in the Hall next to our office.

We have not yet had an opportunity to test a churn of this kind, but we think the principle on which it is constructed is good, and we doubt not it is an improvement on all former patterns.

This churn is so contrived that the cream may be kept at the right temperature during the whole churning process, by means of heated water that comes in contact with the sides of the tub which holds the cream. The heat of the water is gauged by a thermometer that stands constantly within it, and indicates when the same should be increased or diminished.

It is of the first importance to regulate the temperature of the cream during the time of churning. Yet the practice of turning water into the cream is vicious. And the placing of a churn near the fire will never warm the cream equally. But water in contact with the side of the churn may have its temperature so regulated as not to injure the cream.

We learn from those who have tried these thermometer churns, that they are the best which have yet been contrived. We have one on hand that we intend to try as soon as we have cream enough for the purpose.

FOR A KICKING COW.—A few weeks ago, we stood for some time to witness an attempt to milk a cow that had just had her calf taken from her, and who kicked so furiously as to render it dangerous to attempt the operation. Coaxing and beating were of no avail, and it at length struck us to suggest that the kicking leg be tied up. A cord was procured, a slip-knot in one end passed round the leg below the knee, and the other end thrown over a beam; drawing away on this, she soon found she had no leg to spare to kick with, and was as quiet as a lamb.

FLOUR AND WHEAT IN MILWAUKEE.—We understand that about 200,000 bushels of wheat are in store for eastern market, ready to be shipped from the different warehouses in this city. The wheat has been purchased at an average of about 75 cents per bushel. Of FLOUR, about 15,000 barrels are ready for shipment.—We also understand that the amount of both wheat and flour exceeds that in store last year, at this time.

The present good roads will be likely to add considerably to the surplus here, before the navigation opens. On Saturday, about 4,000 bushels of wheat were brought in. Only about one-tenth that comes to market here is spring wheat.—*Milwaukee Wisconsin, March 8th.*

HOW TO GROW RICH.—Nothing is more easy, says Mr. Spaulding, than to grow rich. It is only to trust nobody; befriend none; to heap interest upon interest, cent upon cent; to destroy all the finer feelings of nature, and be rendered mean, miserable, and be despised, for some twenty or thirty years, and riches will come as sure as disease, disappointment, and a miserable death.

Brief Notes from Correspondents.

DESTROYING WILLOWS, &c.—In your last number of the Genesee Farmer, Milo has undertaken to inform the public how to extirpate willows that grow in marshes and along the banks of creeks. I know a method so much better, and requiring so much less labor, I will give it to the public if you think it worthy a place in your valuable Journal.

Cut your willows as close to the ground as you please, the longest day in the year, which occurs about the 20th of June, and not one in fifty will ever sprout, and what few do I have never known to leaf out the next year. Alders and other marsh brush may be killed in the same way.—G. B. GILLETT. *Le Roy, March, 1843.*

WIRE FENCE.—A farmer whose head is turned by an article in the last Farmer in relation to wire fence, says that a very great saving and improvement may be made in fence by the use of a single horizontal stretched wire, in the following manner:—Lay the fence in the usual way five rails high; instead of driving stakes at the end of the rails, set them singly at the middle of the rail, and run the wire from stake to stake, and nine inches above the top rail. The stakes should be driven alternately on each side the fence, and in a straight line, in order to support both fence and wire. S. W.

THE MORGAN HORSE "GENERAL GIFFORD."—We direct attention to the advertisement of the owner of this splendid horse. A correspondent says:—

MESRS. EDITORS:—Being requested by one of the owners of the celebrated Morgan Horse, General Gifford, to give you my opinion of him, I do so with pleasure. I have a mare with foal by him, and consider him a perfect model for a road horse, either for saddle or harness. He appeared to me, when I saw him last fall, to possess all the fire, strength, and speed, attributed to the highest blooded specimens of his stock, combined with extraordinary docility of temper.—Mr. Mason informed me that he had timed his speed and that he had trotted his mile within three minutes, since he purchased him, a statement of the truth of which I have no doubt, from a *dash* I saw him make under the saddle.

His splendid flowing mane, and the inimitable arch of his neck, and fire of his eye as he pranced impatient of rest when led out of the stable, gave me the first conception I ever had of the truth of that part of an ancient description of the horse, which speaks of "his neck" being "clothed with thunder;" and as he stood fronting me after being ridden half a mile, with his head thrown in the air, precisely like the figure of his sire, the Gifford Morgan, contained in the Cultivator, I could well imagine why the old Morgan horse, which this and his sire are said so closely to resemble, was always a favorite parade horse. He weighed, when I saw him last fall, only in decent working condition, 1040 pounds—and, in my estimation, is unsurpassed in all the qualities which make a road horse valuable, including easiness of keep, speed, strength, and power of endurance. J. DORR. *Scottsville, N. Y., 1843.*

In remitting payment for several copies of the Farmer, a friend gives the following reasons for supporting agricultural papers. His laconic remarks are "in order":—

Although I am not a farmer I am a well wisher of the farmers and mechanics—as I am a miller by trade and often annoyed with foul and smutty wheat. If every farmer would take an agricultural paper, this would soon be as it should—good clean wheat, instead of smutty and foul, which so often makes fretful millers and scolding wives. Then I say, farmers, mechanics, and all, take the Genesee Farmer. It opens to you the science of your profession—making clear and intelligible all that has heretofore been deemed chance. No farmer can fail to be wiser and richer, if he carefully peruses the well-stored pages of the Farmer. So thinks the "Boquet Miller." HENRY PALMER. *Essex, N. Y., 1843.*

ONIONS A REMEDY FOR SCALDS AND BURNS.—I wonder if the readers of the Farmer are acquainted with the virtue of onions in relieving the pain occasioned by a scald or burn. About ten years since my wife scalded her fingers so severely that several pieces of flesh came off from the bones.—After trying various remedies with a view of easing the pain without effect, she at length pounded an onion and applied it to her fingers though she had never heard of such a remedy. The pain ceased immediately and did not return, though her fingers were very sore for some time.—We have tried the remedy several times since and always successfully. E. S. GILBERT. *Burns, N. Y., 1843.*

EDITOR'S TABLE.

TO CORRESPONDENTS.—Communications have been received, during the past month, from Jno. McVean, H. Little, M. M. R., H. N. B. Rogers, B. W. S., Henry Palmer, B. S. Gilbert, C. H. Maxson, J. Dorr, G. B. Gillett, Jno. Lawrence, H. Y., Subscriber, L. Skorke, M. Eames, Rustic, Alleghany, G. A. M., Chas. P. Smith, A. Farmer, W. S. T., S. Davison, Joseph Carpenter, G. A. J., A. Willson, Inquirer, H. M. Stow, J. H., S. N. Holmes, and W. H.

THE publication of the Premium List of the State Ag. Society compels our printer to defer several articles which have been placed in type for this number—among others the communication of our Illinois friend on the "Wants of Western Farmers." For the same reason, (and the additional one that our advertising patrons afford us no opportunity to give *extra pages* of reading matter,) we omit our usual page of "gleanings from foreign exchanges"—together with answers to various inquiries.

"LIVINGSTON" is informed that we are in favor of giving both sides of all questions that may properly be discussed in an agricultural journal—and that his article, which is both appropriate and well written, would have been published months ago, had it been accompanied by the name of the author. [] Those who favor us with articles for publication, are reminded that the name of the writer should always accompany each communication, although it may be withheld from the public.

O. S. G., of Mantua, Ohio, will find the solution of several if not all his queries in the previous volume of this journal. The information desired would occupy nearly the whole of this number—and we certainly cannot find time to give it in a private letter as desired.

AGRICULTURAL BOOKS.—A correspondent (whose letter we have mislaid,) wishes us to specify ten or twelve of the best agricultural books; and suggests that we should keep an assortment of such works to supply school libraries, &c. We hardly think we could make a better selection of books than those mentioned in our premium list, published on last page of the March number. As we have frequent applications for books, especially from agents, by mail, we have ordered an assortment of the most popular works on agriculture, horticulture, &c., which we shall receive in a few days.

The advertising department of our present number is filled with matters worthy the attention of farmers and horticulturists generally. We direct attention to it, for the benefit of readers as well as advertisers.

THANKS.—We again acknowledge our indebtedness to those individuals who are engaged in extending the circulation of the Farmer. The daily additions to our subscription list are truly encouraging. The following is one of the numerous substantial and complimentary letters received by the Publisher since the commencement of the present volume:—

DEAR SIR:—I again enclose \$8 for twenty more subscribers to the Farmer. I will continue sending as fast as 20 names are added to the list. The price is so trifling that no person who is at all interested in agricultural affairs can refuse to take it. The only excuse assigned to me was by a farmer to-day, who declined taking it for the alleged reason that it reminded him too forcibly and too frequently of what he ought to do, but did not do, on his farm; that he did not like this negligence in farming placed so prominently before him. I prevailed upon him, however, to take it, and his name is on the list I send you.

The Horticultural Department, under Mr. BARRY, is deservedly popular with the readers of the Farmer in this region. I have taken the Farmer since its commencement, and I must say that his articles alone have been worth to me four-fold the subscription price, ever since his connection with that department.

I am no competitor for any of the premiums, nor do I expect or will I receive any compensation for any services I may render; but any further assistance I can give will be most cheerfully contributed by

Your ob't serv't, J. D. G. NELSON.
Fort Wayne, Ind., Feb. 2, 1843.

WOOD'S CAST-IRON PLOW.—The bill which passed the United States Senate, to renew the patent of this plow, has been defeated in the House of Representatives.



HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

The Fruit Garden.

The great interest felt at the present moment in regard to the Garden Culture of Fruits, in cities and villages, as well as among the Agricultural population, induces us to offer a few observations of a practical nature, which must of necessity be brief and imperfect, suggestive in some degree of the best mode of procedure, on this subject. The main considerations are the Situation, Aspect, Soil, Arrangement, Selection of trees, and Planting.

1. *The Situation* for a Fruit Garden should, if possible, be on a sloping and somewhat elevated ground, as well to admit of thorough drainage as to avoid fogs and frosts that frequently prove fatal in low places, unless they happen to be on the margin of a lake, or river of considerable size. Situation is a matter of much less importance in some latitudes and sections of country than in others; for instance, here in Western New York, in some ten or twelve counties the fruit crop seldom suffers from frosts even in the lowest situations. An observing fruit grower says that, to the best of his knowledge, there has not been a failure of the peach crop, even, more than once in ten years on an average, in a circuit of many miles from lake Ontario. Where no danger is apprehended from frosts the only evil to guard against, in low places, is too much moisture, producing a cold, wet subsoil, on which none of the finer fruits can be cultivated with success. In many parts of this State, however, as in some of the middle counties, such as Oneida, Herkimer, Otsego, and in Jefferson, Lewis, St. Lawrence, &c., where late spring frosts are prevalent and frequently destructive, low situations are completely unfit for fruit trees. Throughout Ohio, Michigan, and most of the Western States, one of the chief difficulties the fruit culturist has to contend with is the late spring frosts; and experience has fully proved that the only way to avoid them is to choose elevated sites for the trees.

Prof. KIRTLAND, of Cleveland, Ohio, who has

paid much attention to this subject, says in the "Western Reserve Magazine" for March, 1845: "Observation shows us that, with few exceptions, the more elevated the locality the greater certainty there is of fruit crops. The peach tree rarely fails on the high grounds in Burton, Mantua, Edenberg, Hartford, and Poland; and well cultivated orchards of the apple and pear trees bear some fruit every year. On the low grounds in the same townships, the peach is not productive more than one year in four, perhaps not so often, and the apple and pear very uncertain."

Early autumn frosts are also very injurious in low places in some parts of the country. The young wood of trees, on low grounds, is usually rank and soft, and unable to resist the effects of these frosts that come heaviest on such places. There are, however, in all parts of the country, a vast number of persons who can not choose for their garden the most suitable situation. Possessing, perhaps, but a small lot, from a fourth of an acre to an acre; selected, not from its adaptation to fruit culture or gardening, but on account of its convenience to their place of business; they are compelled to do the best with it just as it is. What is to be done in such cases, where the situation is unsuitable? Why, art must provide what nature did not. Protection must be given to the trees, both in spring and autumn, on the approach of untimely frosts.— This is easily done where the trees are trained or kept low. Pear, plum, apple, cherry, &c., may be grown in a dwarf or pyramidal form not to exceed six feet in height. Apricots and others may be trained on the walls or fences, or trellises, and in all these forms trees are easily protected by having mats or other suitable covering ready to throw over them on the approach of danger. And besides, such trees are more appropriate and profitable for small gardens than standard trees.

2. *Aspect.*—There seems to be a very general misapprehension of the effects of exposure among inexperienced cultivators. The supposition being that the tender trees should have a south aspect. Experience shows that this is wrong; the frequent freezing and thawing produced by such exposures being much more fatal than the more uniform cold of even a northern aspect. A correspondent of the Horticulturist writes (January 21, 1848,) from Schenectady, that a nurseryman there informs him "that his plantation of pears which do not receive the sun in winter till after mid-day have never been frost bitten, while those which receive the morning sun were much injured last winter as well as this." In the colder portions of the country it is better to avoid both a full north and south aspect, and the effect of high north and west winds should be broken by trees or some other object.

3. *Soil,* of all other things, is the most important, as depending on it are the health, fruit-

fulness, beauty, and longevity of the trees, as well as the size, fairness, and flavor of the fruit. In newly settled countries, in the fresh virgin soil, whole tracts of country may be found well adapted, in the natural state, to the production of nearly all the garden fruits. But a large proportion of soils, in their natural state, are not capable of producing the healthiest and most fruitful trees, and the fairest and finest flavored fruit, without due improvement and preparation. In the neighborhood of towns and villages, where land has been for a long time under culture, this is more particularly the case, and there more care is necessary in the preparation of the soil.

It is no trifling matter to plant a fruit garden in ungenial, ill-prepared soil. It is a sure method to produce loss and disappointment, instead of handsome, healthy trees and fine fruit. To give directions for the preparation of soil for any one particular class of fruits would be easier than to direct the making of a soil suited to all the fruits for a family garden. We know by experience that the apple, pear, and plum, require a stronger and heavier soil than the cherry, peach, or apricot, and the quince a more moist (not wet) soil than any of them. The natural defects of soils consist generally in being either too wet or too dry, too sandy and open, or too clayey and impervious to water and air. Open sandy soils are pretty sure to lack lime, potash, and other soluble minerals which go to form the ashes found when the leaves, wood, and bark of fruit trees are burnt. This has been clearly demonstrated by some exact analyses made by Dr. LEE, the Agricultural editor of this paper, of nursery soils in the vicinity of Rochester. The analysis was made to ascertain the cause of the death and bad growth of apple trees, on a soil well manured with stable manure and otherwise apparently in good condition. The result of the analysis showed that lime and potash, so essential to the organization of the apple tree, had been entirely exhausted by previous culture under apple trees. These necessary ingredients were supplied and the trees consequently made a fine, healthy growth.

Practically, experience has shown that a friable calcareous loam, not too rich nor too poor in organic matter, is the best for the general purposes of a Fruit Garden. On such we find the oldest, healthiest, and most productive trees of the various fruits. And this soil is easily made, at least around the trees. If the soil naturally contains too much clay, is hard and too retentive of moisture, trench it up and apply sand, muck, rotten chips or leaves, and lime. By this mixture, made agreeably to the dictates of good common sense, a friable calcareous loam will be formed. The unlearned reader is informed that the word *loam* means a soil that has clay and sand in fair proportions. A *calcareous* loam is the same with a due admixture of lime.

A peaty soil is entirely unfit for a Fruit Gar-

den, until well drained and prepared by the addition of clay, sand, lime, ashes, &c. Lime and potash are important ingredients in the ashes of the wood, bark, leaves, and fruit of the apple.—According to Dr. EMMONS' analysis, in the Journal of Agriculture and Science, there are in 100 parts of the sap wood of the pear 22 parts of potash and 27 parts of phosphate of lime, and 12 parts of lime; and in the bark, 6 parts of potash and 30 of lime. In the fruit of the pear, (according to a table of analyses of fruit and vegetables in the London Gardener's Chronicle, by Dr. THOS. RICHARDSON,) there are, in 100 parts of the ash, 44 of potash, 8 of soda, and 7 of lime. Thus we see how largely lime and potash enter into the composition of the tree and fruit of the pear, and all must be furnished by the roots out of the soil. And so it is with the apple. Dr. EMMONS' analysis shows in 100 parts of the ashes of the sap wood of the apple 16 of potash and 18 of lime, besides 17 of phosphate of lime, (same as earth of bones, or bone dust,) in 100 parts of ashes of the bark—4 parts of potash and 51 of lime. In 100 parts of the ashes of the fruit of the apple, according to Dr. RICHARDSON'S analyses, already quoted, there are 35 parts of potash, 26 of soda, and 4 of lime. In the ashes of the fruits of the cherry and plum, potash and lime are also found, by recent analyses, to exist in considerable quantities. What we learn from all these facts and experiments is, that lime and ashes may and must be used with manures, where the soil naturally lacks them.

4. *Arrangement, or Laying out.*—The form of the Garden must depend, in many cases, on circumstances beyond the control of the proprietor. Where it can be chosen, a square or parallelogram is preferred, as being easier divided into suitable compartments, and that is usually the form of most city and village gardens. In such gardens the usual and probably the best arrangement is to have a walk say 6 feet wide all around, within 12 feet or so of the fence or wall that surrounds and incloses the garden; another similar through the center. Cross-walks, 3 or 4 feet wide, may be made at suitable distances, making a series of compartments for culinary crops.

The borders on each side of the principal walks may be planted with fruit trees. The small fruits, such as gooseberries, currants, &c., can be planted along the edges of the smaller walks. The walls or fences may be used for training grapes, apricots or nectarines to, and the raspberries, strawberries, &c., occupy one of the wall borders. A garden of half an acre, laid out in this way, will contain upwards of 50 trees of the various fruits, beside the small fruits, and allowing room enough for all the vegetables required by an ordinary sized family.

5. *Selection of Trees.*—Much depends on a judicious selection of trees and varieties of fruit. The proportion of the several fruits is a matter

that depends entirely on the taste or purpose of the proprietor. Some will prefer more apples, some pears, others peaches, &c., as their partialities happen to run. As a general thing, however, in a garden apples should be admitted sparingly, and these should invariably be on paradise stocks, so that they can be kept in the form of dwarf or bushes, 5 or 6 feet apart. The rarest and finest sorts only should be grown, as the common varieties can always be bought cheap from the orchards. The pears should be mostly on quince stocks, grown as pyramids, branched from within 6 inches of the ground. They can be planted 6 or 8 feet apart. If trees could be had at the nurseries properly trained they might be safely removed at a bearing age; but as these can seldom be had of good form the best and most economical way is to procure good yearling trees, or at most two years from the bud, and if they are not in the proper shape they are young enough to be moulded by the knife into a suitable form. If some choice varieties are desired that do not succeed well on the quince they can either be double worked or taken on the pear stock, which by root pruning and disbudding in summer may be kept in the small pyramid form, as those on the quince, or they may be grown as half standards, branching at 3 or 4 feet from the ground. The cherries should be on the *prunus mahaleb* stock, which answers the same purpose as the quince does for the pear, produces a dwarf and prolific habit. They should be branched from the ground and take a bushy or pyramidal form. They are very easily protected from birds. Yearling trees are the best, as they transplant easily and safely and admit of training in proper form. They may be planted 6 or 8 feet apart in the borders. Peaches on plum stocks are more dwarfish than on the peach; but the peach on its own stock may be easily kept in the required size and form by early and careful attention. They should branch near the ground and take the form of a bush. The trees should not be more than one year from the bud. They can then be cut back and made to branch low and take the desired shape. They may be planted about 9 feet apart. Plums, apricots, and nectarines should be grown in the same form.

Standard trees are not appropriate for gardens, as they shade a large surface of ground, are tardy in bearing, and admit of little variety. The dwarf trees convey, at first sight, the idea of fitness to their position. They are within the reach of the cultivator, the fruit is less exposed to the winds, and is easily gathered. The trees are at all times easily protected against untimely frosts, and the roots being in a small circumference are easily fed with such nourishment as they may stand in need of. Nearly all the fruits grown in the way suggested will produce fruit the second and third year after planting. The trees of all kinds should be healthy and vigorous,

and purchased from a correct and responsible source, as nothing is more grievous than to have fruits prove false to their names.

All the trees of each fruit should, if possible, be planted together—that is, next to each other; giving, if there be any difference in the soil, the lightest and driest to the cherry, peach, apricot, and nectarine, and the heaviest to the apple, pear, and plum.

6. *Planting*.—The trees in ranges along the borders of walks should be so far from the walk as not to encroach upon it. The spaces should be measured off and the holes dug; let them be large enough to admit the roots all spread out in their natural position.

Pears on quince stocks, apples on paradise, and cherries on the *St. Lucie* or mahaleb, should, if budded low as they ought, be planted so deep that the point of union between stock and graft will be even with or rather below the surface. When the planting is done, or as it progresses, note in your record or register the name of every variety, commencing at the end of the row; if any happen to stand not in a row, describe the particular place so that it will be understood, and then labels will be superfluous and may be removed, as they are apt to be forgotten till they cut the body or branch of the tree.

Gardens being usually somewhat sheltered from winds, and the trees usually being of smaller size, staking is less necessary than in exposed orchards. Where there is the least danger, however, of the trees being moved by the winds, a neat stake should be set with the tree, so as not to injure the roots. Fasten the tree to it, say half way from the ground, having a band of straw or matting tied around the tree to keep it from being chafed on the stake.

The following is a *Select List of Fruits* of the highest character in nearly every part of the country, and from which the amateur may select without the slightest apprehension of having a poor one, or indeed any thing short of *first rate*.

APPLES—Summer—Ripening from August till October.—Early Harvest, Early Strawberry, Early Sweet Bough, Red Astracan, Early Joe, Dutchess of Oldenburg.

Autumn Apples—Ripening from September till November.—Hawley, Dyer, Gravenstein, St. Lawrence, Fall Pippin.

Winter Apples—from November till June.—Norton's Melon, Golden Reinette, Canada Reinette, Non-such or Red Canada, Seek no Farther, Esopus Spitzenberg, Swaar, Ladies' Sweeting, and Northern Spy. [The last has been served up on the tables of the Eagle Hotel in this city in beautiful condition on the 4th of July.]

PEARS—Summer—from August till October.—Madelaine, Osband's Summer, [*Summer Vergalien*], Bloodgood, Dearborn's Seedling, Summer Franc Real, Belle of Brussels, Bartlett.

Autumn Pears—from 1st of October till De-

ember.—Seckel, White Doyenne, Gray [or Red] Doyenne, Countess de Lunay, Louise Bonne de Jersey, Paquency, Ananas, Beurre Diel, Duchess d'Angouleme, Oswego Beurre, [Reed's Seedling,] Swan's Orange, [Onondaga,] Beurre Bosc.

Winter Pears—from December till April.—Chaumontel, Winter Nelis, Glout Merceau, Beurre d'Arremerg, Vicar of Winkfield, (for cooking.)

We have tested all the above pears on quince stocks, and find them to succeed well, being more prolific, fruit larger, fairer and finer than on the pear. We must except the Dearborn's Seedling, Bloodgood, Seckel, and Oswego Beurre, all of which grow very well on the quince, but have not borne with us.

PLUMS.—Royal Hatve, Green Gage, Imperial Gage, Washington, Jefferson, Lawrence's Favorite, Columbia, Huling's Superb, Duane's Purple, Coe's Golden Drop, Common late Damsen, (for preserves.)

PEACHES—giving a succession from 1st of August till October.—Early Tillotson, Early York, Haine's Early Red, Cooledge's Favorite, Yellow Alberge, Crawford's Early Malacoton, Jacques' Rareripe, White Imperial, Lemon Cling, Large White Cling.

CHERRIES—giving a succession from June till August.—May Biggarreau, or Beauman's May, Knight's Early Black, May Duke, Black Tartarian, Elton, Napoleon Biggarreau, Belle de Choisy, Sparhawk's Honey Biggarreau or Yellow Spanish, Black Eagle, Downer's Late, Carnation, Belle Magnifique, Large English Morrello. The three last are fine late tart cherries, for cooking, and with the May Duke and Belle de Choisy are of slower growth, and form small sized trees; the others are all rapid growers, and form handsome pyramidal shaped trees.

APRICOTS.—Breda and Moorpark.

NECTARINES.—Early Violet, Elruge, Boston.

Hedges and Hedge Plants.

THE subject of ornamental hedges and living fences begins to attract very general attention throughout a large portion of the country. The inquiries are, "What is the best plant for an ornamental hedge?"—"What is best for a strong impassable hedge?"—and, "What is the best for an evergreen hedge?"

For live hedges, on a large scale, for the farmer, perhaps our *native varieties of thorn* are the best and most economical that can be recommended for the Northern States. The plants are raised from seeds, which are easily obtained in every part of the country, or they may be purchased at a low price from the nurseries. The plants may be set out either at one or two years old, in a well prepared soil, and by regular and careful annual pruning or clipping, form in a

few years a close, strong, and beautiful hedge.

For extensive hedging in open exposed tracts of country, and particularly on the prairies of the west, the *Honey Locust*, (*Gleditsia triacanthos*.) offers many advantages. Its growth is very rapid, much more so than the thorn; it is armed with powerful thorns that render it fearful to men or animals, and its foliage is delicate and beautiful, like all the acacia tribe. It bears cutting well and is perfectly hardy. It is easily raised from seed, or the plants may be purchased cheap at the nurseries. Plants a foot high, one year from the seed, planted a foot apart, cut half back when planted and regularly cut every year, will in three years, or four at most, make a dense, impassable, and beautiful hedge. The common yellow locust, (*Robinia preadacacia*.) may be used for the same purpose, but is not so good, as it is attacked by a borer.

For ornamental hedges around gardens or pleasure grounds, the *Italian privet*, a sub-evergreen but deciduous in a northern climate, though it retains its foliage through November, is an excellent plant, propagated easily from cuttings, and easily cut and kept in any desirable size and form. It is of rapid growth, has elegant foliage with spikes of pure white blossoms which appear profusely in June, and afterwards bears clusters of black fruit, like small grapes. The plants may be set a foot apart, well cut back at planting; and, sheared once or twice during each succeeding season, makes in three years a very pretty hedge. The *Buck Thorn*, (*Rhamnus catharticus*.) which is raised from seed and managed in the same way, makes a beautiful hedge. Fine specimens of this are to be seen around Boston. The plants are set out at one or two years old, 8 or 10 inches apart, cut half back at planting, and each succeeding season cut back half of the season's growth, thus producing closeness until it attains the desired height. All live hedges should be kept in a pyramidal form, broader at the base and narrowing to the top—thus giving the bottom as well as the top the full benefit of air and light.

For ornamental *evergreen* hedges or screens, where strength is not requisite, the American Arbor Vitæ (*Thuja occidentalis*.) is very eligible, forming, in a short time, a dense, elegant wall of green, both in summer and winter. They may be taken 3 or 4 feet high, and set a foot or more apart, and may be kept in any desired form and height by shearing. The *Red cedar* is another evergreen that answers this purpose well, and is coming into general use.

But for a *strong*, and at the same time a beautiful evergreen hedge, none of these we have mentioned are equal to the *Norway Spruce*. Its strong, rapid growth, great hardness, and elegant green at all seasons, combine to place it at the head of this class of plants, and it cannot fail to be, in time, extensively used as a protection

to fruit gardens, orchards, and pleasure grounds, against the invasion of both human and brute depredators, and to ward off the severe north and west winds so injurious in many parts of the country to the culture of the finer fruits. ROBERT NELSON of Newburyport, Mass., an experienced man, says, in the Horticulturist for September last, that in Denmark he has planted and managed several thousands of yards of it as a hedge, and has seen it there from 5 to 50 years old. The same writer also recommends the following mode of *planting and trimming* :

PLANTING.

When two or three years old, and having attained a height of about from one to two feet, the seedlings are to be transplanted where they are wanted for a hedge. It will be remembered, that manure is almost death to the Norway Spruce, which is most fond of sandy, or still better, gravelly soil, and I have known hedges of this tree to grow most admirably, when planted on sunk fences. Where the soil is very rich, it would be well to dig the trench pretty deep, and fill it with small rocks to the depth of six inches. The transplanting should be done in spring, and it need not be very early; even the middle of May is often not too late, unless we should have a very forward season. Transplant with as large a ball of earth as possible, or else be careful to get all the roots, and not to let them dry; press the ground about the roots, but not too firmly; water directly and plentifully, which will settle the ground best around the roots; and afterwards occasionally in a dry season, till they begin to grow. If wanted for an ornamental hedge in a garden, to grow only about four feet high, the plants ought to be set out from nine to twelve inches apart; but when the hedge is wished to grow six or seven feet high, they must be planted one foot apart.

For an outside hedge, as a protection against cattle, or for subdivisions in the fields, where they are desired to give shelter against high winds, I would advise the choice of plants two feet high, and that they be planted two feet apart. As soon as the hedge is set, it will be necessary to protect it with a few rails for a couple of years.

Although many gardeners and nurserymen recommend the planting of hedges in double rows, still, for several reasons, I most decidedly prefer to plant only single rows.

TRIMMING.

A good hedge ought never to be trimmed in any other way than in a conical shape. Nature teaches us best, and a very little observation, I think, shows plainly that this is the natural way. It may be considered tasteless and absurd, to trim a hedge in a square form, in point of beauty, or, still worse, broad at the top and narrow at the bottom; but when we reflect that the growth of the bottom of the hedge is checked and stifled by allowing it to be broadest at the top, reason should teach us to abandon that mode on the ground of unfitness.

As soon as planted, stretch a line, and with a hedge shear trim both sides in a convenient *conical form*, leaving the top till the hedge almost has attained the desired height.

A well trimmed hedge in a small garden, four feet high, ought never to be broader at the bottom than twelve inches, and should slope to the top in a very acute angle. For each foot higher it may be allowed to grow two or three inches broader at the bottom, and in that proportion at any height. In this way only, every shoot will enjoy the full benefit of air, light and moisture, and by this simple and natural method, you will, in a short time, form a hedge such as I have often seen, as green and close from bottom to top, that even a sparrow could not without difficulty pass through it.

A hedge, until it has attained the desirable size, may be trimmed at least twice in a summer, with a hedge shears; afterwards it can be much easier, more quickly, and as well done, with a sharp sickle or hook.

Persons desirous of forming hedges of any of the above plants, will learn where they may be found by referring to the numerous nursery advertisements in this paper.

A Beautiful new Flowering Shrub.

Spiræa prunifolia flore pleno. Double white flowering Plum-tree leaved *Spiræa*.

THE genus *Spiræa* furnishes quite a number of very pretty flowering shrubs and plants, of which the *Opulifolia hypericifolia*, *Salicifolia*, *Sarbilifolia* and others among the *shrubby*—and *Filipendula*, *Almaria* and *Arunceus* among the *herbaceous* species—are well known to all cultivators of ornamental plants. *Dougalpii* and *Lindleyana* are both shrubs recently introduced, but none of them equals the *Prunifolia flore pleno*, recently introduced into Europe by Dr. SIEBOLD, who first brought the splendid Japan Lilies, and other rare and beautiful things from Japan. Mr. VAN HOUTTE, the distinguished Belgian Horticulturist secured the whole stock from Dr. SIEBOLD, and has been cultivating and selling them through Europe at *one guinea* per plant. We have just received a few plants, and hope to test its merits and hardiness in our climate in another season. We cannot better give an idea of this than by quoting the following from Mr. VAN HOUTTE, (Hovey's Magazine, Vol. 13, page 258.)



Spiræa prunifolia. (Fig. 26.)

"It is difficult to convey an impression of the beauty of this shrub from the specimen represented in the engraving. Imagine a neat deep green, upright bush, covered with thousands of snow white flowers, of the size represented, and as perfect as roses, and some idea may be formed of this new spiræa. Braving with impunity the severity of our hyperborean latitude [Belgium] it must be considered one of the greatest acquisitions for decorating the lawn or parterre.

We do not know the native country of this shrub. M. Siebold, to whom we are indebted for its introduction, we learn found it cultivated in the Japan gardens, where it attained the height of six or eight feet. Its native habitat is supposed to be Corea, or the north of China, and it is sometimes found growing in a wild state in the environs of cities, but evidently not indigenous.

According to M. M. Zuccarini and Ziebold, (*Fl. Japan*.) it forms an upright and bushy shrub, with slender branches, which are covered with a smooth, ash-colored bark, which, when old, detaches itself in thin scales. The leaves are oval, rounded at their base, a little acute at the apex, downy beneath, and denticulated at the edge. The flowers, which appear in clusters of four to six, the entire length of the shoots, are perfectly snow-white, and perfectly double. In shape they resemble the double *Ranunculus aconitifolius*; and their number and arrangement as well as the light green of the foliage, and neat habit, render it the most charming of hardy shrubs.

Its cultivation is the same as that of the *Spiræa trilobata*, and other well known kinds; and it is increased either by division of the root or by layers."

A New Remedy for the Curculio.

A "Subscriber" in the Horticulturist says:

"This season wishing to stimulate a couple of old plum trees, which stood among others in my fruit garden, I directed my gardener to place around each tree a couple of barrowsful of fresh horse manure from the stable. This was accordingly laid on the surface of the ground, and as work was rather pressing at the time, it was suffered, tho' rather strong in ammonia to lie thus for a fortnight. I think it was put about the trees just as the fruit began to swell, and before it became as large as peas. The result is, that these two trees are bearing a good crop of fruit, while every other plum tree in my garden has, as usual, been stung and dropped all its fruit. There were no punctures, or scarcely any, to be found on the fruit of these two trees."

Mr. DOWNING adds in noticing the above "that upon a couple of large nectarine trees growing directly against a fence which shuts in our stable yard, not a single fruit was punctured by the curculio, though other nectarine trees 60 or 80 feet distant did not escape." The inference naturally to be drawn from these facts is, that fumes of the fresh stable manure repelled the curculio.

A very similar instance was related to us not long ago by a gentleman of this city, an observing amateur fruit grower. It appeared that some of his servants made a practice for a considerable length of time of depositing human urine, daily, near an old plum tree that had lost its entire crop from the punctures of the curculio for many years past. Last season, however, it bore a full crop, suffering slightly, if at all, from the curculio. The gentleman said he could trace it to no other cause than to the ammonia from the urine, that circulated in the atmosphere around the tree.

Now here are three *accidental* cases confirming the supposition that the ammoniacal vapor ascending from the fresh stable manure and the urine is really so offensive to the curculio as to repel it entirely. This is a matter well deserving of further and full experiment. Stable manure is easily obtained by every body, and urine will answer the same if placed so near the tree as that the fumes will surround it.

WALL TRELLISES.—In constructing trellises on walls, for the support of Roses and other climbing plants, public taste seems to favor wooden fixtures, painted white, and possessing very little of the truly ornamental in their form and character. There are other designs far more cheap, simple, elegant and appropriate. J. A. EASTMAN, Esq., Secretary of the Horticultural Society of the Valley of the Genesee, showed us the other day, at his residence, a design of this kind, consisting of iron bolts about a foot long and half an inch in diameter, driven into the wall in rows about 3 or 4 feet apart, and some 6 feet apart in the rows; in the end of each bolt is an eye a quarter of an inch or so, in diameter, through which strong wire is passed. The whole is to be painted a dark color, and will form a convenient, cheap, and simple trellis, much preferable to the common board fixtures so prevalent.

Rules of Pomology.

THIS subject seems to attract a good deal of attention at the present time. In the two previous numbers of this paper we have said as much in relation to it as may be interesting or useful to our readers, and we only refer to it now to notice very briefly the manner in which the subject is treated by Mr. HOVEY, of Boston, in the March number of his Magazine of Horticulture.

Mr. HOVEY says that no new rules were wanted, but merely a "re-assertion of those already obtained." Now, we ask no other proof of the insufficiency of what has "already obtained" than the universal confusion that has arisen under them. How many fruit cultivators in this country knew what rules existed for the regulation of Pomology? And how many have regarded or been governed by these rules? Very few we think, and the main reason is, that no rules existed but those which are considered to govern other sciences.

Pomology as it has been and is, cannot justly claim to be entitled a science: as it *ought to be*, and we hope *will be*, it will rank among the first and most interesting of the natural sciences. And as such we must be governed by clear well defined rules. This we think every candid man must acknowledge, and we cannot see why Mr. HOVEY, himself one of the first pomologists in the country, should not so regard the matter. That a fruit should be described by a competent person is not less reasonable than that the description of any other object of natural history, to be relied upon, should be made by a proper person. We would rather rely on the description of a fruit by Mr. HOVEY than that of some one who had not an opportunity of knowing pre-existing varieties.

Mr. HOVEY also says in allusion to Horticultural Societies, that their duties are to "encourage skill in cultivation, and to make known new varieties of fruits, flowers and vegetables, not to decide on *what fruits* shall have a name, *who* shall give, or how names shall be given." Now in this matter we beg to differ. We think the most reliable authority respecting the fruits of every locality will be the Societies and fruit committees of such localities.

Mr. H. objects with some propriety to the term "American." We think as Pomology is nothing but Pomology, at home or abroad, that "American" is superfluous. If used at all, it should be *American Rules of Pomology*, as the rules are American, and pomology not exclusively so.

Mr. HOVEY, although objecting to rules altogether, claims properly, the credit for having through a correspondent drawn attention to the necessity of such rules: and he gives a code of his own which after all, contains the substance of those we have published, and nearly in the same words, as adopted by the State Agricultural Society, and by all the Horticultural Societies of this State, we believe.

Answers to Correspondents.

PEACH TREES.

MESRS. EDITORS:—I should like to inquire of the cause of the great loss of young Peach Trees in this vicinity last spring. The manner of their death I will attempt to describe. My trees had been set one year, one year's growth from the bud when set. They grew the year after setting from 3 to 3½ feet, appeared healthy until the blossoms had partly opened, then remained in that situation several days, when they very slowly began to wilt, and finally died. On examination I found a ring around the dying trees varying from the surface of the ground to two feet in height. The rings were from 2 to 5 inches up and down the trees, the bark dead and clinging to the wood, while above and below the ring it was green. The roots were good, and some of them sprouted and are now alive. Some of the trees were affected with the disease which extended but part of the way around—these lived and grew, leaving a piece of dead wood on one side of the tree. Six peach trees from Ellwanger & Barry's nursery, apparently 2 years old from the bud when set, were not affected. These trees were planted at the same time and in the same soil. The apricots I had from the same nursery were affected by a dead strip on one side of the tree, just above the bud, 2 or 3 inches long, but they grew well, and bore fruit. The soil is rather a stiff loam, the holes were dug from 3½ to 4 feet across, 18 inches deep, filled with light sandy loam, rotten manure, and some coal dust. One nectarine

from Mr. BARRY, planted on a light loamy knoll died in the same way, except that the dead ring was just below the surface of the ground. Many of my neighbors have lost peach trees in the same way, mostly the last spring. Now if you can understand me, I should like your opinion on the subject through the *Genesee Farmer*. It may be a satisfaction and advantage to many subscribers, besides myself.

Yours, &c.,

Lockport, N. Y., Feb., 1848.

N. B. ROGERS.

Your peaches were no doubt *winter-killed*. Such cases are quite common when a yearling tree is transplanted in the fall, and a severe winter succeeds. You will find wherever a limb was cut off or a bruise made, a black spot in the spring, and most frequently on the side most exposed to the sun. These spots sometimes spread around the tree and kill it. The success of the two year old trees proves this, they being more able to resist the influence of the sun and frost. The fact of some being affected just below the surface of the ground was owing to the same causes, thawing and freezing. The heat of the surface soil and other objects reflected against the tree during warm days, and the sudden formation of ice around the same place at night. Newly transplanted trees from their looseness, usually have more or less of a basin around the base, that admits of water accumulating and ice forming. Those that get entirely encircled with the black or dead spot will live and appear to grow until the sap previously deposited in the part of the tree above the affected part has been exhausted; it will then die, as did yours when they began to expand their blossoms, communication existing no longer between the upper and lower extremities.

We shall be glad to hear from any of our readers in relation to this subject.

RETARDING VEGETATION.

G. B.—*Lafayette*. Have you not seen trees in certain situations, with the buds in the top of the tree beginning to swell, and even expand while the earth was yet frozen around or above the roots, and when it could not be possible they were in a corresponding state of vital activity? We have seen such instances. Dr. LINDLEY recently gave in the "*London Gardener's Chronicle*," a very plain article on this subject, and we shall probably quote it entire next month; at present we will give the following.

"As to the idea that the bleeding of a tree begins first at the root, and in connection with this supposition that what is called the rise of the sap is the cause of the expansion of buds, and leaves and branches, nothing can well be more destitute of any real foundation. * * * If in the spring, when the buds are first swelling, a tree is cut across at the ground line, no bleeding will take place, neither will the sap flow for some distance upwards, but among the branches the bleeding will be found to have commenced.

The fact is that the sap is driven into accelerated motion first at the extremities of a tree, because there light and warmth first *tell* upon the excitable buds."

Try this, and if you find it so, you will agree with us that if the roots are retarded, so ought to be the tops.

JAS. H. WATTS. We are much obliged for your splendid specimens of Newtown Pippin Apples. They are the finest we have ever seen. The celebrated Pelham orchard is outdone. Your friend in Brighton who grew them must have the right sort of soil, and should plant this fine fruit largely.

B. W. S.—*Raisin, Mich.* Your communication is just received. Your suggestions in regard to the French names of fruits are very good, and we will endeavor if practicable to carry them out.

PLANTING LOCUST SEED.—M. M.—*Sheboygan Falls, W. T.* You will find an answer to your question at page 85, present volume.

S. M.—*Lebanon, Pa.* We have attended to your request. If convenient, we would be glad to have you communicate some of the results of your experience.

We are under obligations to Wm. G. WARING, Esq., Boalsburg, Pa., for a drawing of an excellent nursery implement, the "Double Shovel Plow," and for several varieties of Apple, Pear and Grape Scions, which were received in good order.

LADIES' DEPARTMENT.

Milk-Maids turned Pianists.

A correspondent of BATEHAM's excellent Ohio Cultivator regrets that the rosy cheeked variety of the genus Milk-Maid is fast disappearing from our native land. What a pity! I never see a farmer's wife milking, and hear the noise of a piano in the house, but I feel an involuntary sensation of pity. It puts me in mind of a young friend of mine who married a farmer's daughter, with a piano. As all the country girls in the vicinity said it was the piano that married the man, I felt a desire to disabuse them. At my first inquiry in the premises my friend frankly confessed that so far from being cajoled by the piano, that luckless instrument had come well nigh driving him from the house. But, said he, she had the tact to discover my aversion, and I believe she has never played "Bouncing Bet," or "Bounding Billows" since that day. I wanted to see her milk, said he, and with a sly coquetish smile she said she would gratify my curiosity. "Would have done you good to see the nonchalance with which she stepped about among those cows, not with the dainty tread of one alike afraid of the cows and the ground they walked on; but with that graceful practiced step which avoids dirt as if by intuition. And then the way she despatched her task—with what a slight of hand she made each cow yield her lactal treasure. But the best of it all was the unconsciousness of the actress of the fact, that she was more than Fanny Kemble Butler, in the part she was now acting.

All connoisseurs not directly or indirectly in the trade, will agree that a masterly performer on the piano forte, is a person rarely seen—while the number who profane sweet music, and caricature its variations, is legion! Then what a mistake it is for a farmer's daughter to spend her time and money in attempting so hapless a task, as that of becoming even an *endurable* pianist, when she can be so much more respectably employed both physically and intellectually.

S. W.

CORN MEAL CAKES.—In the first number of the *Farmer*, Vol. IX, page 35, you published a recipe for making "Corn Meal Cakes." My wife has tried it and found it good. As sour milk is not always readily obtained, we have found a substitute in the use of *cream tartar*; thus, two quarts of meal, cold water, yeast, salt, &c., (according to recipe,) 4 eggs, (which may be put in at night,) and two teaspoonfuls of *cream tartar*—mix well together. In the morning dissolve a large teaspoonful of *saleratus* in water, stir quick, and bake in a dripping-pan. Good while warm; and if left to become cold, will be equally good when warmed again. Those who are fond of sweet, will find something to suit my taste, (if not theirs,) by putting half the above quantity into a separate dish, (at night,) and adding thereto a half teaspoonful of molasses, more or less, as may suit the taste. Add *saleratus* in the morning, as above, &c.

N. B. The *saleratus* should be a little in excess, otherwise the cakes will have a bitter taste. H.

WEIGHTS AND MEASURES.—As all families are not provided with scales and weight, referring to ingredients in general use by every housewife, Dr. Brown gives the following list:

Weight and Measure.—Wheat flour, 1 pound is 1 quart; indian meal, 1 pound 2 ounces is 1 quart; butter, when soft, 1 pound 1 ounce is 1 quart; loaf sugar, broken, 1 pound is 1 quart, white sugar, powdered, 1 lb. 1 oz. is 1 quart; best brown sugar, 1 pound 2 oz. is 1 quart, eggs, average size, 10 eggs are 1 pound;

Liquid Measure.—Sixteen large table-spoonfull are $\frac{1}{2}$ a pint; eight table-spoonfull are 1 gill; four large table-spoonfull are $\frac{1}{2}$ a gill; a common-sized tumbler holds $\frac{1}{2}$ a pint; a common-sized wine-glass holds $\frac{1}{4}$ a gill.

INCOMBUSTIBLE WHITE-WASH.—Pass fine freshly-slaked lime through a fine sieve, and to six quarts of the fine pulverized lime thus obtained, add one quart of the purest salt, and one gallon of water, and boil the mixture and skim it clean. Then to every five gallons of this mixture, add 1 lb. of alum, 1-2 lb. of copperas, and slowly add 3-4 lb. potash, and 4 quarts fine sand. It adheres firmly to wood or brick.

To Competitors for our Premiums.

We give below the names of the competitors for our May premiums, with the number of subscribers obtained by each—together with the names of all persons who have ordered twenty copies or more, many of whom do not compete for any of the premiums. The list is, we believe, accurate—but of course subject to correction. We shall give the names, &c., of the principal competitors, only, (thirty or forty) in our next number.

Competitors will bear in mind that no remittance will count for the premiums, unless mailed on or before the 30th of April.

J. H. Stanley,	168	P. H. Turner, (Wis.)	27
Wm. Lyman,	153	H. Munson,	26
E. Howland,	126	Hiram Shays,	26
Moses Eames,	125	P. M., Freetown Corn's	26
E. C. Bliss,	118	D. S. Shotwell,	36
H. Frisbie,	107	E. C. Saunders,	25
I. R. Trembly,	100	Jo. Wykoff,	25
L. Runyan, (Pa.)	89	Alden & Markham,	25
*J. L. Dolsen (Mich.)	86	W. L. Booth, (Mich.)	25
L. P. Clark,	81	W. Churchill, (Conn.)	25
H. C. Kimberly,	81	Jas. Aldrich, (Mich.)	25
F. J. Eastman, (Vt.)	80	R. O. Milton, (Mich.)	25
J. A. Carpenter, (Wis.)	73	E. F. Munson, (Ohio)	25
A. W. Beach,	72	Benj. Hildreth, (Ohio)	25
Erastus Hurd,	65	D. Johnson,	24
C. H. Carter,	65	Allen Payne,	24
Jno. G. Truce,	62	James Mapes,	24
C. A. Knox,	60	Wm. Mott, 2d,	24
Dr. O. Reynolds,	60	William Holden,	24
J. D. G. Nelson, (Ind.)	60	C. Weller,	24
J. Swain,	59	P. Hogan, (Mich.)	24
R. Sears,	55	Isaac S. Wilson, (Ohio)	24
B. & G. M. Copeland,	54	C. H. Stowell, (Vt.)	24
J. H. Gould,	53	Jas. Keevill, (C. W.)	24
Caleh Nye, Jr.	52	C. C. Slocum,	23
D. A. Ogden,	51	A. Smith,	23
C. Fenton,	50	L. Cumings,	22
E. W. Lawrence, (Mich.)	50	R. Senter,	22
L. D. Smith, (Mich.)	50	S. S. Benham,	22
B. Spaulding, (Vt.)	48	M. R. Dunham,	22
Jno. B. Lowell,	45	H. G. Hodskin, (Mich.)	22
Jno. Lawson,	40	O. C. Comstock, ("	22
L. Strobidge,	40	H. H. Sedgwick, (Wis.)	22
Henry Fellows,	40	A. Underhill,	21
McDonald, & Stone,	39	C. English,	21
Wm. Chamberlain,	37	J. Stone,	21
B. Billings,	37	J. Gordon,	21
S. G. Sears,	37	D. Halsted,	21
D. D. Cole,	37	J. Lathrop,	21
J. B. Wilbur,	36	C. Brewer,	21
W. L. Waters, (Tenn.)	36	W. M. Sprague,	21
G. L. Watkins,	34	P. Chamberlain,	21
Reeve Corwin,	34	E. S. Marvin, (Mich.)	21
H. Swan,	34	N. Wesson, (Wis.)	21
Jas. Perkins,	34	A. G. Tompkins, (Ky.)	21
O. Rice, (Mich.)	34	Jno. Curtis, (Pa.)	21
D. M. Smith,	33	Jas. Sharp, (C. W.)	21
B. Todd,	33	A. Graham, (Va.)	21
Thos. Kiddle,	33	A. Comstock,	20
E. M. Foot,	33	H. Wheeler,	20
S. Booth,	33	Jno. Cloy,	20
J. S. Squires,	32	H. C. Silsby,	20
T. T. Lake,	32	Jas. McPherson,	20
W. T. Hastings,	32	T. C. Maxwell,	20
B. Linn, (Va.)	32	Geo. Stewart,	20
Robt. Evans, (Pa.)	31	H. G. Wetmore,	20
J. Harris,	31	Charles E. Hart,	20
J. N. Mead,	30	E. Shaw,	20
B. Farr,	30	O. W. Moore,	20
Mrs. R. E. Perry, (Mich.)	30	J. B. Palmer,	20
A. L. Stevens,	30	Samuel Heaton,	20
J. Hutchinson,	29	N. Park, Jr.,	20
P. Vorce,	29	H. J. Sicles,	20
J. K. Briggs, (Mich.)	28	Pardon Green	20
Wash. Hadley, (Ind.)	28	Abner Bryant,	20
H. McCarty,	27	D. Keyes, (Mich.)	20
Jno. Lewis,	27	C. C. Sutton, (Mich.)	20
Henry Chapin,	27	E. Goodrich, (Mich.)	20
S. E. Norton,	27	M. Hopkins, (Pa.)	20

* Not a competitor—the papers being for a Society.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat, -----	\$1 25	1 31	Pork, bbl. mess	10 50	12 00
Corn, -----	40	44	Pork, cwt., ...	5 00	5 50
Barley, -----	50	56	Beef, cwt., ...	3 50	4 00
Oats, -----	35	40	Lard, lb.,	7	8
Flour, -----	5 75	6 00	Butter, lb., ...	16	20
Beans, -----	33	1 00	Cheese, lb., ...	6	7
Apples, bush.	18	38	Eggs, doz., ...	10	12
Potatoes, -----	50	63	Poultry, -----	7	8
Clover Seed, ...	4 50	4 75	Tallow, -----	8	9
Timothy, ...	2 00	2 25	Maple Sugar, ...	10	12
Hay, ton, -----	10 00	12 00	Sheep Skins, ...	50	33
Wood, cord, ...	2 00	3 50	Green Hides, lb	4	8
Salt, bbl., -----	1 38	1 50	Dry " " " " "	7	8
Hams, lb., -----	7	8	Cal' Skins, ...	9	

Rochester, March 27, 1848.

New York Market.

[By Magnetic Telegraph.]

NEW-YORK, March 26-7 P. M.

Flour and Meal.—The market for all descriptions of produce; excepting perhaps Corn, has been very dull to-day. The flour market has been inactive. The range for fair western brands is \$8.37½ to 50, with sales at both prices. Genesee is \$6 50 to 62½, and occasionally even more for a better brand. For common the sales were about 1000 bbls. in addition to which 500 bbls Canadian flour were taken for export at \$6 37½. Meal, the inquiry is limited. There has been sales of 6 or 700 bbls at \$2 44 to 2 50 and 2 or 300 bbls Rye Flour at 3 62½ to 3 75.

GRAIN.—Fair demand for Wheat but holders ask prices above the views of buyers. Genesee is held at \$1 50, and Ohio at 1 40 to 1 42. There has been a little improvement in the demand for Corn for the east and for shipment. About 10,000 bushels Jersey yellow changed hands at 52c, and 10 to 12,000 bushels at 47c to 48c a little touched. Sales 2500 bushels Rye at 75c, and 2000 bushels at 73½, delivered.—Market heavy. Oats 43 to 44c for river.

PROVISIONS.—In Pork no change. Mess, \$10 25, and 9 25 for new. 100 lbs lard prime sold at 8 75 to 8 87½.—Small lots river mess beef at \$14 50. Beef very dull. Sales 7 or 800 bbls Lard at 6 to 7c. ASHES.—\$7 75 and 1 5 to 75 for Pots and Pearls.

BUFFALO, March 27-3 P. M.

Flour is dull to-day, and holders have submitted to a slight decline. Some 200 bbls. Eagle Mills, Ypsilanti changed hands at \$5.25, and 350 bbls of two equally good brands western taken at the same. Rather more inquiry exists for wheat, and we notice sales of 2500 bushels at \$1.12. Corn is without movement.—Clover seed continues in good request, and also Timothy, and we hear of the sale of 11 bbls of the former at \$4.50, and 12 do of the latter of clean, at \$2.50. Further sales of 6 bbls ordinary.—Sales beef Tallow has been made at 9½ to 10c; prime do at 10c. Good demand for Mess Pork and market quick at \$10.

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GENESEE FARMER.

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No. 5.

THE GENESEE FARMER:

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DANIEL LEE & D. D. T. MOORE, Editors.
P. BARRY, Conductor of Horticultural Department.

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The Balance of Organic Nature.

In our last paper, we endeavored to make the unlearned reader understand the important fact that, no animal can subsist on decomposed animal and vegetable substances; and that plants alone are endowed with power to re-organize the constituents of the bodies of all living beings, after they have been fully disorganized by any means whatever. It is our present purpose to offer a few remarks illustrative of the beautiful and exact balance of organic nature, whether the matter exists in the form of minerals, vegetables, or animals. Laboring farmers are just beginning to discover the almost unlimited power which their Maker has given them over three kingdoms of nature, viz: the Mineral, Vegetable, and Animal kingdoms. The mineral kingdom includes all rocks, metals, loose earth, water, air, and all other matter which is neither a vegetable nor animal substance. The things which belong to the mineral kingdom were created before vitality, either vegetable or animal, had an existence on the planet. When life ceases, there are chemical laws which operate with greater or less force, to disorganize and mineralize the bodies of all plants and animals. Now, it is impossible to understand the best process for re-organizing the mineral constituents of human food and clothing, as they exist in the soil, in air and water, without studying closely the decay and perfect dissolution of all the products of animal and vegetable life. Every farmer should seek to acquire a knowledge of the balance, or the even and reciprocal dependance of all animate and inanimate things, on the surface of the earth. If plants alone organize all living compounds, not merely wood, starch, oil, sugar, gum, and gluten; but fat, butter, cheese, flesh, wool, brain, and the like, how do these substances get back again into their original state of simple minerals? Let us see. If we weigh the food of an adult, non-growing man, horse, cow, or other domestic animal, for twenty days, and all the excretions from

the bowels and kidneys for the same time, estimating all the matter consumed and voided at its dry weight, the matter that escapes through the passages named, will weigh not far from forty per cent. of that taken into the stomach. The loss is sixty per cent. or thereabout. If we examine the air taken into the lungs at each inspiration and compare it with that expired every time these organs are compressed in breathing, the expelled air is found to contain one hundred times more carbon, and far more moisture, (oxygen and hydrogen combined,) than it did when it entered the lungs. The critical analysis of all organized matter used as food for man and his domestic animals, discloses the interesting fact that, carbon and the elements of water (the vapor thrown out of the lungs) constitute from eighty to ninety-nine parts in every hundred of such food. The ceaseless operation of breathing serves to burn up and mineralize a vast and indefinite quantity of organized carbon, oxygen, and hydrogen; and we will add nitrogen. This latter element escapes with moisture in insensible, or sensible perspiration; still more largely in urine; and to a considerable extent in the fecal dejections from the bowels.

All the matter voided by animals which is not fully mineralized, as well as the bodies of all living things after their death, decompose by fermenting, rotting, or otherwise passing back into air, water, and earth. Take a rich vegetable mold, till it, and allow no crop nor plant to grow therein, and you will soon consume it all—converting its organized carbon into carbonic acid; its oxygen and hydrogen into water; and its nitrogen into volatile ammonia.

Mineral coal dug from the earth is organized carbon buried in ancient reeds and forests by the sinking down of the crust of the planet at particular points, and the washing in of earthy sediment above the submerged forest, to be consolidated into stratified or sedimentary rocks. The prodigious force of volcanic power, acting from below, upheaves all these strata; their cracks and wide fissures are washed into valleys by the ceaseless action of rain, frost, electricity, light, heat, and other meteoric influences; and thus they wear down solid rocks to coal beds, and often far below them.

Carbon is the *coal* which may be obtained alike from wood, straw, grain, flesh, and almost, if not quite every truly organized product of life. There is carbon enough in the carbonic acid which is chemically combined with lime in limestone rock, to cover the whole globe with a pure

diamond 500 feet in thickness.*—While an immense quantity of carbonic acid is discharged into the atmosphere from volcanoes and internal heat, acting like fire on limestone in a burning kiln, by which 100 lbs. of rock lose about 44 lbs. of gas; yet old ocean keeps up nature's great balance, by absorbing an equal quantity of carbonic acid gas to combine with earthy minerals below. On the circumscribed islands and continents of our little world, vitality can operate only to a very limited extent. Nevertheless, there is room to feed and clothe such a mass of moral, rational, human beings as we love to contemplate. All can be virtuous, wise, and happy. Tillage and science (that of the bible being chief among the latter) will one day have worked out a harmony in the social, political, and religious world, as perfect as that taught us in astronomy, geology, chemistry, and physiology. As the two hundred and fifty millions of souls now in Europe acquire intellectual and moral light, under the glorious banner of "Liberty, Equality, and Fraternity," human butchery, kingcraft, and all other craft which robs the many to enrich the few, will cease to vex mankind. Universal education and universal peace will lead to scientific agriculture, universal plenty and happiness.

We have wandered from our text. Let us return then, and witness at the death of all plants and animals, the speedy decomposition of their bodies, and the matter diffused through the atmosphere very much as is a cord of wood burnt in a stove. Not only do carbon, nitrogen, oxygen, and hydrogen, when disorganized, rise into air, but *sulphur* and *phosphorus*, as in the gases from a bad egg, rise likewise. Water has a strong affinity for all the gases which fly off into the air from manure heaps and all decaying vegetable and animal substances. Hence, by a wise provision in nature, rains, dews and snows bring back to the earth the constituents of plants, and the water that enters their roots, ascends to their leaves and is evaporated, supplies these living beings with their appropriate aliment. Carbonic acid and other gases enter the pores of leaves directly; and as the atmosphere is ever in motion it constantly brings fresh food to these organs. It is important to understand the fact that, although the light and heat of the sun and other forces will decompose water, carbonic acid and ammonia, ready to combine their elements, viz: carbon, oxygen, hydrogen, and nitrogen, into woody fibre, starch, oil, sugar, gum, and all nitrogenous compounds, yet no such combination can take place unless the soil yields all the lime and other minerals which form the ash of the plant. Although the starch in wheat, beans, corn, and potatoes, is nothing but simple carbon and the elements of water, yet without potash or other alkali, not a particle of starch can be organized.

The formation of vegetable tissues and their

seeds and fruit we will study at another time.—Although the amount of incombustible earthy substances consumed by plants is small, still this part of the mineral kingdom is the true basis of the vegetable kingdom, as the latter is of that of animals.

"All are parts of one stupendous whole,
Whose body nature is, and God the soul."

Augusta, Ga., April, 1848.

Hints for May.

THE great battle for life is now fairly begun. See the armed legions of strong men take the field, with the determined visage of victory, armed with the shining implements of warfare.—The light troops have scoured the plain—the proud war-horse in full harness, and the ponderous ox are at their posts—the glorious sun has scaled the walls of old Winter and thrown wide the portals of lovely, blooming May—the grass, the flower, and the leaf, spring up like our own bounding hopes—the merry bird, the joyous child and the whooping boy, are in the fields—the busy insect and the creeping worm, are engaged in the same conflict—doing battle for life. Man! do thy share in the coming onset; for the sake of thy loved hearth of little ones—for thy garner and thy stores—for the aged, the unfortunate and the needy.—The word is, Onward! do, or die!

One half of the farmer's success in this battle for life and subsistence, consists in *system*—always to know over night what the work is for the morrow, and to have every preparation ready and at hand, and to always do that first that most requires doing. A man's head that does this part of the battle, is like a great General—his head is worth more than his hands. Always note down in your mind all the little jobs that want doing, when convenient; there are broken days and odd hours, always enough to perform them.

Remember that all animal and vegetable matter makes manure—nothing that will rot and decompose, but what produces the food of plants; therefore save everything for that purpose that can not be eaten. We do not act with that true philosophy in saving every thing that plants can eat, as we do in relation to our animals. Why? Because we do not understand, or properly appreciate the physiology of the vegetable economy; and yet it is the first step—the incipient stage of the final result. None of us do it—no, nor half do it—nor ever will, till our population equals China, where four rods of ground support a human being.

It is a great mistake to draw out barn-yard manure too early—before it is half converted. Leave the yard litter under the cattle till they go to pasture, or at least till the very moment you intend plowing it in. When the litter is well

* Diamond is pure crystallized carbon.

rotted, if not ready for its use, pile it in heaps in the yard; it is better than to distribute it in the field, to leach, dry, and bleach.

Planting corn in drills 3½ feet by 18 inches, two plants in a place, and manuring in the hill, makes the great premium crops. It is a little more labor to hoe it, as you can not plow both ways; but nevertheless it pays for the extra work. Soaking in *salt petre*, (nitrate of potass,) or *glauber salts*, (sulphate of soda,) is a good process, as it gives the young plant a vigorous and healthy start, although it retards its coming up 3 or 4 days. To hinder birds pulling it, pour on to a bushel of corn a pailful of scalding water, and add one half pint of tar; stir while hot till thoroughly mixed and glazed with the tar; let it stand over night, and dry with plaster. Too much tar destroys the power of vegetation.

Any time this month fruit trees may be pruned. Do not *trim them up*, but thin out cross and crowded branches; properly balance the limbs on each side, till they look uniform and well shaped. Cut out the center stem of those which have a disposition to spindle and grow too high. Cut close to the stems left, and cover the large wounds with paint or wax. In grafting old trees, set the scions as low as possible; for it is a great mistake to commence a new top on limbs 12 or 15 feet from the ground, which must require 10 feet more height to give a sufficiency of bearing wood. They are difficult to hand-pick and the wind-falls are spoiled.

Fruit trees that stand in grass plots, where it is inconvenient to destroy the sward, may be greatly benefited by covering a space 4 or 6 feet around the base of the tree with straw, or the bottom of hay stacks, to a depth that will smother the grass. Remove before winter to avoid mice. The earth is left light and rich and the grass effectually destroyed.

Look out for the caterpillars on apple trees before they become large. With a rod as large as a riding whip, with a jagged end, of a cool morning while in their webs, you may twist them out in one minute. All the oils, soap suds, turpentine, and tobacco-water are fatal to them.

In the kitchen garden it is lost labor to plant the tender vegetables, as beans, cucumbers, squashes, peppers, &c., till the warm weather has set in and cold nights passed, as they produce sickly dwarfish plants, that never recover. In the climate of this State the 15th to 20th is soon enough.

Any dry time this month sow plaster or ashes on clover and meadow land. One bushel to the acre of plaster and three of ashes is a full dose. If leached ashes, any quantity almost may be used.

If you manure in the hill, never let the article touch the seed. If corn, put it *under* with earth over before dropping. If potatoes, put it *over*.

In dry seasons and in dry light earth, it is better thoroughly incorporated with the soil.

If you try any experiment with crops, never include the whole field, but leave a part for comparison.

Plant potatoes early and dig early, and use, if possible, early varieties; it is the only security while the disease prevails, which has already inflicted a greater penalty on mankind than the Asiatic cholera.

It is important in every respect to increase our crops, as the present prospect is, that American produce of all kinds will command a fair price in European markets; for there is a great nation doing battle, not for subsistence alone, but for existence and liberty; and it is not improbable that the struggle in France is the entering wedge of a commotion greater than the world ever saw—that the whole Royal Bloods of Europe may be obliged to borrow *pea jackets* and leave for Yankee Land. God grant it, say we. We can take care of such cattle, and set them "digging corn and hoeing taters." *

[Editorial Correspondence of the Genesee Farmer.]

Hints on Various Subjects.

AMONG other things of interest to the farmer, which we have noticed in our southern travels, is the practice of covering seed corn with a kind of shovel plow. As the hills are made five feet apart, a smart girl will drop as fast as two plows can cover, so that two mules and three hands can plant from twelve to twenty acres in a day. A field of 150 acres planted in this manner has attracted our particular attention. The corn has come up well, stands even, and is now (15th April) well plowed out and some of it half knee high. We assisted in putting up a corn-sheller on the same plantation, with which two mules got out not far from 100 bushels of grain per hour. One planter five miles below Augusta cultivates nearly 1000 acres in corn this season. It is no uncommon thing to see thirty plows running in one immense field. Women are quite as expert at the plow-tail as men. They are cheerful, chatty, and apparently contented and happy.

THOMAS CAMPBELL, the poet, says, that America is the only nation in the world where the whole population have at all times enough to eat. This is a remarkable fact, and during the present disturbances in Europe will serve to draw immense numbers of all classes, from ex-kings to half-starved peasants, to this vast and glorious country. Our agriculture will improve rapidly, not less by the increase of numbers to consume its varied products, than by the general diffusion of knowledge among the tillers of the earth.

The Orange Groves of Florida are suffering very severely from the ravages of a minute insect belonging either to the *coccus* or *aphis* fam-

ily. Among all the remedies which have been tried, in addition to washes of soap suds, lye, &c., the fumes of burning sulphur, and other pungent gases, as ammonia, burnt leather and the like, have proved most useful. These all operate in the same way as stale urine and decaying manure under plum trees, (as mentioned by Mr. BARRY in the last Farmer,) to keep off curculios. In this warm climate, insects are more abundant and troublesome than at the north. Every intelligent man should study their habits, and aim to add a little to the common stock of the public information in regard to protecting the community from this great evil.

The best hedge that we have seen in the United States extends about a mile along the highway on a plantation of 3000 acres, near this city. It is the Cherokee Rose, which is now in full bloom, presenting a magnificent floral spectacle, and filling the atmosphere with delicious perfume. No animal without wings can get over, or through it. Having stood forty or fifty years, it still promises a good fence for a century to come.

The owner and occupant of this splendid estate, Mr. DELATIGLE, was a St. Domingo planter at the time of the insurrection and dreadful massacre by the blacks, and was so fortunate as to escape to the United States.

Cotton plants look beautifully, and the weather is auspicious; but this crop has to encounter many hazards before it will come to maturity and be gathered. To keep it clear of grass and weeds, both negroes and mules have to start early in the morning, and move lively much of the season.

Peaches, figs, and grapes are thought to be beyond the reach of late frosts, which sometimes destroy them in the Southern States. The culture of these valuable fruits will one day be of immense account in this mild climate. Enterprising gardeners are now sending by railway and steamers, green peas to northern cities. Our peaches will be in New York, Albany, and Boston, at least three weeks before those from New Jersey. The same steamboats which bring Massachusetts ice to this city, take back southern luxuries in payment. This coasting trade is yet in its feeble infancy.

There is a great lack of competition in steamships. It is but 700 miles from Charleston to New York—while the fare between the two cities is three times as high as it is between Buffalo and Chicago, a distance of 1050 miles by water. Continuous railroads from Savannah and Charleston to Nashville in Tennessee, and thence to Louisville, will soon alter the complexion of steam navigation on the Atlantic, between the northern and southern cities of the Union.—Cheap travelling and greater intercourse are necessary to remove sectional prejudices, and make us one in feeling and sentiment, as we are one in language, religion, government, and interest.

Augusta, Ga., April, 1843.

The Potato Rot.

The Boston Courier contains a communication from Professor HORSFORD, of Cambridge, giving the views of Baron LIEBIG, the celebrated chemist, and Dr. KLOTSCH, an eminent vegetable physiologist, keeper of the Royal Herbarium, in Berlin, on this baffling disease.

The substance of Dr. Klotzsch's discovery is annexed:

In the 5th, 6th and 7th week after setting the tubers, and in the 4th and 5th week after planting out germs furnished with roots, or at a time when the plants reach the height of six to nine inches above the soil, we pinch off the extreme points of the branches or twigs to the extent of half an inch downwards, and repeat this on every branch and twig in the 10th and 11th week, no matter what time of day.

The consequence of this check to the development of the stem and branches, is a stimulus to the nutritive matters in the plants in the direction of the increase, both of roots and of the multiplication of the branches of the stem above ground, which not only favors the power of the root, but also strengthens the leaves and stalks to such a degree, that the matters prepared by the physiological action of these parts are increased and applied to the formation of tubers. The checking of the transformation in the leaf is equivalent to the interruption of the natural change of the leaves into calyces, corolla, stamens and pistils, which is effected at the expense of the nutritive matter collected in the plant; and these, when this modification of the leaves is arrested, are turned to account in the formation of tubers.

Led by these views, I made, in 1846, experiments on single potato plants, carefully marked, by pinching off the ends of the branches. They were so readily distinguished, in their subsequent growth, from the plants beside them, by more numerous branches, larger and darker foliage, that, in truth, no marking was necessary.

The produce from these plants of tubers was abundant, and the tubers were perfectly healthy—while the plants next them, which had not been so treated, gave uniformly a less produce, at the same time the tubers were rough on the surface, and in many instances attacked with the prevailing disease. This experiment was incomplete, and did not give a positive result, but it was not yet encouraging for me.

In the middle of April, 1847, an experiment was made on a low lying field with the round white potatoes, generally cultivated here—a variety which had not suffered much from the disease which first appeared in 1845. The potatoes were planted in the usual way by an experienced hand.

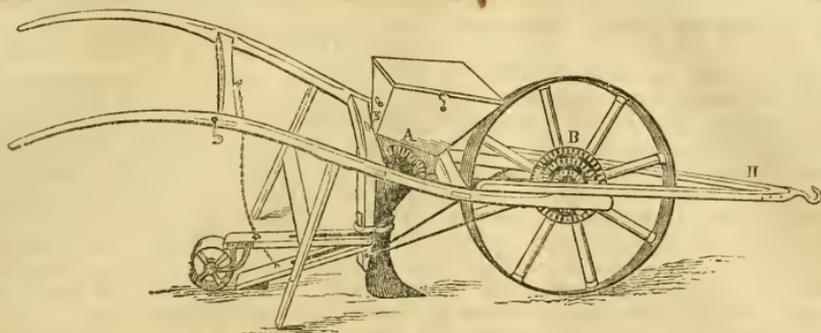
After weeding them in the end of May, I renewed my experiment by pinching off the points of the branches of every second row, and repeated this in the end of June.—The result surpassed all expectations. The stalks of the plants not treated on my plan were long, straggling, and sparingly furnished with leaves, the leaves themselves small and pale and green.

In the next field, potatoes of the same variety were planted on the same day, and left to nature. They appeared in the first six weeks healthy, even strong, but gradually acquired a poor aspect as the time of flowering and fruit approached, and finally exhibited precisely the same appearance as the rows not treated by pinching off the extremities, in the field in which my experiments were made.

The harvest began in the surrounding fields in the month of August, and was very middling. The tubers were throughout smaller than usual, very scabby, and within these fields, to a small extent attacked by the wet rot.

In the end of August, the difference between the rows treated by me and those not treated became so striking, that it astonished all the work people in the neighborhood, who were never tired of inquiring the cause. On the contrary, the rows treated as above were luxuriant and in full vigor, the plants bushy, the foliage thick, the leaves large and dark green, so that most people supposed they had been later planted.

But the difference in the tubers was also very decided. The tubers in the plants in the rows treated on my plan were not indeed larger, but vastly more numerous, and they were neither scabby or affected with any disease whatever.—A few had pushed, (which was ascribed to a late rain,) and were, apparently, incompletely developed, while scab and wet rot attacked more and more the tubers of other plants which also fell off on the slightest handling.



ALBANY SEED DRILL AND CORN PLANTER. (Fig. 27.)

A good and cheap drill, for planting corn, beans, and small seeds for root crops, has long been a desideratum among our farmers. The *Albany Seed Drill and Corn Planter*, represented in the above figure, we have carefully examined, and consider it a very perfect and apparently durable implement, and can confidently recommend it to our readers.

In noticing this drill, the editor of the *Albany Cultivator* says:—"This is, in its general features, similar to the well known English Drill or Brush Barrow. It is light, strong and durable; can be used by one man, as its whole weight will not exceed fifty pounds, or can be drawn by a horse when a large amount of work is to be done. It is also quite simple; the small seeds, as onions, carrots, parsneps, turneps, &c., are sown by a revolving brush inside the hopper, and which forces the seeds through a hole in a tin slide or plate, at the bottom of the hopper—the holes in the slides varying in size according to the size and quantity of seed to be sown. For corn, beans, peas, &c., the brush and tin slide, or plate, are removed, and a wood cylinder substituted, with eight cavities in the same, equal distances apart, and in each cavity is a screw with a large head, which can be turned out or in to receive the requisite number of grains of seed to be sown in each hill. One or all these cavities may be used at the same time, according to the distance between the hills. The brush and cylinder both receive their rotary motion from the large or forward wheel, B, by means of small gear wheels, one of which, at B, is moveable on the connecting rod from A to B, and can be confined so as to operate in any of the different rows or series of cogs in the face of the large wheel, and thereby receive a greater or less number of revolutions to the ground over which it moves, consequently varying the distance of the hills with the cylinder, from 3 to 6, 9, 12, 24, 35, 48, or 96 inches asunder. The plow can be placed up or down, to any required depth, to suit tall or short persons holding the same; the scraper and roller follow and cover

the seed, and compress the earth at one operation."

The drill is manufactured and sold by the inventor, H. L. EMERY, at the Albany Agricultural Warehouse, (as will be seen by reference to his advertisement in this number.) The price, complete and warranted, is, we believe, \$12.

Product of Two Acres. — Inquiry.

MESSRS. EDITORS:—I send you the following statement, showing the amount received from the sale of the products of two acres of land during the past season, which you are at liberty to publish.

From one-fourth of an acre of June Peas,.....	\$20.00
“ three-fourths “ Potatoes, (Meshan-	
nocks,) sold early,.....	101.25
“ three-sixteenths of an acre of Sweet Corn,....	20.00
“ one-sixteenth “ Tomatoes,.....	15.00
“ one-fourth “ Melons,.....	35.00
“ one-half “ Ruta Bagas, 400	
bushels at 37½ cts.,.....	150.00
	\$341.25

The soil upon which the above crops were raised was dry and sandy, with some mixture of gravel. No extraordinary pains was taken in raising said crops.

The land was plowed but once, and none of it manured, except the half acre sown to ruta bagas, which was covered with coarse manure as thick as could well be plowed under; it had been planted the year previous with corn, and was in what might be considered tolerable good condition.

The ruta bagas were sown the eleventh of June, in drills two feet apart, and were hoed but twice during the season.

I should be glad to hear from some of your correspondents their views as to the best method of culture for turneps, especially the ruta bage—the best way of preparing the land—time and manner of sowing, and the best way of avoiding or remedying the effects of the black fly, which, in this section, is very destructive; and such other facts as may be of interest to those of your subscribers who raise turneps extensively.

Yours, &c.,

J. W. SPRAGUE.

East Hamburg, Erie Co., N. Y., Jan., 1848.

Gleanings from our Foreign Exchanges.

LOOKING-GLASSES FOR BIRDS.—"The following plan is perfectly efficacious for scaring birds from fruit and other produce," says a correspondent of the *Gardeners' Chronicle*. "One of my servants having by chance broken a looking-glass, it occurred to me that the broken pieces suspended by a string, so as to turn freely in every direction, would give the appearance of something moving about, which would alarm the birds. I accordingly tried the plan, and find that no bird, not even the most fool-hardy of them, dares come near. They had attacked my peas. On suspending a few bits of the looking-glass amongst them, the marauders left the place. The tom-tits attacked my Seckel pears, to which they seem very partial. A bit of looking-glass suspended in front of the tree put a stop to the mischief. My grapes were then much damaged before they were ripe, by thrushes and starlings; a piece of looking-glass drove these away, and not a grape was touched afterwards. I have before tried many plans, but never found any so effectual as the above."

Note. If there is any virtue in this suggestion, it will be of great benefit to the growers of cherries, strawberries, &c. The cherry-bird is one of the boldest and most annoying nuisances that infest the fruit garden. It is worth trying.

BUTTER.—Dr. Ure remarks in one of his recent works, and which remark may very well be taken as an answer to your question, that "it is computed a cow which gives eighteen hundred quarts (old English) of milk per annum, eats in that time eight thousand pounds of hay, and produces one hundred and forty pounds of butter."

"Two pounds and a quarter of hay corresponds to one quart of good milk; and a cow which eats sixteen thousand five hundred pounds of hay, will produce three hundred pounds of butter per annum."

POISONOUS PROPERTY OF BRINE.—It is not to be wondered at that your pigs should be suffering, if, as you state, "a portion of brine got mixed with their wash," and they partook of the same. We have the authority of the late celebrated veterinarian, Mr. Youatt, for stating that "the brine in which pork or bacon has been pickled is poisonous to pigs;" and that "several cases are on record in which these animals have died in consequence of a small quantity of brine having been mingled with the wash, under the mistaken impression that it would answer the same purpose and be equally as beneficial as is the admixture of a small quantity of salt."

A SINGULAR AGREEMENT.—Twenty-nine years ago Betty Winal, then residing at Tarlton, bottled a quantity of white currants in their green state, being then in the 33d year of her age.—Having kept them some time in a state of pres-

ervation, William (her husband) and she agreed, that they should be kept while they both lived, and that they should be made into pies at the funeral of the one who should die first. The wife departed this life on the 2d of this month, and was interred at St. Peter's church, Preston, on the 5th, the family having removed to Dawson-street, Preston. Their mutual pledge was fulfilled, and the pies made of these currants were served out, after returning from church, every attendant taking a slice. Though the currants had been kept twenty-nine years, they were as fresh as if just taken from the trees.

Note. We have frequently preserved gooseberries and currants for 10 months, as fresh as when picked from the bushes. Plums may be preserved in the same way, if taken before quite ripe.

WOOD ASHES.—Fresh ashes contain caustic alkali, which, whatever be the form of the ammonia with which it may come in contact, will take from it, by virtue of its greater affinity, the acid which holds it fixed, and thus let it free; therefore fresh wood ashes are highly prejudicial for mixing with farm-yard manure, guano, or any other body containing free ammonia.

Note. The same reasoning applies to lime, and is undoubtedly correct. Gypsum, charcoal, and swamp muck, are safe and good absorbents, though not as great stimulants of decomposition as lime.

URINE OF HORSES.—The urine of horses consists, in every hundred parts, of 94 of water and 6 of urea, and the salts of soda, lime, and potash.

COLOR OF SOILS.—Atmospheric air is composed of nitrogen 79 parts and oxygen 21, with about one part in a thousand of carbonic acid gas. Water is composed of 88 parts of oxygen and 12 parts of hydrogen (by weight.) You will, therefore, perceive from the great abundance there is of oxygen in the atmosphere and in water, and from the great affinity there is for this gas by metals and earths with metallic bases, that soils exposed to the influence of air and water will vary in hue according to the quantities of oxygen which becomes fixed in the soil; a ferruginous earth may be red or yellow, or an intermediate shade, according as the iron is more or less oxidised.

MARKING SHEEP.—A Member of the Windsor Co. Agricultural Soc. states that the clip of wool sold by the late Dr. Jarvis, of Claremont, one year (known always to be of the first quality and in good condition otherwise,) shrunk 2½ per cent. by clipping off the tar marks; and that the whole loss in consequence of the large amount of tar used, was 3½ per cent. The writer recommends, as a substitute for tar, a paint that can be more easily removed as follows:

"The materials for marking should be lump-black and linseed oil. If the latter cannot be procured, hogs' lard will do. Mix a small portion of turpentine with the lump-black before mixing with the oil. It should stand twenty-four hours before using. Those who will use tar at all events, for marking, should endeavor to make one small mark answer all purposes."

Farming in Rhode Island.

MANURING ROOT CROPS.

IN a late number of the Providence, (R. I.) Journal, sent me by my early friend ADAM ANTHONY, I read with absorbing interest, a very well written detail of his farm management, or rather what a Seneca county farmer would call *his farm making*. When, eighteen months ago, I stepped from the surrounding desert, on to this Oasis of Adam Anthony's, I said to myself, by what magic has this arid sandy waste been clothed with such redundant vegetation? Such a thick set lawn, such clover, such a growth of corn in drills for fodder, such Indian corn, I had rarely ever seen on the alluvial plains of the all-fertile west. Here, said I, is a *tableaux vivant* in the vegetable kingdom, which if it does not exhibit the physical contour and perfection of the animal man, it does more, for it shows him in the combined strength of all his moral and physical perfections; it shows what he has done for the benefit of his race, by causing tons of grass to grow, where heretofore hardly one blade could be found to mark the domain of sterility.

I soon learned from the intelligent, enterprising proprietor himself, that the *modus operandi* by which he had produced this great living picture, partook neither of charm or mighty magic. Science and practical experience had revealed to him, that on a soil where the inorganic, not less than the organic matter, the phosphates of lime, soda, potash, &c., had been in the beginning washed into the adjoining ocean, the basis for a perfect vegetation, could only be attained by bringing to this hungry surface those lost inorganic treasures, in the condensed form of the ashes of plants. To this end, he commenced with the application of two hundred bushels of leached ashes to the acre—an expensive mode of renovating land, if we did not consider its very favorable location as to market, the absence of all direct competition, and above all, the lasting ability or nucleus these ashes give to the soil itself to perpetuate its fertility, through the medium of its own productions.

This farm is a hungry, sandy loam, with a subsoil of gravelly detritus. The ashes at first enabled it to produce grass; now the dung of forty stabled cows, composted with swamp muck and peat, gives an increasing grain bearing fertility to the whole tilled surface. In the recital of his farm management Adam says:—"Although deep and mellow tillage for carrots is uniformly recommended, a different practice in several instances has been attended with the best results. On a very hard and slaty soil a larger crop was produced than on the deep tillage, and also on a light sandy loam, where the manure was only hoed in without plowing." May it not be inferred that the cause of this result, was owing to the unfermented condition of the manure, that

on the shallow tillage, being more directly exposed to the atmosphere, fermented in season to feed the present crop, while that in the deep tillage fermented too slowly to be immediately available? Had the manure been free stable dung, without peat and muck, a very different result might have been produced; the deep tillage would then have taken the lead, at least at the end of the race. Experiment has always proved that stable manure is the most reliable food for the present crop. Nature makes this compost—man makes the other, and nature must have time to rectify his errors.

I have often been disappointed in the action of compost manure the same season it was applied to a garden crop, but the effect of stable dung is immediate. If no manure is applied to the soil the next season, that part which had received the compost will give the best yield.

I have been led to the above remarks, only because a great master in rural economy, very modestly expresses his doubts as to the causes which produced the effect in his own experiments.
Waterloo, N. Y., 1848. S. W.

A Seneca County Farm.

A FARMER who disports himself on a 200 acre farm in the flat alluvial plateau of Romulus, came here to-day to buy butter and cheese for his own family use. This same man told me that the only plump wheat he grew on one field, was on the soil thrown out of a deep ditch cut to relieve the field of surplus water. As far as the soil from this ditch was spread the wheat was plump, long eared and abundant; on the remainder of the field it was thin and shrunken. Methinks I hear the hackneyed, hereditary farmer say—"This is a grass farm; it should be plowed less—keep more cows; the man should make his own butter and cheese, and have much more to sell." 'Tis true that this farm will yield good hay, and an abundance of early pasture; but after the middle of July, if not before, heat and drouth are certain; springs there are none—water is scarce—pasture dries up—the calcareous soil cracks open—the cows, few as they are, feed at the straw stacks in August. They now look wistful, dried up, thirsty, and the milk-pail, now useless, is put down cellar to keep it from falling to pieces.

If this farmer does buy a little butter and cheese, he also sells more wheat, clover seed, corn, oats and pork, than some whole towns in a cold, springy, grazing country. He has taken the GENESEE FARMER more than eight years; and what is better, he *cuts all the leaves*, and reads it understandingly. He knows that his subsoil to the depth of fifty feet, more or less, affords the very best *pabulum* for grain crops; and grain he intends to grow. He is now ditching, and is desirous of knowing where he can procure the best subsoil plows. S. W.

"Hedges" and "Special Manures."

[A HORTICULTURAL friend in Cleveland, O., sends us the following "crude and hasty" suggestions, to use his own terms; and we publish them, not because they present any new or useful fact or discovery, but that they may in some degree aid in drawing the attention of cultivators to the important subjects treated upon.]

MESSRS. EDITORS:—It affords me pleasure to see the great improvement that has been made in the late numbers of your paper, and also to discover the evident and rapid changes our agricultural journals are effecting with the farming interest, at least in the State of Ohio. The two most interesting topics that are engaging my attention, in my enfeebled condition, is "Hedging for fences and protection against dogs and loafers," and "Special manuring of fruit trees."

I have become convinced that on the warm gravelly ridges, running parallel to the south shore of Lake Erie, the *Maclura* (Osage orange,) will prove to be the very article needed. It is here perfectly hardy—is not depredated on by insects—is of rapid growth, and will form a hedge in five years that will save our fields from the intrusion of cattle, our sheep from destruction by dogs, and our fruits from pillaging loafers—all very serious desideratums. On the colder clay soils in Trumbull county this shrub is liable to be killed to the ground every winter; and hence, in such locations, will not answer the purpose.

As the phosphate of lime acts so important a part in the nutrition and growth of a pear tree, we should tax our inventions to obtain a supply from every possible source, at least such of us as are attempting to cultivate this tree on soils that do not abound in it. That bones and animal secretions and excretions contain a large percentage of it, is known to every chemist; and every horticulturist should know enough of the science of his calling to enable him to employ to the best advantage these various articles. It also abounds in vegetables—some containing a greater quantity than others. A French chemist informs the public that, by a certain process, it may be made to coat the surface of the leaves of the *Pokeberry* (Phytolacea) with minute crystals. If this statement be true, this troublesome weed must become an important addition to the compost heap. Other plants and trees contain perhaps as great an amount of this salt. But there is still wanting among practical men a knowledge of the best means of securing and applying the articles in which it is contained. A hint is thrown out, I think by LIEBIG, that common salt acts by rendering phosphate of lime soluble.

Chloride of soda is certainly not of itself nutritious to vegetation; but every observing person must have noticed, that in *due quantities* it occasions a rapid, strong, and healthy growth of certain kinds of vegetation. Its favorable effects

are very evident on the pear, plum, thorn, and quince tree; also, on the strawberry vine.—Does it not, in such instances, act in the manner suggested by LIEBIG, and bring the phosphate of lime into a soluble state, fitted for the immediate wants of the growing tree, shrub, or plant?

If we are correct in our views, lime excites a similar effect on the silicate of potash, in our soils, and converts it from an insoluble to a soluble article. In the latter condition it is taken up by the roots of grain and grasses, and forms a large part of their stalks and leaves. We look with deep interest to some of your agricultural chemists for a set of rules to guide us in cultivating and enriching our soils for growing different species of fruit trees.

ANONYMOUS.

Application of Manure.

MESSRS. EDITORS:—I have been a subscriber to the Genesee Farmer for several years, and taken much pleasure in reading your practical articles. You have said considerable relative to the manner of preparing manure with lime, &c. My way is to get along with as little expense, and as large a profit, as possible. I never want to heap up coarse manure, but get it out as early in the spring as my corn ground is ready to plow—before it loses half its strength—and if it can be plowed in before it gets dry, so much the better. The plow should follow the man that spreads the manure; and if coarse, do not be in a hurry, plow deep, stop often, and unclog your plow, and the crop will well pay for the trouble.

By applying it in this manner, I am confident I obtain double the profit from manure, that I could from any other mode I ever practiced. It also fits the ground for a wheat crop, either fall or spring, when well plowed and harrowed—and if wheat can be raised, it is in this way. And if you plant the eight rowed yellow corn, it will grow so large that travelers will think it is the large Ohio corn.

WM. ALLEN, JR.

Cazenovia, Dec. 1847.

ECONOMY IN CANDLES.—If you are without a rush-light, and would burn a candle all night, unless you use the following precaution, it is ten to one an ordinary candle will gutter away in an hour or two, sometimes to the endangering of the house:—"This may be avoided by placing as much common salt, finely powdered, as will reach from the tallow to the bottom of the black part of the wick of a partly burned candle, when, if the same be lit, it will burn very slowly, yielding sufficient light for a bedchamber; the salt will gradually sink as the tallow is consumed, the melted tallow being drawn through the salt and consumed in the wick."

GRAIN IN FRANCE.—France produces annually 231,000,000 bushels of wheat, and 369,600,000 bushels of inferior grains.

Farmers and Millers.

Messrs. Editors:—It is with much hesitancy that I offer a communication to your popular and widely circulated journal, with its intelligent and well informed readers; and were it not for the hope of benefiting others by my own experience, you certainly would not be presented with this communication. And, sirs, it is with this hope that a miller at this moment is writing.

As farmers cannot well do without millers, nor millers without farmers, it is important to study that policy which is the interest of both. And first, it is very essential that all grains should be sufficiently pulverized, that when taken into the stomach the digestive apparatus has only to separate and absorb the nutritious matter for the system, and remove that which is not; and as food is retained in the stomach a certain length of time, it being pulverized gives a gain of all that time which would be required for the stomach to perform that operation, the more completely to separate and absorb all nutritious matter therein contained. Well, then, as the farmer's first principle in economy should be to save what he has already acquired, and to convert it to the best possible use, (and especially uncooked grains fed to animals,) it becomes necessary for him to have his grains ground fine, and for the miller, to insure his custom, to be prepared to grind it fine. And as millers cannot do full justice in their business without the grain is in proper order, it becomes of the highest importance for farmers, in order to receive full justice at the hands of millers, that their grain be dry—not what some men call dry; but if necessary it should be dried by artificial heat. And second—their grain should be well cleaned.

One idea in regard to grinding corn and cobs. It is a notorious fact that there is nothing in cobs of the nature of grinding, and for this reason the corn that is with them must help grind them.—Now, I would suggest to your kind readers (to those who do not know it by experience,) to try a composition of grains for milling, especially corn in the ear. Put with it oats, barley, or rye; see if it does not grind finer, and if your horses, cattle and hogs do not like it better. The preparation may be one half oats, &c., or less according as you have them. The reason of its grinding finer is, there is more of grinding material, less of cobs, and that a mixture of grains help grind each other. Respectfully yours,

S. N. HOLMES.

Holmesville, N. Y., 1848.

The "Farmer."—To Destroy Ground Moles, &c.

FRIEND MOORE:—We have received the numbers of the Farmer ordered, and more are wanted. I have had no idea of being a competitor for a prize, for I view it some like a

school master who offers gifts to those who excel in their studies. In this case those whom nature has done the most for, are sure of the prizes; although the other classes may have exerted themselves to their utmost, yet they have the mortification and discouragement of seeing their superiors bear off the palm. I have thought that if the school master should tell his scholars that such of them as proved themselves the best scholars by their obedience and strict attention to their studies should be rewarded, he would do justice to his school. I find no fault with your prize plan, for it is evident that some of the scholars, at least, who were disappointed, were benefitted notwithstanding, because their best faculties had been exerted, and exertion in a good cause has its reward. We are all satisfied with your paper. A person observed to me yesterday that he would not be without it for double the cost; he is a merchant too, and has nothing to do with farming.

I recollect an inquiry in one of your papers for some method of destroying the ground mole in gardens, but I do not recollect of seeing any answer, and perhaps but few gardens are infested with them. I have been very much annoyed with them. Last spring they ate my peas and corn that I planted first and pretty early; they followed the rows through and left but now and then a seed. I planted the same rows the second time, but tried an experiment to which I attribute my success. I took a little tar, and put warm water to it sufficient to cover my seed; after stirring the tar and water together until it was well mixed, I then put in my seed and stirred it again, and found that the tar adhered to every seed. I then turned the water off and stirred in dry ashes until I could handle the seed without their sticking to my hands. Perhaps lime would be better than ashes. The moles followed the rows through again before the seed came up, but they did not seem to relish the "gravy" that I had served the seeds up in. I have full faith in my experiment, for I treated my cucumber and melon seeds the same way. The hills were examined by the little rascals, but the seeds were not destroyed. JAS. ALDRICH.

Niles, Mich., 1848.

SALT NOT GOOD FOR BARN-DOOR FOWLS.—Gallinaceous birds, reared by the sea side, or on the banks of a salt-water river, avoid the saline stream, and search for food and drink as far inland as they can range. I know not how common salt could be administered to them. It is more than doubtful whether the hens would pick it from the ground in its crystalline form, and it would be difficult to distribute it in equal doses by means of bread, &c., soaked in salt water. The chances are, that some of the hens would be poisoned.

Pigeons, I think, are the only domesticated birds to whose health salt is beneficial, and they prefer it in combination with animalized matter: the more offensive it is to our senses, the more agreeable it appears to be to theirs. Hens, too, are great pickers of bones. I have seen one devouring the flesh, and clearing the skeleton of her dead husband, doubtless on the native Australian principle of respect and affection for the deceased. Salt, in a liquid state, acts as an emetic with fowls, as with dogs.—*Agricultural Gazette.*

Corn and Cob Meal.

THERE are few in this section of country, who endorse the sweeping proscription of corn and cob meal which lately appeared in your paper.* We have heard the subject somewhat extensively discussed, since the appearance of that article, but we have yet to meet with the first individual whose experience coincides with the writer's views. "They say," said one man, in my hearing, "corn and cob meal is poison to a horse; but, in my view, those horses are the worst off that can't get enough of it to eat!"

I would sooner trust the instinct of the animals themselves, than the hasty theories, or carelessly conducted experiments of any amateur farmer. Why do they eat them? Perhaps it will be said, as a man is reported to have drunk a pail of water for the sake of the gill of rum which it contained, so they eat the cobs to obtain the corn meal. But, then, the cases are not parallel.—The appetite of the man had become depraved, vitiated, and unnatural—reason itself was toppled from its seat. His case was an exception, and so would be the instance of an animal (an instance yet to be reported,) which should be found to hesitate over a meal tub, because of the presence of ground cobs. Have not our hogs and cattle been observed to eat them in the rough? I have witnessed mine do so, before the cobs had become hardened by age, with evident gusto.—May not the fact, that the practice is not more habitual, be referable as fairly to the circumstance that other food is generally at hand more easily masticated, as to the supposition of indigestibility?

What is the testimony establishing its hurtful nature? Assertions are, doubtless, evidence; but not conclusive proof. The courts generally require, not the inference or conclusions of a witness, but the particular facts within his knowledge, minutely described. We have a right to suppose that, eating so large a proportion of perfectly indigestible stuff, costiveness would be one of the necessary results. Who has observed it? On the contrary, do not the bowels appear more loose and natural than when supplied with corn meal alone? Now, if corn meal tends to constipation, and an admixture of cob meal restores a healthy state, should not the "pounded glass," recommended by our impulsive friend, be substituted, not for the cob, but for the corn itself?

But, while there is a total absence, heretofore, of all experience of the hurtful qualities of cob meal, the testimony in its favor is various and positive:—

"Grinding the cob with the corn is said to add one-third to its value for feeding."—*Ellsworth's Report.*

"Experiment has satisfied us, that a given quantity of corn, ground in the cob, will accomplish as much as twice

*The article referred to by our correspondent was published in the November number of the Farmer for 1847—page 237. It was written by one of our correspondents in answer to the inquiry of another. The inquiry, and our remarks thereupon are published on page 229 of the same volume.—E. D.

the quantity fed in the ear, in fattening hogs; provided, the meal is fermented by a mixture, for a few days, with water. We would recommend that it be thoroughly ground into meal; as we have found, from our own experience, a very decided advantage from this mode of feeding, and are fully satisfied that it is not overstated."—*M. B. Bateham.*

"Previous to the purchase of the crusher we averaged 214 ears of corn. Our stock average seven head. One hundred and sixty ears (for the last two years) are now run through the crusher. The different appearance of the horses, and their better ability to work, prove, beyond a doubt, that the crusher affords a more nutritious and healthy food. It will also be seen that it places to our daily credit fifty-four ears of corn."—*Dr. A. H. Tyson, in Am. Farmer.*

"We take the present opportunity of directing the attention of our readers to the great value of meal, prepared by grinding corn and cob, for stock; and from the many evidences of practical farmers, as well as from experiments of our own, we can not but press it upon the attention of the prudent farmer. That there is a nutritious substance in the cob, no one, we think, who has paid any attention to the subject, will pretend to deny. In throwing away the cobs of our corn, we have been wasting very good feed. But, besides the actual economy, there is another advantage in this way of feeding corn, which ought to engage the attention of every farmer. It is notoriously true, that the unground grain of corn is heating to the stomach of all animals, and of difficult digestion, producing cholera and other inflammatory disorders, particularly in horses. They are deprived of the benefits derived from the stimulus of distension, (so proper to the health of all animals,) by being unable to eat a sufficient bulk to produce it, before they become gorged.

"It is believed by many, that there is but very little nutriment in corn cobs; but as one proof to the contrary we will adduce the following. A farmer in Virginia, a few years since, afraid his corn crop would not be sufficient to last through the winter, determined to try, and did winter his horses on corn cobs alone, pounded in a common hominy mortar with his own hands. They received no other substance except long forage, as hay and fodder. Upon this they did their work and were in good condition."—*C. N. Bement.*

"Among the evidences of the nutriment contained in the corn cob, the experiment, by distillation, of Mr. MINOR of Virginia, showed that five bushels of cobs contained four gallons of spirit. He also found other nutritive matter than the saccharine, as mucilage and oils."—*American Farmer, Vol. 1, p. 324.*

These testimonials might be extended. It will be perceived they speak from experiment and personal experience, and are from sources entitled to consideration. That one of these, at least, C. N. BEMENT, possess the requisite qualities for a successful experimenter, we have the testimony of HENRY COLMAN: "Agriculture has not in this country a more ardent friend to its improvement. His zeal is associated with great exactness of observation."

I am, myself, making use of cob meal alone, by way of experiment; and, although not prepared to speak of its nutrition, I can certify to the avidity with which it is eaten by poultry and cattle.

LIVINGSTON.

North Bloomfield, N. Y, 1848.

BENEFIT OF SALT IN THE FOOD OF SHEEP.—From some experiments made at the Agricultural Institute, at St. Germain, in France, it appears that the sheep which gained in weight 34 lbs. a month, increased double that amount in the same length of time, when about one tenth of an ounce of salt was added to the food of each per day.

WHAT CONSTITUTES GOOD FARMING.—About 2,000 years ago, when the old Roman, Columella, was asked what constituted good farming, he answered, "first, good plowing." On again being asked what came next, he replied, "good plowing;" thus strongly impressing the occasion for good tillage over every other consideration.

Profits of Poultry.

MESSRS. EDITORS:—I have looked in vain in all the numbers of the present volume of the Farmer for something on the subject of Poultry; as some of the subscribers I obtained for the Farmer are to some extent engaged in that business, I promised them that their interests should be regarded. Compared with some of the large oxen raised in Western New York a hen is a very small thing; but when we consider how much she contributes towards the luxuries of life, I think she should not be entirely overlooked.*

I will give you some statistics of my little flock—hoping that it may induce others to come out who have had far better success than I have. My flock averaged from January, 1847, to January, 1848, 27—12 of which were full blood Polands, and the remainder half bloods. They yielded me, within the year,

265 dozen Eggs (average price, 10c.)	28.50
60 Chickens, (full bloods, worth 1s. 6d. each.)	11.25
	<hr/>
	\$39.75
Keeping the 27 Hens, and raising Chickens, \$19.86	
7 dozen eggs used for setting, at 10c.	70
	<hr/>
	20.56

Profits, \$19.19

I keep my hens in a close yard and keep grain before them at all times, changing from corn to buckwheat, barley, broom-corn, &c. The true way to make hens profitable is to anticipate all their little wants, and supply them. I keep none now but the pure Poland, of which I have 65, and so far as my experience goes, there is no better kind of fowls—constant layers, and seldom wanting to set.

J. H. STANLEY.

Le Roy, N. Y., April, 1848.

* "Our sentiments" likewise, if we have neglected the subject it was unintentional. We thank Mr. S. for his favor, and will endeavor to bear his hint in mind. We shall be happy to hear in like manner from others who have been successful in the raising and management of Poultry.—Ed.

Salt for Swine.

MESSRS. EDITORS:—I have recently read an article in the "Watchman of the Valley," published at Cincinnati, O., recommending the liberal use of "charcoal, sulphur, and salt," for swine. In regard to charcoal and sulphur I know nothing, except that I have before seen them recommended, especially the former. Of salt, I know a little from experience, and that little is not in favor of its use. I recollect that when a lad, my grandfather stated, that when giving salt to his cows his hogs followed him, and he gave them a little, which they ate readily, and he then gave them a little more. Very soon afterward they all began to vomit. An uncle, a neighbor, and myself, all tried the experiment

about the same time, and with the same result. The quantity given was small, perhaps not much exceeding a common teaspoonful.

A few years ago, one of my neighbors had fattened several hogs for market; (it was during the latter part of summer.) Three of them sickened, two of which died in a very short time, the other recovered. The owner could assign no reason for the occurrence, but their having eaten salted food; and this was generally believed, although it was not certain, that this was the cause. For these reasons I have always regarded salt as injurious, if not fatal, to swine.—I would be glad to learn more on the subject.

Fairport, N. Y., 1848.

H.

Sugar Maples.—Suggestion to Farmers.

Few observers have failed to notice that holes bored in the maple never heal over. The wood and bark both perish for several inches above and below the hole, and often two inches each side of it; the tree is in consequence essentially injured, and after a series of years ruined. The reason why it does not heal, is probably because of the unfavorable shape of the wound—the new wood not having room to form.

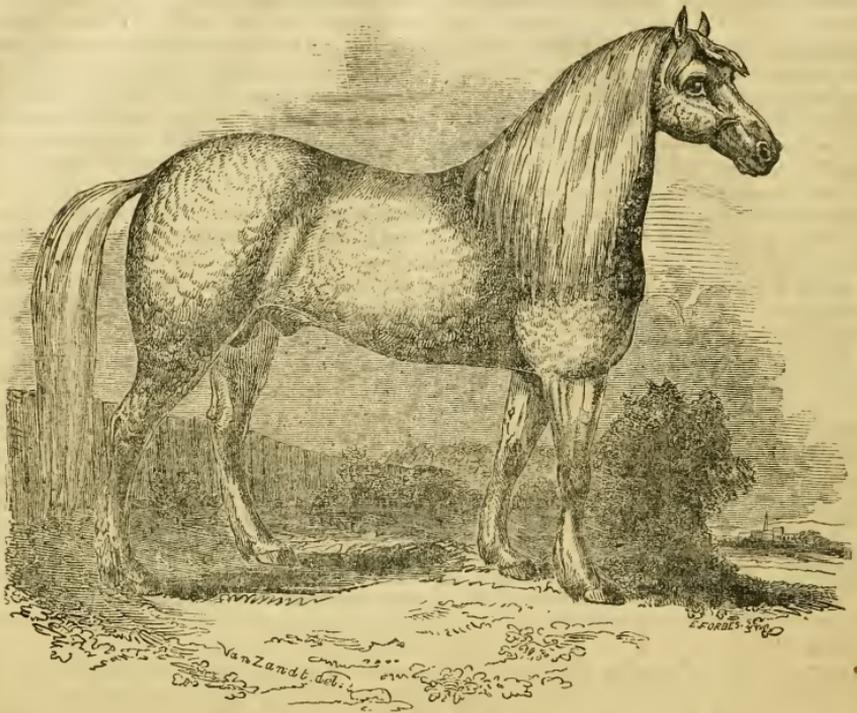
The maple is a beautiful and valuable tree, and sorry I am that so few farmers care enough for the future, or those who shall come after them, as to lead them to take pains to save and perpetuate this pride of the forest, this bountiful free-giver of an unequalled and delicious sweet. My suggestion is this:—let the manager of the sugar orchard, when on his round to gather his buckets, at the close of the season, take with him a gouge chisel and mallet, and a basket of well made wooden plugs, or else corks—(the gouge should be some half-inch wider than the hole in the tree:) let him cut out a chip slanting inward above and below the hole meeting at the centre of it; then drive in the plug or cork so as to make a smooth and water-proof fit, and the work is done. A healthy lip will soon form and grow over the orifice, and the tree will thus be preserved from decay, an ornament to the grounds where it grows, and a benefit of no little importance, reaching to several generations.

Rome, N. Y., 1848.

H.

THOUGH NOT "in season," the suggestions contained in the above article may hereafter prove valuable to those who preserve the Farmer. The matter is worthy of a second thought, and some attention.

EVERY man certainly has a right to live, and the duty of every just man is to let him live. Blessed be the day, if come it ever should, when man will learn that his own true prosperity is essentially involved in the prosperity of his neighbor.



THE NORMAN HORSE "LOUIS PHILIPPE."

THE above portrait is a good representation of the Norman Horse "Louis Philippe," recently purchased by Mr. R. B. HOWLAND, of Union Springs, Cayuga county, N. Y. His color is dapple gray; he is four years old past, and about fifteen hands high.

In a letter recently written us, Mr. HOWLAND says:—"Having purchased the full-blood Norman Diligence Stallion "Louis Philippe," I send you a notice of his whereabouts, that you may spread the information if you think proper. I was led to the purchase of this horse from the knowledge acquired of them during a tour of several months on the continent of Europe.—From their unsurpassed activity, strength and hardihood, I was convinced they would be a great improvement on our native mongrel stock, which are generally very poorly adapted to draught, and inferior to the Norman when put on the road. The Diligence horse is also remarkably easy to break, and kind and courageous under all circumstances. This horse ("Louis Philippe,") was foaled on the 15th of July, 1843, from full-blooded sire and dam. The parents were imported in 1839, by EDWARD HARRIS, of Moorestown, N. J., a gentleman justly celebrated for his enlightened and disinterested efforts, and very liberal expenditures in the cause of agriculture and

science. The stock seems improved by the transfer across the Atlantic."

This is the first Norman horse owned in this State, we believe—and we congratulate the farmers of Cayuga, and vicinity, on so valuable an acquisition.

Perhaps we cannot better close this brief and necessarily incomplete notice, than by giving the subjoined extract from the Report of the Committee on Foreign Stock, at the State Fair held at Albany, in 1842. The Committee, (Messrs. Henry S. Randall, Francis Rotch, and Geo. J. Pumpelly,) alluding to the sire of "Louis Philippe," remark:—

"They have had the pleasure of examining a grey four year old Norman stallion, presented by Mr. Edward Harris of Moorestown, New Jersey, and imported by that gentleman from France. This horse belongs to the breed used for the diligence or stage coach in France, and although not decidedly fleet, they are remarkable for their bottom and endurance. It may, indeed, be well doubted whether any other variety of horses would drag those cumbrous vehicles so great distances in a given time. Like their descendants, the Canadian horses, they are easily kept, will feed on the coarsest materials, and are remarkable for their freedom from disease, and their iron

hardihood and endurance under all circumstances.

"Your committee consider Mr. Harris' horse one of unusual substance and symmetry, for the breed. The shoulder lies well back, the back is short, the whole conformation betraying immense strength. He has a great length and substance of fore-arm, and the limb below the knee is clean and short, for the character of the breed. He also displayed free and spirited action. Your committee cannot but believe that in its pure state, this variety of horses would prove one of the most valuable for heavy draft; and there is little doubt that crossed with the light mares of our country, would produce a peculiarly hardy and active race of horses, fit for the road or the plow."

Pennock's Wheat Drill.

MESSENGERS. EDITORS:—As the above machine is comparatively but little known in this wheat growing region, and having used one the past season and thereby pretty thoroughly tested its valuable properties, we have thought it not amiss to commend it more particularly to the farmers generally. The past winter has been unusually severe upon wheat in this section, rendering the appearance of the forthcoming crop anything but promising—while, in many cases, whole pieces have become entirely worthless. The attention of wheat growers is called to the subject with a view, if possible, to devise some remedy for the evil.

The use of the roller has been recommended by some; but when the roots of the wheat plant have been once drawn out by the action of frost, there is but little hope of replacing them so as to produce a healthy, vigorous growth. "Pennock's drill," in our humble estimation, affords the best, if not an entire preventive of the evil complained of—depositing the wheat in small trenches and leaving a ridge of some three inches in height between the drills, the action of frost instead of laying the roots bare is gradually leveling these ridges and covering the roots deeper.

In drilling in my wheat last fall in a field of some eight acres, we sowed one acre broad-cast, as an experiment. We find this spring the one acre completely ruined, while the remainder of the field is apparently but little affected by frost—the roots of the plant being generally well retained in the soil; and now present a lively, vigorous growth. In another field the same experiment was tried with nearly the same result.—Upon the one acre we have drilled in a bushel of the 'black sea' spring wheat, and await the result.

The drill is equally adapted to sowing other kinds of grain. We tested its qualities a few days since as a corn-planter, with the most gratifying result. Having placed the machine in a proper position, with horses attached, and throwing the drills "out of gear," except the first, fifth, and ninth, we took the reins and giving "old Rock" the word *go*, off we started at a quick step

—depositing three rows at a "through" with all the precision and regularity of clock-work—not *in drills, but in hills*—thus rendering the task of planting a ten acre lot but a play spell. But the best part of the operation is still in prospect. We propose, as soon as the crop is fairly out of the ground, to reverse the order by throwing "out of gear" the above mentioned three drills, and throwing the other six "into gear," and thus, passing over the ground in the same order as before, shall be enabled to cultivate the whole surface nicely—repeating the operation every few days, or as often and as long as may be necessary. Such is my plan for raising corn with the drill—rich enough in theory and sufficiently promising in prospect. The operation I find gives infinite delight to 'the boys,' who have thrown their hoes to the 'tomb of the Capulets.'

Respectfully yours,
CALVIN SPERRY.
Gates, Monroe Co., N. Y., 1848.

The Locust.

(*Cicada Septendecim.*—LIN.)

THIS mysterious insect will again make its appearance in this city and a large surrounding tract of country about the first of June next, after a submergence in the earth for a period of *seventeen* years. It would be a valuable and curious inquiry to learn the district of country to which they are restricted, and whether the whole terrene surface of the United States is inhabited by them; and whether they overlap and infringe each other's territories, whereby they apparently appear at shorter intervals than the fixed and unchangeable term of seventeen years, which, as far as our knowledge extends, never varies. If that period is constant, there must have been more than one creation, as the difference in the temperature in different seasons, since the historical period, is not sufficient to advance or retard their progress, from the egg to the *imago*, or perfect insect, for a number of years. Their appearance in the region of Saratoga Springs and the Hudson River was in 1843, and in a large district in Ohio in 1846, and we have no doubt that their emergence to light is annual in the different parts of this continent, and perhaps in more than one place in the same year.

Will some of our subscribers living east, west and south of this city, in the neighborhood, but beyond the region of their actual appearance, advise us of this fact, that we may learn the extent of the district they inhabit, and that future observers may note whether they increase or diminish in the extent of their territory. Our own opinion is, that the clearing and cultivation of the land will eventually be fatal to them. This is a legitimate subject of inquiry, and we shall be obliged to some of our readers if they will charge their minds with this subject, and communicate the facts we want.

New York State Agricultural Society.

Premiums for Winter Meeting.

MANAGEMENT OF FARMS.

1st prem., silver cup, value \$50 | 2d do do, 30; 3d do do 20

CHEESE DAIRIES.

1st prem., silver cup, value 50 | 2d do do, 30; 3d do do 20

The persons making applications for premiums, must submit written answers to the following questions:—

1. What is the locality of your farm, its elevation, and latitude?
2. How much land under cultivation? How much in pasture and in meadow?
3. What is the nature of your soil and subsoil?
4. What plants or grasses do you use for pastures? What for hay, and how are your meadow lands treated, and how much hay do they yield per acre?
5. How many pounds of milk from each cow? How many from the whole herd?
6. How many pounds of cheese to 100 pounds of milk? The quantity of milk and cheese during the season? The quantity of milk and cheese to each cow?
7. At what time do you commence and close making cheese?
8. Do you rear the calves? Do you keep swine?
9. Is any food used besides grass and hay?
10. A particular account of the method of making cheese? The quantity of the cheese, its price in market, and place where sold?
11. The number of cows milked? the breed of the cows and their age? and the time of calving?
12. What difference is there in the quantity of cheese yielded by the same quantity of milk given by different cows?
13. Has any particular kind of herbage been noticed to have an influence in increasing the proportions of *cheesy matter* in a given quantity of milk? And what kind of herbage produces the most and best milk?
14. If any butter made during the season, state how much.
15. What are the principal causes which produce bad cheese?
16. State such other particulars as from experience and observation are deemed important, so that correct results may be obtained as to the best manner of managing a Dairy.
17. Do you keep cows in the same pasture or do you change pastures?—and which is preferable?
18. What kind of salt is used? Have you used solar evaporated salt or steam refined salt from Onondaga Salt Works, and what has been the result?
19. Has any of your cheese or butter been sent to foreign market? How has it kept in warm climates?
20. What quantity of land is required to keep a cow in good condition through the year?
21. What is the difference, if any, between the morning's and evening's milk in the quantity of cheese, from an equal quantity of milk?

It is expected that the questions will be answered with precision, and that all the operations of the dairy will be carefully noted during the season. The object of the Society is, to ascertain as far as practicable, all that relates to the manufacture of cheese, the quantity of milk and cheese per cow, and the quantity of cheese from each 100 pounds of milk, and the kinds of plants and grasses best adapted to producing milk for cheese; the best breed of cows, and the location of farms best adapted to the manufacture of cheese.

The statements presented must be verified by the affidavits of the competitors, and also by one or more persons who assisted in the dairy and is acquainted with the operations, and sent to B. P. Johnson, Secretary, by 1st January, 1849.

BUTTER DAIRIES.

1st prem., silver cup, value 50 | 2d do do, 30; 3d do do 20

The regulations for Cheese Dairies must be complied with by applicants, adapting answers to Butter instead of Cheese.

BUTTER.

For best 3 tubs or firkins of meeting, cup, value 15
Butter exhibited at winter 2d do do 10

CHEESE.

Best 3 Cheese, cup, value 15 | 2d do do 10

To be accompanied with a particular statement of the manufacture and preservation of the Butter or Cheese.

DRAINING.

Best experiment in draining, 2d do do 20
cup, value 30 | 3d do do 10

To be accompanied with—1st. Statement of the situation of the land previous to the commencement of the process—the kind and condition of soil. 2d. The method pursued, with a particular account of the expense. 3d. The result and increased value of the land, if any.

FIELD CROPS.

Best crop of Wheat, not less than 2 acres. 20	Best crop of Indian Corn, not less than 2 acres, to be shelled and weighed between 20th Dec. and 5th January. 20
2d do, 15; 3d do 5	2d do, 15; 3d do 8
Best crop of Spring Wheat, not less than 2 acres, 15	
2d do, 10; 3d do 5	

Best crop of Barley, not less than 2 acres. 15	less than 1 acre, 50 pounds estimated a bushel 10
2d do, 10; 3d do 5	2d do, 8; 3d do 5
Best crop of Rye, not less than 2 acres. 15	Best crop of Sugar Beets, not less than ½ acre, 50 lbs. to the bushel. 8
2d do, 10; 3d do 5	2d do, 6; 3d do, 4
Best crop of Oats, not less than 2 acres. 15	Best crop of Carrots, not less than ½ acre, 50 lbs. to the bushel. 8
2d do, 10; 3d do 5	2d do, 6; 3d do 4
Best crop of Buckwheat, not less than 1 acre. 10	2d do, 6; 3d do 4
2d do, 8; 3d do 5	Best crop of Mangle Wurtzel, not less than ½ acre, 50 lbs. to the bushel. 8
2d do, 8; 3d do 5	2d do, 6; 3d do 4
Best crop of Beans, not less than 1 acre. 10	Best acre of Corn Fodder, with account of cultivation and preservation 10
2d do, 8; 3d do 5	Best ½ acre of Hops, with full account as last 10
Best crop of Potatoes, not less than 1 acre, as to quantity 15	Best ½ acre Flax, same ac. 5
2d do, 10; 3d do 5	Best ½ acre Tobacco, do 5
Best crop of Potatoes, of good table quality, not less than 1 acre. 15	Best acre of Broom Corn 5
2d do, 10; 3d do 5	Best acre of Clover Seed 5
Best crop of Ruta Bagas, not less than 1 acre. 10	Best acre of Timothy Seed 5

Statements to be furnished by applicants for Premiums on Farm Crops, except Indian Corn.

1. Statement of the previous crop, if any, and how manured.
 2. The kind & condition of the soil, and the location of the farm.
 3. The quantity of manure on the crop, the manner of its application, the quantity and kind of seed used.
 4. The time and manner of sowing, harvesting and cleaning the crop; and the actual yield by weight or measure, the statute bushel in grain crops to be used; the market value of the crop, and the place where marketed.
 5. A detailed account of the expense of cultivation.
 6. A sample of the grain must be presented at the annual meeting. The land must be measured with chain and compass, and the Surveyor make affidavit to his survey. The applicant, and one other person who assisted in harvesting and measuring the crop, must make affidavit of the quantity of grain raised. The entire crop upon the piece entered for premium to be harvested and measured. Form of affidavits for surveyor and applicant are annexed. The premiums on field crops are intended only for crops raised upon the farm in its usual cultivation. The Society do not intend to offer or award premiums for crops raised by unusual manuring and cultivation.
- Competitors must become members of the Society, and forward their statements and proofs to B. P. Johnson, Secretary, Agricultural Rooms, Albany, previous to the 1st of December, 1848. Premiums will be awarded at the annual meeting on the third Wednesday of January, when the competitors are expected to be present, or some person in their behalf.

Statements for Indian Corn.

No premium will be awarded on Corn crops unless accompanied with a statement of the following particulars:—

1. The condition of the soil at the commencement of the culture, and the crops raised, if any, the two previous years, and the quantity and kind of manure used, as near as the same can be given from recollection.
2. The manner of plowing, dragging, and furrowing or marking the land for planting; the distance the hills or drills are designed to be left apart; the time of planting and about the time the corn appeared above ground; and the number of kernels dropped in hills or drills as near as can be ascertained; and the number of stalks designed to be left in each hill or drill.
3. The variety of corn planted, and the quantity of seed per acre; the quantity and quality of manure put upon the crop, and the manner of its application; and the number of times the corn was hoed, or other method of cultivation.
4. The time of cutting the stalks, or of cutting up the corn; the number of loads of stalks, and its estimated value for fodder.
5. The corn to be shelled, cleaned, and measured in a sealed half bushel, from the two acres, between the 20th December and 5th of January, and the number of bushels to be stated.
6. The ground to be measured by a surveyor, with chain and compass, who must make affidavit of the correctness of the survey; and one or more persons, in addition to the owner, to make affidavit as to the gathering, cleaning, and measuring the corn.
7. A full and particular statement of the expenses, including the number of days' work of team and hands, and the value of the same; the value of the manure; the market value of the corn at the place where marketed.

All of the above facts to be verified by the oath or affirmation of the applicant.

Forms of affidavits for surveyor, applicant, and assistant, are annexed.

The application, with the proofs, must be forwarded to the Secretary, at the Agricultural Rooms, Albany, by the Jan. 10, 1848.

Forms of Affidavits for Surveyor, Applicant, and Assistant.

County, ss.—A B being duly sworn, says he is a surveyor; that he surveyed, with chain and compass, the land upon which C D raised a crop of — the past season, and the quantity of land is — acres, and no more.
Sworn to before me, this _____ day of —, 184 _____, A B, Surveyor. _____, Justice.

County, ss.—C D being duly sworn, says that he raised a crop of _____ the past season, upon the land surveyed by A B, and that the quantity of grain raised thereon was _____ bushels, measured in a sealed half bushel; and that he was assisted in harvesting and measuring said crop by E F; and that the statement annexed, subscribed by this deponent, as to the manner of cultivation, expenses, &c., is in all respects true, to the best of his knowledge and belief; and that the sample of grain exhibited is a fair average sample of the whole crop.

adapted for the germination and growth of particular vegetables, as well as the soils to which it is best adapted., Silv. cup, val. \$25

Atmospheric Influence on Soils.
3. For an essay or memoir showing the nature of the Atmospheric influences on soil in promoting its fertility, including the modification of these influences, arising from heat and cold, dryness and moisture, Silver cup, value \$25.

Analysis of Indian Corn.
4. A full and complete Analysis of Indian Corn, including the different varieties usually cultivated in this country, from the earliest stalk to the maturity of the ear, (including also the cob) in 1850. \$200

Sworn to before me, this } C D.
day of _____, 184 . }
Justice.

EXPERIMENTS.

For the best experiment to be continued through three crops, to ascertain in bushels of grain and weight of stalks or straw, the actual value of manure to a farmer. The experiments to be conducted as follows, viz:—

County, ss.—E F being duly sworn, says that he assisted C D in harvesting, getting out, and measuring his crop of _____, referred to in the above affidavits, and that the quantity of grain was _____ bushels, as stated in the affidavit of C D.
Sworn to before me, this } E F.
day of _____, 184 . }
Justice.

FRUIT.

For the best new seedling variety of winter apples, of decidedly superior quality and valuable for exportation; one dozen specimens to be exhibited; together with a history of its origin; a description of the growth, character, and habits of the tree, and the growing of the fruit—such fruit to be adjudged by the committee as of the first character for orchard purposes., dip. & \$10
For the 2d best do., 5

1. Three contiguous acres of ground shall be selected.
2. One acre of which shall be manured with not more than ten cords of common barn-yard manure the first year, and plowed under. The second acre to be manured with fermented and composted manure, to be applied in any manner the experimenter chooses—but a full account of the mode of making and materials of the compost and the manner of its application, accompanied with a statement of the cost of making, and application, will be required.
3. The three acres are to be planted with corn the first year; the second to be sowed with barley or oats; the third crop to be winter grain; and an accurate account of the yield of each crop to be kept.
4. A full account of the whole management and all the details respecting the culture and the circumstances affecting the crop.
5. The several kinds of soil to be particularly described, and specimens transmitted to the State Society for analysis before commencing the experiment—and also at the conclusion of the experiment—discriminating carefully between each acre.

The above new seedling variety to be sent to B. P. JOHNSON, Secretary, Agricultural Rooms, Albany, before the 15th of January, 1849, for examination.

WOOL.

Best statement in regard to fine woolled sheep, their management, preparation of the wool, packing for market, and the advantages of wool depots, \$50

For the best, . . \$40 | 2d best, \$30 | 3d best, \$20

Answers to the following questions must accompany applications:—

N. B. The specimens of soil to be selected for analysis, must be taken from the surface in different parts of the acre. Where the acre is green sward, the sample must be taken just at the termination of the roots of the grass. Specimens should also be selected from the depth of seven or eight inches,—at all events immediately below the usual depth to which the plow runs. The specimens of soil must in no case be mixed; and should consist of about 1 pound sewed in a cotton bag.

1. What is the expense of keeping a given number of sheep best adapted to the production of fine wool? What is the difference in the expense of sheep yielding a small quantity of wool and those yielding a large quantity? And what the difference, if any, between Saxons and Merinos?
2. What system of breeding will most rapidly increase the flock? and what difference, if any, in the increase of fine and coarse woolled sheep?
3. What is the best method of summer feeding? and of wintering fine woolled sheep? and of preparing the fleece for market?
4. What is the value of the carcass of fine wool sheep for mutton?
5. What effect has the keeping of sheep upon the fertility of the soil? and what number of sheep, if any, can be kept upon 100 acres of cultivated land without diminishing the grain crops?
6. What kind of sheep will produce the most valuable fleece?
7. What method of breeding will produce this kind of sheep?
8. Can any general system of sales of wool be adopted in this country, by which the value of the article can be graduated, according to quality, with as much certainty as other farm products?

SALE OF IMPROVED STOCK.

At the show of the Society last year, at Saratoga, the demand for purchase of improved animals having far exceeded the supply for sale, the Executive Committee, with a view of facilitating the sale of animals, will open a register for such animals as breeders and owners may desire to sell, and which they will offer for sale at the show in September next, at Buffalo.

Long and Middle Wool.
Best statement of long and middle woolled sheep, their management, preparation of wool, its uses, value of the mutton, and the best method of rearing and feeding, \$50

Competitors for premiums on management of Farms, are referred to the transactions of 1845, page 163, where the queries to be answered will be found.

1. What constitutes the difference in value of the fleece of the various breeds of long or middle wool sheep for manufacturing purposes?
2. What breed of sheep is best adapted for mutton? and what the best and most economical method of fattening for market?
3. What system of breeding will most rapidly increase the flock? and what is the difference, if any, in the increase of long or middle wool sheep?
4. Is there any other use to which coarse woolled sheep can be put, more profitable, than fattening for mutton?
5. What is the best method of summer feeding? and of wintering long and middle wool sheep? and of preparing their fleece for market?
6. What effect has the keeping of sheep on the fertility of the soil? and what number of sheep, if any, can be kept per 100 acres of cultivated land without diminishing the crop?
7. Which is the most profitable breed for the farmer to raise?

The location of the Fair at Buffalo, being so convenient to the Western States and Canadas, the Executive committee will be pleased to see a numerous attendance of gentlemen from those places, and extend a cordial invitation to them to be present, and bring their Stock and other articles for competition at the Fair.

ESSAYS AND REPORTS.

The Society desirous of encouraging inquiries and investigations connected with the science of Agriculture, and being aware how little is known with regard to some of the fundamental principles of Agriculture, solicit essays and articles on the following subjects.

For the convenience of exhibitors of Stock, forage, consisting of Hay, Green Oats, Corn Stalks and straw (for litter) with water, will be supplied upon the ground without charge, so that animals on their arrival at Buffalo, may be driven directly to the Show grounds, and need not be removed till the exhibition is closed. Grain will also be furnished for Stock, Swine, and Poultry. The Executive Committee trust that this arrangement will obviate the objection heretofore made by exhibitors,—who have often been subjected to more or less inconvenience in procuring feed for their stock, and at no inconsiderable expense.

The subjects will be continued for more than one year, unless in 1849 papers are received which may be considered satisfactory.

Agricultural addresses from distinguished gentlemen connected with learned institutions, will be given every evening during the Fair.

Influence of Soil on Vegetation.

1. For an essay or memoir describing and proving, on scientific principles, what is the best admixture of the ordinary elements of soil, for promoting the germination and growth of particular kinds of vegetables, Silver cup, value \$25.
2. For an essay or memoir describing, on scientific principles, the mode in which Gypsum operates in rendering the soil better

It is intended to have during the week of the Fair, a meeting of Pomologists from different parts of the Union and Canadas, of which due notice will be given in the agricultural Journals.

Any information desired by persons who intend to compete for premiums, and the queries for management of Farms, and in regard to Wool; will be furnished by the Secretary on application. And he solicits free and full inquiries from all who are desirous of competing at the Fair, or of presenting articles for exhibition.
B. P. JOHNSON, Sec'y.
Agricultural Rooms, Feb., 1848.

SPIRIT OF THE AGRICULTURAL PRESS.

PLOWING GRASS LAND.—In a late number of the *Mass. Ploughman* the editor remarks:—"We noticed that many farmers were turning up green swards last week for planting. Some of them have an idea that the sward will rot sooner when it is turned early, than when the work is done at planting time. This is a great mistake, as any farmer will see who examines and reasons upon it. There is nothing green early in the spring, and the old straw and stubble are a long while in rotting when there is nothing to aid them.

But wait till the tenth or fifteenth of May and you have a green crop to turn under; and this soon sets every thing in motion. The later you turn green sward for planting the better will you succeed in rotting the furrow. We are sometimes induced to turn earlier than we would choose lest the work should be too much crowded in planting time.

GUANO TO CORN IN THE HILL.—"How much Guano will it take to manure an acre of corn in the hill?"

We answer that 50 lbs. will be enough, and that it should be mixed with 3 loads of mould from the woods or the same quantity of rotten manure, and 1 bushel of plaster to each acre. These should be thoroughly mixed together—the quantity named will give a pint to each hill of corn, which we consider will be sufficient to start the corn plants at the onset, and ensure their rapid and luxuriant growth until the roots shall have got down to the manure which may have been plowed in. We would not apply Guano alone in the hill, as the ammonia already formed, is in too concentrated a state to be allowed to come into immediate contact with the seed while in a state of germination. By incorporating it with the mould and plaster, we render the Guano harmless, prevent the escape of its most active and valuable principle, convert what would otherwise be an evil, into a positive benefit, prolong the period of its action, and besides which, add two other ingredients to the soil, which, of themselves, are invaluable as food, and as the provider of food, to the corn plants. If the land may not have been manured broadcast, it will require double the quantity of mould, or rotten dung and guano, but the same quantity of plaster will answer, even in that event.

We would remark here, that we feel it due to the cause of good husbandry to state it to be our opinion, that nothing but necessity can justify any farmer in relying upon manuring in the hill for the improvement of his land, as nothing short of broadcast manuring can effect that object—and we will further state that no system of improvement can be considered good, which does not embrace rotation of crops, liming, clover and plaster. Manuring in the hill may, and no doubt will ensure a single good crop, but it is too partial in the distribution of the fertilizer to effect general benefit.—*American Farmer.*

At the Farmer's Club of the American Institute in the city of New York, a paper was read from Mr. J. P. Downey, furnishing his views and experience on the disputed point of the ascension or descension of the gases of manures. His experiment appears simple in the process and successful in the issue: he plowed a small patch of ground from eight to nine inches deep, and spread his manure in the furrows as he plowed; he then took another piece of ground adjoining, plowed it and spread the manure on the top, harrowing it in thoroughly, the soil being of the same quality. He found the former to yield twenty per cent. over the other, although on the first start the corn on the first piece did not thrive so rapidly as the latter; yet, in two or three weeks after it came up, it began to gain, and so increased until the time of gathering, confirming his belief, that the gases of manure "will not (in his own language) descend, but ascend."

NEST EGGS.—The eggs are made of clay, formed to the right shape, in the hands. After being dried they are whitewashed; when they are ready for use. The matter is so simple, that it only requires to be thought of, to be available. These eggs answer the purpose perfectly—the hens accepting them as fully as those of their own make.

TO PRESERVE WATER IN SEA CASKS AND CISTERNS.—It is said that water may be preserved quite pure, either on long voyages, or in cisterns, by the addition of 1 lb. of black oxide of powdered manganese to 1,000 gallons; stir it well together, and the water will lose any bad taste it may have acquired, and will keep for an indefinite length of time.

MAINE AND VERMONT.—Maine is a great potato State, and Vermont a great hay State. We suppose the circumstances of their location have produced this trait. Maine is so situated, with her extended sea-coast and navigable rivers running into the interior, that she can ship the crops of her potato fields to any port with comparative ease, while Vermont, not having such facilities for marketing that kind of produce, has not cultivated so extensively. On the other hand, her soil being good for grass and grazing, her farmers have found it profitable to grow hay, and to propagate cattle, horses, sheep, &c. Hence more attention has been paid, in Vermont, to the hay crop. We think our farmers should be looking about them, and enquire what is the most economical mode of increasing this valuable article among us. If our root crops fail in future, as they have for a few years past, more reliance must be put on grass, and of course, more grass must be cultivated.—*Maine Farmer.*

BEEF LAW IN MASSACHUSETTS.—A friend of ours, who sometimes sends cattle to Brighton, made some inquiries of us, in regard to the rules of the butchers in that State, respecting the dressing and weighing of beef cattle. The following is an extract from a law in that State, in regard to it, which will answer his queries.

"All beef cattle, except bulls, sold in market by weight, shall, when slaughtered, be prepared for weighing in the following manner:—The legs shall be taken off at the knee and gambrel joint, the skin shall be taken from all other parts of the animal; the head shall be taken off at the second joint of the neck; the entrails taken out, and all the fat of the same be taken off and weighed as rough tallow, and every other part of the animal, excepting the hide and rough tallow, (the udder of cows excepted,) shall be weighed.

All beef shall be weighed upon the first week day succeeding that on which it may be slaughtered."—*Id.*

PHILOSOPHY OF FARMING.—Here is the secret of good farming. You cannot take from the land more than you restore to it, in some shape or other, without ruining it, and so destroying your capital. Different soils may require different modes of treatment and cropping, but in every variety of soil these are the golden rules to attend to: Drain until you find that the water that falls from heaven does not stagnate in the soil but runs through it and off it freely. Turn up and till the land until your foot sinks into a loose, powdery loam, that the sun and air readily pass through. Let no weed occupy the place where a useful plant could possibly grow. Collect every particle of manure that you can, whether liquid or solid. Let nothing on the farm go to waste. Put in your crops in that course which experience has shown to lead to success in their growth, and to an improvement and not impoverishment of the land. Give every plant room to spread its roots in the soil, and its leaves in the air.—*American Agriculturist.*

A friend of ours, who began life with less than one thousand dollars, and who has brought up reputationly and well-educated, a large family, and has now become rich from the profits of farming alone, informed us that one season he expended \$900 for city manure, all of which he put on twenty acres of land, that he had not a doubt but this manure increased the hay product of that field at least one and a half tons per acre, but he would only calculate it at one ton. Hay was then worth for a series of six years the average price of \$15 per ton; he thus realized \$1,300 more within that six years than he otherwise would have done, had he not purchased the manure. He calculated that the grass this field produced, which he fed off after mowing, was an equivalent for the extra expense of cutting and marketing this extra ton per acre; and the land at the end of the six years was in much better condition than it was before he put on the \$900 worth of manure.—*Id.*

WIRE FENCE.—This mode of fence is becoming quite common, as we learn from various sources, in the northern part of Illinois. We hear of many pieces of it at various places near Rock River—one of them on the farm of John Shillaber, Esq., in Ogle county, being about two miles in length. The cost generally, as near as we can learn, is about 35 cts to the rod. It is said to answer a most admirable purpose against all stock but swine. Cattle and horses particularly, after having their noses well saved once by it, can scarcely be got near it again. A portable fence might easily be made of this material.—*Prairie Farmer.*

SALTING MANURE.—Mixing salt with stable and other manures has a great tendency to prevent the development of grubs and vermin, which are frequently bred in dung when carried unsalted to the fields.—*Am. Agriculturist.*

EDITOR'S TABLE.

TO CORRESPONDENTS.—Communication has been received, since our last, from T. D. Burrell, Calvin Sperry, R. B. Howland, Anonymous, *, A Milk Maid, Jas. H. Watts, A. H., A Farmer, Inquirer, H. C. W., A Subscriber, A. Wilson, W. S., and A. N. N.

ACKNOWLEDGMENTS.—We are indebted to Messrs. GREELY & McELRATH, publishers, New York, for parts 1, 2, 3 and 4 of Ewbank's Hydraulics.—To D. M. DEWEY, agent, Rochester, for the first four numbers of the present volume of the American Phrenological Journal, and a copy of the Edinburgh Journal, and Magazine of Moral and Intellectual Science.—To J. W. BAILEY, for proceedings of Clinton County Agricultural Society, for 1847.—To Hon. Messrs. E. B. HOLMES, J. A. DIX, and others, for various Public Documents.—To D. APPLETON & Co., publishers, New York, for copies of the "Cyclopedia of Practical Receipts," "The Horse's Foot, how to keep it sound," and other works.—To B. P. JOHNSON, Esq., Secretary of State Ag. Society, for Transactions of said Society for 1841 and 1842.—To C. M. SAXTON, publisher, New York, (by S. HAMILTON, Rochester,) for several numbers of the American Architect.

HINTS FROM A TENNESSEAN.—We take the liberty of publishing the subjoined extracts from the letter of a friend who orders about 40 copies of the Farmer to be sent to Wilson Co., Tenn. The notions of the writer's friends will be new to many of our readers—while his own ideas relative to giving full particulars in reports of large crops are to the point. We will hear the wants of our distant readers in mind, and meet their wishes so far as we can consistently. We shall feel obliged for the information desired relative to a clover seed machine, and hope some friend will furnish it for publication. But to the extracts. The writer says:—

"I must say that I was well pleased with the papers received, and have taken some pains to extend the circulation of the Farmer. The greatest difficulty in obtaining subscribers here, is, that people generally think that the process and modes of culture used in the north, will not answer here. Many say that if by reading the Farmer they could learn to raise 15 bbls. of corn, or 15 or 20 bushels of wheat to the acre, they would have it though it cost ever so much. And show them the amount of 65 bushels, and in England of 80 or 90 bushels per acre, and they are disgusted—seem to think that any person of half sense would know that such yields were impossible.

"In reports of large crops I would like to see the mode of culture, kind of soil, quantity of seed, and any thing else that had a tendency to increase the quantity, mentioned. I should be pleased also to see a cut representing a clover seed machine, with a description, showing the cost and execution of the same, the number of hands required to use it, and the quantity of seed obtained per acre. In short, give us cuts of all labor-saving machines—and let some of your subscribers here know how to raise 15 or 20 barrels (of ears) of corn to the acre; they don't seem to have the most distant idea of 30 or 40 bbls. per acre—that's all a Yankee trick."

"I am not writing for the press, but thought best to let you know the notions of some of your subscribers here, that you might meet them."

A FRUITFUL TREE.—Mr. SAMUEL C. CORWIN, of Phelps, Ontario county, has an apple tree (Greening) which bore 70 bushels the past year. Of the 70 bushels 65 were good merchantable apples. This may be considered "rather steep" by some of our readers, but we are assured the statement is correct.

OHIO WHEAT CROP.—The Ohio Cultivator of April 15, says:—

"The wheat crop in the central portions of the State looks very promising, and is now past danger from the winter.

A friend from Huron County informs us that in Huron, Erie, and other northwestern counties, the appearance of the crop is not so promising—many fields being badly winter killed, especially where the land is too wet and imperfectly drained.

Letters from Columbiana county state the wheat crop looks well, except on wet lands—but the neglect of drainage is a great loss to the wheat farmers.

In Southern Ohio, on rich lands, the wheat crop is so forward, that pasturing it off with sheep, will be of advantage."

THE ALBANY AGRICULTURAL WAREHOUSE, as will be seen by reference to our advertising department, has passed into the hands of Mr. HORACE L. EMERY—Mr. TUCKER, of the Cultivator, retiring from the establishment. From his business habits and capacity, (having spent several years in the Ag. Warehouse of Messrs. Ruggles, Nourse & Mason, of Boston,) we think Mr. E. will conduct the establishment in a proper and creditable manner—alike beneficial to himself and the agricultural public. During a "call" at his Warehouse, a few days since, we noticed that his stock of well made Farm Implements, Tools, &c., was complete and "in order." We commend the establishment to our readers, and particularly to those in its vicinity and the surrounding country.

DESIRABLE FARMS.—We would refer those wishing to purchase a homestead in this vicinity to the advertisement of JOHN MOXON, Esq., in this number. The farms offered for sale by Mr. M. are very desirable for their location, buildings, and other conveniences. [The advertisement of these farms, inserted in our April number, contained an error. As now published we believe it is correct.]

DURHAM CATTLE.—Persons desirous of purchasing Durham stock are referred to the advertisement of G. Z. VAIL, Esq., of Troy, in this number of the Farmer.

EVERY MAN A FARM.—On motion of Mr. Wentworth, of Illinois, the following resolution was recently adopted by the U. S. House of Representatives: Resolved, That the Committee on Public Lands inquire into the expediency of providing by law, that any landless citizen of the United States, or any other adult landless person who will legally testify that he has taken the necessary steps to become a citizen, and intends to be so soon as possible, may possess, by actual residence and cultivation, so long as he shall continue landless and destitute of the means of purchasing land, a certain quantity of the public lands now remaining unsold and unclaimed under any of the pre-emption laws of the United States, and thus secure every person a farm who is willing to dwell upon and cultivate it.

STOCK OF FLOUR AT DETROIT.—The Detroit Advertiser of April 17, says the quantity of flour in store at Detroit will not exceed 75,000 or 80,000 bbls., and that the surplus of the old crop now among the farmers is much less than at the same period last year. A comparatively small amount of flour is in the interior on the line of railroads to come forward. Last year at this time there were over 225,000 bbls. of flour in store at Detroit.

The receipts by the Central road from Jan. 1 to April 1, in 1848, and for the same time in 1847, were as follows:

	1848.	1847.
January,-----	bbls. 3,692	20,829
February,-----	" 11,630	27,120
March,-----	" 16,633	36,619
Total,-----	" 36,960	84,618

TREES.—Now is the time to set out trees—whether fruit, shade, or ornamental. It is the time to show our interest for posterity, by planting trees to shade the heads of our children, if not our own. Every man who owns a rod of land upon any street, should plant trees upon it. The cost is trifling, while the increased value it will give to it will pay a hundred per cent. interest.

PEAS AND BEANS.—Peas should be sowed tolerably early, even for main crops, or they will be liable to rust or mildew. They will endure cold without injury. We have seen them in flourishing condition when the ground was covered with snow.

Beans are tender, and much injured by cool weather, even if there is no frost. We had beans as early from planting in May, after the weather became warm, as from those planted a month earlier, and the crop was far better. As the early planted partially failed to vegetate, and those that came up became chilled and stunted from the cold and the pelting of storms.—Boston Cultivator.

CRANBERRIES ON UPLAND.—Mr. Gardner, of Massachusetts, according to a statement in the Farmer's Cabinet, raised a full crop of cranberries last year on upland, while those on their native swamps were killed by frost.

MR. BURKE, the Commissioner of Patents, estimates the corn crop in the United States, for the last year, at 540,000,000 bushels—or about, at fifty cents per bushel, to 270,000,000 dollars—equal four times the value of the whole production of cotton.



HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

THE past month has been one of wonderful activity on the subject of tree planting, throughout the entire country. The number of trees sold and planted around this neighborhood from the 25th of March, when transplanting began, until the 25th of April, when it may be said to have closed, exceeds that of any previous year, and shows how rapidly and deeply a taste for fruit culture and gardening is seizing upon the public mind. We rejoice that such a spirit is abroad, and trust that it will suffer no abatement until every homestead in the land shall boast the possession of a good fruit garden, and a due proportion of trees and shrubs of ornament. A treeless house is like a homeless man, a melancholy subject to contemplate.

To those who have taken pains to procure trees and to plant them, it would seem needless to say, "take good care of them;" but there are many who think when a tree is placed with its roots in the ground that it can take care of itself. This is a mistake. Trees cannot take care of themselves; they require careful attention, and particularly during the whole of the first season after planting. The earth should be kept clean and mellow around the roots; half rotten manure thrown around the roots, two or three inches deep, prevents injury from drouth, and renders watering unnecessary. Trees that appear to suffer from being blown around should be neatly tied to a stake, and such as languish from defective roots should be cut back, to reduce the number of leaves. Young shoots that are starting in a direction to spoil the form of a tree should be rubbed off. There are many little matters that require attention, and on which the successful management of trees depend. Transplanted trees should be examined at least weekly, one by one, during the season. Many will do it oftener.

In the *kitchen garden* little has yet been done by those who have no hotbeds, owing to the prevailing coldness of the weather—unless it be with peas, lettuce, and such hardy things. Now, however, there is no time to be lost; procure

fresh genuine seed of all the sorts you want, and see that your ground is in perfect order before sowing. An abundance of peas, beans, cabbage, carrots, parsneps, beets, and radishes, should be raised by every farmer; not one in a hundred raises enough. Good early and winter vegetables are hardly to be seen. A neighbor sells his cabbages at 9 to 12 cents apiece. Onions were scarcely to be found in our market during the past winter, and at the present time celery is a luxury for the upper ten—only heard of by thousands who might as well not have it on their tables every day. Not half a dozen persons in this country raise a good melon—such as our friend DONNELAN'S splendid Minorcas.

Why is it? The poor farmer, struggling with little help, and small means, must forego such comforts, for melons, celery, and other things require time to cultivate them; but we know a vast number of families of young men who have abundance of leisure to raise all the choicest culinary articles; yet they don't know how.—Growing cabbages, cucumbers, melons, cauliflower, celery, &c., is out of their line, and they never give it a thought.

Now these are the very persons who ought to grow such things in the greatest abundance; and if they do not know how, let them go at once to the bookstore and buy such books as Bridgeman's, Buist's, or McMahon's Kitchen Gardener, and there learn the entire routine. The man whose home is in the country and whose pursuit is tilling the soil must, to live comfortable, be a gardener, to an extent, as well as a farmer.

A new variety of sweet corn (originated by Judge DARLING, of Conn.) is highly spoken of as being much earlier than any other kind known.

The *Early and Late Walcheren Cauliflower* are two new varieties of this excellent vegetable, said to be superior and better adapted to our climate than any other. We hope our gardeners will test these things at once.

The *Flower Garden* will now occupy attention. Hardy annuals may be sown, and *Monthly Roses, Verbenas, Peonias, Helitropes, Scarlet Geraniums, &c.*, turned out in masses in the border or in the lawn. Dahlias about the middle or last of the month.

We would repeat what we have often said in relation to the formation of flower gardens, viz: that it should not be cut and carved into a map of small raised beds, among narrow, deep walks, and edged with box plants set several inches apart. The walks in a flower garden should be few, and not over 2 or 3 inches deeper than the beds. Edging of box should not be used at all, unless planted properly, and not one person in five hundred knows how to do that, of those even who call themselves gardeners. To take Box plants and set the roots in the ground as a tree, leaving a stem to be seen, is mere folly, and the edging at best a mere burlesque. Box, when

planted right, will not show more than two or three inches of the top above ground; the branches all spread at equal distances, just touching, forming a close, connected even line.

Don't fail, among annuals, to get *Phlox Drummondii*—beautiful, and a long bloomer—and the *Portulacacas*, that are finest when the weather is scorching everything else. The *Sedum Sieboldii* is another beautiful succulent plant, perennial, that loves the hot sun. It is a most desirable, though rare, border plant.

How to Raise Pear Seedlings.

NURSEYMEN and others who have attempted to raise pear seedlings, are well aware of the obstacles which present themselves. The first is, the difficulty of obtaining seeds, and the second and chief one, is a *leaf blight* that completely divests the plants of their foliage in summer, (about the month of August,) and stops their growth. The next is their liability to be drawn out in winter by severe frosts, from the lack of sufficient fibres to hold them firmly in the ground. The usual practice to avoid the drawing out by frost is to take up the plants, and either lay them in trenches in dry soil out of doors, or in a cellar.

Mr. NELSON, a very intelligent gardener of Newburyport, Mass., says, in the Horticulturist, he succeeds well by sowing the seed in the fall, and as soon in the spring as the plants have *four leaves* he takes them up, cuts off the tap roots, and transplants them into nursery rows in good soil, and thus they form sufficient fibres to hold them in the ground during winter without protection, and may be budded the next season.—We saw last August, in Bloomfield, a small bed of a few hundred that had been managed precisely in this way. They were then all budded and the buds had taken, and the plants were stout, short jointed, and finely clothed with healthy foliage. We therefore think well of this method. The labor can be no objection whatever. The transplanting should be done on a dark day, before rain.

We copy the following article from the *Mass. Ploughman*, which may furnish useful hints, giving, as it appears, the detail of a very successful practice—regardless of the *leaf-blight*:

MR. EDITOR:—Dear sir, I can not agree with your correspondents on the subject of raising seedling pear stocks. I have had some experience in the business for the last six years, and have planted from one to three hundred bushels of them, and have raised from fifteen to thirty thousand seedlings a year. I have tried them on different soils, and the very best I have ever raised were planted upon a hill of very hard strong land; the land was broken up and planted, some of it one year and some of it two with potatoes. The ground was plowed in November and furrowed out into rows of two and a half feet apart, so as to use the cultivator between the rows. Manure was put into the rows and the pomace sowed upon it and covered very lightly, taking care to keep them free from weeds, and they grew finely until the fire blight, so called, caused the leaves to drop and the growth to stop, but they had made a wood of about ten to fourteen inches and very stocky, and I do

not consider this much injury to them as the growth is stopped and the wood ripens hard, and they stand the winter much better, the roots branch out and they have very little top compared with those that are planted upon a very deep rich loam. Some of them will have a tap root of from ten to twelve inches long and be as bare of fibrous roots as a pipe stem. Upon such soils they generally make a second growth and the wood does not ripen and they are very green and tender and very likely to die in winter. The growth upon such a soil as one of your correspondents says from eighteen to twenty-four inches, would be very great, and taken from such a seed bed as that and set out into nursery rows, three-fourths of them would die the first year, as but a very few nurserymen can obtain such a soil, and if they were put into a poorer one they could not be expected to start and grow very readily. I think there is something more to be looked to than getting a large growth the first year. When I set them into nursery rows in spring I think the most important item is to see that they are well taken care of in the fall, by putting salt hay or coarse manure into the rows and have it well spread and trod down so as to keep the frost from leaving them out. If they are not well protected in the fall of the year in which they are set out it is sure death to three-fourths of them. When I want them to stand in the pomace where they are sowed until they are two or three years old, I plant them with apple pomace, about half of each, and they will stand the winter without being protected at all, as the apple roots are much stronger than the pear, and there is no danger of their being thrown out by the frost. I broke up one acre of hard, strong land last spring, and planted it with potatoes. In November I plowed it again, furrowed it out into rows, and planted one-half of it with one hundred bushels of pears ground into pomace and the same quantity of apple pomace, mixed together. These are intended to stand upon the ground until they are two or three years old. I have now six quarts on hand which I have cut and taken from the pears with a knife. I selected such kinds of winter pears as would yield from eight to ten good plump seed and put them into my cellar in the fall, taking care to select such kinds as would keep well from rotting and cut them evenings and such leisure hours as I could get, and put the seed into a box, mixed a little earth with them, and set them out upon the ground and let them remain there until spring, as I can not get them up until they have had the action of the frost upon them, and as soon as the ground is in good order in the spring I plant them. Last year I planted them in the spring as above described, and they were much better than those that were planted in the fall, the ground being newly plowed and in better order in the spring. But I am obliged to plant all such kinds as the common spring pear, as they will not keep. The pears after the seed is cut from them are not lost; I have kept my store pigs upon them until now, by boiling them and mixing with shorts, and they have grown well upon them.

Yours,

W. G. LAKE.

Topsfield, Feb. 14, 1848.

A "MISCELLANEOUS" TREE—A gentleman of Golnitz, in Altenburgh, carried the art of engrafting various kinds of fruit into a native tree so far that it contained 300 samples. This we believe, has never been surpassed. It was a work of love with him. He appended a piece of board to each engraftment which gave the tree an appearance the most amusing. The Russians who once bivouacked in the vicinity, refrained from harming it, although they cut down all its companions for firewood.

FRUIT TREES in this vicinity, says the Ohio (Columbus) Cultivator, of April 15, are now in full bloom, and present a promising appearance, excepting peaches in exposed and wet situations. From nearly all parts of the State we observe favorable notices of the prospects for fruit; tho' in the southern counties many of the peach trees have lost their buds by the winter.

The *Araucaria imbricata*, or Chili Pine.

This noble evergreen tree, was introduced into England in 1795, and according to Loudon, in his Arboretum, was kept in a green house till 1806 or 8, but is now found quite as hardy as the *Cedar of Lebanon*. In 1836 the largest specimen in England was that at Kew, 12 feet high, 40 years old, being raised from seed in 1795—and at that time plants in the London nurseries were sold at two to five guineas each, according to size. Within the past two years a large number have been imported to this country, and are rapidly taking their place beside the *Cedar of Lebanon*, *Deodar*, &c., among all collections of rare and beautiful trees.

We have no doubt but that it will be found hardy in all but the extreme northern parts of our country—being as hardy as the *Cedar of Lebanon*, many noble specimens of which are to be seen on Long Island and around N. York.

We copy the following sketch from the London Horticultural Magazine:—

ARAUCARIA, *Jussieu*. Derived from *Araucos*, a name applied to the natives in those districts of Chili where the tree is indigenous.—Noble evergreen trees.

Araucaria imbricata, *Pavon* (*imbricate-leaved Araucaria*, or *Chili Pine*).—Leaves generally eight together, ovate lance-shaped, thickened at the base, stiff, straight, with persistent mucros. Cones globular at the end of the branches, about the size of a man's head; scales beautifully imbricated.

A very remarkable evergreen tree, of magnificent dimensions, almost the only one to be met with in those districts where it is indigenous. It is a high tree, from 80 to 100 feet, with a trunk like a pillar. Standing closely together in the forest, the trees are generally devoid of branches to the height of fifty or sixty feet: the top is in the shape of a depressed cone, the side-branches proceeding from the trunk in a horizontal direction, and ascending slightly at the tips. Over those branches the leaves are thickly set like scales, which give an appearance of rich embossed work. From the thick coating of leaves which pervades the whole outline of the tree, an idea of extreme brittleness is conveyed to the mind. The wood, however, was successfully used in ship-building in 1780 by Don Francisco Suedariarena.

This plant is a native of the mountainous parts of Chili, in South America, particularly in that division occupied by the tribes of original inhabitants called *Araucos*, from whom the tree derives its name; and from the fact that the climate where it thrives has accommodated itself so wonderfully to European productions, a hope may be held out that the *Araucaria* may in this country prove a valuable acquisition to the arboriculturist. The largest forests of this tree are on the elevated parts of *Naguelbuta* and *Caramavida*, which *Pavon* describes as "offering to the view, in general, a rocky soil, though in parts it is wet and boggy, on account of the abundance of rain and snow which falls in these regions, similar to many provinces in Spain." *Poeppig*, a traveler in the Peruvian Andes, states, that "the *Araucaria* forest of *Antuco* is the most northerly that is known in Chili; so that the northern boundary of this king of all the extra-tropical American trees may be estimated at thirty-six degrees south latitude. The extreme southern limit is not so clearly ascertained; which is not surprising when we consider how little, comparatively, is known of Western Patagonia: it seems probable, however, that it does not stretch far beyond lat. forty-six degrees. Between *Antuco* and *Valdivia* this tree only grows among the Andes, and, as the Indians assert, solely on their western declivities, and nowhere lower than from 1,500 feet to 2,000 feet below the snow line, up to which they frequently reach. Farther to the south, the *Araucaria* appears at a lower elevation; and in the country of the *Cunco*s, and about *Osorno*, is said to occur on mountains of a very moderate altitude, near the sea.—The *Corcovado*, a mountain that rises opposite *Chiloe*, is said to be studded, from its foot to the snow line, with large groups of these beautiful trees."



Araucaria imbricata. (Fig. 29.)

The wood, as grown in the Andes, is of a yellowish white color, veiny, and of close texture; and is said to have been used in ship-building. The tree produces a whitish resin, used extensively by the natives in the cure of wounds and contusions. The fruit may be said to form the regular harvest of several of the original tribes, and it is eaten by them in a raw state, and after being boiled and roasted.

The tree is particularly ornamental, and no plant can be used with greater effect in distinguishing particular spots of country appropriated to art. It should be on every gentleman's lawn: it is both elegant and unique; and if sheltered during frosty weather, so as to keep off that rustiness of color which a free exposure to the seasons brings with it, it will well repay the trouble in spring time.

With regard to what is the best mode of propagating this tree there is but one opinion—raising from seeds. Bottom heat is invariably recommended; and the seeds should be inserted to the depth of about an inch and a quarter, in large boxes or pans filled with free loamy soil, which should on no account be allowed to get dry. When two years old they should be transplanted into nursery lines, in a warm sheltered situation in the open ground, carefully guarding them from excess of moisture, and, in frosty weather, from excess of cold. Those raised in hothouses, greenhouses, &c., certainly look better; but when planted in their final situation, in exposed places, the former soon took the lead. Planted by the seaside in Norfolk, they have made shoots about a foot in length in one season. Plants nine inches high are 2s. each; eighteen inches high 5s. each (1846.)

Culture of the Dahlia.

In the March number we extracted from the Horticultural Magazine an article on the "Properties" and "Propagation" of the Dahlia, and now we continue from the same article on

PREPARING THE GROUND AND PLANTING.

The ground should be dug, and if it will bear it, trenched as low as the soil is good, turning the bottom to the top. Procure your principal stakes, which should be six feet long, and drive them into the ground at their proper places, which should be six feet apart in the rows, and the rows six feet from each other, the second row, being however driven half way between the opening of the first, so that

they do not look so formal as if they were exactly behind each other, and besides which it gives them more room

in the same space of ground: these stakes should be driven a foot and a half into the ground. If the ground has been well dressed, or is newly turned up—or has, in fact, good heart in it, plant without dung: if it has been impoverished, put a good spade-full of well-rotted dung to each stake, and fork it into the ground to mix it well, in about a foot circle in front of the stake, and leave a hole in the center, which must not be disturbed: place all the pots with their plants at their several stakes, then with a trowel plant the balls of earth six inches from the stake; sloping towards it, and the plant may be covered up to the depth of four inches, if necessary, without the least injury; and if the plants are lankey they are better for being covered up a little, and shortening the plant above ground. Water freely after planting, not merely at the plant, but a good way round it. Here a single loose tie to protect them from the wind, is necessary, and any bandage or stick on the plant at the time of planting must be removed, for these ties will, if not removed, cut completely through the plant.

TRAINING THE PLANTS.

With good growth the Dahlia requires three more stakes driven down in angular form, as soon as the side branches make much growth, but the main stem is to be fastened to the center stake. The branches ought not to be in each other's way, therefore, if this is likely to occur, remove the intruding shoot or branch; but never thin a plant for the mere sake of thinning. When the buds appear they may be and often are more numerous than ought to be permitted to bloom, but they should not be much thinned in their incipient state; as soon as they indicate whether there is a chance of their making a flower, the most promising may be kept for blooming, the least promising may be removed; any branch too beyond the flower should be taken away, and the end of a shoot on which there is a flower may be taken off: all small weakly branches may be cut out, so also may all branches that are in the way of more important ones.

GENERAL REMARKS.

The watering of Dahlias, like that of many other subjects, is of but little use unless the ground be well saturated for a good distance round it, or in fact, all over, for the supplying of water at the root only is of very temporary benefit, inasmuch as the parched earth all round absorbs the moisture so rapidly that a very short time after it is applied it ceases to be beneficial. Many persons mulch round the stem with dung for some distance, but there are great objections to it; first, it is a universal harbor for ear-wigs and other annoying and destructive insects, and it is impossible to dislodge or get rid of them; next, it brings the fibres of the roots to the top of the soil, and when dry the plants suffer in a short time almost beyond recovery. It is far better to dung the ground well, plant rather deep, and water all the ground, in preference to wetting merely immediately close to the stem. Another bad practice is to water often and superficially, instead of seldom and downright well; when the ground has a good soaking and the water sinks deep, the roots will go after it, and do not suffer from every little change of weather.

Dahlias may be planted any time from the middle of May till the middle or last of June.—The following are a few fine free blooming varieties, within the reach of all:—Royal Standard, Standard of Perfection, Sir E. Antrobus, Sphere, Tournament, Matchless, Queen (Widnall's,) Topaz, Premier de Voisnu, Illuminator, Harlequin, Marchioness of Ormonde, Cleopatra, Indispensable white, La Tour d'Auvergne, Model, Marillo, Madam Wallner, Glory of Altenberg, Horace Binney, Henry Clay, &c., &c.

We have received from BENJ. GOSS, of East Bloomfield, a seedling apple called "Golden Goss." He says it "bears large crops annually, and will keep till middle of May."—A very handsome yellow apple, with a Swaar flavor. Too ripe to judge of it correctly.

Hort. Society of the Valley of the Genesee.

In our March number we gave the premiums on Fruits and Vegetables offered by this Society the present year. Below we give the premiums on Flowers and Flowering Plants:

ON FLOWERS, PLANTS, &c.	
<i>Hyacinths</i> —Best 12 varieties,	\$1 00
Do. Best display,	5 00
<i>Tulips</i> —Best 12 varieties,	1 00
Do. Best display,	5 00
<i>Pansies</i> —Best display,	2 00
<i>Panomics</i> —Herbaceous, best 12 varieties,	1 00
Do. Best display,	5 00
<i>Phloxes</i> —Best 12 varieties, "The Horticulturist,"	3 00
<i>Roses</i> —Best 12 varieties, "The Rose," by Parsons,	2 00
Do. Best display,	5 00
Do. (Hybrid Perpetual, best 12 varieties,	3 00
Do. (Bengal) best 6 varieties,	1 00
Do. (Bourbon) do.	2 00
Do. (Tea) do.	2 00
Do. (Noisetti) do.	2 00
<i>Carnations and Picotees</i> —Best 12 varieties,	2 00
Do. do. Best display,	3 00
<i>Verbenas</i> —Best 12 varieties,	2 00
<i>Petunias</i> —Best 6 varieties, "Genesee Farmer,"	7 00
<i>Dahlias</i> —Best 12 varieties, "The Horticulturist,"	3 00
Do. Best display, "Genesee Farmer,"	5 00
Do. Best seedling, "Genesee Farmer,"	7 50
<i>Flowering Trees</i> —Best display,	2 00
Do. Shrubs—Best display,	10 00
<i>Herbaceous Perennial Plants</i> —Best display,	15 00
GREEN HOUSE PLANTS.	
<i>Roses</i> —Best 6 varieties,	1 00
<i>Fuchsias</i> —Best 6 varieties, "The Horticulturist,"	3 00
<i>Geraniums</i> —Best 6 varieties,	1 00
Best eight House Plants,	2 00
Best single do. do., "Genesee Farmer,"	7 50
NATIVE FLOWERS.	
Greatest number of species correctly named, "The American Flora,"	5 00
Second best, "The Horticulturist."	3 00
Best floral ornament of Native Flowers,	5 00
Second best, Hovey's Magazine,	3 00
BOQUETS.	
Best pair Table Bouquets,	3 00
Second best do., "Genesee Farmer,"	7 50
Best pair Hand Bouquets, round,	3 00
Best pair do. do., flat,	2 00
DECORATIONS.	
Best floral ornament, "Loudon's Suburban Gardener,"	5 00
Second best,	3 00
Third best,	1 00
ANNUALS.	
Best display during the season,	4 00
Second best, do.,	3 00
Best 6 varieties of China Aster,	1 00
Best 6 varieties of Balsam,	1 00
Best 12 varieties of 10 week stock,	2 00
FLOWER GARDEN FOR 1849.	

To further encourage a taste for the cultivation of Flowers, the Society will offer a premium of \$25 00 for the best arranged Flower Garden, containing the choicest and most extensive collection of flowering trees, shrubs, roses and herbaceous plants.

GEORGE ELLWANGER, }
JOHN THOMPSON, Jr., } Com.
WM. KING, }

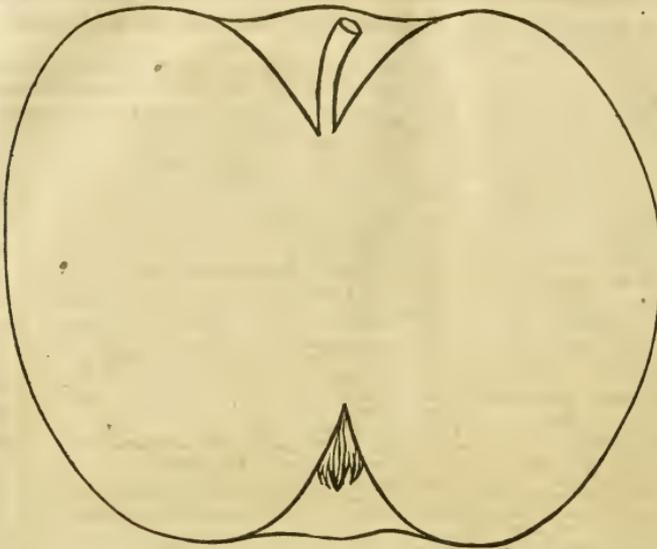
REGULATIONS.

No article shall be entered for competition except at general exhibition, unless the competitor shall have been a member of the Society for at least one month.

The Society reserves the right to withhold premiums on inferior specimens, even though they should be the best exhibited.

Members may enter articles for exhibition merely which are not of their own growth or production.

All articles entered for competition shall be labelled with their name and the name of the producer; and no specimen incorrectly named shall be considered as entitled to any premium.



The Hawley Apple.

Dowse or Dows, (of some orchards.)

It is a fact universally admitted, that the finest fruits now cultivated in the gardens and orchards of this country are of American origin—*really* "FRUITS OF AMERICA"; and it is not a little gratifying to the cultivators of New York, that their State has made a liberal and splendid contribution to the list, and that within a very few years. For instance, the *Swan's Orange* or *Ondaga*, the *Osband's Summer*, and *Oswego Beurre* pears—three fruits that we can say, without the least hesitation, stand unrivalled in their season; the *Northern Spy*, *Early Joe*, *Norton's Melon*, *Hawley*, and *Tompkins* apples, (the latter, Mr. DOWNING says, is superior in flavor to the celebrated *Porter*); the *Washington*, *Imperial Gage*, *Jefferson*, *Lawrence's Favorite*, *Columbia*, and many other plums—all of the very first class; the *Tillotson*, the finest of early peaches, besides several cherries, recently noticed, the character of which we do not yet consider fully established. And nearly all these, except the plums, which have mostly originated on the Hudson, have sprung up accidentally, without the least effort on the part of cultivators, throughout the orchards of the western part of the State.

Nothing could more conclusively show the extraordinary adaptation of our soil to fruit culture, than this single circumstance; and it becomes the duty as well as the interest of every man who is blessed with a homestead in so fruitful and favored a region, to use well this great source of wealth, comfort, and happiness, that has been placed in his possession.

The *Hawley* apple, which is the subject of this notice, is an autumn fruit of the first quality—large, handsome, and fine flavored; trees vigorous,

hardy, and productive; in every respect surpassing, in our opinion, the celebrated *Fall Pippin* that has, for perhaps a century, been as current among the fruit dealers of New York as gold and silver. The first full and correct notice of it appeared in the *Horticulturist* last July; since then it was noticed in *Hovey's Magazine* of December last. The first time we saw it, was at the State Fair at Auburn, in 1846, where it was exhibited by Mr. E. C. FROST, of Chemung Co., as the *Dowse*. His specimens were monstrous, and we well remember the commotion it created among the pomologists present, to all of whom it seemed to be unknown.

—It was next exhibited at the Horticultural exhibitions in Rochester, by MOSES B. SEWARD, Esq., who has two very fine bearing trees, grafted some eight or ten years ago by himself. He brought the scions from Columbia county, where he formerly lived. Here we lived for several years, almost next neighbor to this fine fruit, without any knowledge of its existence, until it was brought out by the exhibition. This is a fact highly illustrative of the benefits resulting from Horticultural Societies. There are at this day many native fruits of the highest value, unknown out of the orchard where they originated, waiting for time and circumstances to bring them to notice.

The *Hawley* originated in Canaan, Columbia county, in the orchard of MATTHEW HAWLEY, who removed from Old Milford, Conn., 100 years ago, and brought the seeds with him from which this tree sprung. The farm is now owned by Thos. Hawley, a grandson of Matthew, who says, in a letter in the "Cultivator" of June last, that the old tree has been dead 12 years, having outlived "all the old folks." It is now scattered, though sparsely, thro' several parts of the State.

Description.—Fruit large, roundish, somewhat irregular, in many cases ribbed. Skin smooth, a little oily to the touch, of a pale green, becoming pale yellow at maturity. Stalk slender for so large a fruit, about three-fourths of an inch long, planted deep. Calyx rather small, partially closed, set in a deep and furrowed basin.—Flesh yellowish white, fine grained and tender, pleasantly acid, and rich flavor. The tree grows vigorously. We had grafts in a tree about 3 inches in diameter that made shoots 5 feet long and stout, and young trees that grew equally well. The habit is good, spreading, but not too much; young wood a dark brown color, and quite woolly.

Cherries.

THE culture of the cherry on the *Cerasus mahaleb* stock, is just beginning to attract the attention of cultivators in this country. We mentioned it in our leading article last month. So far it has succeeded admirably with us, and we shall be much disappointed if it be not found well adapted to the Western States, where standard trees on free stocks are short lived.

The *Belle of Orleans*, *Louis Phillippe*, *Reine Hortense*, and *Merveille de Septembre*, mentioned below, will bear with us this season. The following notes are from the catalogue of THOS. RIVERS, of Sawbridgeworth, England, who has done more than any other man to introduce to England the continental mode of growing fruit trees in gardens:

The culture of the cherry on the *Cerasus Mahaleb* has been so successful here the past season, that I am induced further to recommend it. With nets over my small bushes, I kept most of the finer varieties till August; the wasps then committed such ravages that I was obliged to gather nearly all; but, for the sake of experiment, I covered some trees of the Morello and Late Duke Cherries with cheap muslin. This preserved the fruit in perfection till the end of September. Cherries may now be made part of our desserts from May, commencing with the *Cerise Indulle*, till late in October. There are some new early cherries of great merit, particularly one called *Belle d'Orleans*, ripening early in June, large, sweet and excellent; of this I have not yet propagated any plants, as it bore fruit last summer for the first time. I may here mention that in rich soils Dwarf Cherries on the *Cerasus Mahaleb* grow with extreme vigor for three or four years; in such cases they should be annually root pruned, they will then soon become compact, fertile bushes. I will now notice a few sorts that fruited here the past summer, and of which I tasted and noted their qualities.

Bigarreau de Hildersheim. I ate the fruit of this variety, preserved under muslin, September 16; its flesh was firm, good and sweet, and would have (as I have written in my note book) "remained good till the end of the month."

Cerise Indulle, or *Early May*, is a small sub-acid cherry, agreeable and valuable for its extreme earliness, as it ripens in some seasons towards the end of May; it succeeds admirably on the *Mahaleb* stock, and is very valuable for forcing in pots, forming a small compact bush.

Downer's Late Red. This is an American variety, sweet and good, and ripens from eight to ten days after the *May Duke*.

Louise Phillippe. A cherry much like the *Kentish*, but sweet and very refreshing. A great bearer, and forms a pretty fertile bush.

The *Madison Bigarreau* is an American variety; flesh soft, rich and juicy. It is an excellent bearer on the *Mahaleb*, and in season just before the *Bigarreau*.

Reine Hortense, *Monstrouse de Bay*. *Belle de Bay*, *16 a la Livre*, *Belle de Petit Brie*—for, like most valuable varieties of fruits, it has numerous synonyms—is a first rate variety; very large, and apparently a hybrid between the *May Duke* and *Kentish*; flesh soft, very juicy, sweet and refreshing; ripening about a fortnight after the *May Duke*, and may be kept on the tree under a muslin cover till late in August.

Tardive de Mons, or *Merveille de Septembre*, is one of the latest cherries known; fruit rather small, flesh very firm, rather dry, and very sweet. I gathered the fruit from my specimen tree the 28th of this present month (October); they were perfectly sound.

LADIES' DEPARTMENT.

Good Housewifery.

THE editor of the *Farmer's Library and Monthly Journal of Agriculture* frequently treats of matters coming within the Housewife's Department. Giving in the January number an account from personal observation of the management of a Northern farm, in all its details, he incidentally gives warning to the lady of the house that all men are not to be deceived by "outward appearances." He says:

Mr. HALL, laying aside his milk-pail, insisted that we should go into his house and take a seat, that being deemed a *sine qua non* toward getting acquainted, and discharging, on his own part, the duties of hospitality. In exterior his dwelling was as unpretending as dwelling could be—like Col. C.'s at Saratoga; but like his, too, inside all cleanliness and comfort. By the by, who can avoid—for the life of us we never could—on entering a dwelling, the true province and dominion of the good housewife, from slowly casting around to see how things looked in her department—whether the windows are washed, paint scoured, hearth cleanly swept up, cupboard neatly arranged, mantle and chairs and chair-boards dusted, cobwebs not a speck to be seen—all, all "set in order," and neat and clean "as a band-box?" But, gentle ladies, even all that, let us warn you, does not satisfy the judgment of men who, while they may closely scrutinize your housewifery, entertain, as we profess to do, the highest possible respect for the important, the noble station which Providence has assigned you in the eyes of all men of sense, and which honor and duty alike enjoin upon you to fulfil with care and with pride, whatever, whether high or low, may be your rank or fortune; but, if possible, with more obligatory force and necessity in the country than elsewhere.

Too well are all men of observation aware, however, that all is not gold that glitters—the fairest looking apple is sometimes rotten at the core. The hall, the parlor, the show-rooms, and all apartments in common view, may indicate minute attention and good taste on the part of the mistress, whose eye is best of all brushes; and yet, as it sometimes happens, the chambers of such a house may be the receptacles of filth—the cellars the convenient repository of every offal—the kitchen the scene of waste, and lounge of every idle loafer about the place—the dairy be poisoned with the bad odors of superfluous moisture and half-scoured utensils. We have seen such establishments with disgust; but much more doth it rejoice us to say that we have known establishments where "the lady of the house," like the truly brave soldier who, when roused at midnight, springs at once to his arms, ready to do battle—so can such a woman, in proud defiance of the strictest scrutiny, take husband or stranger by the light of the lamp or the light of the sun, by day or by night, from the garret to the cellar—open every closet and every drawer—and demand, "Where do you find in my department, a pin or a feather out of place, a mickle of waste, or a garment without a button?" But, to achieve all this, she should have all needful help. Such only is the woman who deserves the name of a good housewife; but he who possesses her possesses a treasure of inestimable value, and had indeed must be his own management if, with her thrift and her example and encouragement, he fail to thrive. "She looketh well to the ways of her household, and eateth not the bread of idleness."

All housewifery moveth
With gossip to spend,
Good housewifery loveth
Her household to tend.

INDELIBLE INK.—This may be made much cheaper than purchased, as follows:—Two drachms of nitrate of silver, added to four drachms of a weak solution of tincture of galls. Another:—Nitrate of silver, one drachm, mixed with a solution of half an ounce of gum arabic in half a pint of pure rain water. Moisten the cloth previously with a strong solution of pearl, or salt of tartar, and iron it dry.

A GOOD IDEA.—Mr. Walter Goodale of South Orrington, in a communication published in the *Bangor Whig*, on the subject of raising fruit, says:—"I never knew a boy to steal fruit, whose father raised it himself, and I would say to all persons who own land and boys, if you wish to make them honest, set out trees, and let them see that it costs something to raise fruit."

To Competitors for our Premiums.

The following list contains the names of all the regular competitors who have obtained 50 subscribers or over. The eighteen persons whose names are first given are entitled to the premiums offered. Each will understand from the position of his name the amount of his prize, by reference to the Premium List published on last page of the March number.

The Books are ready, and our friends will please select the works they desire, and inform us in what manner to forward them, &c.

E. HOWLAND, Saratoga County, N. Y.,.....	262	J. Swain,	59
WILLIAM LYMAN, Livingston Co., N. Y.,.....	237	B. & G. M. Copeland,	56
I. R. TREMBLY, Livingston Co., N. Y.,.....	235	R. Sears,	55
J. H. STANLEY, Genesee Co., N. Y.,.....	175	D. A. Ogden,	54
E. C. BLISS, Chautauque Co., N. Y.,.....	145	Caleb Nye, Jr.,	53
MOSES EAMES, Jefferson Co., N. Y.,.....	141	C. Fenton,	53
H. FRISBIE, Orleans Co., N. Y.,.....	107	B. Spaulding, (Vt.),	53
L. Runyan, (Pa.),	89	J. H. Gould,	53
H. C. Kimberly,	85	E. W. Lawrence, (Mich)	50
L. P. Clark,	84	L. D. Smith, (Mich.),	50
F. J. Eastman, (Vt.),	83		
J. A. Carpenter, (Wis.)	81		
A. W. Beach,	72		
C. H. Carter,	70		
Erastus Hurd,	67		
Dr. O. Reynolds,	64		
Jno. G. True,	62		
C. A. Knox,	60		

☞ We give the counties in which the most successful competitors reside. Though they obtain the highest premiums, perhaps their efforts have not been more earnest than many of our friends in other localities less favorable for obtaining subscribers. Were we able to do so, it would afford us pleasure to give all the competitors (including those whose names were given last month,) premiums—though we are well aware that a great majority of them have labored to benefit their respective neighborhoods, rather than for any personal gain. They have our warmest thanks for their generous exertions in behalf of the Farmer—with the assurance that (though much less profitable than other kindred publications,) we shall endeavor to render it worthy their continued support.

HENS.—If you keep hens confined, do not neglect to provide them liberally with meat. In their summer rangings, bugs, worms, grass-hoppers and flies constitute the principal food, and when debarred from these, they require to be otherwise supplied. We have known hens, when suddenly taken from the fields, and incarcerated in their houses, stop laying, and pine away, until they were supplied. A very remarkable indication of the want of this species of food is to be seen in the avidity with which they devour fish, oil, and indeed any fleshy matter that is presented. When there is scarcity of meat, as is frequently the case at particular seasons of the year, we have recourse to the scaly treasures of our ponds and streams, and find them a most excellent substitute.

SALT APPLIED TO ASPARAGUS.—Salt should not be applied to asparagus at the time of making the beds; but when the plants are growing—frequently and in small doses. Water no saltier than that of the ocean is what is recommended.—*London Gazette.*

KEEPING BEEF FRESH.—In preserving beef, the ribs will keep longest, or five or six days in summer; the middle of the loin next; the rump next; the round next; and the shortest of all the brisket, which will not keep longer than three days in hot weather.—*Combe.*

A FRIEND writes us from Lenawee Co., Mich., dating April 8, as follows:—"The late rains have made a very great improvement in the appearance of our wheat crop. It is now looking very promising in this section of the country."

Monroe Co. Agricultural Society.

A meeting of this Society, for the purpose of appointing Judges and making out a Premium List for the ensuing Fair, will be held at the Office of the *Genesee Farmer*, on SATURDAY, the 6th of May instant, at 10 o'clock A. M. A full attendance is desired. JOSEPH ALLEYN, Sec'y. Rochester, May 1, 1848.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,-----	\$1 25	1 31	Pork, bbl. mess	10 50	11 50
Corn,-----	40	44	Pork, cwt.,---	4 50	5 00
Barley,-----	50	56	Beef, cwt.,---	4 50	5 00
Oats,-----	35	40	Lard, lb.,-----	6	7
Flour,-----	5 00	5 50	Butter, lb.,-----	16	20
Beans,-----	83	1 25	Cheese, lb.,-----	6	7
Apples, bush.	25	50	Eggs, doz,-----	8	9
Potatoes,-----	50	63	Poultry,-----	7	8
Clover Seed,--	4 00	4 50	Tallow,-----	7	8
Timothy,-----	2 50	3 00	Maple Sugar, -	7	8
Hay, ton,-----	7 00	11 00	Sheep Skins, -	38	75
Wood, cord,--	2 00	3 50	Green Hides, lb	4	4
Salt, bbl,-----	1 38	1 50	Dry "-----	7	8
Hams, lb,-----	6	7	Calf Skins, ---	9	

Rochester, May 1, 1848.

New York Market.

NEW-YORK, April 29—7 P. M.
 FLOUR AND MEAL.—Flour without change. About 2000 bbls. changed hands at \$64.06 for common, 6.12½ to 6.25 for good and pure Genesee. Michigan sold at 6.18 to 6.25, and occasionally pure Genesee brought 6.27½; good brands N. Orleans 6.25. The foreign news had no effect excepting to check business. Meal is steady at 2.37½ with sales 3 or 400 bbls. Jersey. Sales 200 bbls. Rye flour at 5.65½.
 GRAIN.—For Wheat there was some inquiry, but holders and buyers did not meet in their views. Genesee is held at \$1.40.—Corn is steady and in moderate demand. The sales are about 10,000 bu. at 52c for white, and 52½ to 53c for yellow. A sale of 2000 bu. N. Orleans was made at 50½c. The supply was not large. There was some Corn offered for future delivery, but no sales were made. Rye is quiet; the quotation is 72 to 73c. Sales 8000 bu. Oats at 44 to 45c for northern.

PROVISIONS.—In Pork there is much dullness, and the same remark applies to all articles of provisions to-day. Mess is 10c to 10.00; prime 8.25½, nominal, with sales 2 or 300 bbls. Beef is without sales of importance. Tierces are wanted. Lard is quite dull.—About 200 bbls. sold at 57½ to 58c. In Butter and Cheese there is a moderate business without change in prices.

ASHES were steady to-day at \$6 for Pots, and \$7.75 for Pearls, with small sales.
 TALLOW—Sales 10,000 lbs. Tallow at 8½ to 9c.

BUFFALO, April 29.—Flour is held at \$4.87½ to 5, but many buyers in market. Good Ohio Wheat, in store, could be had for \$1.11. Corn is without change at 35 to 36c. Sales mess pork at \$8.50 to 8.75, and prime at \$6. Small sales lard at 51½c. Highwines at 18c—17 offered but holders refuse to sell under 18.

DETROIT, April 27.—A good feeling in the Flour market, notwithstanding the decline in the English markets reported by the Acadia. For 500 bbls one brand an offer of \$4.60 was made. The holder refused to accept the offer. Sales one or two small parcels at \$4.55.

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GENESSEE FARMER.

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ROCHESTER, N. Y. — JUNE, 1848.

No. 6.

THE GENESSEE FARMER:

Issued on the first of each month, at Rochester, N. Y., by
D. D. T. MOORE, PROPRIETOR.

DANIEL LEE & D. D. T. MOORE, Editors.
P. BARRY, Conductor of Horticultural Department.

FIFTY CENTS A YEAR:

Five copies for \$2. and any larger number at the same rate if directed to individuals. Eight copies for \$3. if only directed to one person—and any larger number, addressed in like manner, at the same rate. All subscriptions payable in advance, and to commence with the volume. *U* Back numbers supplied to new subscribers.

[Editorial Correspondence of the Genesee Farmer.]

How shall the Soil be Improved?

UNDER the above heading an Albany correspondent of the American Agriculturist, writing over the signature of "P," criticises our "Theory of Agriculture" at some length, and particularly objects to our remark "that, if the farmer will only restore all the *earthy* part of each harvest to the field whence it was taken, he may grow any crop year after year without injury to the soil."

The study of agriculture as a science is confessedly in its infancy; and seeking as we do at all times for *light* and *truth* in all matters that pertain to the improvement of the soil and its cultivators, it becomes us to examine this subject with great care. "P." remarks: "In regard to sustaining or restoring fertility by the application of inorganic manures (ashes) only, I wish to inquire whether the plan has been practically demonstrated? Since the theory was first broached several seasons have passed, during which it might have been brought to the test of experiment. But do we hear of soils *totally* destitute of organic matter having been brought to fertility by the application of *ashes* manure, or inorganic substances only?"

We never said nor intimated, that there are "soils totally destitute of organic matter" any where, nor, in case such a spot of naked, mineral earth should be found, the inorganic elements of crops would at me suffice to make them grow and flourish therein. "P." misapprehends our views, and misconstrues our language. In a recent article published in this journal on "The Food of Plants," we said: "100 pounds of gypsum often add 2,000 pounds of clover hay to an acre; and could you fairly estimate the increase of clover roots, and all below where the scythe clips, the net gain would be 3,000 pounds." Here, according to our "theory," one third of all the organic matter in clover plants is left on and in the soil, at the harvest.

Considering the very small amount of organic matter in a clover seed, our opinion is that, on poor soils, such as the farmer would naturally wish to improve, the roots of clover and of most other plants, leave more organized carbon, oxygen, hydrogen and nitrogen in, and on the earth, than is consumed in organizing the crop. If this were not the case, prairies which have been annually burnt over for one or two centuries would certainly lose all their mould, (organic matter,) for that portion of it transferred into the stems and leaves of grass and other plants and every year discharged into the atmosphere by fire, could not get back into mould again.

If the stubble and roots of wheat left at the harvest supply as much material for making new mould as the crop consumed, (as we have reason to believe they will,) then the restoration to the soil of all the earthy elements contained in that portion of the plants taken out of the field in straw and grain, will balance the account. Let us suppose that all of the straw, chaff and wheat taken from an acre is eaten by adult horses, which neither gain nor lose in weight while consuming, and voiding, in dung and urine, this food; and that all of their excretions is evenly spread over the acre where the crop grew. In that case, not one half of the organic matter removed in the crop would be restored in the manure; and we respectfully ask the practical farmer to study this important matter. Not far from one half of the solid substance of wheat straw, and wheat, will make *coal* if carefully burned like wood in a coal pit, with atmospheric air nearly excluded. This coal chemists call *carbon*. Now, whilst the horses were consuming the wheat and straw taken from the acre of land, every body knows that they will breathe both night and day every minute, and that the air expelled from their lungs is unlike the air that enters them. Among other things, the expelled air contains *one hundred times more carbon* (in the form of carbonic acid) than it did when it entered the lungs. M. BOUSSINGAULT found that a horse while eating 17 lbs. 4 oz. of hay, and 5 lbs. 2 oz. of oats, daily consumed in such food 10 lbs. 6 oz. of carbon. Of the latter element, all his dung and urine gave, from the above food, only 3 lbs. 11 oz. 7 dwt.—*two-thirds* or thereabouts of the carbon taken into the stomach, having passed out of the system through the wind pipe, by ceaseless respiration. Organized hydrogen and oxygen in grass, hay and grain pass out of the lungs, after the food has been decomposed, in the shape of vapor, which is often visible when horses are driven hard in a cold

winter day. The dry weight of the dung of a bird is only about one-fifth of that of the food consumed.

All animals literally burn up, and wholly disorganize, or mineralize, a large portion of the organized matter which constitutes their food. Nor does the mineralizing process cease when animals drop their solid and liquid excretions on the earth; or leave their dead bodies like dead plants to rot on the ground. Every body knows that when plants, animals and the dung of the latter decay on the surface of the earth, they rapidly lose weight and load the surrounding atmosphere with poisonous gasses, which being lighter than the pure air, rise high, and are carried far and near by winds. The quantity of organized matter called mould in the virgin soil of an ordinary American forest, will weigh, we are confident, less than the one-twentieth part of the organized matter that falls to the ground in leaves, limbs and trunks of trees, in the course of twenty years, to say nothing of the mass of roots which rot in the soil. *Fermentation* decomposes an immense amount of organized carbon, nitrogen, and the elements of water. In the every day process of raising dough to make light bread, about 7 per cent of the flour is converted into gas, or mineralized. That is, 100 lbs. of dry flour will make but 93 lbs of perfectly dry fermented bread; and 100 lbs of this will form but 40 of dry excretions. If these be dropped on the earth in the ordinary course of nature, probably less than ten pounds of permanent soil will result from the wheat consumed.

We never proposed that farmers should burn their manure, straw, &c., and apply the ashes as an economical substitute for the whole mass. Nevertheless, we have often urged them to study the laws of vegetable organization and *disorganization*, to the end that they might learn among other things equally useful, *why it is* that 100 lbs. of pure guano often go as far in making wheat in England, as 2,000 lbs of ordinary barn yard manure. The fact that there is a difference in the fertilizing power of various manures is well known. Our belief is that this power exists mainly in the soluble *earthy minerals* used by nature in re-organizing the elements of crops, which fly off into the atmosphere when they rot on the ground, or when consumed by man and his domestic animals, and burnt in their bodies to maintain the breath of life, and at last go out of their nostrils. Black muck or mould, no matter how deep, without the earthy salts of silica, lime, potash, soda, magnesia and iron, combined with phosphoric, sulphuric and hydrochloric acids, would be valueless for growing wheat, corn, clover and other crops. We are far from discarding the use of ammonia, charcoal, or stable manure, as "P." more than insinuates.

Both theory and practice alike demonstrate

the value of these fertilizers. But decompose 100 lbs. of wheat or corn in the bodies of common dung hill fowls and save their guano—the ashes of the seeds consumed—and apply this fertilizer skilfully to wheat or corn before new seeds are to be organized, and our word for it, the earthy matter which once made wheat will be found peculiarly valuable to form wheat again. A pound of dry hen-dung, formed of wheat, is worth more than a like weight of dry wheat straw to make the seeds of wheat; and why? Simply because it contains more of the constituent elements of the seeds of this plant than do the stems of the same, particularly phosphates of lime and ammonia. How far ammonia and nitric acid may be dispensed with in fertilizing soils, there are no sufficient experiments on record, known to us, to decide the question. Nitric acid is said to be formed in the atmosphere by the chemical union of its oxygen and nitrogen when an electric spark passes through vapor in a thunder-cloud. Ammonia is formed in decaying vegetable and animal substances, and rises into the air. Nitric acid, ammonia and carbonic acid are soluble in rain water, and fall with it, and in dew to the earth. They aid rain water in dissolving common limestone and other earthy minerals, which, with the acids named, and ammonia, enter the roots of all plants, ascend to their leaves or green stems, where the light of the sun and other agencies, decomposed water, nitric and carbonic acids, ammonia and earthy salts, and out of these materials build up the body of the living being, absorbing and fixing both heat and light in the process. Burn a tree or plant, and both heat and light will be expelled, as you mineralize organized carbon and hydrogen.

At one of the first agricultural meetings held at the old State Hall, in the city of Albany, the Hon. FRIEND HUMPHREY, then Mayor of the city, gave an interesting account of having grown 120 bushels of shelled corn on two acres of poor pine-plain land, by putting a few horn scrapings or shavings, from a comb factory, in each hill at the time of planting. Another acre, similar in all respects but the fertilizer, was planted, and gave hardly one fourth of 60 bushels. So far as these corn plants derived their nutriment from air, rain and dew, all fared alike; and in the main the soil, as to organic matter and earthy minerals, was alike on each acre. The weight of the fertilizer used bore no comparison to that of the crop. Why then should the latter show a net gain of 90 bushels of corn, and probably of stalks and leaves in proportion, on two acres? Let us suppose that each hill of corn without any artificial food, was able to expand its roots so as to draw nourishment from one cubic foot of soil, and that this would give a product equal to 15 bushels. Now any fertilizer that should feed the plants at the proper time and

enable their roots to permeate deeper and farther laterally, so as to imbibe nourishment from four cubic feet of earth, instead of one, should give a crop four times as large, or one of 60 bushels instead of 15 — the amount harvested by Mr. HUMPHREV. If the same matter contained in a kernel of wheat or corn, (which is obviously designed by nature to feed the young plant and develop its roots and leaves,) could be multiplied three fold, it would treble the capacity of the plant to draw aliment both from the soil and the atmosphere. The difference between a poor soil and a good one, is extremely small, else a little bone-earth, gypsum, wood ashes, night soil, guano, or pig manure, could not give a gain in the crop 50 times larger than all the matter applied weighs. Again, the soil seldom if ever loses of its substance more than from 5 to 12 per cent. of the weight of the crop, in organizing the same.

On a poor soil, from some slight defect, the roots of corn fail to spread over more than one fourth of the surface to a reasonable depth, and of course three fourths of the substances in the earth, used in making the plant, never enter into its roots, and all go for nothing. The point to be aimed at is, to make the best possible use of all the elements of cultivated plants which Providence has placed in our surface and sub-soils. As birds and human beings that feed on fish, flesh and seeds of plants, furnish the most concentrated fertilizers in their excretions, all similar elements should be collected and husbanded with the utmost care. Wheat, meat, cheese, and other valuable products are constantly drawing phosphates and sulphates from cultivated soils. To be sent to the cities and never returned. Whilst ammonia, nitric acid, carbon, oxygen and hydrogen, are universally distributed in the air and fall in rain and dew on every acre alike, nothing makes amends for the potash, soda, lime, magnesia, phosphorus, sulphur and chlorine, leached out of the soil and washed into creeks and rivers, or removed into crops, by improper tillage. Hence, we dwell so long and often on the fact that, all soils naturally rich in potash, lime, gypsum and bone-earth, are remarkable for their fertility. All soils nearly devoid of these earthy minerals are uniformly thin and sterile. Vegetable mould don't make them yield wheat like the gypseous shales of *Wheat-land*, Monroe county, N. Y. Rely upon it, the composition of the rocks out of which a soil was made, governs its capacity to feed and clothe mankind. Rocks and soils rich in potash and lime, never lack for the organic elements of crops, so far as we have been able to discover, in any part of the Union. The writer is now engaged in the analysis of soils taken from what are called worn-out cotton fields in Georgia. The roots of pines often descend *eight* feet into the pervious silicious earth, in order to find the

earthy minerals indispensable to organize carbon and the elements of water into wood.

HESSIAN FLIES, &c.

We have collected wheat plants that have the chrysalis of the Hessian fly about their roots, which are now (May 6th,) hatching out. It is about the same time of year that we have witnessed the operation in Rochester. Wheat harvest will be through with in this month. On the limestone lands in the Cherokee region, this crop is largely cultivated, and something later. It seems odd to us that wheat sown the 20th of December should be harvested in May. The thermometer is 86° in a cool brick store; and whortleberries are nearly ripe. Figs will soon do to eat; and many have made a good business for the last three weeks, in shipping peas to northern cities by railways and steamers. Corn, peaches, melons, and grapes will go next.

Augusta, Geo., May, 1848.

Root Crops.—Ruta Bagas, Carrots, &c.

THERE cannot be a question on the subject of the value of the root crop to the farmer and stock breeder. Hogs winter well fed only on Ruta Bagas, or Swedish Turnips; also working oxen, sheep, young cattle, and cows in calf after the stoppage of milking. They can easily be kept sound till June or July. Sugar Beets are decidedly preferable to Ruta Bagas or Manggel Wurtzels, for Milch Cows. But to carrots we give the preference for milch cows, horses, and for fattening purposes. Butter made from carrot feed, has a fine rich flavor, and beautiful color. They can be kept nearly as long as bagas if well secured.

A much greater bulk of bagas and wurtzels can be raised upon a given quantity of land, than either sugar beets or carrots, but not of real available nutriment. In the carrot and sugar beet, the virtues are more concentrated than in either of the others. Bagas and beets are easiest produced as the seed vegetate quickly and throw out rough leaves, easily to be recognized in weeding; while carrots are a long while in coming up after planting—are very small, and in their early stages of slow growth. The weeds increase and overshadow them, rendering the dressing tedious and laborious; yet with all their required care, they are a most valuable crop; for there is no possible feed that can be raised upon an acre that gives so much satisfaction both to man and beast.

Carrots and Beets should be planted as early as the land can be prepared; but bagas should not be planted before the 20th of June, or even later. Earlier planting causes them to neck up, burst, and grow unshapely. Imported English seed of bagas are preferable, the crop being so important to the wheat and wool grower in that

country, that the greatest care is bestowed in raising the best and purest seed.

The course we would recommend for preparing the land, is, to plow deep and thoroughly, manure with fine, and if possible with well rotted manure or compost; the soil made fine and well incorporated, and dragged down smooth. Throw up light ridges with a one horse plow about 30 inches apart—pass an iron garden rake over the ridges and break down about one half of the elevation. Sow and pack down—heavily on a light soil.

For bagas plow and manure, at about the period of corn planting, and let it lie for the weeds to start till about the 20th or 25th of June; then harrow down fine—ridge up and sow.

The advantages of ridging are, that the first hoeing is performed only on the top of the ridge—the plants are readily seen, and moreover the ridging is as good as another plowing to the growth of the plant.

At the first hoeing, strike a hoe-blade between each stool of plants; and at the second hoeing, pass a cultivator or light plow between the drills, and then hoe out thoroughly and reduce the stools to one plant about 10 or 12 inches apart, when it is entrusted to the luck of the season.

The tap rooted vegetables are light feeders, and a plot of ground once well prepared and kept clean of weeds, will give a good crop for several years in succession.

Indian Corn for Fodder.

DURING the past few years considerable attention has been bestowed upon the cultivation of corn for soiling and fodder. In many sections of the country farmers have realized much benefit from this course, particularly in seasons of drouth. As the present month is the time for putting in the seed, we direct the attention of our readers to the matter, and offer a few suggestions as to the mode of cultivation.

The ground should be in good condition, and well pulverized—and if it has been plowed deep and highly manured, the crop will be the better. It may be sown broadcast, or planted in drills, any time this month. The crop will be improved by preparing the seed in a pickle of salt-petre, like that intended for ripening. The most approved method is to sow in drills, or furrows, from 2½ to 3 feet apart—using from two to three bushels of seed per acre. All the after labor necessary is to dress once or twice with a cultivator, or plow; this will weed the ground sufficiently, and neutralize the effects of dry weather, and of course the crop will be the heavier for the labor thus bestowed. In this manner on good soils, from four to seven tons per acre of excellent dry fodder may be produced.

If sown broadcast, more seed will be neces-

sary—from 3 to 4 bushels per acre. The crop should be cut before the frost touches it, and well cured before housing. The stalks are best cured by sweating in cocks; they cannot dry sufficiently in the swarth.

We advise every farmer who is not sure of an abundance of feed for his stock to sow at least one acre of corn for every six head of cattle kept on his premises. There will be no loss in adopting this course, for if he has too much hay it can easily be disposed of, and generally to advantage. Sowing a few acres of corn for soiling in summer, or to be cured for winter use, is a wise precaution, and will render the grower quite independent of an uncertain season for the grass and hay crop.

Prospect of the Wool Market.

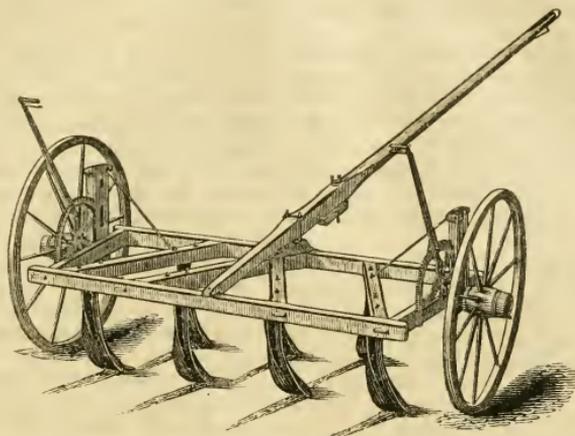
MESSRS. EDITORS:—The prospect is that the wool market, for a short time after the coming clip is off, will be dull, and wool dealers and manufacturers will endeavor to buy at prices much below last year.

It cannot be denied that woollen cloths are very low, and so indeed is every description of manufactures,—caused by the recent pecuniary troubles of Europe, forcing foreign manufacturers to send large quantities of their wares to the American market, with a view to brave the storm which has swept with such violence over half the commercial world. Here is the cause of the depression of woollen cloths; but it no longer exists, and therefore there will be no cause for farmers to dispose of their wool at less prices than last year—unless sympathy for manufacturers induces us to voluntarily indemnify them against the loss they have sustained.

But to this I demur. There are none who are willing to indemnify us against the loss of our crops by insects, rust and what not; and it is unwarrantable therefore for the manufacturer to come forward and say—“We have made no money the last year, ergo, you must sell us your wool at prices which will enable us to make it up.” Our reply must be—“Sirs, we can't be your insurers. Every tub must stand on its own bottom; we can't afford to grow wool at less than last year's prices, and we can as little afford to lose money for our toil as you. Besides, we believe there exists a state of things in Europe which will operate soon to enhance materially the prices of every description of manufactures, which will enable you to pay us prices beyond those of last year.” There are thousands of us, at all events, who believe this to be true, and consequently we mean to wait patiently “a little longer,” fully of the belief that there is a “good time coming, boys,” not only as regards wool, but bread stuffs.

O. P. Q.

May, 1848.



IDE'S PATENT IMPROVED WHEEL CULTIVATOR.

IN the seventh volume of the Farmer, page 235, we published a full description of a Wheel Cultivator, invented by Mr. NATHAN IDE, of Shelby, Orleans county. We now give a figure of the implement as recently improved by Mr. IDE. The principal improvement consists in the mode of raising and lowering the wheels—by which the teeth can easily be varied, and placed several inches above or below the surface of the ground.

We consider this Cultivator one of the best labor-saving implements in use, and as such commend it to the farming community. An advertisement in this paper gives the names and residence of persons by whom it is manufactured and sold in this and other sections of the State.

Time of Sowing Plaster on Clover Land.

MESSENGERS, EDITORS:—I am desirous of obtaining your opinion, or that of some of the able and experienced contributors to your valuable paper, on a subject on which there is some difference of opinion in my town. The subject to which I allude is that of sowing plaster on clover land, the first spring that it is seeded with the same, and more especially, when clover is sown on wheat lands. Some farmers contend that plaster sown on wheat, for the benefit of the clover, is a positive injury to the wheat crop, by causing too luxuriant and late growth of straw, and thereby increasing the liability to rust. I have not been in the habit of sowing plaster on clover for several years, until the second year, which is the next spring after the wheat crop is taken off. It is believed by many, (and I think it a reasonable belief, too) that plaster is beneficial to the young and tender clover the first spring and summer, by enabling it to endure the drouth: but if the wheat crop is injured more than the clover is benefited, of course it is better not to sow plaster until the second year.

I am about to sow something over 20 acres the present month to clover, which is now under wheat; and of course do not value the expense of plastering, if my interest would thereby be enhanced.

ENQUIRER & PATRON.

Manchester Center, N. Y., March, 1848.

REMARKS.—It is still an unsettled point, whether plaster has any effect on the wheat plant. Many of our best farmers, in the very region of the plaster beds, are divided in their

opinions. At any rate, it is a clear vote as to its benefit to clover, and as all good wheat farmers who follow a system of rotation, neither know or tolerate any other process but following with clover, it becomes important that the spring seeding should not fail; and from the wonderful and almost magical effects upon the young clover plant, especially in dry springs, we find the practice of sowing plaster the first seeding is very common. We doubt whether the direct action of the plaster has the effect of very sensibly increasing the luxuriance of the wheat or of retarding its ripening, whereby it is exposed to rust; but a great growth of clover and of timothy when sown in the fall, may have the tendency very materially to reduce the product of the crop. We have often seen the young clover so large as to be cut with every clump of the cradle, and timothy quite headed out.

Now it is quite self-evident, that as wheat is an exhausting crop, it cannot get its proper quantity of nutriment, if another crop of clover and grass, and those stimulated and excited by plaster, are allowed to dispute and rob it of its natural and legitimate food. Therefore it is fair to conclude that, if the season is not over dry, and the clover takes well, it is beneficial to the wheat product, not to plaster it till the second year. Every particle of grass, clover or weeds are detrimental to the productiveness and perfection of the wheat crop, but yet no land, in any great quantity, can be kept *in heart*, except by the use of clover, which is the natural food—the *pabulum par excellence* of the wheat plant, and its growers must decide for themselves, which horn of the dilemma they will choose—to sow plaster—increase the clover crop and enrich their land, at the expense of the wheat crop,—or increase one or two wheat crops at the expense of the continued fertility of the soil.

Leached Ashes.—Superior Soils &c.

LEACHED ASHES are now carted to the canal, and shipped from many points west of Syracuse, all the way to Long Island, where they are found to be the most economical *amendment* to the soil. Per contra, thousands of loads of leached ashes lie in heaps, around the ruins of many an old asbery in Western New York, just as though they contained no more of the elements of new plants, than so much sand!

It is not that the farmers of the sea coast are better read in the science pertaining to their calling, than the western farmer—but only that the latter have not yet reduced their soil to the starving point. If the Long Island farmers had our alluvial subsoil, they would adopt the expedient of throwing it up on the surface, for the benefit of those inorganic elements which the leached ashes supply in a concentrated form. But necessity teaches these farmers that without ashes, no grass—without grass, no stock—without stock, no organic manure.

Many of our Seneca county farmers have already reached that point in a starved crop, where subsoil plowing and ditching, or both, are indispensable to the growth of wheat. The stereotyped causes of failure, freezing out, the ravages of the fly, the worm, &c., &c., may stand the farmer instead of the real causes of failure, still a little longer. But necessity, that stern school master, will sooner or later induce a better and more intelligent husbandry, as the only remedy for retaining the wheat plant as a legitimate cereal of the farm. Whoever heard of the winter-killing of a field of wheat, if well put in, on newly cleared land, in Seneca county? Plenty of leached ashes on an old field, with perhaps the addition of a little barn yard manure, will enable the wheat plant to take so strong, —root, and grow so rapidly—that it will resist or counteract the action of frost;—and the fly must be on the alert and work hard indeed to effectually destroy plants so full of life.

The above remarks are the result of a colloquy I had the other day with a farmer, whose paternal estates is a small farm on one of those all fertile alluvial ridges, in the north part of this county. This man barbers off all his house and field ashes to the soap boiler's pedlars, for a mere trifle. Such is the inexhaustible inorganic treasures of his saliferous soil, that he could never see, so he says, any *amendment* to it, by the application of wood ashes.

DAVID THOMAS in his travels to the west tells us, that near Vincennes, on the Wabash, he saw Indian corn growing in great luxuriance, on upland fields that had been planted to corn by the French and their descendants more than sixty years in constant succession, without manure, and with no perceptible diminution of crop. Such spots on the earth's surface are few and far

between, even on our best alluvial formations. But few as they are, the number of men dignified by the title of farmers, who hold them in fee simple, with a clear understanding of the treasure they possess, are still fewer. The little farm of A. MACUMBER, at Spring Port, Cayuga Lake, lately noticed in the Genesee Farmer, is a case in point. When I asked friend MACUMBER if the former proprietors of his farm had diminished its wheat feeding pabulum in their thirty years plowing, he replied—"about as much as a hen and chickens would have done it."

Seneca Co., N. Y., 1848.

S. W.

Agricultural Improvement.—Plowing.

MESSRS. EDITORS:—I have been for the last fifteen months a subscriber to and reader of your valuable paper, and I trust I have been much benefited by a perusal of its pages. Your paper pursues the proper course—it exposes our errors in farming, and points out the remedy. In this part of the country scientific agriculture is in its infancy, and as a matter of course you have to combat the errors and prejudices of the people. We wish to go on in the same old beaten track which our fathers trod, and make no improvement in our farming, or farming tools, or stock, or any thing that pertains to the farm—whilst the clothes we wear must be of the latest fashion, and the *most decided improvement*. Now why not give a portion of our time and talents to the study of scientific agriculture—to obtain a knowledge of our soils—whether it requires vegetable or mineral manure, or what it needs and what kind of grain our different soils will produce the best crop of? Let us give these things our serious consideration, so that when we come to put in a crop we may do so understandingly and scientifically.

One of our great errors is our plowing, if indeed it may be called by that name. The custom is to plow in narrow lands, a broad furrow, and from three to four inches deep. You may see many fields that have been plowed for years in narrow lands, and in every direction that you look at the field, will show nothing but ridges and hollows—ridges where the land is commenced, and hollows where it is finished.

Now this kind of farming we consider poor—it wears out the land and leaves the surface uneven, and the finishing of the lands poor—and the practice persisted in must inevitably destroy the best natural soils in the country. This may appear like a small matter to many, but we think it deserving of the serious attention of every farmer. We consider it one of our errors, and one that should be remedied.

Allegheny Co., Pa., 1848.

In cold climates the activity of vegetable growth is suspended during winter; but in hot or tropical regions the same thing takes place in summer.

The Locust.

BY DAVID THOMAS.

[From the Genesee Farmer for 1831.]

The insect which appears at long stated periods, called the *Locust*, is the *Cicada septendecem* of Linneus,—taking its *specific* name from the years (17) of each period.* It has been said, however, that there is some variation in these periods, and 15 and 16 years have also been mentioned; but of this I have no satisfactory evidence, and consider such variations very improbable.

During its short existence in the perfect state, this locust is not known to feed on any vegetable, unless it is some exudation from the leaves. The damage sustained in orchards, &c., is caused by the perforations of the female at the time she deposits her eggs. Of the branch of a nectarine now lying before me, [6 mo. 27, 1831,] and which broke down in consequence of these perforations. I observe that the diameter is about one fourth of an inch—that the solid wood is *cut* and *splintered*, so that the eggs are not pressed as they would be if the wood was only *split*—that the direction of these incisions is slanting downwards, forming an angle of 20 or 25° with the branch, but not passing beyond the pith—an inch that the eggs are 2, 3, or 4 in each place.

MOSES BARTRAM,† who appears to have observed the manners of this insect with great attention,—ascertained that in a month or so, the eggs hatched, and the young locusts passing down the tree, entered the ground. Some persons have spoken of 4 feet as a depth at which this insect has been found in after years; and it is nearly certain that in this state they never wander much in a lateral direction. Where the holes in only one spot of a clear field, were very numerous and contiguous, caused by locusts, it was recollected that 17 years before a tree had stood there, although every trace of it had disappeared.

There is one remarkable fact in the history of the locust, of which I have seen no notice in the course of my reading, viz: though it observes the stated period of 17 years, yet in *different parts of the same region it comes forth in different years*. My attention was first directed to this circumstance by the remark of a gentleman that “*the locust year* in Virginia was not the same as in Pennsylvania.” In the summer of 1800, on a journey to the South from this place, I first encountered the locusts on the north side of a small hill some miles above *Wyalusing*, near the *Susquehanna* river; and from that *little boundary* southward throughout the lower parts of that state, wherever the soil and timber were suitable these insects were very numerous.

Along the east side of the Cayuga Lake however, that was not the “locust year,” nor did they appear among us till the summer of 1814, showing a difference of 3 years between this neighborhood and the south-eastern parts of Pennsylvania. But I am told by persons who lived about 8 years ago in different places in the northern parts of Tompkins county between the lakes,* that the locusts were then there in great numbers. In Ohio, however, according to Dr. S. P. HILDRETH, they appeared in 1795, 1812, and in 1829.

A complete history of this insect ought to have a *map* of the United States, showing the different districts in which it comes forth in different years; and if every friend of science would contribute his mite, it might be speedily completed.

As far as my observations have extended, the locust is not partial to beach and maple lands, but confines itself chiefly among the oak and hickory. It is evident, however, that since our forests have been partially removed, it has extended its limits eastward from the Cayuga Lake. In 1814, a locust was a rare thing on my farm, but this summer they are numerous. We ascribe this change to the great increase from the few that wandered hither 17 years ago. In digging pit-sand this spring near an apple tree which had stood 25 years, we took up many that were down in the subsoil.

Answers to the following questions would be interesting: What is the food of the insect in the *larvae* state? What is the greatest depth in the earth, from which it has been taken? What has caused the locusts in one district to differ in regard to time from those of another district? Do not these insects extend the boundaries of their districts? and if so, do not these districts in some places *overlap* or interfere? Agreeably to this view, may not the same district be inhabited by locusts that observe different years? May not their appearance in some places, therefore seem anomalous, when in fact they observe with exactness the period of 17 years? And may not the opinions that they appear in 7, or in 11 years be founded on this overlapping?

* I should be much gratified if some of your readers residing between the lakes, would write for the Genesee Farmer what they know in regard to these reports. [D. T., 5 mo. 12, 1848.]

A NEW RAT TRAP.—Take a tub or a large kettle, fill it within six inches of the top with water, cover it with chaff or bran, and place it at night where the rats resort. By this method thirty six rats have been taken in one night.

THE whole face of the country from Croydon to Evansville, Indiana, says one of our exchanges, a distance of two hundred miles, is covered with pigeons destroying every species of grain put in the ground by the farmer.

* A few locusts are often heard in the intermediate summers, but I suspect that these are a *different species*.

† Transactions of the American Phil. Soc., Vol. 1.

The Potato Rot.—Its Cause and Remedy.

In this communication I shall, I think, give to the world the true cause of the potato malady. While science has been on the utmost stretch to find out the true cause, like all other excitements, it has been too lofty in its researches, perhaps, to give much credence, and too great a name to the splendid essays of those devoted to the performance of the task. I expect that every one who reads this article, (for I expect it to be published,) will come forward with their battalion of a thousand and one queries, presuming that will confound my position. But to the story. The true cause of the potato malady is an insect. What the exact form of the mother is I am as yet unable to say. But one thing is certain, that she lays her eggs, in the latter part of June and during the month of July, sometimes even as late as in August, particularly in late planted fields, just under the surface of the ground near the stalk. After a few days the egg hatches into a worm of a peculiar form, about 3-16ths of an inch in length, of a yellowish brown color, not unlike the worm found in meal chests, with a head something like it, tapering from the head back, with a spiral white ring passing from the head to its termination like a screw. The worm when full grown is about an inch in length and an eighth in diameter.

Its form of Attack and Effects.—Immediately after hatching it begins to enter the stalks, beneath the surface of the soil, to the center and work upwards; the stalk immediately begins to show signs of disease by turning black; the leaves appear as if they had been scorched. The tubers attached to those stalks are all affected.

The time of attack, is when the tubers are setting, which is in the last of July and first of August in some sections, and during the month of August in others. Hence the reason why late planted are more liable to disease than early; for if planted early the tuber sets, and arrives somewhat to maturity before the season of attack. Very rich soils are more liable than poorer, from the greater luxuriance of the plant, the same as vines from the yellow bug, &c. This at once settles the question why newly produced are affected as well as those of greater age.

All the objections which were unanswered by the various theories heretofore given, are settled by the discoveries of the past season in this town. Could I sit down with every objector, and while away an hour or two, I could tell him more to convince him than I can on this sheet of paper. It was by accident that a gentleman in this town found the worm. While in a field of potatoes examining them, he found some of the stalks were hollow and soft, presenting a dark appearance, while others were quite hard, and were greenish. He began opening the soft one, and discovered the worm. He then dug down

around such stalks and found the tubers attached were diseased, while those on the other stalks were hard and sound. He gave the information to many of his neighbors, who upon examination, found theirs the same. From thence the research became general, and the results were uniformly alike in every respect.

Recently while conversing with a farmer from another part of our county upon the subject, he says he found such worms, or the worm changing into the larvæ state, on the surface under the tops, when he was digging his potatoes; and that his are and were much affected this season. This is the first time he has been troubled with the malady; and he never planted so late as the past season.

The remedy is in early planting, the earlier the better. My father and myself planted the past season before the middle of April, so that the ground was frozen to the depth of two inches after planting, (they want to be covered deep,) and we have not raised so perfect and good potatoes for quite a number of years; no disease among them—mealy, hard and fine.

I am confident the foregoing is the true cause of the malady, the effect of which has caused so much distress and death in many parts of the world. To those who are yet incredulous as to the cause, if they will give a few moments of candid reflection they can readily answer every objection, from this single fact,—an insect confines itself to no particular location, or age of plant, but destroys wherever it willets.

E. S. BARTHOLOMEW.

Portland, Chau. Co., N. Y., 1848.

DESTRUCTION OF RATS AND MICE.—MR. L. VAN HOUTTE in the *Flore des Serres*, recommends the following modes of destroying these troublesome vermin, and says the success is certain. Take small pieces of cork and fry it in gravy, or butter, and scatter them around. The rats and mice will eat them greedily, and disappear, killed by the indigestible food. Little balls of brown paper, or small pieces of sponge, fried in the same manner, produces the same effect more promptly. The advantage of these materials over arsenic, ordinarily employed, is obvious.

A NEW DISCOVERY.—The Rev. Mr. Pepper, a Presbyterian clergyman of Albany, has invented a compound of clay, called Argillo, which resembles in structure and appearance, the richest, variegated agates. It is to be used for door knobs, pavements, table tops, and other ornamental articles. It surpasses in brilliancy, any known variety of marble, and is equally cheap. The Hartford Whig speaks of it in the following terms: "No one, who has not seen it can form an idea of its beauty and illimitable variety of color. It is so hard as to resist any scratch except that of a crystal or diamond. Already, Mr. Calhoun has introduced in the Senate a resolution, which passed instantly, to the effect, that all the floors of the public offices in the Capital, should be made of this beautiful material. \$1,100,000 has been offered for the entire patent."

Another Remedy for the Wire-Worm.

WE make the following extracts from a communication recently received from Mr. S. DAVISON, of Greece, Monroe county. After alluding to the inquiry of our Clarkson correspondent, and the answer by W. H. H., of Wheatland, (published in the February number of the Farmer,) Mr. S. says:—

I have noticed for some years past that our best wheat lands are more or less infested with the wire-worm, which will be readily conceded by all who have observed their progress. The remedy prescribed in the remarks to the inquiries of LUCIUS P. CLARK, in the March number of the Farmer is *sure*, but something like the Yankee's celebrated flea powder—"You must catch him and pinch him until he opens his mouth; then put the powder in and it is sure death"!

But I have another remedy which I have tried on a larger scale, and which has proved salutary. The worm in question is well known to breed only in mucky, loose land, covered with the fine grasses, and then working near the surface of the soil so as to catch the tender plant at its most vital point. The eggs are deposited in the small tufts or root of the grasses at the surface. To destroy the wire-worm (and some other insects which are about the surface,) I cover the land two or three inches (or more if you please) thick with straw, and let it lay two or three weeks, in order that it may get settled to the ground. During this time the worms will work on the surface under the straw, by which they are protected from the sun, and can move with ease to devour the tender grass. I then select a dry day and set fire to the straw. This destroys both worms and eggs, and also the parent insects, which are in a winged state and flying over the surface [The same process will also destroy grasshoppers.]

The above remedy I applied to a piece of meadow that was what we call full of wire-worms. A part of the field was not burnt over; and now mark the result of the experiment. After harvest I plowed the field three times and sowed it to wheat. *Where the fire went there has not been any appearance of the wire-worm*—but in the portion that was not burnt they were at work as in other fields of meadow ground that were plowed and sowed to wheat.

New Bee-Hive.

MESSRS. EDITORS:—I have lately had exhibited to me a bee hive of a new construction, combining some new principles to avoid the difficulty of the entrance of cold air, and at the same time securing a perfect ventilation—and to get rid of that great annoyance and depredator, the bee moth.

It is a square box, with a tight bottom hinged to fall-down—having a grated hole in the center two inches square, over which a tube extends to the top and through it a few inches, which is again covered with an open cupalo to keep the rain and snow out of the tube. The bees are obliged to enter at the top through the tube, which is so constructed with openings and partitions as to secure fresh air and direct the bees to their proper apartment. The proprietors, MESSRS. ISAAC & SAMUEL IDE, of Millville, Orleans county, assert that the millers are not so apt to find this entrance as through slats or holes, and that the tube is warm and well aired during the cool autumn evenings, when they mostly act and deposit their eggs—and where the bees are fond of congregating in the tube, whereby it becomes guarded against the intrusion of all enemies.

If these grand disederatums are secured, as is anticipated and confidently asserted by the proprietors, it will entitle them to the patronage and gratitude of aparians. H. Y.

Monroe Co., N. Y., 1848.

Importance of Educating the Farmer.

It is calculated that the division of the occupations of men in the United States is nearly in the following proportions:

Number engaged in internal Navigation,	.....	33,076
“ “ Ocean,	.....	56,021
“ “ the learned professions,	.....	65,255
“ “ commerce,	.....	119,607
“ “ manufactures,	.....	791,749
“ “ agriculture,	.....	3,719,951

Thus it will be seen that those who are engaged in agriculture are three and a half times greater in number than those in all the other divisions. The agriculturists consequently have the physical and numerical power, and can at any time control every government in the United States, and give tone to public opinion. But do they? No indeed; for however powerful they may be in number, they are weak in influence, and this arises from want of proper education. The sixty-five thousand two hundred and fifty-five, engaged in the learned professions, are intellectually stronger than the three millions, seven hundred and nineteen thousand, nine hundred and fifty-one engaged in agriculture, and therefore *rule* them. If it were not so, seven-eighths of the offices in the country would not be held by lawyers and doctors; nor would all the colleges and high schools be endowed principally for the benefit of the learned professions.

Farmers, when will you arouse yourselves to the dignity and importance of your calling, and educate yourselves to that height of intelligence which will make you the *rulers* instead of the *ruled* of the other professions? There is surely nothing to prevent this if you will only be true to yourselves.—*American Agriculturist*.

Wants of Western Farmers.

MESSRS. EDITORS:—Inclosed you will find one dollar, which please credit to my account. And I would say how much I am obliged to you for sending me the "Farmer," being a stranger and living a "long way" from you. But we will not remain so long, for *steam* and *lightning* are bringing us nearer to each other, while the "Farmer" makes us better acquainted. I have been waiting some time for several of my neighbors who talked of sending for the current volume, but have not as yet handed me the "needful." I think the prospect fair, however, of sending you a number of subscribers from this section before many weeks. Most of those who know the value of an agricultural paper take the "Prairie Farmer," which is probably worth more to the western farmer, or farmers on the prairie, than any eastern paper; yet there are many who were formerly acquainted with the "Genesee Farmer," who mean to order it as soon as their finances will permit. I took it myself for several years, and have several volumes neatly bound in my library, together with the "Cultivator." I also became a subscriber to the "Prairie Farmer" while yet living in Kinderhook, and am convinced that all who at the east wish to acquire a knowledge of farming and other matters connected with the west, would find it much to their advantage to go and do likewise. And now, I would prefer wearing my old coat until the elbows "stuck out a feet," if it were to secure to me the only means of paying for my agricultural papers; for I consider the money laid out for them more profitable than any other investment I could make.

I have ever thought since I began the world "on my own hook," that the farmer ought, and in most cases might, be a man of general intelligence would he employ the means within his reach; and for this purpose I commenced, at my first setting out, taking one of each of the best political, agricultural, medical, and religious papers I could find; for every man ought to know enough of politics to know when the country is well governed—and of agriculture to make it pleasant and profitable—enough of medicine to prevent disease, which, in many cases may easily be done, for Dr. RUSH says, "A knowledge of preparing our medicine is as easily acquired as that of preparing our food;"—and certainly a knowledge of the institutions of the Christian religion is much more likely to make us good citizens, than ignorance of the same. And how are we to acquire this knowledge? I answer, by reading, observation and experience, or by theory and practice. These ought and must go together in order to make the perfect farmer.—The question is frequently asked, "Why can not a man become just as good a farmer without, as with, an agricultural paper? To which I

would answer, in yankee style, by asking another question, "How will a man acquire a knowledge of the world soonest and cheapest, by study or travel, by theory or practice?" I answer, by study or theory. Then as a general and I believe the most correct knowledge of the world is soonest and cheapest gained by reading history, biography, &c., so a general and I believe, too, the most correct knowledge of agriculture may be gained by reading agricultural works. I say the most correct, because we have the counsel and experience of hundreds to guide us, and a man must be the veriest dotard, and unworthy the name of farmer, who could not profit thereby. I know it is argued with much plausibility, that agricultural papers are of little or no benefit to the farming community; but you will always see such persons making use of all the improvements of the age, and it plainly shows them to be too penurious to pay for another's labor, and only wish to grow rich at their neighbor's expense.

When I began it was not my intention to say much on the merits or demerits of agricultural papers, but merely to state a few of the wants of the western farmer, which in all new countries are many and various. And among them all I can think of none of more consequence than labor-saving machines and stable markets. The instability of our markets have heretofore been one of the greatest drawbacks on the energies of the farmer; for he never knows until he gets there what it will be. We can never engage a load of wheat or any other kind of produce, even one day beforehand; at least this is my own experience, and the testimony of hundreds who I have heard speak on the subject. And there are many reasons for this state of things. I would not assert that our produce dealers are all a set of shavers, for it is well known that the markets all over the country for some time past have been very fluctuating, and those inland, I believe, are always more so than those bordering on tide water. The fact is, we have no currency of our own, not a single bank in the State, and but few men of capital, and the consequence is, that those who have it take just such a slice as their consciences will spread over. Those made of durable "homespun," with a due regard of doing to others as they would wish to be done by, will take from 12 to 18 per cent. only; those made of more elastic material will chalk up to 25 or 50, while there are some who evidently possess the genuine India rubber article, and can easily stretch them to 75 and I have heard of their reaching as high as the figures 87½, within the past year—and it would actually seem that they grew tougher at every pull. The farmers are generally in debt more or less for their farms, and if they get 75 cents offered them for wheat they take it without any grumbling, well knowing from past experience that the next bid will "advance a notch or two backwards;"

and if 50 cents only is offered they take it, knowing, as there is no other market, there is no alternative. But these disadvantages we think will not long exist. The telegraph is in successful operation between the cities of Milwaukee and Chicago, and the last link will soon be finished connecting us with all the principal eastern cities. This will undoubtedly help us some, (for produce dealers always get the news several days in advance of the mail, especially when the market is declining;) but good and substantial rail-ways are what we most need, and these we are "bound to have," at no distant day either; and we shall not only have an eastern market by railroad, but a western, by the "Chicago and Galena," and a southern market by the "Central" railroads. The latter, which commences at Galena and terminates at Cairo, the junction of the Ohio and Mississippi rivers, with the Illinois river and canal, nearly encircles the State with a communication to markets, and a choice of markets too, at all seasons of the year.

In prospect of the early completion of these improvements we hope for better days; and all we ask is not extravagant but fair prices, a sound currency, (for we have anything but this now,) and honest business men. These, Messrs. Editors, are some of the most prominent wants of the western farmer. The next in consequence or importance is that of labor-saving machines.

This is the country for labor-saving machines, all but the "stump puller;" that is an article I do not recollect of bearing any one inquire for, and what we should do with it here is more than I can imagine. This is the country for harvesting machines, for several reasons. The first is, because more is sown and planted every year than can possibly be harvested by hand. I believe I have seen more than a thousand acres of all kinds of crops wasted for want of sufficient help to gather them; and the amount of crops put into the ground is being increased every year. Why, sir, but a few years have elapsed since all the principal food of the inhabitants was imported hither; I believe the first exportation of wheat was made from this place (Chicago,) in 1839. To be certain that I was correct I have just referred to the weekly report of the "Chicago Journal" for Nov. 22, 1847, in which I find the following:—"In 1839 the export trade (in grain) began, and consisted of a load of wheat and 700 barrels of flour, the latter of which was brought back for want of a market. The total amount of exports for 1836 was \$1,000.64, and for 1847, \$2,296,299, it being \$836,880 over 1846." Mr. MORRIS, in his "Statistics of Chicago," says: "So late as 1835 and 6 the fires usual on the prairies in the fall overran the third and fourth wards; there were only some five or six houses, built mostly of logs and a population of less than a hundred." It now numbers 17,000 inhabitants; (you may if you please com-

pare notes with your own, the "crack" city of Western New York, of which it is said, "history furnishes no parallel.") The report referred to adds: "Over thirty thousand bushels of wheat have been brought to market in a single day." This would require, at 40 bushels per load, 750 teams, or at 30 bushels per load, which would be perhaps nearest correct, considering the condition of the roads, 1000 teams, which at two rods apart, a distance compact or close enough for safety, would reach three miles and eighty rods (or 3 miles and a quarter.) And "from April 15 to Nov. 15, 1847, there were exported 1,685,634 bushels of wheat and 29,688 barrels of flour, which reduced to bushels gives us, at 6 bushels per barrel, 1,863,800 bushels, requiring to carry it to market 62,125 teams, which at the above estimate and distance per load would form a string of teams 194 miles and 92 rods in length. And it is estimated that not more than half of the present or last year's crop is yet brought to market.

Now, taking the last seven years for your guide, (for in reality only "one load of wheat" was exported in 1839,) with the consideration that our plank roads, two of them, and one railroad, beside the greatest canal in the country, all leading from Chicago, will be soon completed, and that we have scarcely began to cultivate the prairie, and just commencing the use of harvesting machines; I say if you will take these things into consideration, and are "smart" at cyphering in progression, you can form a pretty correct idea of what will be produced in this "Eldorado" of the west, and also the number of inhabitants the "Garden City of the Northwest" will contain, from ten to twenty years hence.—But my calculations are longer than my sheet, and I am obliged to close for the present, promising to stick closer to my text next time.

S. S. CROCKER.

York Center, Ill., February, 1848.

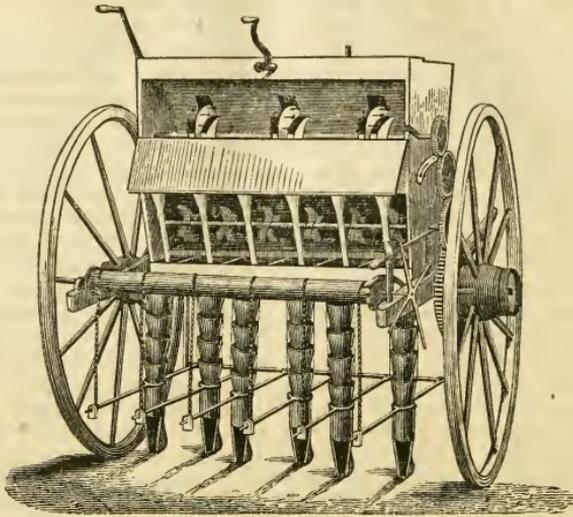
Curing Hams.

MESSRS. EDITORS.—Much as has been written and published upon the subject of Curing and Preserving Hams. The following excellent mode of protecting them from the attacks of flies, I do not remember of ever seeing noticed; and perhaps may not be generally known to the readers of your valuable agricultural journal.

It is simply this:—*Let the last application of smoke be made with sulphur.* Although the amount applied be not sufficient to affect their flavor; yet such is its efficacy, that no other system of defence against the mischievous attacks of flies will be required, until midsummer, at least, (experimentally speaking,) and even those newly cut, will remain undisturbed. The same treatment is beneficial in case of cheese.

Yours, respectfully, W. HANFORD, JR..

Dryden, N. Y., Feb., 1848.



CRAGGS & REYNOLDS' GRAIN DRILL AND FERTILIZER.

THE DRILLING SYSTEM is very properly attracting the attention of grain growing farmers in various sections of the Union. We have frequently called the attention of our readers to the subject, and given such information as would tend to exhibit its value to the growers of wheat and other grain. Many of our exchanges are of late agitating the question, and we observe frequent notices of the drilling machines in use, or being introduced. Pennock's Drill is much used in eastern Pennsylvania, Maryland and Delaware, and in some sections of New York, and gives very general satisfaction. The GENESEE FARMER was, we think, the first agricultural journal which gave a figure and description of this valuable implement.

Our present purpose is to call the attention of those interested in the subject to a new *Grain Drill and Fertilizer* recently patented by Messrs. CRAGGS & REYNOLDS. It is represented in the above engraving. The proprietors claim for it many advantages over the drills in use in this country—particularly in sowing any fine fertilizing substance at the time of seeding. An advertisement, in this number of the Farmer, states where the machine may be obtained.

As we have had no opportunity of examining this implement, or seeing it in use, we cannot express a decided opinion as to its merits. But if the testimony we have heard in its favor is correct, as we have no reason to doubt, it is worthy of a trial by our grain growing farmers. The following communication is from an experienced farmer of this county:—

MESSRS. EDITORS:—I was gratified to see an article in the May number of the Farmer from

the pen of Mr. SPERRY, on the subject of Drilling in Seed. Any subject that relates to improvement in farming or farm implements cannot but be interesting to the progressive agriculturist; and as we are very liable to be disappointed in the wheat crop, by injury from the fly, or its being killed by freezing during winter and spring, any method that may be devised to obviate these difficulties must prove of great value.

Believing as I do that we ought to communicate as well as receive information, allow me to direct the attention of your readers to a machine which has not yet been generally introduced. I allude to CRAGGS & REYNOLD'S Drill and Fertilizer, which, I believe, is admitted by those who have used or examined it, to be the most perfect article of the drill kind offered to the American farmer. In my opinion this Drill possesses many advantages over others which I have examined. I do not, in this brief communication, intend to institute a comparison of the merits of the various drills now before the public, (as I have no pecuniary interest in either,) farther than to state that, in my judgment, the great distinguishing quality of Craggs & Reynolds' Drill is, that it deposits any fine fertilizing substance, such as lime, ashes, plaster, charcoal, &c., regularly as machinery can do it. Last fall I had some five acres of wheat drilled in with this machine. A part of the same field was sown broadcast, by hand. That which was drilled in appears decidedly best. I think all I have to fear is that it is too thick, as I used the same quantity of seed in drilling that I did in sowing broadcast. From present appearances I think I should have used at least one

peck to the acre less on the drilled ground—as, in drilling, every seed is covered at a uniform depth, and consequently all vegetate.

I have not seen corn planted with this machine; but the proprietors inform me that, by throwing a part of the drills out of gear, it can be made to plant corn, beans, &c., to perfection.

Yours, &c., ALFRED REYNOLDS.
Webster, N. Y., May, 1848.

Irrigation.

IRRIGATION has been practiced by the Chinese and Egyptians from the remotest antiquity. In countries where rains seldom fall, and the ground becomes dry and parched, irrigation is of immense value. It consists in taking water from lakes, sewers, running streams or reservoirs, and causing it to flow over the land by means of small canals or furrows, then by proper outlets to carry it off again. It is confined, according to COLMAN and JOHNSTON, almost exclusively to meadow lands.

The benefits of irrigation in a country where rain falls frequently and abundantly, are the same as those of manuring. When the water used holds in suspension any organic matters, they subside while the water remains on the fields, and leave a visible layer of manure on the surface, after the water is drained off. An example of the fertilizing effects of irrigation is seen in the lands along the banks of the Nile and Ganges. But the effects of irrigation with water that contains no organic sediments, must be considered the same as that of rains. Running water furnishes to plants some gasses, which are absorbed, and in this way are beneficial. Crops of young and tender plants should be irrigated by pure water: it may be repeated every two or three weeks when there is any want of rain, and the water be allowed to lie on the field only three or four days. It is thought by English Agriculturists to be injurious to meadows to flood them immediately after mowing.

Warping is a process similar to irrigation: the object of this however is more especially to obtain the sediments of muddy streams, &c.; the water should never be allowed in either process to remain on the field until stagnated. Irrigation is most beneficial on land which is well drained beneath, so as to allow the water to penetrate the subsoil, and not stand too long on the surface. Meadow lands are sometimes watered in the winter to prevent the injurious effects of frost upon the roots of the grass. Irrigation is not practiced to much extent in the United States; and the remoteness of many farms from streams, as well as the expense attending the operation, will prevent its universal application, even where it would be beneficial. M. M. RODGERS.

Rochester, N. Y., 1848.

Reading Farmers.—Draining.—Subsoiling.

WE make the following extracts on subjects embraced in the above heading, from an interesting letter written us by Mr. S. D. BEERS, of Tompkins county. Speaking of Agricultural publications Mr. B. says:

"I do regret, however, that not more than one farmer in ten reads one of any kind. But their influence is felt throughout the country—for I often hear the remark made that such and such an one is a good farmer. Now, so far as my knowledge extends, these very men read all they can lay their hands upon on the subject of Agriculture. Here is a question—what makes them superior farmers? Is it because they read and practice what they read,—or is it because the same energy that prompts them to read, prompts them also to work their farms as they should? Perhaps it is both.

There is one branch of improvement that I think very much neglected, viz: *Draining*—and I would respectfully suggest its discussion more at large in the pages of the Genesee Farmer. There is in the State thousands of acres that are not worth \$5, that may, by a small expense, *properly laid out*, be made worth \$40 or more per acre—for such lands generally contain a large share of vegetable matter that will produce good corn crops for a number of years in succession; and when stocked to Timothy make a meadow far preferable to any *natural meadow*, so highly prized by many. I am now speaking from actual experience on the subject, and I must acknowledge my indebtedness to JESSE BUEL, who has been the originator of many permanent improvements in Agriculture.

There is another improvement that has agitated my mind for a number of years—*Subsoiling*. I am of the opinion that we can have a soil as deep as we choose to till and fertilize. And as we may go down without infringing the rights of others, at least to the center, why not use it as well as to sweat ourselves in torturing a few inches of the surface? I may be mistaken, but do not feel willing to abandon the idea until I give it a fair trial, which I intend to do this fall.

My apology for troubling you with a letter so long and poorly arranged, is that my business is tilling the soil—and if any suggestion that I can make will be instrumental in producing one bushel of wheat, it will, in my opinion, confer a greater benefit on mankind than all the fops and romance writers in the civilized world. In conclusion I would say that I am more capable of learning than of teaching others—and it is to this end that my suggestions are really made. I wish most heartily it were otherwise, for I feel that nothing would give me greater pleasure than to forward the science of agriculture. There is an interest of pleasure, and of profit."

Wool Depots—Their Importance to the Growers of Wool.

SOME interesting facts relative to the origin and objects of Wool Depots are given in the annexed extracts from the report of a discussion at one of the legislative agricultural meetings, in Albany, last winter. Wool depots must prove highly beneficial to a large class of farmers, and we are happy to learn that they are being established throughout the country. Mr. H. BLANCHARD, the projector and successful conductor of a Depot at Kinderhook, N. Y., is entitled to much credit for his exertions in behalf of the wool growing interest—as the pioneer of the enterprise.

Extracts from Remarks of H. Blanchard, of Kinderhook:—

Origin and Arrangement of the Depot.—From facts that were ascertained by Hon. J. P. Beekman, (then President of the N. Y. State Agricultural Society,) at the State Fair held in Poughkeepsie, in 1844, he became convinced that the growers of Dutchess county, by reason of the superior facilities afforded them for the sale of their fine wools, were procuring from six to eight cents per pound more than many wool growers in other sections of the State who produced the same quality of wool. The large quantity of fine wool grown in that county, offered great inducements for manufacturers and purchasers of fine wool to make that a place of resort to obtain their supplies, and thus a fair competition was awakened, which resulted in a just appreciation of the relative value of their wools, and remunerating prices to the fine wool grower. Soon after Dr. B.'s return, the evils consequent upon the system of selling wools in our county, as well as elsewhere, became a matter of discussion between him and other wool growers in our vicinity and myself. The result of which was a request from them that I would open what we now term a "wool Depot." The principles involved in the depot system are not new, they being conducted upon those of a commission business; but it is only the details and application of these principles to wool when received direct from the grower, that had never before in this country been applied in the same discriminating manner, and with as little expense as by this system. In the classification and arrangement of the fleeces, facilities are given to the manufacturer to purchase in an intelligent manner the style and quality best adapted to his goods, while at the same time the grower's interest is protected by the different grades being offered for sale to such, and such only, as require them.

Upon the delivery of the wool at the depot, each lot is weighed and a receipt given to the owner for the amount. The fleeces are then carefully examined and classed according to their quality; each class or sort is weighed and a record made of the weight. It is then examined with reference to its condition. If any portion of the clip is found to be unwashed, or partially washed, or to contain filth, tags, or other substance inside of the fleece, except well washed wool, a discount is made upon the weight of such fleeces. A record is made of this discount, and it is charged over to the owner and allowed to the manufacturer or purchaser. The fleeces, when thus classed, compose a sort of equal value, in quality and condition. When there is any thing in the style or condition of the wool which renders it of more than ordinary value, or if the owner wishes, it is kept separate from other fleeces after being sorted. The various sorts are known by the following designations: Extra, Prime 1, No. 1, Prime 2, No. 2, No. 3 De Laine, No. 3, No. 4 De Laine, No. 4, No. 5.

There are few flocks, however carefully bred, which will not embrace three or four of the before mentioned classes—many six or even eight of them. Hence the wool grower under the old system, when disposing of his wool to a manufacturer using the lower grades, must expect that such a price only will be offered for his whole clip as the lower grades are worth; and the fine wool manufacturer will not become a purchaser unless a large proportion of the clip is of a quality suited to his purpose. It will readily be seen that these difficulties may be obviated by a judicious classification of the fleeces.—The following statement will show the relative value of the different sorts, and the uses in part

to which they are applied. The prices here mentioned are taken from the highest range of the present year:—No. 5, which is the coarsest grade and used for making coarse sateenets, baizes and the coarser kinds of heavy goods, 29 cents; No. 4, used for low flannel, sateenets and $\frac{3}{4}$ cloths, 32 cents; No. 4 De Laine, used for medium kind of worsted goods, 33 cents; No. 3, used for flannels, medium cassimers and sateenets, and low priced broadcloths, 35 cents; No. 3 De Laine, used for mousselin De Laines and other combing purposes, 36 cents; No. 2, adapted to fine fancy cassimers and medium broadcloths, 39 cents; Prime 2, 41 cents; No. 1, 44 cents; Prime 1, 46 cents; Extra, from 52 to 65 cents.

—These high grades are used for the finer qualities of cassimers and broadcloths. The difference between the Nos. 3 and 4, and the De Laine or combing qualities of the same Nos., consists in length and strength of staple, and not in quality of the fibre—the difference between Nos. 1 and 2, and Prime 1 and 2, in the Prime numbers being from high blooded flocks in which the finer portions of the fleece run farther down upon the skirts, thus giving more fine wool in the staplers scale than from low grade flocks. The Extra No. embraces a wider range than either of the other sorts, and is designated by low, medium, and high extra, that it may be adapted to merino, a cross with merino and Saxony, and high blooded Saxony flocks. The quantity of exquisitely fine wool received at the depot has been so small compared with what may be termed fine wool, that I have not yet thought it advisable to make classes higher than an extra, the average value of which I deem to be 60 cents; although a few fleeces may be found in that sort worth 75 or even 85 cents. The classification will be extended if circumstances seem to require it. As a further illustration of the relative value of wool we may take the standard of prices applied by some of the large manufacturers of fine wool to their sorts after the fleeces have been parted on the staplers bench. Two examples will be given, with the name and price of each sort:—Super, 30 cts.; Extra, 65 cts.; Prime, 52 cts.; No. 1, 44 cts.; No. 2, 39 cts.; No. 3, 33 cts.; No. 4, 29 cts.; No. 5, 25 cts.; Listing 20 to 22 cents. Extra, 90 cts.; Picklock, 75.; No. 1, 63.; No. 2, 53.; No. 3, 45.; No. 4, 38.; No. 5, 32.; No. 6, 27.; No. 7, 23.; and Listing 20 cents.

I have invariably found it the case that the fine wool manufacturer attaches a much higher value to the fine qualities in his sorts than a manufacturer of medium wools would to the same quality of wool; also that the manufacturer of low and medium qualities, attaches a higher value to the low qualities, than the fine wool manufacturer does to wool of the same grade. Few if any of the manufacturers of low or medium goods reach a point in the staplers scale above 50 cents. They usually make a less number of sorts, and estimate about five cents difference between each.

It needs no argument to show that the manufacturer of superfine broadcloths, cassimers, sateenets, flannels or worsted goods, can at the Depot select such wools as are exactly suited to his peculiar style of goods, without being under the necessity of purchasing a single fleece he does not want; and that with such facilities, it is for his interest to pay a fair market price according to the relative value of the style or quality he wishes to work; and furthermore that he is not paying for filth concealed inside of the fleece instead of wool.

It is for the interest of the wool grower, as well as the manufacturer, that they should be brought together with the least possible expense, and in a manner that the improverments or frauds of the one should not escape the notice of the other. I have the opinion of several manufacturers—who certainly ought to be competent judges of the fact—that full five cents per pound intervenes when wool finds its way from the grower to them through the ordinary channels of trade. Under the depot system, the charges at present for receiving, sorting and selling, are one cent per pound. This covers all the expense except insurance, which is one-quarter of one cent for each three months the wool remains in the depot unsold.

Those who have been the friends and supporters of this enterprise, by annually depositing their clips, find that it affords an excellent opportunity in having it examined by a competent judge, and its defects or merits pointed out, and by comparing it side by side with other clips, to learn the true character of their wool. Those who have not had long experience in wool growing will readily admit that this is necessary in order to form a correct opinion of the various styles grown. Again: the depot forms a kind of an Exchange, at which place, during the season for deposit

ting wool, the growers may meet and compare views, communicate and receive information concerning the improvements each have made, and from the books of the agent determine, from the sorting of different flocks, and the prices obtained for each, which is most profitable, and also where those flocks, which produce the style or wool they wish to grow, are to be found. Other duties may prevent the farmer from bestowing as much time as is necessary to procure that information which is essential to become a successful grower of wool. It very naturally falls within the range or the duties of the agent of a depot to collect just that kind of information most needed by the wool grower; and his interest being identified with theirs, he can have no motive for withholding that information. I would here stop to ask the wool growers present, how much real available information have you received within the last ten years from that large class of wool buyers who are usually known by the name of agents, speculators or dealers? Unless your experience is different from those with whom I have conversed, you will admit that greater facilities are offered, under the depot system, to procure just that kind of information which may at once be made available in the successful prosecution of the wool growing business, than have been heretofore enjoyed.

It may readily be seen from what has been said, that in order to ensure a successful prosecution of the Depot system large quantities of wool must be deposited in one place; for unless this be the case a sufficient quantity of each sort cannot be obtained to make it worth the attention of the manufacturer to visit the Depot and make his own purchases. Again, small establishments would only increase rather than diminish the evils resulting from competition in selling, for it is apparent that if a large number of individuals have an article of the same kind to dispose of, the desire to effect a sale would create a competition among the sellers that would not exist if the sale of the whole was to be made by one man. In the latter case the competition is with the buyers, in the former with the sellers; for the uncertainty of another call from a buyer often operates as an inducement to close a sale at a less price than they believe the article to be worth.

The question will naturally arise, will the manufacturer approve of this system in making his purchases? Knowing them to be a shrewd, cautious, and persevering class of business men, always ready to act upon the principle of purchasing where they can buy cheapest, and selling where best prices can be obtained, before deciding upon the feasibility of the Depot system, I visited many of the most prominent manufacturing establishments, and after presenting the object I had in view, received from them assurances that it met with their cordial approbation. I also received from them much valuable information in regard to the relative value of their sorts, the adaptation of the various styles and qualities of wool to the different kinds of goods manufactured, which it would have been difficult to obtain from any other source.

Did time permit, I could here present extracts from numerous letters received from them, expressing their strong desire that the enterprize should be undertaken.

Dr. BEEKMAN being called on to address the meeting, said—I was greatly gratified when Mr. Blanchard received the invitation from the Society to spread his ideas respecting the sale of wool before this meeting. The subject is of deep interest to the farmer, for tho' he may grow good wool as much as he pleases, if he cannot sell his wool at satisfactory rates, he might better quit raising. I have been engaged for about twenty five years in raising wool. There was a difficulty peculiar to the state of the country, in maturing a proper plan to afford the wool grower a fair remuneration; and when I first engaged, I was placed in the dilemma of not knowing the best market or the real value. I engaged a person whom I thought in every way competent to select, and who professed fully to understand his business, to choose for me, and the selections were thought to be good. There was a good share of merino blood, and out of four or five hundred sheep, some sixty or seventy were taken. When the time for shearing arrived, the man was left to himself to do all. I paid him so much a head, and when I went to the barn to see how the shearing was done, I found a quantity of wool—a number of pounds scattered about. The shearing had been done carelessly and the wool wasted; but I presumed that this was the regular mode, and that nobody was in fault. I took the word of the man, being myself unacquainted with the business. I took the wool to the agent, who was making

purchases, and he made remarks which were rather unpleasant about its quality—the manner of washing and of shearing—and yet I thought perhaps the man was right. I thought I had taken care in selecting, but it appeared that I had got into the wrong flock. The man got the wool at his own price, as I was unacquainted with its real value. It was for the agent's interest to get it as cheap as he could, and he succeeded. The whole subject was in uncertainty—the wool manufacturers were few—there was no regularity—many of us were unacquainted with the prices, and there was much imposition, in reference to the value of the different flocks. The prices prevalent at the good markets were but partially heard and known, and the end was that the farmers were grossly imposed upon. I knew a man who had a very excellent flock, the wool from which was worth at least 40c. He sold to one of these agents for a little over 30c., because he was not conversant with its value. The agent, by trading the wool, succeeded in getting it at his own price. He secured it—made the bargain firm, and then impudently told the man he was a great fool to sell at that price—the wool is worth more, but the bargain is made and you cannot get out of it.

I tried to think of another plan; and after great reflection, I thought, if we could find some man, who knew the value of wool, and what prices were paid—a man of good judgment and of sound sense—the manufacturer might get a better bargain, and the farmer a better remuneration. The farmers were not conversant with these things—they received their information from the proprietors of the manufacturing establishments. I believed a system could be commenced, which would benefit all the parties to the wool trade.

The machinery of the manufacturer is made for different grades; but he does not want to go to a farmer for a dozen different sorts. All flocks have different grades, from fine to coarse; and the establishment of a depot such as Mr. Blanchard has described, seemed to present a place where the farmer could bring his wool, and receive the best prices; where the tariff of prices would be well known; where the wool would be assorted and arranged; and where the manufacturer could get what he wanted without buying three or four times more than he required. The success has been most gratifying. The manufacturers go there, instead of going about among the farmers. They come there to buy, for they are sure of finding an assortment. It transfers the competition from the farmers to the manufacturers. There is often an uneasy desire to sell among the growers, even if they make their sale at less than the current price, while by the accumulation at the depot, the manufacturers are there to compete with each other, and secure to the farmer the very best prices.

There is another topic I would touch upon in connexion with this subject, Mr. Chairman, and I have done. As events are progressing it cannot be long before we shall begin to throw back upon Europe, for the immense quantities of wool she has heretofore sent us, our returns of the same article. The quantities imported into this country from abroad, have for the last few years, been gradually lessening and we are now about upon an equipoise. According to the course of trade and judging of the extent of our territory, and our improvement in agriculture, we shall soon have wool to spare, and we shall be called upon to aid in clothing the inhabitants of Europe, as we now aid to feed them. We must become exporters of the article and to send it abroad as it comes from the lofts of the farmer, coarse and fine, mixed, clean and unclean, will only lead to imposition and losses. The wool must be carefully examined and sorted, the different qualities separated and numbered, and after undergoing this process it will be ready for the European market. Orders will be received from thence for particular qualities and numbers, and it will be only when we have thus systematized the work that we will be ready to obey their orders. Now, who will be so competent to fill up these orders as the proprietor of a Wool Depot, who has the different qualities on hand ready for just such a call? It appears, therefore, a competition for the article between the manufacturers of our own country and those from abroad. By sending wool to a Depot it enables the farmer to realize the intermediate profits between himself and the manufacturer, which would otherwise go to some half dozen intermediate agents.

FRUIT.—The prospects now are that there will be an abundance of fruit in all this region. Every description has blossomed in great profusion.—*Buff. Com. Adv.*

Rearing Poultry.

As the time to lay the groundwork for raising poultry is at hand, we will respectfully call attention to the subject by briefly stating our plan for the management of each variety usually raised on the farm; and as we hold it to be intimately connected with the success of each, we will state that *poultry houses should be thrice a year whitewashed, at all times kept clean, well ventilated, and have freshly slaked lime occasionally spread over their floors*; that there should be constantly kept convenient to the hen-house, accessible to the chickens, deposits of old plaster or lime and heaps of ashes and sand. The plaster and lime being essential to enable the hens to form the shell of their eggs, and the ashes and sand necessary for them to dust in, as protection against the chicken lice, which so annoy all fowls, both old and young, and which so often kill the latter.

YOUNG CHICKENS.—As these are hatched they should be taken from the hens and kept in a basket lined with wool or cotton, until the hen completes hatching out her brood. While the mother is engaged in this work, the chicks should be fed with corn meal dough, moistened with boiled milk or the crumbs of pone or wheat bread, similarly moistened, every few hours through the day. At night, until the mother has finished her labors, let the chickens be restored to the nest, unless there be reason to apprehend that the nest is lousy; in that case, it will be best to keep the chickens in the basket, protected from cold. When the chickens are all hatched, the mother and her brood should be placed under a coop, which should be so made as to protect her and them alike from sun and rain, the slats to be so arranged as to admit of the passage of a free current of air. The coop should be occasionally removed, as it is at all times necessary that the young should be kept dry and clean. While the chickens are *young* it would be better that their food should be *cooked*, to prevent their being scoured; and therefore, for some weeks, we would confine them to the crumbs of pone or wheat bread, moistened with boiled milk. They should be fed thrice a day; water should be given them in a very shallow vessel, which should have slats across it to prevent the chickens from getting in and wetting themselves; they are extremely tender until they become fledged, and should be kept dry. In rainy weather it would be best for the mother and her young to be removed to the shelter of a room where the chickens could be protected from the weather, for we are satisfied that more chickens are killed by getting wet than from any other cause. *Chicks* should be cut fine and mixed with their food thrice a week. Young chickens are subject to *diarrhæa* to correct this a tea-spoonful of pulverized *chalk* or *charcoal* should be mixed with every cup-full of

meal or other food fed out to them. While the mother is confined in the coop, she should be as far removed as possible from the dung heap. A handful of gravel should be placed within her reach; she should have food and water regularly given her thrice a day, and care must be taken to grease or oil the back part of her head, down her neck, and under each wing, to destroy any lice with which she may have become infested while setting. A small piece of *assafoetida*, if kept in the vessel in which the chickens are given their water, may prove both preventive and curative of the *gapes*, a disease which we believe to be the result of *worms*. In chilly days we have found it serviceable to mix up a little pulverized black pepper with the young chickens' food. We have found boiled millet seed an excellent food for the young, while we have given it uncooked to the old with excellent effect.—Hens, while laying, should have their food alternated, sometimes Indian meal dough, then corn or buckwheat and again oats.

In raising young chickens, care must be taken to keep them *dry*, feed them regularly, and give them fresh water, which should be renewed whenever it may be rendered dirty.

The nests of the laying as well as the setting hens, should be preserved from lice. This may be effected by making them of clean straw, placing a few tobacco stems at the bottom, dusting a little ashes through the nest, and greasing the under part of the wings of the hens, where they join the body, as also the back of their heads and necks. It may be done also, by using snuff and grease, instead of grease alone—this last plan we do not approve, though effective, as it is apt to sicken the hens for a time.

Garlic, Cloves and Shallots, chopped up very fine and mixed in small quantities with the chickens' food occasionally, exert an excellent influence upon their health. *Young chickens*, while feeding, should always be protected from the large fowls.—*American Farmer*.

THE AMERICAN VETERINARIAN, OR DISEASES OF ANIMALS.—S. W. Cole, Esq., Editor of the Boston Cultivator, has published a work with the above title, which, after examination, we feel bound in duty to recommend to our readers. The author treats the diseases to which animals are subject in a plain common sense way, so as to be understood by farmers generally; he gives the name of the several *diseases*, describes their *symptoms*, and prescribes the *remedies*, in so plain and comprehensive a way, that any man of ordinary intelligence may treat his own animals when diseased, with the certainty of curing them, if their cure be practicable. The object of the writer appears to have been to make himself understood,—a thing most lamentably neglected by many other writers,—and we take pleasure in saying, that he has been singularly successful, for he has eschewed all incomprehensible hard sounding terms, and brought his phrases down to the capacities of the unlearned as well as the learned. His book is practical, eminently suited to the wants of the agricultural community, and should be in the hands of every man who owns or rents a farm.—*American Farmer*.

FACTS and not theories, or opinions, are the things most wanted for the improvement of agriculture.

Answers to Correspondents.

W. H., of Mount Morris. No ground can be under or top drained, without sufficient descent to carry off the water, except by conveying it into tanks or reservoirs, and raising it by machinery, as they do in the fens of England and the low lands of Holland.

The destruction of the Canada Thistle involves more points and opinions than we have time or space to bestow on the subject. We advise W. H. to consult the prize essay in the State Agricultural Society's Transactions for 1845. It contains the whole story—all that can be said on the subject.

On the subject of hedges for fencing, we almost despair of seeing it succeed in this country. The English White Thorn has an enemy in the scale louse, that is fatal to it in most localities—and all other substitutes noticed as foreign are killed by the mice during our hard winters, who burrow in the mat of dead grass, and the accumulation of leaves at the roots. The Native Thorn is nearer right for this purpose than any other indigenous shrub. The seeds should be sown in the fall in a bed—kept clean, as they require to lie in the earth a year before they come up—after which they may be in the set at two years growth.

W. S. Brandt, N. Y. On looking over the authorities, we find no disease of the barn yard fowl, that corresponds with your description. We once had occasionally a fowl affected very much like yours, and stopped its progress by feeding it in corn meal dough, in which, to each pint, was mixed one table spoonful of sulphur, and ten drops of spirits of turpentine. We have also seen fowls lose the use of their legs and die, by eating salted articles. Too much salt is always fatal to them.

O. S. G., Mutua, O. On your upland sandy soils well rotted or composted manures are preferable, and the coarse, strawy parts—chip manure, sawdust, in fact every thing that will decompose—use on your clays and retentive soils; it renders them more porous and pervious to water. Clover on light and open soils is the only manure that can be depended upon for extensive use.

The disease in cattle called "black feet," is in our opinion nothing more nor less than frost-bite, and it is not at all unlikely that it is superinduced by the disease on grasses and grains known as *Ergot* or Spurred Rye, as a small quantity has the effect wonderfully to decrease the circulation of the blood, reducing the pulse from 60 to 40 in a short time. Cattle affected thus during their exposure to extreme cold, would inevitably freeze their extremities.

Lime, ashes and plaster may be used together. They are all alkaline in their base. Sow broadcast on the grasses, and plow in for wheat, oats, &c. Plaster is of little use on low wet land. Ashes in any shape, are good every where—except on very strong clays, on which lime is preferable.

Soiling cattle in the stable, on green food, is the most profitable way on small arable farms, as twice the quantity may be sustained on the same number of acres, besides the great quantity of manure saved. But it is hard to learn old dogs new tricks, and you will have to overcome all the old habits and prejudices, before you can carry it into effect.

J. P., North Clarence, N. Y. To effect the curing of corn in the ear and secure it against the depredations of vermin, we would recommend the erection of an independent building of proper size; the sides diverging one foot in ten, covered with 1 inch boards with $\frac{1}{2}$ inch openings, and the roof with projecting eaves and end cornices—and either set upon pillars of wood the height of a wagon bottom, or the posts to reach down that distance to a stone foundation—one foot in width of each pillar to be covered with tin or sheet iron, to prevent any possibility of access to vermin. There should be a passage or half in the center, with bins made of 4 inch stuff, as well as the floors.

THE NEXT STATE FAIR.—At a recent meeting of the Executive Committee of the N. Y. State Agricultural Society, it was determined to hold the next State Fair on the 5th, 6th and 7th of September next—instead of the 12th, 13th and 14th of that month, as had been previously appointed. The Fair, as we have before stated, is to be held at Buffalo.

To Repel the Curculio.

MESSRS. EDITORS:—I noticed in the April number of your valuable paper, an article relative to the expulsion of the curculio from plum trees.

The remedy spoken of may do well for a farm orchard; but for garden trees, the manure and urine are objectionable, for two reasons. The ammoniacal vapors, or steam, ascending from the manure and urine and diffusing itself through all the atmosphere in the neighborhood, is almost as offensive to our olfactorys, as to those of the curculio. Also, the unsightly appearance of a heap of manure under a fruit tree, is objectionable, and more particularly so to the keen optics of the fairer sex. I purpose offering a substitute, which if successful with you, will be far preferable to any kind of manure or urine. The curculio, like all insects and animals possess an innate principle called instinct, and this instinct guides and directs them to where they can subsist and propagate their species.

The plum seems to be their favorite place of congregating, and the ground beneath as favorable a place for multiplying their species as any other.* Whether they cherish an "eternal hate" to the plum, and therefore persecute it "to the death," or whether they carry in their bosoms the "glowing fires of affection," and destroy it with their penetrating love, I know not—it matters not—within their reach, the plum dies. The curculio cannot propagate its species on a dry and barren rock, or any other substance akin to it. Therefore in laying a close pavement of brick from the body to the circumference of the tree, and kept clean, the plum at once becomes protected—the curculio takes the hint—comes not near, or quits the premises altogether, and leaves us to the full enjoyment of regaling our palates with the most delicious sweets of one of the finest of fruits. (Richmond, Ia., 1845.) A. N. N.

* The insect deposits its egg in the young fruit: it there hatches and feeds upon the fruit until it drops. The grub then enters the ground, and in a space of three weeks or so is supposed to have completed its transformation to the beetle form. We have observed some instances where paving seemed effectual, and particularly in a garden in Ohio, where the trees were closely paved around, and clean swept every day, not a curculio was to be found; but in other cases paving has proved fruitless.—Ed.

SOWING WHEAT IN JULY.—J. JONES, of Wheatland Md., writing to the American Farmer, in answer to an inquiry on the subject of sowing wheat in July, gives some facts which will be interesting to many of our readers. We are not aware that the same method (and time) of sowing wheat is practised in other sections of the country than Delaware and Maryland. Mr. Jones says: "I have made enquiries of several of the friends of early sowing, and have been informed by a neighbour of Mr. Hossenger, of Newark, Delaware—who was the first to sow wheat in July in this country—that his practice has been for five or six years, to sow wheat amongst his corn in July, and cultivate it in, from which practice he has obtained as high as 25 bushels per acre. I also understand, that during that time he has not failed to make a good crop but once. Mr. Hossenger continues that practice—many others in that neighbourhood have adopted the same plan; others have sown cornstalk fallow, and even clover-lay, with a like good result. Mr. Hossenger and most others, do not approve of pasturing down their wheat, either in fall or spring. But Mr. Wm. Bowman, one of the best and most successful farmers of St. George's Hundred, is in the habit of pasturing his July sown wheat with sheep. Possibly pasturing with sheep would be no disadvantage if fly was in the wheat. I should prefer to risk the fly, and not pasture. The July wheat sowers are generally our best farmers, and our best farmers generally at this day of agricultural improvement, put in all their fallow wheat with the drill. I have not sown any yet in standing corn, but I think I will put in in that way next July, and either cultivate or have a machine made with five drills, nine inches apart, to run between the rows of corn. I have been in the habit of planting with the drill in rows four feet six inches apart, and one stalk in the hill, one foot apart in the rows. Although I have seen others sowing wheat in July with great success, I have never yet sown any till near the last of August, and too often, late in September. I am so well satisfied with the practice of Mr. Hossenger, that I shall try to get in all my wheat this year, at least a month earlier than I have ever done before."



HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

Summer Management of Trees.

"As the twig is bent the tree's inclined," is a very old and true maxim, and one that should be remembered by all cultivators of trees. We believe the ordinary mode of proceeding is, to allow trees to grow as nature and circumstances may direct during summer, and in winter or spring correct by pruning, &c., any defects or deformities that may have arisen. This is not what we call *good* culture, and this is what most people are, or ought to be, aiming at now-a-days.

Just about this time, (the 1st of June,) young trees will be pushing vigorously, and as a general thing, will have made growth enough to enable the cultivator, (their tutor,) to perceive what form they are about to assume—whether the young branches are proceeding from the right place, and in the right direction, to reach the desired form. If they are not, they should be set right at once, by rubbing off shoots that are not wanted, pinching the top off to retard such as are pushing too vigorously, to the detriment of others. An equality of growth among the shoots intended for the main branches, or frame-work of the tree, should be maintained; and where a surplus of small branches in the interior are appearing, giving the tree a bushy or twiggy look, a sufficient number of them should be removed to allow the others to acquire a full and vigorous growth.

A standard tree, in an orchard, should have 5 or 6 feet of a clean, straight stem. Straightness can be perfectly obtained by keeping the young tree tied to a stake, until it has acquired strength and firmness enough to support itself in a straight position. All shoots proceeding from the stem, below the first tier of branches forming the head, should be rubbed off with the hand while tender, as, if allowed to grow, they retard the development of the head, and impair the form and habit of the tree. In forming the head of a young standard, a vigorous upright shoot should be secured for a *leader*, and three or four others of

the most vigorous to form branches or loughs. A laxness or slenderness of habit can be corrected by pinching off the ends of the branches, producing a more horizontal growth.

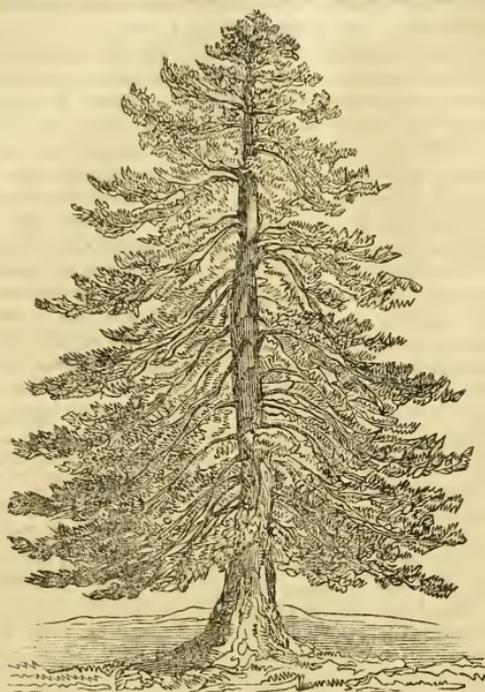
Dwarf trees require more care than standards, as their forms are more artificial. These should branch near the ground, say 8 inches to a foot. If the young tree, when planted, had not branched so low, it ought to have been cut down to within three or four buds of the point where the first branches are desired. Those who have planted young trees intended for dwarfs or pyramids, no doubt, attended to this matter at the time of planting. And now, they must see that a regularity and uniformity of growth is going on—that the leader is proceeding vigorously upwards, and the side branches nicely balanced—one not robbing and outgrowing, or overgrowing the others—this is the point. We have just spoken of the methods of obtaining this equilibrium of growth.

In a late number of the *Farmer* we spoke of the form most suitable for the various fruit trees, under certain circumstances, and the suggestions we briefly offer now are simply intended to aid the unpracticed hand in producing these forms. In all cases we advise caution—too little pruning is not so bad as too much—too many shoots or branches far better than too few. It will be well for every cultivator to acquire a knowledge of vegetable physiology—the *theory* of horticulture, as well as a skilful practical use of the knife. When he has done this, and studied well the peculiar habits of growth and bearing of the various trees, then he will have them entirely under his control, and will be able effect safely, and easily, any desired result. We have all much to learn on these points, and the orchard and garden is a good school.

Protection of Fruit.

Just at this time, when fruit is about ripening, birds and insects commence their attacks. Cherries, on account, perhaps, of their early ripening, and delicacy of texture, suffer most; indeed, in many places it is difficult to save any. One of the most effectual methods of catching insects is to have numbers of phials half filled with sweetened water, hung in the tree—the insects will make their way into them. We have heard of thousands being trapped in a day.

Close netting has frequently been used to protect fruit from birds, but is seldom completely effectual. A simple method, by means of pieces of looking glass, was given in the last number of the *Farmer*, in *Gleanings from our Foreign Exchanges*, which it appears has been found effectual, and we find it copied far and wide in the Horticultural Journals of Europe and this country.



THE SILVER FIR—(*Picea Pectinata.*)

This beautiful evergreen is yet comparatively rare in American collections, and particularly in this part of the country. The American species, *Picea balsamea*, is common; indeed it may be found in almost every collection of trees, large or small. There is a striking difference in the character of the two trees. The balsam fir is of a compact, upright growth; the foliage, as well as the branches, have an erect, dense habit. The Silver Fir attains a much larger size, the branches diverging in a horizontal direction, and the foliage in the same way, comb-like, as the name implies, and the silvery lines underneath are much more distinct. It succeeds well in this country. We have seen noble specimens at the east, and we have on our own ground one that is 7 years planted, and has now attained 12 feet high. Its annual growth is about 2 to 2½ feet. Among evergreen trees, a taste for which is rapidly increasing, the Silver Fir is eminently worthy of a place. We copy the above figure and the following description from the *London Horticultural Magazine*:—

PICEA, *D. Don*, (the silver fir.)—Derived from *pix*, in allusion to the pitch which the trees produce. Evergreen trees.

Picea pectinata, *Don* (comb-leaved Silver Fir.)—Leaves nearly flat, disposed in rows like the teeth of a comb, solitary, turned up at the points, on the upper side dark green, with two

silvery lines underneath, whence the name of Silver fir. Cones large, cylindrical, erect, six to eight inches long, with blunt closely pressed scales of a brown color when ripe.

An erect growing noble tree, scattered over a great many countries, and long since praised by the prince of Latin poets for its unequalled beauty. It fills some of the forests of the Alps, the Carpathian mountains, the South of Germany, the Uralian, Altaic, and Baikal mountains, and may be considered to be indigenous to the mountains of Central Europe, and those of the west and north of Asia. It assumes its most majestic appearance in Italy, in Germany, and especially in the neighborhood of Strasburg, on low, deep, loamy lands near to the Rhine. It is not to be found naturally in Scotland, and there is very little ground for supposing that it is a native plant in England. Its most celebrated locality is that of Olympus, the trees of this species contributing to form that noble wood, by which that famous seat of the gods is surrounded.

The silver fir has been planted in considerable numbers around gentlemen's seats, and it will be generally observed in such situations towering above all other trees. When young the tree is an exceedingly slow grower, often losing its leading bud from the effects of spring frosts. In their young state the plants grow much better in Scotland than in England, and

perhaps this is to be accounted for by the fact that there, when the tree is excited by fine weather to put forth its tender shoots, nipping frosts are by no means so common as in England, or, in other words, the climate is not so uncertain as it is in the latter country.

Its love for deep loamy soil has very much operated against its being planted in this country in great numbers; for the land which suits it best is more profitably employed in growing corn crops, &c. Nevertheless, in all places where ornament is required it will continue to offer many attractions over some other evergreens. After it has attained to the age of ten or twelve years, it commences to grow rapidly, making annual shoots of from two to three feet in one season.

Virgil was right in ascribing to it the attribute of beauty. It has nothing of the tortuous ramification which forms the delight of the painter, nor is it calculated to elevate the mind when the winds are high, or during a storm; we hear not the shouting of the tempest in its lofty top. In the oak, for instance, the voice of Nature is loud and deep; but in all the individuals of the *Coniferæ* there is only a shrill hissing sound, which in minds attuned to such things awakens a feeling of extreme solitariness. Its leaves are full of beauty, and will suffer the minutest examination; its branches are disposed horizontally, and sometimes may be observed at a great distance, and to advantage against a clear sky. The trunk is straight and unbending, rising to a majestic height, and the tree altogether may be justly considered as one of those which adds dignity to the spot where it rises.

The propagation and culture of this plant are accomplished much in the same way as in the common pine. The cones should be gathered in December, subjected to a very slight degree of kiln-drying, and then thrashed on a floor, as recommended in the case of the larch. When sifted, and freed as much as possible from the broken pieces of the cones, &c., they should be kept in a dry place till the middle of March, and sown in beds of light loamy soil, placing the seeds so as that the plants may rise at about an inch apart from each other; and this will be best insured by reckoning one seed in every four as likely to vegetate.

This, perhaps, will be better understood when it is stated that Silver fir seed is always bad, and requires to be sown very thick to have a good close crop. In moist soil a covering of half an inch will be sufficient, and in dry soils it may be increased to three quarters of an inch, and even one inch. When the plants have been two years in the seed bed they may be transplanted into nursery lines, in the very richest soil that can be had, only it is not proper to use fresh manure. They should stand about two inches

apart, in lines six inches asunder; for if planted at a greater distance apart, they will be found to make strong side branches, often robbing the leading shoot, which is, besides, very liable to injury by frost. It will be worth while to insert dead branches (cut in summer so as to retain their leaves,) throughout the lines: this will ward off the effects of spring frosts, and will be found to answer better than planting them under old trees, as is done in several nurseries in Surrey. Two year's seedlings are 10s. per 1,000, and transplanted plants, nine inches high, are from 15s. to 20s. per 1,000. Amongst the synonyms which are applied to this plant are *P. taxifolia* and *P. excelsa*.

Strawberries.

MR. BARRY:—I wish to inquire if you, or some of your correspondents can inform me the cause of the unfruitfulness in some strawberries that I set in August 1845—the soil a sandy loam, furrowed with a plow three feet apart; plants 8 inches in the rows, the rows dressed with horse manure; the first winter covered with sea weed of different kinds that lands on the sea-shore; second winter horse manure and straw. In 1845 and 1847 they were full of blossoms, and grew beautifully, the wonder of all that saw them, but produced not one perfect berry. Some have said that they grew too luxuriant; some that they were all male, others all female. I am not satisfied as to the true cause, for they were taken from a bed in my garden that bore well the season before, of *Keen's Seedling* and *Hautbois*. By running a cultivator between the rows and hoeing, not a weed was to be seen in them the first two years, but they got to be very thick in the rows. Within a few days I have plowed them all up, and planted potatoes. It was estimated by some that I should have 20 to 40 bushels the first season. Respectfully yours,

Nantucket, Mass., 1847.

S. B. SWAIN.

REMARKS.—It is no uncommon thing for plants, taken from a bed that had been productive to prove utterly sterile by what is usually termed "running out," owing to an imperfect development of the *pistils* or fructifying organs of the flower. The *Keen's Seedling*, though usually perfect in its flowers, will occasionally run out, and the *Hautbois* frequently. The Cincinnati mode of strawberry culture, as described by N. LONGWORTH, Esq., the great teacher of strawberry philosophy, is to plant *pistillate* or female plants, with a few *staminate* or males among them to fertilize them—say one to a dozen. Hovey's Seedling is one of the largest and finest pistillate varieties, and the *Early Scarlet* one of the best for fertilizing. The *Early Scarlet*, the *Alpine* and *Wood* strawberries scarcely ever fail to produce a full crop by themselves, having perfect blossoms.

Mr. LONGWORTH and others at Cincinnati will not admit that plants ever "run out," that is, become defective in stamens, and thus partially changed in character; but we have yet to find evidence that they do not.

BUFFALO HORTICULTURAL SOCIETY.—The *C. m. Advertiser* speaks well of the exhibition held by the above Society on last Tuesday afternoon and evening. Tulips were of course the principal feature.

Rochester Gardens.

LATELY we made a hasty visit to a few of the best private gardens around this city, to see what was going on at home. We found many things both pleasing and instructive. In the culture of fruit, particularly, we find a rapid progress.

At the garden of AARON BRICKSON, Esq., whose elegant residence is on Main-street, we found the most complete and best managed collection of garden fruit trees we have seen in this state. His dwarf pears, and cherries, and apples, were in full bloom, and though only planted four years ago, have attained a large size, and perfect, beautiful, form. His dwarf cherries, particularly, are the finest we have ever seen, being a complete mass of bloom, from the ground to the top. The sceptic about dwarf trees should visit Mr. E.'s garden. His strawberry and raspberry borders, his asparagus beds, his peach trees, and grape trellises, are all in the finest and most productive state; and, indeed, the whole garden is a *model*—and all is managed, under the direction of Mr. E., by a man who does not pretend to be a *gardener*.

MAJOR JNO. WILLIAMS, whose residence is on Jay-street, near Brown's Square, has a complete and well managed establishment. We went to see his famous tulip show, but found much more to admire. The grounds comprise two or three acres, and are somewhat marred in appearance by a collection of peach and other fruit trees that occupy the place of a lawn in front; but their good keeping prevents them from being unsightly. The garden is judiciously divided into compartments; the walks are well made and edged with dwarf box; and the collection of fruit is extensive, and the trees are all in a healthy, vigorous condition. The strawberry border, filled with a few only of the best sorts, looks promising. Mr. W. took the first premium last year, and probably will again, for the largest specimens. A neat Flower Garden is situated at the rear entrance to the house, well filled with the finest of the perpetual Roses, and other choice plants, and beds are in readiness for verbenas and choice annuals.

We were much pleased to find an extensive collection of Evergreens, recently planted, embracing nearly all the species usually to be had in the nurseries. Mr. J. M. WHITNEY, brother-in-law of MAJOR WILLIAMS, who directs the management of the garden, is passionately fond of Evergreens, and is collecting from every quarter. Mr. WHITNEY is nursing carefully some cedars taken by his own hand from Mount Vernon, close to the grave of WASHINGTON, and a few seeds collected by him in Havanna, during a visit there last winter. We admire the taste that thus picks up by the way, little objects of interest, to be planted around home—how

many pleasant remembrances they may impart in after years. The garden of the traveler might be a delightful Museum. Mr. Williams has constructed on each side of the hall door, a neat window garden, each sufficient to contain a nice collection of plants, and furnish winter bouquets. A magnificent *Hoya cacciosa*, (wax plant) is now in full bloom. These window gardens, by the way, are simple, excellent arrangements, and we must commend them strongly to persons who wish to cultivate window plants properly. They are delightful in connection with the drawing room, in winter, and every family of taste might enjoy one.

D. W. POWERS, Esq., on Exchange-street, on the west bank of the Genesee, has a charming little place. His grounds—about an acre—is almost in the form of a semi-circle. The house stands well back from the street, and the ground in front, the width of the house, is laid out in beds, filled with ornamental trees, shrubs and plants—and all edged with dwarf box, clipped and kept in perfect order; indeed, altogether the best specimens of box edging around Rochester. On either side of these beds is a well kept, pretty lawn. In our opinion, Mr. P. made a mistake in planting too many standard fruit trees, and making too many straight walks; but, these blemishes are diminished by the general good keeping. He has recently erected, in connection with the dwelling, a beautiful little green house, a drawing of which we intend soon to give. Mr. Powers' is a place that our citizens may point to with pride and pleasure.

Horticulture in Alabama.

Nothing gives one a more definite idea of the extent and variety of soil and climate of our Union than a comparison, at this season of the year, of accounts of the season in different parts of the country. For example, we have to-day received letters from Maine and New-Hampshire speaking of snow, and two feet of frost in the ground here, while the following extract from the letter of a zealous amateur in Mobile, dated *March 10th*, speaks of a *crop of young pears*, and shoots 8 or 10 inches long already.

"I think the climate and soil here will do very well for pears, on either pear or quince stocks. I have about 500 young trees planted, embracing nearly all the finest varieties; over 200 of them are on quince stocks; these latter show, at this time, a fine new growth of from 8 to 10 inches, and some of the trees have young pears upon them, now going on finely. I suppose this sounds strangely to northern ears, where I presume all fruit trees still have the look of dear winter.

"I have in my young orchards about 250 plum trees, 160 cherry, 100 apricots, and about 1400 peach and nectarine trees, besides some of all the other fruit trees; and I am resolved to give them a fair trial. I have also about 250 apple trees, among which are 12 of "*Early Joe's*," these latter I had from ELLWANGER & BARRY of Rochester, N. Y., with 100 pears on quince stocks; and every tree is living and doing well.

"I have some doubts regarding the success of plums, cherries, and apricots here. The northern peach trees do very well here; and, although they are transferred to this warm climate, some of their northern habits stick very closely to them. They bloom at least from two to three weeks later every spring than our native peach trees, which almost entirely preserves them from the spring frosts.—*Horticulturist*.

Horticultural Intelligence.

THE Horticultural Society of the Valley of the Genesee held its first exhibition, for the season, on the 20th of May, in the City Hall of Rochester. The display of tulips, particularly, was gorgeous. Major JNO. WILLIAMS presented 80 varieties. Beautiful bouquets, vases, &c., were presented by Mrs. L. A. WARD, Mrs. S. O. SMITH, Mrs. E. F. SMITH, Mrs. G. W. BURBANK, Mrs. J. W. BISSELL, Miss SHAW, and others. 25 specimens of wild flowers were presented by L. WETHERELL, Esq. A collection of pot plants and cut flowers were presented by ELLWANGER & BARRY.

Large, handsome, well grown cucumbers were shown by Messrs. HUGH MULHOLLAND, and BENJ. HILL, and asparagus, by Mr. MULLHOLLAND. In vegetables there was a great deficiency, but the flowers were select and admirably arranged, making the exhibition, on the whole, one of the most satisfactory we have seen.

The following is the notice of the opening of the Weekly Exhibitions of the Massachusetts Horticultural Society:

The Massachusetts Horticultural Society will open their Weekly Exhibitions for the coming season, at Horticultural Hall, School-street, May 13th, at 12 o'clock, A. M., by a grand display of pot plants: including Roses, Pelargoniums, Fuchsias Cacti, Calceolarias, Cinerarias and Heaths. Also, Bouquets and Cut Flowers.

The Albany and Rensselaer Society held its Annual Meeting, at Albany, on the 6th of May, and elected the following officers:—

President—JOEL RATHBONE, of Bethlehem.
Vice Presidents—D. THOMAS VAIL, Troy; DR. HERMAN WENDELL, Albany; EZRA P. DOUW, Greenbush.
Secretary—L. P. JOHNSON, Albany.
Treasurer—A. E. BROWN, Albany.
Managers—AMOS BRIGGS, Schaghticoke; Stephen E. WARREN, Troy; J. M. Lovett, Albany; Wm. Buswell, Troy; J. McD McIntyre, Bethlehem; Jas. Henry, Watervliet; Wm. Newcomb, Pittstown; James Wilson, Albany; A. Osborn, Watervliet.

The following arrangement for exhibitions for the season was adopted:

At ALBANY, 2d Wednesday, 14th June—For fruits, cherries, strawberries, flowers, vegetables, &c.

At TROY, 2d Wednesday, 12th July—For fruits, cherries, currants, gooseberries, raspberries, flowers, vegetables, &c.

At ALBANY, September—Annual Show.

At ALBANY, 2d Wednesday of February, 1849. Annual Meeting—Fruit, flowers, &c.

The Buffalo Horticultural Society held its first exhibition on Tuesday, 23d of May.

Ripe field strawberries were brought to this city on the 16th of May, by Mr. ELLIOT, of Greece. The Grecians have a warm soil—the best in this part of the country for early crops. Some of them ought to plant 10 acres of strawberries, to supply a few of the 30,000 worthies of Rochester with a dish now and again.

Fine, full grown cucumbers were brought in about the 12th of May, by Mr. H. MULHOLLAND, whose fine market garden is in Brighton, just

on the city line. Mr. M. furnishes the best of vegetables, but they are monopolized by a few, who know what is good in that way. His crop this season is unusually fine and forward, and conveys a useful lesson to those who feel an interest in this most useful branch of culture. Mr. JOHN COLGAN, his gardener, deserves to be well spoken of.

The fruit crop at the present moment looks unusually promising in this region. If no untimely frost should occur hereafter, the crop will be fine. Strawberries will be produced in greater abundance and variety than ever before. HON. ISAAC HILLS has 12 varieties that promise well; many other gardens have large collections in the best state of culture. East and North of us, the more tender fruits are much injured by the winter.

The Northern Spy Apple.

WE are indebted to Mr. JOHNSON, a fruit dealer of this city, for a basket of this fruit, the finest we have seen. Not one measures less than 11 inches in circumference, smooth, fair, and highly colored, and as fresh to-day. (May 23,) as if it were February. We are indebted to JAS. H. WATTS, Esq., for specimens at various times, and from various sections of the country, alike beautiful and every way fine.

We wish our friend COPPOCK, of Buffalo, and his friends who, at his festival, placed the Spitzenburg above the Spy, could see these, and taste them; we venture to say if they did, they would very soon pronounce a reversal of judgment.

WE are indebted to B. P. JOHNSON, Esq., of Albany, Corresponding Secretary of the N. York State Agricultural Society, and Corresponding Secretary of the Albany and Rensselaer Horticultural Society, for a copy of the Annual Report, Constitution, Rules and List of Premiums of the latter society, and for the following Circular which we commend to the attention of Fruit Growers, Nurserymen and Horticultural Societies. The Convention, no doubt, will be well attended, and productive of beneficial results to pomology.

POMOLOGICAL CONVENTION.

AGRICULTURAL ROOMS,
Albany, May 16, 1848. }

P. BARRY, Esq.:—*Dear Sir*—On the 9th of March last, the Executive Committee of the N. Y. STATE AGRICULTURAL SOCIETY, passed a resolution inviting the FRUIT GROWERS and nurserymen of the United States and Canada, to hold a Pomological Convention during the meeting of the society, at the next annual show and fair at Buffalo, on the 5th, 6th and 7th of september next.

The importance of such a convention it is presumed will be duly appreciated by all who are interested in the subject, and the most auspicious results are anticipated from the deliberations of the convention.

It is proposed to have the sessions of the convention commence on Friday preceding the meeting of the society, (the 1st of September,) and to continue during the ensuing week, until the close of the fair. Accommodations will be furnished to all gentlemen who may attend, and they are respectfully requested to report themselves on their arrival to PROF. W. R. COPPOCK, who will furnish them with every necessary information.

On behalf of the society, I am desired to extend to you an invitation to be present on that occasion, to aid in the deliberations of the convention.

I am, very Respectfully,

Your obedient servant,

B. P. JOHNSON,

Corresponding Secretary.

The society with which you are connected, is most respectfully requested to send delegates. E. P. J.

LADIES' DEPARTMENT.

The Manufacture of Cheese.

For the benefit of those of our readers who are engaged in cheese dairying we make the following extracts from a valuable essay by Mr. ALONZO L. FISH, of Litchfield, Herkimer county, embracing experiments made by him in the manufacture and management of cheese. At the January meeting (1843,) of the N. Y. State Ag. Society, Mr. Fish was awarded a premium of \$50 for his essay, or statement. It will appear at length in the Transactions of the Society for 1847, soon to be published:—

Having been personally engaged in 1845, in some 60 dairies, which were located in some thirteen towns and four counties, and more or less in the same manner the past two years, I have observed a marked difference in the capacity of soils for producing herbage, under different modes of culture, and the various conditions and treatment, of cows, affecting their capacity for milk, both as regards *quality* and *quantity*. The inconvenient and improper fixtures, in many instances, for making and curing cheese, which are to be found, all unite in convincing me, that any set of rules for making cheese would not be practicable, even with the most proficient cheese maker; because,

In the first place, milk is a fluid very liable to be varied in quality by impure water, by damp and unventilated stables, change of diet, excess of feeding, excitement of temper, irregular milking, salting, &c., which destroys its susceptibility to produce like results.

2d. Cheese, when pressed and exposed in a *curing process*, is no less easily affected, and is equally liable to be varied in texture and flavor, by size of cheese, exposure to excess of heat, bad air, &c., the effect of which I shall hereafter notice. There are, however, leading principles which form the basis of operations, and should be closely adhered to, *in all cases*, in the process of manufacturing cheese. *Salt, Rennet, heat and pressure*, are the principal agents used in converting milk into cheese, the flavor and texture of which is determined by their proportionate use. Their proportion is varied by different dairymen, according to their notions of propriety, as best adapted to their experience, fixtures, &c. Hence arise the great inequalities in dairies, in the same neighborhood, and even in the same *dairy-rooms* may be found as many different qualities of cheese as there are fruit in an apple orchard. Some of these are matured at an early period, while others mature later, and are unsuited to the same market.

Much of the cheese being contracted for before it is made, (in the early part of the season) both buyer and maker are liable to be disappointed, in the cheese being suited to the market for which it is designed, destroying the confidence of purchasers, and injuring the interest of the dairymen. It is therefore necessary, that makers should have sufficient knowledge of the science to determine the result of their practice, which cannot be learned from verbal instruction. It is by *practical experience and close observation only*, that the maker can learn to adapt his practice to the frequent and extreme changes to which our climate is subject, varying the quality of the milk, and materially affecting cheese in the process of curing.

The evening's and morning's milk is commonly used to make one day's cheese. The evening's milk is strained into a tub or pans and cooled, to prevent souring. This is done by running water through a vessel set in the milk, or setting pails filled with cold water into the tub, and stirring till cool; but little cream will rise over night.

The cream is taken from the evening's milk and kept till the evening's and morning's milk are put together, and warmed to receive the rennet. This is often done by heating a part of evening's milk to a temperature that will warm the whole mass. Both are objectionable, *because the natural affinity which is necessary to preserve between the constituent parts a perfect coherence* is destroyed, by a portion of the milk being overheated. It is better to warm the whole mass in a manner that will produce an *equilibrium of heat*, which is best done by placing the vessel containing the milk, within a larger vessel, with two inches under the bottom, and one inch of space at the sides, into which space water may be put to cool the milk, and into which steam may be let to warm the milk and scald the curd. The more water surrounding the milk, the more uniform will be the heat. The cream, if added, (which is generally

done), is best incorporated with the milk, by putting it with twice its quantity of new warm milk from the cow, and add warm water to raise its temperature to ninety-eight degrees. Stir it till perfectly limpid, add cream to milk, and then put in rennet, that the same stirring may mix both at once with the same mass. If milk is curdled below eighty-four degrees, the cream is more liable to work off with the whey. *An extreme of heat will have a like effect.*

Curdling heat is varied with temperature of the air, or the liability of the milk to cool after adding rennet. A fine cloth spread over the tub while the milk is curdling will prevent the surface from being cooled by circulation of air. *No jarring of the milk*, by walking upon a springy floor or otherwise, should be allowed while milk is curdling, as it prevents a *perfect coherence*.

Rennet.—Various opinions exist as to the best mode of saving rennet, and that is generally adopted which is supposed will curdle the most milk. I have no objection to any mode that will preserve its strength and flavor, so that it may be *smelt and tasted* with good relish, *when put into the milk*. Any composition not thus kept, I deem unfit for use, as the coagulator is an essential agent in cheesing the curd, and sure to impart its own flavor. The rennet never should be taken from the calf, till the excrement shows the animal to be in perfect health. It should be emptied of its contents, salted and dried, without scraping or rinsing, and kept dry for one year, when it will be fit for use. It should not be allowed to gather dampness, or its strength will evaporate. To prepare it for use, into ten gallons of water, (blood warm,) put ten rennets, churn or rub them often for 24 hours, then rub and press them to get the strength, stretch, salt and dry them as before. They will gain strength for a second use, and may be used when the weather will admit of soaking them to get the full strength. Make the liquor as salt as can be made, strain and settle it, separate it from sediment, (if any,) and it is fit for use. Six lemons, two ounces of cloves, two ounces of cinnamon, and two ounces of common sage are sometimes added to the liquor to preserve its flavor and quicken its action. If kept cool in a stone jar, it will keep sweet any length of time desired, and a uniform strength can be secured while it lasts. Stir it before dipping off to set milk; take of it enough to curdle milk *firm* in 40 minutes. Squeeze or rub through a rag anatto enough to make the curd a cream color, and stir it in with the rennet. When milk is curdled so as to appear like a solid, it is divided into small particles, to aid the separation of the whey from the curd. This is often *too speedily done*, to facilitate the work, but at a *sacrifice of quality and quantity*.

The three *indispensable agents*, *heat, rennet and pressure*, rightly applied, must keep pace with each other in effect. The two former operating to subdivide, the latter to aid cohesion, by bringing the particles of a sameness closer in contact. This should be *skillfully and studiously* applied in a mild way, according to the capacity of the curd to receive it. The less friction in working the curd the less waste. *If heat is raised too fast*, or commenced while the curd is too young, the effect of the rennet will be checked, and decomposition will not be complete, and will result in a leaky cheese.

This often happens when steamers are used in small dairies. Heat may be raised in scalding to *keep pace with rennet*; if rennet is quick, heat may be raised quick, if slow heat must be raised slow and held longer. Scalding heat may be carried from 96 to 104 degrees, according to the size of the cheese, and temperature to which the cheese is exposed. During the process of scalding, the whey and curd should be kept in motion, to prevent the curd from settling and sticking together, as separating it is attended with great labor and waste from friction.

When the curd is cooked, so that it feels elastic and will squeak when chewed with the front teeth, it is separated from the whey to receive salt. This is done by dipping it into a strainer over a basket or sink, or drained off and salted in the tub. Either may be done without adhering in lumps, by siring it in a small portion of whey, till cooled to 94 degrees. This is the most critical part of the process, where cheese-makers are most likely to err, as the portion of salt retained in cheese after pressing, will be in proportion to the capacity of curd to receive it when added. At a particular period and temper of curd, when draining off whey, it will absorb salt freely, and after being thoroughly mixed and packed up for a few minutes while warm, it will be evenly shrunk and cleansed by salt and whey, and will press out freely; but if the curd is *not well cooked*, or cool-

ed too fast in draining off whey, it will require a degree of stubbornness, prevent the absorption of salt to shrink and cleanse, and no amount of pressure will be sufficient to drive out the fluid.

If curd is not worked even, the larger lumps will not be cooked enough, or the lesser too much. (like large loaves of bread and small loaves baked together in one oven.) hence, the cheese is left impregnated with the elements of fermentation, which increase on being exposed to heat, till the cheese is sufficiently swollen (or huffed) for each constituent to occupy a separate space in the same shell or rind. The fluids first attract together by affinity, forming small cavities in which they remain unaffected by salt become foetid, and generate an unpleasant odor, which is a fair proof of the quality of rennet used. Curd should be salted warm, it is then most absorbent, and thoroughly cooled before putting it to press, to suppress the combined action of heat and rennet. The quantity of salt required, varies with the condition of the curd, size of cheese, amount of heat to which the cheese is curing, and market for which it is designed.

A well worked cheese, from fifty to one hundred pounds, requires one pound of refined salt to forty pounds of curd, to remain in the cheese after it is pressed and exposed to a temperature of from seventy to eighty degrees. This may be varied from two to four pounds to the hundred, according to the texture of cheese required—small cheese requiring less and large cheese more.

A degree of moisture is necessary in cheese for a malleable texture, but this should not be from animal fluids retained in the curd. A high salted cheese immediately exposed to high temperature, becomes sour, hard, dry and crumbling: the same exposed to a cool, damp atmosphere retains sufficient moisture to be soft, yet solid. A cheese light salted in a high temperature will cure quick, become porous, lumpy and stale. Curd from hay milk, requires much less salt than that from grass or milk feed, as it is poorer, and will retain salt like leavenments. The richer the milk, the more salt is required to control the animal properties, and the less absorbent the curd the pores being filled with the finer butyric particles.

More salt is required in hot weather also, to overrule the combined action of rennet and heat, neither of which will be effective alone. When curd is ready to press, it is important to dispossess those decomposing agents. The gastric juice (or coagulator) is a fluid, and works off with the animal fluids in whey; and the only way to get rid of it, is to work the curd down fine and solid and work the whey all out.—Then cool the curd thoroughly before pressing, and the cheese will be solid and keep its place. But if the whey is not all out, the decomposer is yet on hand, continues its action (aided by heat) till an equilibrium of chemical action is destroyed in the cheese, and the fluid properties leak out in fetid whey and oil, leaving it a rank and worthless article. In short, the proper method of using salt must be arrived at by a close observation as to its chemical combination with the constituent properties at different ages of the cheese with different sizes, heat, dampness, &c. This, although an essential point, has not been sufficiently determined by chemical analysis to be reliable. (To be Continued.)

A NEW PLOW.—The Farmer and Mechanic describes a new plow, the chief characteristic of which is a revolving mould board. The inventor says that the work is done one-third easier, the earth is thrown up very much lighter and it can be built cheaper than any other plow, while a dozen can be packed in the space that one of the old kind would occupy.

A ROCHESTER MILL IN SPAIN.—Mr. JOHN EGGLESTON, millwright of this city, has built for Señor AGUIRRA, of Bilbao, Spain a model of a Flouring mill, which is to be used as the pattern for the construction of one in that distant country.

TO CORRESPONDENTS.—Communications have been received, since our last, from S. Miller, David Thomas, M. M. Rodgers, Alfred Reynolds, S. B. Swain, S. W., S. F. Smith, J. N., A Subscriber, John S. Hilles, J. B. Marsh, Wm. R. Prince, O. P. Q., and H.

Recent severe illness has prevented the Publisher and home editor from attending properly to the present number of the Farmer. For this reason it is not so complete, in many respects, as would be desirable—and is also issued somewhat later than usual.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,.....	\$1 13	1 22	Pork, bbl. mess	10 50	11 00
Corn,.....	49	44	Pork, cwt.,...	5 00	5 25
Barley,.....	50	56	Beef, cwt.,...	4 50	5 00
Oats,.....	35	41	Lard, lb.,.....	7	8
Flour,.....	5 25	5 75	Butter, lb.,.....	9	11
Beans,.....	33	1 00	Cheese, lb.,...	6	7
Apples, bush.	25	50	Eggs, doz.,.....	8	9
Potatoes,.....	63	75	Poultry,.....	7	8
Clover Seed,...	4 00	4 75	Tallow,.....	7	8
Timothy,.....	1 50	2 50	Maple Sugar,...	7	8
Hay, ton,.....	10 00	12 50	Sheep Skins,...	38	1 00
Wood, cord,...	2 00	3 50	Green Hides,lb	4	
Salt, bbl.,.....	1 25	1 30	Dry ".....	7	8
Hams, lb.,.....	7	8	Calf Skins,...	9	

Rochester, May 29, 1838.

New York Market.

NEW-YORK, May 29—7 P. M.

The Flour market is rather active to-day, and sales reach 6 or 7000 barrels at \$5.25 a 5 37½ for good Michigan and State; \$5.50 a 6 for pure and fancy Genesee and Ohio. Meal \$2.50 a 2.56½. Rye Flour \$3.63½.

Grain—Ohio Wheat is offered at \$1.25; Corn 54 a 56c for good; the sales are 50,000 bushels at 53½ a 53½ for southern flat, and 55½ a 56 for Northern and Jersey.

Rye has a downward tendency; 4000 bushels sold at 69 a 70c; Oats dull at 45 a 48c.

Pork is \$9 a 10; a parcel of Beef sold at \$11.50. Lard 6 a 6½c. Pots are \$4.25 a 4.37; Pearls \$5.

BUFFALO, May 29.

On Saturday there were sales Ohio Wheat to the extent of about 5000 bushels at \$1.05 on short time, with interest, and 8000 do Oats to arrive at 35c.

This morning the market opened with a fair inquiry for good brands of Flour, at prices slightly below the views of sellers. Sales 400 barrels at \$4.81, and 420 bbls. fancy Ohio at 5; 500 do. Milwaukee City Mills at \$4.81—and 420 do Illinois at \$4.75.

CLOVER THRASHER AND SEED CLEANER.—Robert McGown, of Jersey Shore, Lycoming County, Pennsylvania, has invented a machine for thrashing and cleaning clover seed. It has been pronounced by all the farmers in that district of country, who have witnessed its operations, to be the most complete machine for that purpose which they have ever seen. It thrashes and cleans from twenty-five to thirty bushels per day. The thrashing and separating is done at one operation, and the concave and cylinder with screws are used, in the thrasher, so also is the common fan in separating.—*American Artisan.*

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THE GENESEE FARMER:

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[Editorial Correspondence of the Genesee Farmer.]

An Agricultural Excursion to and in Abbeville District, South Carolina.

SOUTH CAROLINA has no Counties, but is divided into Districts, each of which is as large as two or three ordinary Counties in other States. Abbeville District is noted for its distinguished men, good soil, skilful and successful planting. It is the birth place of JOHN C. CALHOUN, the home of Gen. McDUFFIE, classic in revolutionary story, and the seat of the most celebrated academy in all the South. The court house of the district is 65 miles north of Augusta, to reach which we went up on the west side of the Savannah river in the state of Georgia, and returned on the east side, in the state of S. Carolina.

The country presents many exceedingly interesting geological features. Its rocks belong to the plutonic family, and the older strata of sedimentary formations. By "plutonic" rocks the unlearned reader will please understand such as were once melted by volcanic heat and crystallized in cooling. "Sedimentary" ones are those formed by deposits of earthy sediment in the bed of the ocean, in lakes or other water, and by great and long continued pressure consolidated into solid stratified rocks. For 55 miles north of this city, (Augusta,) these sedimentary rocks are tilted up so as to present their fractured edges almost perpendicular to the horizon. Ancient volcanic action has left its enduring impress on every mile of surface from this to the mountains of Tennessee. Nothing is more common than to see red clay lying above all the rocks, which is usually from one to fifty feet in thickness, seamed by earthquakes, and the narrow chasms filled with belts of flint, which was injected from below in a state of fusion, like melted lava. Micaceous sandstone, felspar, hornblende and trap rocks most abound. So few practical farmers have studied the peculiarities of the various rocks that constitute the crust of the

globe, just below its loose earthy surface, and the origin of all soils, that we cannot pursue this subject intelligibly without making more stops and explanations than will be agreeable to either party. To the writer, agricultural geology is full of profound interest; but it is all Greek to many readers.

In the year 1756, Patrick Calhoun, an emigrant from Ireland, and father of John C., settled in Abbeville District with a few other pioneers, who penetrated far into the wilderness, and some 200 miles from Charleston. We visited his old plantation, which has passed out of the hands of the family, and is farmed by a non-resident. JOHN C. CALHOUN has moved farther up toward the mountains, and is regarded as one of the best practical farmers in the state. Gen. McDUFFIE is an extraordinary and very high minded gentleman. His health is gone from a disease akin to paralysis so that he is unable to walk a step. Some 25 or 30 years ago he fought a duel with Col. CUMMINGS, of this city, and has carried the ball from his antagonist in his body, and near to important nerves, ever since. His plantation contains 4000 acres, and 1700 are in cotton, corn, wheat and oats, which looks very fine. Gen. M. is justly proud of his farm, and feeble as he is, was carried into his carriage, and driven with the writer, several hours through extensive fields of corn, cotton and wheat, to point out his improved system of tillage. Two hundred acres of corn have been well manured this season. There are 103 negroes on the plantation, old and young. The task of a hand is to hoe an acre of corn or cotton a day, which is usually completed on this farm by 2 o'clock, P. M. The proprietor said that if his people desired it he would allow them to take their task by the week, in which case they might gain two days in the week to work for themselves. Most of the negroes live in frame cottages, painted white. Mr. McD. has an excellent overseer, who gets \$750 a year, house rent, grain and meat for his family—a salary equal to \$1000. Wheat gives from 5 to 8 bushels per acre. It is so light in all parts of the South, that we have seen, as to be laid in gavels from the cradle when cut, and it is bound without a rake in small bundles like those of flax at the North. The harvesting of wheat is executed in a very slowly manner. Cotton being the main crop, it receives the greatest attention, whilst all other matters are neglected.

Many planters in Abbeville are saving their land from washing by what are called hill side

ditches. As much water falls in a shower of twenty minutes duration here, as in an hour in New York. On light, loose, hoed land, in corn and cotton, these heavy rains wash off soil sometimes by the acre on side hills, if not protected by horizontal ditches. These ditches have a fall of one inch in twelve feet; at least, this is the fall preferred by Dr. Towns, who has constructed miles of these safeguards on his plantation, which joins that of Gen. McDuffie. These excavations are open and well set in grass to protect them from washing. Sometimes the rows of corn or cotton terminate at these ditches, and at others they run parallel with them, round the hill-side to be protected. It is from three to eight rods from one ditch to another, as the surface is steep or more level.

Subsoiling is just coming into favor and practice in this part of the Union. Dr. Broyles, of Pendleton District, has invented a sub-soil plow, which is sold at \$3, that at a trial with one of the Boston implements of the kind, was reported by a committee to be superior to the latter.

Neat cattle are better in Abbeville than any we have seen south of it, except a few choice cows in this city. Common cows nowhere give more than from one to two quarts of milk at a milking. Stock of all kinds, except working mules and horses, is sadly neglected. Grass is too scarce for sheep to thrive, except when few in number, and enjoying a wide range. The whole country is badly infested with dogs, which are quite incompatible with sheep husbandry. Sheep are never washed, so far as we have seen, and are usually shorn twice a year, to prevent the briars and bushes pulling off all their wool. Instead of altering male pigs and calves, the females are spayed to prevent the undue increase of the two races. If grass for feed can be cheaply grown in the Southern Atlantic States, (of which we are still in doubt,) this can be made a superior stock-raising country. At present, (10th of June,) cattle are poor, and many have not shed their coats. Indeed, not one animal in a hundred has enough to eat. Short commons have dwarfed them down to about one-third the size of northern cattle.

All cultivated crops not already harvested, look well. Peas are up on land sown since wheat was harvested, in May. These peas will come off in season to seed with oats, barley, rye or wheat in autumn of this year. Figs are ripe; and early peaches will be by the 20th of this month. The wool or cotton aphid exists on all the apple trees of the South, that we have seen, and causes ugly looking, black excrescences or warts. Pears, plums, cherries, currants and gooseberries do not flourish in this climate. Even grapes are scarce and poor, judging from the appearance of the vines in the oldest and richest settlements. Wild plums and blackberries a-

bound over the whole country, and are held in high esteem to feed hogs.

Military musters are held in higher regard, and oftener occur in South Carolina than in any other state in the Union. Her chivalry has sustained terrible losses in the Mexican war. In almost every family we visited in the state, its members were in mourning for the loss of a brother or father. At the time our agricultural address was delivered in the Court House at Abbeville, a meeting was held to erect a suitable marble monument in honor of a partly slaughtered company of fine young gentlemen—the sons of old and wealthy families of the vicinage. When will the time for “beating spears into pruning hooks and swords into plow-shares,” arrive in this nation of farmers? When will the cultivators of American soil instruct their representatives in Congress to vote one dollar to teach the arts of peace, and the science of agriculture to the young men of the republic, where they now vote thousands to instruct them in the art of shedding human blood by violence, or the science of war?

Augusta, Ga., June, 1848.

Hints for July.

If your corn is all hoed out and plastered and ashed, your cabbages set, gardens wed, and all the lions killed that are in the way of the great battle with the hay and grain—then we say, take off those coats and on with the frocks. Rob old Time of his scythe and hour-glass, and let him take a nooning of a few days this hot weather, while you try your hand at “mowing down all, both great and small,” with his keen and unflinching instrument.

See that all the scythes, forks, rakes, hay rigging, rubbers, &c., are in order, and ready for the conflict. “Make hay while the sun shines,” is old, but true and judicious advice. One load of hay quickly and thoroughly cured, is worth a whole prairie of dew-rotted, rain-soaked and sun-bleached trash.

Cut your June and wild grasses early, even before clover, if you desire to have it worth any thing. Clover hay must also be cut early, or when the last sets are in blossom, and the first ones a little turned; and observe one well established principle, that if that cut in the forenoon is not cured sufficiently to take in the same day, that as soon as it is fairly wilted it should be put up in cocks of 75 or 100 lbs., and left from three to four days; and on a fine sunny morning open it and by ten o'clock it is ready to load. By this process the leaves and blossoms are preserved in a fine fragrant state—the real old hyson—and not the black, tasteless, bean-stalks and hop-vines of the old process. If you have any fears that the hay is too green when taken in,

pack it away loosely, and let it settle by its own weight; and finely and evenly sprinkle on four quarters of salt, and not more, while unloading.

Stacking out hay is a bad business, unless it is thatched, or made up by an artist—it should be in the barn, or under barracks. An open, rainy fall and winter destroys at least one quarter, and if it stands over one year, the mice destroy the balance.

A good horse rake, with a horse and driver, will save the labor of ten men. It is not quite as handy to load, being a little wadded, but yet time is money, in good weather, in haying time. The horse rake is an excellent *gleaner* in a wheat field, especially when the grain is crinkled, or the binders do not, or have not time, to rake it clean. A boy will easily go over ten acres in a day, and leave the scatterings in winrows.

Keep the bottle out of the harvest field. There is nothing like cold water to supply the sensible and insensible perspiration, and to cleanse and wash off the mucous of the throat and fauces. All glutinous and saccharine preparations, as molasses, ginger, cider, &c., have no tendency to allay thirst, and frequently bring on diarrhea and bowel complaints. Drink cold water, and if from exhaustion, the men need stimulus, give them food, and a drink of tea or coffee. "That's the hammer," and nails too. So thinks the Prompter.

Buckwheat is to be sown early this month, about three pecks to the acre—but it is generally a sign of bad farming to see large fields of buckwheat. It says pretty intelligibly that its owner is a laggard and did not get his land prepared early enough for any other crop, and so slashes in the buckwheat: this rule admits of exceptions.

In swarming bees, make the hive clean, and if new, rub a cake of beeswax on the inside, and sprinkle a little weak brine of salt and water—it is a great harmonizer of the discontented spirits, and keeps them quiet.

Sow round turnips and cut Canada thistles the last week in this month. Make hay while the weather is good—put the whole of your operations through, chuck up to the mark—let the boys, girls and colts kick up their heels on the 4th, while you stay at home to watch the farm and prepare the work for the morrow.—And so may you prosper, as you lift at the wheel. So mote it be. *

HOW TO MANAGE A KICKING COW.—Take a piece of rope about two feet in length, and tie, or splice, the two ends together so as to form a loop. Double up, by bending, the fore leg of the milking side of the cow and slip the loop over her knee. By this means, she will necessarily have to stand on three legs and will not be able to kick.

Experiments in the Culture of Indian Corn.

Mr. S. H. REED, of Bergen, Genesee county, gives us the result of an experiment in thick and thin planting of Indian corn in 1847. He planted one acre with the hills 3 feet 4 inches by 1 foot 6 inches apart. Another acre, in the same field, and on equally good soil, was planted about 3 feet one way by 3 feet 4 inches the other. Both acres were cultivated alike. The crop was hoed only twice; but a cultivator was run through *four times* during the season—the first time soon after the corn was up. The weeds were thus kept out, and the soil frequently stirred—two essentials in the successful cultivation of Indian corn. The soil was a black, sandy loam, in a high state of cultivation, though no manure was applied during the year.

The yield of the closely planted acre was estimated at 90 bushels of sound shelled corn; while the acre in which the corn was planted at the usual distance, produced only 45 bushels—a difference of *one half* in favor of close planting. The corn grown was the variety known as the *Dulton*. The larger varieties would not probably produce as well planted closely, even on rich soil—neither would any variety on a poor soil. But Mr. R. is of the opinion, and thinks his experiment proves its correctness, that by good tillage and close planting, on rich soils, the corn crop may be greatly increased, if not doubled, in many sections of the country. Much, however, will depend upon the kind of seed, quality of the land, &c. The soil can scarcely be too rich or too well pulverized for corn—tho' judging from their usual practice, many farmers have fears on these points. Generally the great error is in not having the soil sufficiently enriched; and another is, in not stirring the ground often enough, with a light plow or cultivator, while the crop is growing—especially in dry seasons.

Mr. REED states that in planting corn he puts from 7 to 8 kernels in each hill. On hoeing, and when all fear of injury is past, he pulls up all surplus plants—leaving four in each hill. By adopting this course he has no vacant spots in the crop. The plan is a good one.

While on this subject we will give an extract from the late Report of the Commissioner of Patents, showing some curious results in the change of varieties of Indian Corn. Writing to the Commissioner of Patents, Mr. ISAAC FOWLER, of Erie county, Ohio, says:

"In the raising of Indian corn some experiments have been made which have produced singular results. In the year 1839, I planted one and a half acres of ground with three different kinds of corn, half acre of china, half acre yellow gourd seed, half acre white flint—the result of the crop was seventy-three and a half bushels shelled corn from the china, fifty-six and a half

from white flint, and fifty-four from the yellow gourd seed. The result was beyond any thing before raised in northern Ohio, and so much in favor of the China corn, that I have every year since planted it. Now what I wish particularly to call your attention to is this, that when I commenced with that corn it was a flint corn; from seven years' use, it has become so closely allied to gourd seed that the kernal is very much dented, and the ears from twelve to twenty rows. The same remarks hold good in relation to the white flint. From sixteen years' acquaintance and cultivation I am prepared to say, that it seems to bear no similarity to its species sixteen years ago; it was then an eight rowed flint corn; it is now some sixteen to twenty rows gourd seed, which demonstrates to my mind the fact that this climate changes the species of corn from one kind to that of another."

Fatting Pigs on Parsnips.

A correspondent has written to us, to inquire "whether we knew, by our own experience, the quality of the parsnip for feeding and fattening pigs?" In answer, we beg to state, that, at our farm at Oatlands, Ringmer, we have been in the habit of employing parsnips for that purpose for some time. Upon reference to our books we find, that on the 11th of October, 1847, we put up two shoats of eleven weeks old and fed them on skim-milk and parsnips, for three months, when they were killed, weighing 231 and 238 lbs. They were well fattened, firm in flesh, and the meat of excellent flavor. The quantity of parsnips consumed by them was nine bushels each.—*Sussex, (English) Express.*

REMARKS.—We have often wondered that no more account is made of this very valuable root. All the world is alive to the value of the carrot; while this rich esculent, is entirely overlooked. That the parsnip contains more saccharine matter than the carrot, or even any of the beets, we are satisfied. A very excellent wine is made of it, which we venture to assert cannot be made from any other of the whole root crop. Its estimation as an edible for the table also tells in its favor. And a herd of hogs turned into a field containing bagas, beets, carrots, and parsnips, would not be long in settling the question which they like best; and as they cannot read the Genesee Farmer, and are not influenced by any of our blundering theories, and trust alone to experience, and that unerring guide that nature has provided them in place of reason, we are disposed to give them the credit of being very capable judges—very.

DESTRUCTION OF MICE.—A curious fact is mentioned of the extraordinary number of 28,071 mice having been taken or caught from September to January, in the Dean Forest, Gloucestershire, over an area of only 1,603 acres. The successful method adopted there was boring holes in the ground twenty inches deep, wider at the bottom than the top, which prevented them getting out when once in, and into which holes was dropped some food.

Short-Horn Cattle.

IT may be recollected that E. P. PRENTICE, of Albany, reserved from his public sale of Short-Horns, held three years ago, four of his best cows. These cows and the offspring, in all twelve, comprising the entire stock of Mr. PRENTICE, has lately been purchased by Mr. GEO. VAIL, of Troy. Mr. VAIL's herd, with this addition, numbers about forty-five head, old and young, consisting of cows, heifers, bulls, and a few spring calves, and embodies through his own importations, the strains of blood of the celebrated herd of THOMAS BATES, of England; and, through those recently purchased from Mr. PRENTICE, that of Mr. WHITAKER's, also of England.

This herd, as at present constituted, cannot fail to elicit the admiration of those who examine them, for symmetry of form, and superior handling and dairy qualities. As a proof of the latter quality, we refer to the "Transactions of the N. Y. State Agricultural Society," for 1844, page 215, where it will be seen that the Society's first premium was awarded to Mr. Vail for the largest quantity of butter made from six cows in thirty days. It there appears that six of his cows, fed on grass pasture *only*, produced 262 lbs. of butter in thirty days; and that the average yield of milk per day was 22½ quarts for each cow.

We are authorized to state that Mr. VAIL will sell at private sale a portion of his present stock. An opportunity is thus afforded to those who wish to improve their breeds by communicating to them the best strain of blood of the most celebrated breeds of Short-Horns in England; and affording an opportunity to those who may purchase, of exhibiting choice stock at the State and County Fairs, to be held the ensuing fall. By reference to the premiums awarded by the N. Y. State Agricultural Society, for several late consecutive years, the estimate in which this stock is held, may be seen. * *

CUCUMBERS.—The growing of cucumbers, on an artificial soil, is a doubtful experiment; but on a rich, virgin, sandy loam, success is certain. Nature makes a grateful pabulum for delicate feeding plants, which man cannot yet imitate. Coarse feeders, like Indian corn, thrive best on highly manured soils; while more delicate plants are surfeited by them. Let him who would grow cucumbers in perfection, haul into his garden a load or two of rich, virgin sandy loam, and plant the seed thereon. Many people cover the young plants with boxes covered with millinet. It is better to stimulate the growth of the plant by the free access of sun and air, as then the plant will soon outgrow its enemies. Five minutes spent in killing the bugs, for two or three days in succession, will secure the safety of the plants. S. W.

Notes from S. W., of Seneca County.

A Book Farmer of the true variety—White Flint and Mediterranean Wheat—Farmers Error—Early Peas—Good promise of Crops, &c.

I ALWAYS feel as though Book Farming would finally overcome stalwart prejudice and ignorance, when I see the intelligent, smiling face of such men as JOSEPH WYKOFF, of Varick; being full of the hope within him, and wishing to benefit others, this man has procured more subscribers for the GENESEE FARMER than any other man in Varick and Romulus. In proof that he does not act blindly, or from a false enthusiasm, Mr. W. is acknowledged to be the best, or one of the best, practical farmers in the plateau of old Romulus. He is a *con amore* farmer himself, and is desirous that every tiller of the soil should also love his calling, for itself, until they have learned that there is no good husbandry with labor misapplied, or natural laws unheeded or misconstrued and outraged.

Mr. W. gave me two samples of wheat, the Mediterranean, and the White Flint of Gen. HARMON's introduction. He gives a decided preference to the white flint, as being no more liable to the ravages of the fly, less liable to winter-kill on flat, undrained fields, and as yielding more to the acre, and three or four pounds more flour to the bushel. Mr. W. does not make up his award in favor of the white flint variety on slight grounds, or on the result of a single experiment; he has had the benefit of much observation and experience in the culture and growth of both varieties of wheat.

One of the great hereditary errors of farmers, is the notion that plowing land and leaving it exposed to the sun will not diminish its fertility, and that a growing crop only, exhausts the soil of its organic fertility. Dr. LEE tells us, and he speaks experimentally, as well as from scientific theory, that land may be exhausted of all its organic matter, by stirring or plowing so as to prevent all vegetation. A. MACUMBER is of opinion that summer fallow at best is only the least of two evils. The secret of his great success in farming is, (next to his *ne plus ultra* farm) in keeping his land covered with growing grain or grass. Vegetation not only covers the soil from the sun and dry winds, but the roots it leaves in the soil go far to supply organic matter for the feeding of the succeeding crop.

On the 14th of this month, June, the first green peas were brought to market in this village. They were grown on one of those parallel ridges of the Onondaga saliferous formation, a gravelly loam, in the town of Galen, Wayne county. Peas planted at the same time, (first of April,) on our level clay loams, are not yet in pod. Now, (22d June,) some farmers are making clover hay; in two weeks more we shall be in the midst of wheat harvest. Every

crop promises well. The most inveterate croaker, (and there is no lack of croakers among farmers,) finds no cause at this time to predict, even a light crop, of any kind. S. W.

Waterloo, N. Y., June, 1848,

Another Grain Drill.

MESSES. EDITORS:—I had the pleasure, this afternoon, of witnessing the performance of a new Drill, lately got up by P. SEYMOUR, of this town, so extensively known to the farming community as the inventor of the Broadcast Sowing Machine.

This drill sows nine rows at a time, nine inches apart, and does it in a workmanlike manner. The machinery is simple—and so far as I could judge from a hasty examination, not liable to be out of repair. It is attached to one of his broadcast sowing machines—and it may be changed from a drill to a broadcast sowing machine in a few minutes. This is certainly an advantage, as plaster, ashes, clover and grass seeds will always be sown broadcast.

As drilling in wheat and some other grains appears now to be the order of the day, farmers should not commit themselves too hastily in favor of either of the machines now in the field. The time for sowing wheat will soon be at hand. Let each enter the field, unprejudiced; then let the prize be awarded to the most perfect machine—not forgetting to take into account cost, general utility and durability. Yours, &c.,

MYRON ADAMS.

East Bloomfield, N. Y., June 19, 1848.

FRESH BONES FOR HENS.—A correspondent of the Germantown Telegraph says:—Those who keep their hens confined, will find it for their advantage to keep them liberally supplied with ashes, lime, gravel and pounded bones.—These articles are highly beneficial—especially the latter, which, with a large per centum of animal matter, contains also another principle highly essential in the formation of the shells of eggs. While on this subject I would advise every one who keeps hens, to provide them liberally with vegetable and animal food. When permitted to range abroad through the fields and gardens a very considerable portion of their sustenance is obtained from insects, and if they are restricted and deprived of the privilege of seeking it for themselves, they must be supplied, or they will become unhealthy and an expense rather than an income to the farmer. Buckwheat, as it contains a larger quantity of lime than other grains, is also an excellent feed for hens.

SAVE YOUR SUDS.—If you have a strip of land, do not throw away suds. Both ashes and suds are good manure for bushes and young plants.

Gleanings from our Foreign Exchanges.

SULPHATE OF LIME.—Mr. Majendie submitted to the inspection of the Council a sample of sulphate of lime—a substance which in its native mineral and impure state is well known to farmers under the name of gypsum or plaster of Paris, but which as an artificial and pure compound of sulphuric acid and lime is known to chemists as sulphate of lime. He stated that his sample of sulphate of lime was obtained as a refuse by the tallow chandlers in their process of making the “composition” candles, and was to be purchased at a cheap rate. Its peculiarity consisted in the minute state of division to which its particles were reduced by that chemical process, a condition which it was conceived would greatly accelerate its action when applied as a dressing for the clover crop. Professor Way had made for Mr. Majendie an analysis of this substance, and found it to be composed as follows:

Sulphate of lime,	66.40
Free sulphuric acid,	3.18
Accidental water,	17.01
Combined water, and a little fatty matter,	12.86
	99.45

Mr. Majendie at a future meeting would report the price at which it could be obtained as an article of commerce. Professor Way, who was present, explained that the tallow-chandlers, to obtain from candles the stearine, of which their composition candles is made, boiled the tallow along with quick lime, for the purpose of effecting that separation; and that the quick lime was afterwards precipitated by means of sulphuric acid, and formed the sulphate of lime in a highly comminuted state, of which a specimen was then submitted to the Council by Mr. Majendie. He regarded this sulphate of lime as bearing the same relation to the common gypsum as the super-phosphate bore to the common phosphate.

THICK AND THIN SEEDING.—I have tried both thick and thin wheat sowing, and have arrived at the conclusion that the higher the condition of the land the more seed should be sown, and the thicker the crop it is capable of bringing to perfection—as a stout horse in good condition will bear a load that it is useless to attempt to move with a weak animal. Early sown wheat no doubt stools much, but there are many disadvantages in early seeding. I plant 9 pecks to the acre, and commence in November. My yield of last harvest will average as nearly as I can tell, 48 bushels per acre, (41 acres,); but mine is not strong wheat land. To insure large produce, the land being in high condition, much depends on a proper selection of seed. I grow Red Cluster; it has a short stout straw, stands up well in a heavy crop, and is not inclined to mildew. This is important to be remembered—wheat likes a hard mattress and not a feather

bed to lie on; there never will be a great produce unless the land is firm. Do not bruise the plant in frosty weather, nor eat off later than February. I had lately the pleasure of going over Mr. Woodward's farm at Cumberton; he is a thick seeder, and I hold him to be inferior to none as an agriculturist. His crop of wheat last year was 200 acres, a great portion of it averaged over 60 bushels; one field of 14 acres, planted with 3 bushels, produced 68 bushels, all best corn, and more than three tons of straw to the acre. Lord Talbot, I am told, who paid Mr. Woodward a visit shortly before harvest, and has discernment in these matters, said, on viewing his field, (the first he came to on the farm,) he had never seen a “crop of wheat” before. The land was in high condition, and had moreover 2 cwt. of Peruvian guano to the acre, before drilling, on bean stubble. The thin seeding theory has arisen and been put down, in past years, time after time; it may be adapted to land not capable of bearing a crop.

DRAINING.—Mr. Fisher Hobbs thought the Council would be glad to know that among the practical good results of the Newcastle Meeting of the Society, one had occurred from a casual circumstance which had furnished the farmers of that neighborhood with a tangible and striking proof the advantages of draining, a fact which had been communicated to him by Mr. Ramsay, a member of the Society, who had felt a deep interest in the progress and success of that Country Meeting. By the requirements of the Society, it was necessary that the site of the show-yard on the Town Moor at Newcastle, should be drained sufficiently to prevent any inconvenience for the purposes of the exhibition, should the weather at the time of holding the meeting have proved unfavorable, and much rain have fallen. Such was the repugnance of the freemen at the breaking of the ground for this purpose, and the violation of their common rights in the supposed lasting injury that was in that manner about to be inflicted on their property, that it was only after the most obstinate struggle, and the united remonstrances of the authorities of the town, that such operation was allowed at length to be effected, agreeably with the regulations of the Society. The time had passed by, and the struggle was almost forgotten; but the area of the common so drained (although not perhaps in the most complete manner, according to the experience gained at the present day) had remained a lasting instance of the striking effects produced by that drainage. The Steward of the Herbage Committee, as well as many of the freemen had now signified to Mr. Ramsay their entire conviction of the beneficial effects of draining, in consequence of the decided superiority of the grass on the drained portion over that on the remaining undrained portion of the Town-moor. Mr. Hobbs further

remarked, that, as an instance of the results attending draining of a stiff soil, this casual circumstance had wrought a very favorable change in the opinions of many of the farmers in the neighborhood.—Mr. Brandreth Gibbs, as the director of the show-yard at the Newcastle meeting, fully corroborated this statement.

REAPING MACHINE.—Mr. Hussey, of Baltimore, U. S., requested that his reaping machine might be subjected to trial in England under the orders of the Society. The Council directed that Mr. Hussey should be informed that he was at liberty to enter his machine for the York meeting of the Society, when it would be subject to trial at the discretion of the stewards and judges of the Show on that occasion.

WIREWORM.—Mr. Dickinson, of Curzon-st., favored the Council with the result of his endeavors to eradicate the wire-worm from his Italian Rye-grass, of which it had previously, on the small plot of ground, destroyed three crops. This result was attained by the application of volatile alkali, as it exists in guano. This communication was received with the best thanks of the Council, and referred to the Journal Committee.

Cost of Clearing Land at the West.

MESSEURS. EDITORS:—Your readers, from the following, can see the difference between commencing on a new farm at the West, and beginning as many of them did in Western New York.

In 1846 I hired broke up, and completely grubbed out, thirty-four acres of very grubby white and yellow oak openings, at \$6 per acre. I had to fence two sides of the lot, 160 rods, requiring 2240 rails, or fourteen per rod; paid for splitting 75 cents per hundred—and for hauling them to their place 50 cents per hundred, and for laying 40 cents per rod, making for fencing, \$32 80.

For fencing, as above,	\$32 80
It cost to clear the land, about	10 00
For plowing and grubbing 34 acres, at \$6,	204 00
Hauling of 144 loads of grubs, before sowing,	12 00
Harrowing three times, thoroughly,	24 00
Forty bushels seed wheat, at 75 cents,	30 00
Harvesting, at \$1 50 per acre,	51 00
Threshing and marketing, 6 cts per bushel,	48 00
	411 80

I had about 800 bushels, and sold for 80 cents, 640 00

Leaving a profit over all expense, of \$228 20

I paid about one dollar an acre too high for plowing and grubbing, it being a "dicker" trade. I come at the price as it cost me, having hired the most of it done. My crop being good, and the price fair for this place, it was a good outlay. But the main profit is in having subdued and brought to a good state of cultivation, thirty-four acres of land which can now be easily tilled with one span of horses. Last year I had

such a piece, of forty acres, to sow to wheat. With one span of horses I broke it up in seventeen days, harrowed twice, before cross plowing, in six days; cross plowed it in thirteen days, and harrowed in the seed in seven days more—in all, team-work, forty-three days. The crop looks promising, and under favorable circumstances, will give eight hundred bushels of wheat. I wore up three plow points on an old plow, and had the harrow teeth sharpened once. The land, a sandy loam, wears tools but little.

This is the sunny side, and looks fair, I know. But how many at the east with means so scanty that they can not procure a home, or place to labor, might here become comparatively independent, where land is cheap and productive?

Eckford, Mich., 1848. A SUBSCRIBER.

Draining.

THE draining of wet lands has become one of the most important branches of mechanical agriculture. An excess of water in the soil prevents the access of air, reduces the temperature, favors the formation of frost, fogs and mildew, and renders tillage difficult or impossible. Soils may be rendered too wet in various ways, as, by the tides of the sea, by the setting back of rivers, by permanent springs in the soil, by small subterranean streams, and by the compact and retentive nature of the soil or subsoil. The advantages of draining, and the various modes by which it is best accomplished, are well described by JOHNSON and COLMAN, from whose works the following facts in relation to the operation are derived.

1. It carries off all stagnant water, and gives a ready escape to the excess of what falls in rain.
2. It prevents the ascent of water from below, either by capillary attraction, or springs.
3. It allows the water of rains to penetrate, and find a ready passage from the soil, instead of washing the surface.
4. The descent of water through the soil is followed by fresh air, which occupies the space just left by the water.
5. The soil after thorough draining becomes looser, more friable and easily broken; this is especially true of stubborn clays, which in practice becomes altogether another soil.
6. By freeing the soil from the excess of water, it becomes warmer, and thereby advances the crop to an earlier harvest: thus it is "equivalent to a change of climate."
7. When the autumn is wet, draining carries off the superabundance of water, and prepares the land for sowing fall crops, which would otherwise be retarded, or altogether prevented.
8. In its consequences it is equivalent to an actual deepening of the soil.
9. In wet soils, bones, wood-ashes, rape dust, nitrate of soda, and other artificial manures are almost thrown away.
10. He who drains confers a benefit upon his neighbors also.
11. It

produces a more salubrious climate, and conduces greatly to the health and moral happiness of the whole population.

Several different modes of draining are practiced in Great Britain, which are worthy of notice—some of them are also known and practiced in the United States. The process of draining by open ditches is the rudest, and was doubtless the first form of draining. Covered drains were next substituted, of various construction. One form of these is made by digging a ditch, and then filling it with straw or faggots, and covering it over with the earth which was thrown out. Another form is excavated so as to taper to a point at the bottom, and having a shoulder left at the height from the bottom which it is desirable to cover the water-course. This is then covered by an inverted sod, which rests on the shoulders; after which the earth thrown out in excavating is returned, and the surface levelled. Another process is by the mole plow: another by filling the bottom of a ditch with small stones of uniform size. Two other forms, called in England *tile* and *pipe drains*, are constructed by means of tile and pipes made of brick clay, and are said to form water-courses which are both cheap and durable.

M. M. RODGERS.

Monroe County, June, 1848.

Comparative Forwardness of the Seasons.

It is with delight that the farmer, after a long and dreary winter bears, for the first time, the notes of the blue-bird and robin-red-breast, the first precursors of spring. The singing of these birds, the music of the frogs, and the flowering of the early plants are observed and listened to, with peculiar delight; not because the early songsters sing more sweetly than those that appear later, nor, that these flowers are more beautiful and fragrant than those that deck the hills, and cover the valleys, and fill the air with their balmy fragrance later in the season;—but from the well known fact that they are the harbinger of spring.

The first appearance of the blue-bird and robin, the flowering of the maple, the shadbush and the fruit trees, have been so long recorded, and at different localities over this state and country, that from a comparison of these observations we are enabled to judge of the relative advancement of one spring with another.

In number 7 of the 8th volume of the *Genesee Farmer*, the writer presented a summary view of these observations for the last eleven years, beginning with the spring of 1837, and ending with that of 1847.

From the observations made at forty-four different localities in the state, embracing all its remote parts, it showed the mean date for the appearance of the robin to be March the 19th.

The robin and blue-bird first heard here this year March the 8th. The mean time for the flowering of the shad-bush, from observations made at 48 different localities, was May 1. It was in blossom here this year May 1; last year May 7; in 1846, April 26; in 1845, April 21; and in 1844, April 14. The earliest appearance of the robin here within the last twelve years was in 1840, when it was first seen February 29; the latest appearance within the same period of time was in 1839 and '43, when it appeared April 3d, of each year. The earliest flowering of the maple on record here, within the same period, March 3d of 1842; the earliest flowering of the shad-bush, April 14th, 1844. This, the spring of 1844, is the earliest on record; plum in blossom April 15th; peach and cherry, the 16th; currant 19th; and apple the 24th; strawberries and cherries ripe May the 25th; and the wheat harvest was commenced June the 29th. The peach, plum, cherry and apple blossomed here this year, varying from April 5th, when a peach tree was in blossom, to May 1st, when apple blossoms began to open, although not in full bloom until the 13th: plum and cherry were in full blossom about the 25th; peach a little earlier. In 1844 the peach, plum and cherry were all in full blossom at the same time: not so usually. The spring of 1842 was earlier than the average; peach in blossom April 15th, plum 19th, cherry 22d, and apple May 2d. Strawberries and cherries ripe June 11th; the wheat harvest was commenced July 19th.

The springs of 1839, of 1841, and of 1843, were uncommonly late. In 1841, which is the latest spring on record, plum began to blossom May 15th, peach the 18th, cherry the 21st, and apple the 22d. Cherries ripe July 3d; the wheat harvest was commenced July 28th. In 1843, cherry in blossom May 10th, plum 12th, peach 16th, and apple 16th. Strawberries ripe June 16th, and cherries the 23d; the wheat harvest was commenced July 20th. Strawberries ripe here this year May 29th, and cherries June 5th. The comparative view thus presented to the reader shows the present season to be earlier than the average. The temperature of the spring, by comparison, is shown to be above the mean.

We have had some cold days since the 1st of June—but not more so than usual:—it is very common to have frost, and even flakes of snow, during the first half of the month of June. A correspondent of the *Journal of Commerce*, writing from Hampshire Co., Mass., says, that the frost there, since the first of this month, was so destructive to agricultural vegetation as to render it necessary to replant. We had frost here; but it did little damage. Many of the readers of this paper will recollect the killing frost of June 6th, 1816, with the same distinctness that others remember the eclipse of the sun,

in June, 1806, or the "dark day," as it was called, of May 19th, 1780. The frost of June the 6th, 1816, was perhaps no more memorable than the one of September, during the same year—this nearly destroyed corn, and rendered it exceedingly difficult to obtain seed for planting the next year.

The writer would suggest to those who are in the habit of making and registering observations of the time of the earliest flowering of plants, shrubs, forest and fruit trees, that they do this as soon as a flower can be found whose pollen begins to fall; because the time when a plant is in full flower is very much a matter of opinion, as to which different persons vary widely in their estimates. Let the most favorable places be selected, and the observations be made and recorded of the same trees, and plants of the same localities. Observations thus made and preserved, become of great interest and value to the farmer himself; and, not only so, but to his children, and the generations that come after them.

L. WETHERELL.

Rochester, June, 1848.

Meteorological Observations.

THE following is a condensed statement of a Meteorological journal kept by M. EAMES, Esq., in Rutland Jefferson County, N. Y., whose residence is 1056 feet above tide level—showing the amount of water which fell in each month of the years 1846 and 1847. Also, the lowest and highest point of the Barometer and Thermometer in each month of the year 1847:

	Amount of Rain.		Barometer.		Thermometer	
	1846.	1847.	Highest.	Lowest.	Highest.	Lowest.
January,	2.72	3.13	29.34	28.04	46	-11
February,	1.30	2.18	29.18	27.67	45	4
March,	1.80	1.52	29.27	28.14	46	5
April,	1.53	2.70	29.15	28.22	65	6
May,	2.94	.63	29.12	28.40	80	31
June,	4.25	4.14	29.05	28.29	82	39
July,	3.60	5.12	29.09	28.58	92	46
August,	2.53	1.36	29.16	28.52	89	49
September,	3.68	8.06	29.19	28.52	79	36
October,	6.68	4.32	29.45	28.20	69	16
November,	5.15	4.54	29.34	28.48	67	-3
December,	1.84	3.67	29.17	28.14	61	-7
	39.07	42.37				

Discovery of a Mineral Paint or Cement.

Mr. Wm. Blake, of Akron, Ohio, called on us two or three days ago, says the National Intelligencer, and exhibited an article that must, we think, become of great value. It was discovered sometime since in the township of Sharon Ohio, and is taken from an excavation in a rock about twenty feet deep, and spreading over some six or eight acres. The substance is black, resembling indigo, and about the consistency of cold tallow, when taken from the mine, but an exposure for a few days to the atmosphere, turns

it to a hard slate or stone. It has been found upon analysis to contain about one-half silica, one fourth alumina, and one eighth pyrites of iron, with lesser proportions of magnesia, lime, and carbon. From the extraordinary character of the article, it is supposed by geologists who have visited the mine, that there must be some fissure or crevice in the bottom of the ditch, through which the article, in a liquid state, was ejected from below.

When the substance is taken out, dried, ground to a fine powder, mixed with linseed oil, and applied with a brush to either wood, tin, iron, cloth, paper, or bricks, and then exposed a few months to the atmosphere, it becomes a perfect slate, impervious to the action of the weather, or to fire—the weather serving only to turn it to stone, and render it harder the longer it is exposed, while fire will char the substance to which it is applied before it will give way.

We were shown specimens upon cloth and wool that were as fine specimens of school slate as we have ever seen, and would show pencil marks equally well. It is also susceptible of the highest polish, as we saw a piece upon wood that was polished, and had the appearance of the finest Egyptian black marble. The article is of much value, we should suppose, for covering roofs, steamboats, dams, fences, buildings, and everything else requiring protection from fire or the weather, or for fire fronts, carriages, or centre or pier tables, as it is in fact slate in a liquid state when applied, and in a few months acquires the solidity of the finest slate.

We learn from Mr. Blake, who has secured a patent for his discovery, that it is sold at his place at \$3 per hundred lbs., which will cover the roof of a house thirty feet square, or nine hundred superficial feet.

Note.—The Cement above mentioned is being used to a considerable extent in Rochester and its vicinity. We learn that about fifty buildings have been roofed with it, in this city, within a few months past. For the information of those of our readers who reside in this vicinity, we will state that Mr. M. F. REYNOLDS, at No. 17 Buffalo street, Rochester, is the agent of the proprietor—and that he sells the cement, at \$4 per hundred lbs.—ED. GEN. FAR.

SCRATCHES AND COLIC IN HORSES.—I have never failed to cure the worst cases of colic by drenching the horse with about half a pint of good hop yeast. The yeast may be diluted with an equal quantity of warm water; and a half pound of gunpowder well mixed with about the same weight of hog's lard will cure the scratches.—Wash the part clean with soap-suds, and rub in the mixture several times daily for a few days. I have applied it, as a poultice, by tying on with a strip of cloth.—*Southern Planter.*

Rearing Poultry.

[Concluded from page 156.]

DUCKS.—The old ducks, if they have not access to creeks or rivers, where they will find food adapted to their nature, should have animal food mixed with their grain or meal, and if it be expected of them to lay well, attention must be paid to their being regularly fed night and morning. This attention not only insures plenty of eggs, but attaches them to their homes.

It is best to set the duck eggs under hens, as ducks are but indifferent setters and nurses.—Thirteen duck eggs are as many as a hen can conveniently cover. One drake to five ducks is about the right number for breeding purposes.

As the ducks are being hatched they should be taken from the hen and placed in a basket, as recommended for young chickens. Boil a piece of fresh meat of some kind, chop it very fine, and mix it up with corn meal dough, made with boiled milk, as for the chickens, and feed the young ducks. When the hen has hatched all out, place her and her young brood under a coop, where they must be regularly fed three times a day as above directed. They should be kept with the hen until they begin to get feathers on the sides of their bodies, when they may be turned into the poultry yard with the other fowls, but you should always recollect if you expect them to become fine large fowls, you must feed them well, not omitting to give them occasional meals in which animal food is mixed, and that they should be kept dry. Water is the proper element of wild ducks; nature has provided them with oleagenous substance that nearly renders them impervious to water—not so with the tame or domesticated duck when young. On being exposed to wet, their feathers become ruffled; perhaps this is owing to their not being able in a farm-yard to obtain that kind of food which enables the wild duck to secrete that peculiar oil which protects their feathers from wet. Be the cause what it may, the fact is obvious that young tame ducks, in the early stages of their existence, are injured by becoming wet, and that disease and death is the consequence. Therefore they should be kept in their coops for some weeks of a morning, until the dew is exhaled by the sun—and hence their coops, while being made water-tight, should be so arranged that they can be kept in them when it may be necessary to screen them from rain or dews. Fresh clean water should always be before them to drink, but never to dabble in. As they attain age and become feathered, they may have access to ponds or running streams—not before. Their food then may be advantageously made of boiled potatoes and corn meal, homony and corn. While growing, they should at all times be plentifully fed, as stinting them while in that state invariably stunts their growth.

As tame ducks are promiscuous layers and will drop their eggs anywhere, they should be kept in the duck house of a morning until they shall have laid their eggs.

YOUNG TURKEYS.—These are delicate and chilly bodies, and require the utmost attention to raise them. For many weeks after being hatched they require to be kept dry and warm and to be fed with stimulating, nutritious food. As soon as hatched they must be taken from the mother and given a grain of black pepper, then be put into a basket with wool or cotton, and lightly covered with the same material. If the weather be cold the basket should be placed sufficiently near the fire to keep them measurably warm. In a few hours after being hatched and thus treated, they must be fed with hard boiled eggs, chopped fine. This food may be advantageously continued for a few days. After the third day it might be well to mix with the eggs little crumbs of pone bread or stale white bread, moistened to a proper consistence with the curd of sour milk, off of which the whey has been strained, and with which the tops of the wild onion or chives, chopped fine, must be mixed. This kind of food, with occasional messes of boiled wheat, millet, or rice, should be continued for about eight weeks, never omitting to season them with the tops of the wild onion or chives, as above directed.

The hen turkey when first given her brood, should be placed in a dry, warm apartment, be regularly fed and watered thrice a day. The young ones should be fed oftener, be given water regularly, which should be placed in a shallow vessel, so that they cannot wet themselves, as wet is fatal to them. In a few days, say three or four, a pen should be prepared out of doors for the old hen turkey, which should be so made at top as to turn rain and afford shade, as both sun and rain are injurious when the chicks are quite young. It is best, too, to have a separate coop in which to feed the young ones, as, otherwise, the old hen would be sure to appropriate the largest share of food for herself at the expense of her brood.

As the young turkeys get older and stronger, and their digestive organs become strengthened, say in about eight weeks, the old hen may be let out of the coop, and the young fed on cabbage leaves or lettuce chopped fine, mixed with small homony or boiled potatoes; but, even at this stage of their growth, the chopped wild onions and chives should not be omitted, as they still require the stimulating effects of these herbs to give tone to their stomach, and diffuse a warmth through their systems.

Those who desire to have fine, well grown birds, must recollect that to insure this result, the turkey must be well fed during its entire stage of growing; they should recollect also, that of the turkey, though domesticated, is of a wild, roving

nature, and that, unless attached to its home by kindness and care, will be apt to take to the woods; to prevent which they should be fed in the poultry yard night and morning, and thus made to love their homes. They need not be stuffed, but still they should be fed, generously fed.

The Snuffles and Gapes.—Young turkeys, when about three or four weeks old, are sometimes liable to be attacked by these diseases, and we are told that they may both be cured by mixing a tea-spoonful of flour of sulphur in as much corn as is usually fed to twenty young turkeys. This must be given once a day until the disease, whether snuffles or gapes, disappears, which it will do in a few days. It is reasonable to presume, if sulphur will cure these diseases in the turkey, that it would prove equally efficacious if administered to chickens; and as the remedy is simple and inexpensive, it is certainly worthy of trial.

The Scours.—If the young turkeys should be attacked with this disease, mix a table spoonful of pulverized charcoal or chalk with every pint of their food.

GEESE.—As the goslings are hatched they must be taken from the mother and cared for as recommended for young ducks. When the goose has hatched all the eggs, the young must be given her, though it would be best to keep her confined for two or three days, when she and her young brood may be turned out into the kitchen yard or lane. The goslings should be fed with crumbs of bread soaked in boiled milk, or with corn dough, made up with bonnyclabber, frequently through the day for the first week. When they gain strength enough to follow their mother, without danger of being seized with the cramp, she may be permitted to range somewhat at large in search of grass, that being the natural food of the goose. Chives chopped up fine and mixed up with their food once a day, will be found beneficial. When the goslings get six or eight weeks old they may be allowed messes of boiled potatoes and Indian meal dough, in which chives have been chopped fine and mixed.

Goslings are liable to diarrhea; this may be checked by mixing a tea spoonful of powdered chalk or charcoal in a pint of their food. The same precaution is necessary with regard to water, with young goslings as with young ducks. Their drinking water should therefore be given them under the same restrictions, and as much care taken to preserve them dry as with the young of ducks. The goslings should have clean straw placed beside their mother for them to sleep on in the goose-house at night. The house should at all times be kept clean.

It may be well to observe, in conclusion, that each kind of poultry would be the better for having a separate house for their accommodation.—*American Farmer.*

The Last Efforts of an Inventive Genius.

A. B. had been a man engaged in active life, of a vigorous mind, and fond of studying some new application of mechanical powers. Some of his inventions have been highly useful. When old age had laid her withering hand upon him, and disease had brought him to the borders of the grave, his mind burst forth with unwonted vigor. Although many of his thoughts were extravagant and gave evidence of a deranged intellect—yet two of his suggestions I think worthy of consideration. One related to the best means of mending breaks in the canal. It is well known to those conversant with the subject, that it is a matter of much difficulty, at the time of a break, to procure timber of sufficient length and strength to commence a dam upon. Much time is lost and great damage done in the delay in procuring timber.

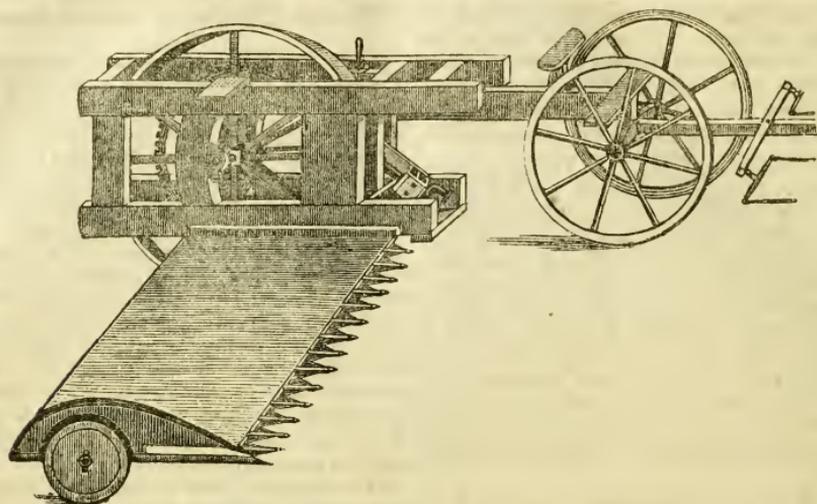
His suggestion was to have each repairing scow provided with sufficient ropes or cables to stretch across the canal; then, by inserting posts in each bank, the ropes can be fastened and the dam built in a few minutes.

The other suggestion related to digging wells when stone were not easily procured for walling them. His plan was as follows: dig a well of the requisite size, say 8 or 10 feet deep; then procure lath sawed from a half inch thick, and spring them in around the well at the usual distance of lathing. Put on a good coat of plaster made of lime cement. When this is hardened sufficiently, dig down another 8 or 10 feet, and proceed as before. It is obvious that this would make a wall of strength and durability, and would be a cheap and expeditious way of walling up a well or cistern.

If you think these suggestions worthy of being snatched from oblivion, you will please insert them in the *Farmer*. Yours, &c.,

East Bloomfield, N. Y., 1848. ADAMS.

IMPROVED CHEESE PRESS.—Mr. Ira Carter, of Plattsburg, Clinton county, N. Y., has invented a beautiful and excellent Cheese Press, which is very different in its construction from any in common use. By pinions working in two rack levers, the table on which the cheese is placed, is raised and brought in contact with the head of the rack levers, and the whole weight of the cheese table and its appendages act upon the rack levers as a pressing power. Owing to this peculiarity of its construction, it occupies but a very small space, as the rack levers are upright, and joined by a cross head. It can do more work than presses which occupy three times the space which it does. They can be built very cheap as the whole of the works can be made of cast iron, and thus be made very durable. Measures have been taken to secure a patent.—*Scientific American.*



HUSSEY'S REAPING MACHINE.

Hussey's Reaper, and other Implements.

OF the various reaping machines now offered to the public, *Hussey's Reaper* is considered by many practical farmers decidedly superior to any other. As it has been used extensively for several years, in different and distant sections of the country, a large number of grain growers have given it a thorough trial. The machine is highly commended by those who have had from three to six year's experience in its use—sufficient to afford abundant evidence of its value as a durable labor-saving implement—as will be seen by reference to certificates embraced in an advertisement published elsewhere in this number of the Farmer. It is manufactured by Mr. THOS. R. HUSSEY, of Auburn, N. Y. The price of the machine varies according to size. Those which cut a swath 5 feet wide are sold for \$110—five and a half feet, \$115—six feet, \$120.

The following is an extract from a Report on Implements by the Agricultural Committee of Newcastle county, Delaware, published in the May number of the Farmer's Library and Monthly Journal of Agriculture. The reader will observe that the extract not only speaks favorably of Hussey's Reaper, but also commends Pennock's Grain Drill and other implements heretofore noticed in the pages of this journal :

THE Committee on Agricultural Implements regret that farmers and mechanics have been so remiss in not bringing out valuable implements, known to have been put in successful operation, within a few years, in different parts of this country and this State—among which are,

1st. *Hussey's Reaping-Machine*, upward of thirty of which are owned in this County. Twenty of these were introduced the last harvest, varying in price from \$100 to \$175 each. The work done by them has been eminently satisfactory the past season. Mr. Bryan Jackson and Col. J. W. Andrews report that they cut—with one of the largest

size—54 acres of heavy wheat in one day. Mr. Wm. Bowman reports that he cut 14 acres in half a day. These are extra days' work, and can only be accomplished with good horses and at good speed. From 15 to 20 acres may be deemed a fair day's work.

2d. *Hussey's Mowing-Machine*, with cutters on the same principle as those of the Reaper, has been successfully tried in this County, and if done at the same speed, will cut from 10 to 15 acres per day.

3d. *Pennock's Drill*.—This implement has been in use 5 or 6 years, with great success. W. J. C. CLARK, the President of the Newcastle County Agricultural Society, stated before the Society that he sowed a part of his field with this drill last year, at the rate of one and one-fourth bushels of wheat to the acre, and that the yield of the drilled was more than double that of the part of the same field upon which two and a half bushels of wheat had been sown to the acre broadcast.

4th. Mr. J. CARR, of Bradywine Hundred, has recently imported a drill from England, at a cost of nearly three hundred dollars. This machine has the management box, and is constructed so as to sow the concentrated manures, pou-drette, guano, ashes, &c., at the same time of sowing the wheat.

The thanks of this Society and the farmers of the County are due to Mr. Carr for his public spirit in sending to England (his fatherland,) an order to purchase the best and most improved implement of the kind in the kingdom, regardless of cost, (in which he was most fortunate, as he got the identical implement which took the first premium at the Royal Agricultural Exhibition)—particularly when it is known that he (Mr. Carr) has invited all farmers and machinists to come forward and examine it, and to build and use from the same pattern free of charge.

5th. *Threshing-Machines*.—We have in St. George's Hundred four superior Threshing-Machines or Separators, which get out and clean the wheat ready for market at the one operation, 400 bushels per day, if well attended. The first two of these Separators were brought from Rochester, New-York, last June, by B. F. FRENCH & CO. The other two were purchased, and are now owned, by J. & ISAAC WOODS, of St. George's. They have all been used with much success.

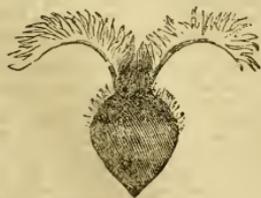
6th. *Hemp-Brake*.—A Hemp-brake of simple construction has been invented and patented by an ingenious fellow citizen, Mr. FRANK HOLCOMB. It has been successfully tried in the presence of a portion of this Committee, who doubt not that the implement will eventually be nearly as valuable to the hemp-grower of the West as Whitney's cotton-gin was to the cotton-grower of the South.

The Crisis of the Crops

[From the London Pictorial Times.]

The month which follows the longest day exposes the cerealia, or corn bearing plants, to the severest trial of the season. It is then the plants flower, and it is necessary to fecundity that the weather be warm, dry, and breezy. Such is precisely the character of our present days; we are passing the critical period auspiciously; the fragile stamina of the wheat, the barley, the oat, the rye, are swinging unperceived by careless eyes in fruitful summer winds, and as they turn their tiny bodies to the sun, burst in glittering sprays of pollen, which as they descend are caught, particle by particle, by the pistils, vivifying the germ, and making the hope of a "merry harvest" all but secure. The early rains gave the plants strength and "*bottom*;" the present genial temperature has drawn forth the flowers from the chaff-coverings of the ear, and the fresh enlivening winds which we have enjoyed with it are completing the work of fructification. The only evil which remains to be dreaded is an attack from one or more of the various species of smut which attack corn plants. To put our country friends upon their guard against them, and to enable agriculturists to discriminate and report any species which may appear, we subjoin the following account of the whole family:—

These fungi are called *uredines*, the plural of *uredo*, which is a term derived from the Latin word *uro*, to burn, because the discoloration of the parts of plants affected by them produces a burnt appearance. The *uredines* are chiefly found on the young or old leaves of corn plants, and occasionally on the stems; but in the last instance, it has been surmised that the indications similar to *uredo* are only immature forms of *puccinia*.



Pistils and Germ of Wheat.

There is no stage of growth in which the wheat plant is free from the attacks of the *uredo*. Early in the spring it is found on the young blades; and in the year 1846 it was in such quantities in some districts, that the fields looked yellow with it, and at one time it produced much alarm. Later in the season it often abounds in the glumes and palea of the ear, even after the grain is formed. These yellow or orange *uredines* are of two kinds. One of them, from the oblong form of its pores, is called *uredo lineare*; the other *uredo rubigo*, whose pores are nearly spherical. *Uredo rubigo* means red dust, and no name could possibly convey a truer idea of its appearance. Both

these *uredines* are closely allied to the rust on the leaves of rose trees, called *udea rosea*. Their color varies from orange to a brownish hue, and they cause the parts attacked to look as if they were dusted with rustiness of these colors. They belong to the order *coniozyetes*, or dusty fungus. It is a rare thing to find any wheat field altogether free from them at any season of the year.—When the chaff scales are attacked, the spots look like patches of red gum. Hence red gum is sometimes given it; but it is most frequently known as red-robin, red-rust, or red-rag.



Flowers of Wheat Magnified.

The flower consists of two pistils and three anthers.



Flowers of Wheat Enclosed in the Chaffy Covering of the Future Grain.—(Magnified.)

The Manufacture of Cheese.

[Mr. Fish's Essay, concluded from page 163.]

PRESSING.—When curd is properly tempered for pressing, a cotton or linen cloth is spread over the hoop, the curd is put in and pressed with from three to twelve tons weight, turned twice in eight-and-forty hours, into clean dry cloth. The press should be sure to follow down as the curd yields (when young,) to press out whey before a rind is formed to prevent its escape. There is no danger of too much pressure, after the first ten minutes. The press, hoops, cloths, &c., should be cleaned with lye often, to keep the rind from cracking. The cloth is taken from the cheese when it is taken from the hoop. The cheese is set on the table for a few hours until dry enough to absorb oil, and then painted with annatto, mixed in strong lye, (from common ashes) kept in a jar for ready use. This toughens the rind so that it will not require much grease after the first coat, to become smooth, if rubbed often with the hand moistened with oil.

The paint will fade to a rich butter color, which is as high a color as is desirable. A firm rind may be formed upon cheese when young, by a careful exposure to drying air, frequently rubbing with the hand, and no more oil than will readily incorporate with the rind. If more grease is used than will be taken up, it will sooner or later flake off, leaving the cheese scabby without rind, exposed to cracks, flies, mould, &c. Oil for greasing cheese is obtained from cream skimmed from whey, (after standing 24 hours:) it is churned till separation takes place like butter, then melted over a slow fire till it is turned to oil. A preparation of bees-wax, from $\frac{1}{2}$ to $\frac{3}{4}$, mixed with oil, will make a rind impervious to flies.

It is most desirable that cheese designed for foreign markets should be in proportion half as thick as they are wide, and not to exceed 100 lbs. in weight. The size of the hoop may be calculated from the number of gallons of milk; each gallon will make one pound of cheese. A cheese

21 inches wide will weigh	14½ lbs	to each inch in depth.
20 " " "	12 lbs	" " "
19 " " "	10½ lbs	" " "
18 " " "	9 lbs	" " "
17 " " "	8 lbs	" " "
16 " " "	7 lbs	" " "
15 " " "	6 lbs	" " "
14 " " "	5 lbs	" " "

Cheese of the above proportions are banded with cotton cloth to keep them in shape. The band should not cover more than an inch or inch and a-half of the flat surface.—Heavy cheese must be banded with cloth that will not stretch, or their weight will make them ill-shapen.

In April, 1847, I divided curd into two equal parts, after it was salted, and ready to press, and pressed in equal and varied shapes to ascertain the result of varied heat, salt, &c. April 24th, (see schedule of April,) No. 1 was kept in a room of from 90 to 100 degrees heat; did not huff, but not having rennet enough to keep pace with the heat, soured, was hard, dry and smart; shrunk twelve per cent in sixty days. No. 2, kept in temperature seventy-five degrees, did not huff, cured slow, was soft and mild flavoured, shrunk nine per cent in ninety days.

April 26th, doubled rennet; put cheese No. 3 by side of cheese No. 1; No 3 huffed in three days, in twenty days run oil, tainted and spoiled. No. 4 put with No. 2; huffed, cured quick, and was light, porous and sharp. Doubling the amount of salt would control rennet, and keep cheese from huffing; but did not prevent them from souring, becoming hard and unmerchable. The time of curing was in proportion to the amount of heat and rennet used. Some of the high salted cheese in a hot room, were better; but none in the cool room had that flavor, were long curing, shrunk less, and were of better quality. The same course was taken in August, by dividing several days' curd each day into three equal parts, pressed alike, and exposed to different temperatures in curing. The result was in favor of a medium rate of salt and heat, high salting and heat, making hard smart cheese, low salting and heat, soft, mild, and tasteless; low salting and high heat, porous, soft and sharp.

In 1845, the experiments alluded to, with sixty dairies, being got up expressly for shipment, a selection was made from the largest and most experienced dairymen in thirteen towns. A vigorous effort was made to reduce the whole practice to one general rule, consisting in strict cleanliness

in every department, an equilibrium of heat in milk to set, not exceeding 90° with pure rennet to curdle milk in forty minutes; curd thoroughly worked by hand till as fine, when scalded as wheat or corn; curd scalded in whey, with heat not exceeding one hundred degrees, and that heat held until the curd appeared shrunken, and would squeak when pressed between the front teeth. The whey to be drained off, and the curd salted while warm, with 2½ lbs. of refined salt to 100 lbs. of cheese, cooled and pressed forty-eight hours. Cheese half as high as wide.

These leading points, strictly adhered to, were found adequate to produce the article required, where curing rooms were constructed so as to preserve a uniform moderate temperature. The cheese, not affected by extreme changes of climate, fermented slowly and uniform, rind firm and smooth with little grease; texture firm and solid, yet malleable like butter; the flavor mild and pleasant. The weather being cool till June, a great uniformity was manifest in shape and texture. A sudden change of weather to 38 degrees, lasting several days, produced a contrast in different dairies, equal to the extreme in temperature, which was found in many dairy rooms to exceed the common atmosphere from 8 to 10 degrees. With little or no ventilation in these, cheese were much swollen, and could be kept in shape only by using less rennet and more salt. The huffed cheese remaining in some rooms became tainted, or generated a sharp, unpleasant flavor; those removed to a temperature suited to their constitution cured quick, and were well adapted to early home markets. Those salted high enough to stand the excess of heat, were hard, dry, crumbly and smart. A dry room was found best for a wet cheese, and a damp room best for a dry cheese, but in no case was a high temperature, (exceeding 75°) found necessary.

These and like experiments, too numerous to detail, confirm my conviction that much of the bad flavor complained of in the American cheese, may be prevented with proper attention to curing. In addition to the extreme changes of weather in our climate, which are more than sufficient to destroy the constitution of a well manufactured cheese, the practice too generally prevails, of placing cheese in some loft or upper room, least needed for other uses, and often next to a roof where heat concentrates, and cheese becomes literally baked. I deem such rooms best as are calculated to preserve an equilibrium of low temperature. A tight, spacious, studded and plastered lower room well ventilated, with northern exposure, where heat may be increased, and air dried by fire and ventilation or cooled and dampened if required, by air from an underground or adjoining room, where ice may be kept, is best adapted to this climate.

Having previously written at considerable length upon general treatment, adaptation of food, I shall not here go into a lengthy detail, but a few hints may not be inappropriate. The success of dairy-men depends much upon adapting their practice to the provisions of nature. Cows should be in a condition to yield the greatest flow of milk, upon the cheapest and most spontaneous productions from the earth. Maize, mangelwurtzel, cabbage, carrots, and ruta bagas (of the cultivated crops) yield the largest product per acre, and from the various periods at which they arrive at maturity, are well calculated to protract the flowing of milk till late in the season. Those most perishable to be used first. It is proved by experiments that a cow will give the most milk from the same amount of food, during the first sixty days after having calved. My cows yielded 45 lbs. milk per day the first of March, on 25 lbs. of good hay and 4 quarts of provender in slops. The first of June they diminished in quantity, and the first of November on same feed, they gave only 20 lbs. per day. Other cows of equal quality coming in from the middle of April to the first of May, gave, on the first of June, 55 lbs. of milk on grass only, and held a good flow of milk through the season. On the first of December they gave 20 lbs. of milk each, while those in milk the first of March were nearly dry, upon the same feed, proving conclusively, that cows in general, will yield more and better milk from the first of May to January, than from first of March to January. The months of March and April require much more labor and grain feed, that would otherwise turn to money. Nature provides in spring time, a principle of general progressiveness in the animal and vegetable kingdom. The thriftiest growth of spontaneous products is in May and June, and cows should then be in a condition to receive its aid.

If seed of a spring crop is sown too early, the crop will be stunted, so with cows that calve in February and March.

Nature having made its master effort in the animal economy, it cannot be revived again in spring-time of vegetation, and in the fall, when farmers have more or less of coarse perishable food, like pumpkins, apples, etc., they are not in as good condition to yield milk, as when they are started late, and their milk is kept up by sowed corn, or other succulent food.

I realized the greatest nett product of cheese in my dairy in 1844 and 1845. Commencing April 20th with half my cows in milk, average yield in 1844, 700 lbs. per cow, market weight. In 1845, average yield 775 lbs. per cow, weighed daily from the press, averaging five lbs. per cow per day during the first five months. No one kind of grass or other food is found to produce as much or as good milk, as good pasturage upon soil yielding a great variety of grasses, each maturing at different periods, and furnishing in their turn the *flower of feed*, from which the finest flavor of butter and cheese is derived. Such soils are prevalent in this county, where the land is elevated and not over worn with tillage. Low, marshy grounds, and those having a northern or northwestern descent are exceptions.

A difference of from five to ten per cent is frequently shown by the lactometer in the quality of milk from neighboring dairies, the proof being in favor of those *best fed and cared for*. The practice is prevalent among dairymen of pasturing the low, wet and shady portions of their farms, (if they have such,) and using for meadows the more aired portions. In some locations, it is impossible to make a fine flavored cheese. The curd works tough and stubborn, and cheese is invariably of a harsh rank flavor. If this practice should be reversed, and the low lands used for meadows, and the elevated, warmer portions grazed, no doubt a great improvement would be made in our dairy products.

More care is required in working curd where whey and grain is fed, than when cows are grazed, as the milk is richer, and the cheese more apt to be harsh-flavored; when cows are in heat, their milk should not be put with the rest, till thoroughly cooled. It is often *rank and bitter* and will sour in a few hours. If cows eat salt largely, beware of soft leaky cheese: it retards the effect of rennet to decompose. Salt should lay by the cows that they may take a little daily. Corn sowed in *drills* will produce more milk, arising from cultivation and the effect of sun and air. If fed when too old, it is not succulent, and will dry up the milk.

The Essentials to Productive Farming.

THE following essentials for productive farming are from the pen of the editor of the American Farmer, which is, we believe, the oldest agricultural paper in the United States:

1. Good implements of husbandry, plenty of them, which should always be kept in perfect order.

2. *Deep plowing, and thorough pulverization* of the soil, by the free use of the harrow, drag and roller.

3. An application of *lime, marl* or *ashes*, where calcareous matter or potash may not be present in the soil.

4. A systematic husbanding of every substance on a farm capable of being converted into manure, as a systematic protection of such substances from loss by evaporation or waste of any kinds, and a careful application of the same to the lands in culture.

5. The draining of all wet lands, so as to relieve the roots of the plants from the ill effects of a super-abundance of water, a condition equally as pernicious as drouth, to their healthful growth and profitable fructification.

6. The free use of the plow, cultivator and hoe, with all *row-cultured* crops, so as to keep down, at all times, the growth of grass and weeds, those pests which prove so destructive to crops.

7. Seeding in the *proper time*, with good seed, and an equal attention as to time, with regard to the working of crops.

8. Attention to the construction and repair of fences, so that what is made through the toils and anxious cares of the husbandman, may not be lost through his neglect to protect his crops from the depredations of stock.

9. Daily personal superintendence, on the part of the master, over all the operations of the farm no matter how good a manager he may have, or however faithful his hands may be, as the presence of the head of a farm, and the use of his eyes, are worth several pairs of hands.

10. Labor-saving machinery, so that any one may render himself as independent as needful of neighborhood labor, as a sense of the comparative independence of the employer upon such labor begets a disposition of obedience and faithfulness on the part of the employed.

11. Comfortable stabling and shoes, for the horses and stock, all necessary outbuildings for the accommodation of the hands, and protection of the tools and implements, as well as for the care of the poultry.

12. *Clover* and other grasses to form a part of the rotation of crops, and these to be at proper periods plowed in, to form the pabulum for succeeding crops.

13. To provide a good orchard and garden—the one to be filled with choice fruits, of all kinds—the other with vegetables of different sorts, early and late, so that the table may, at all times be well and seasonably supplied, and the surplus contributed to increase the wealth of the proprietor.

Lunar Influence—Tides, &c.

In the third number of the present volume of the Farmer is an article from the pen of Mr. J. W. DICKINSON, in which he comments with considerable freedom and some severity, on some of the doctrines of "philosophy," and even upon "philosophy" itself. I do not intend to argue the question with Mr. D., but will simply remark, that if he had made himself acquainted with modern philosophy, (which he evidently has not done,) he would have ascertained that some of his remarks, though applicable once, are inapplicable now; and that some of his questions are very easily answered. But I wish rather to be a learner in this matter; and being one of those who still adhere to the "Newtonian system" (theory?) of the tides—"for want of a better"—I wish for light on the subject. And as Mr. D. more than intimates that he has "a better," my wish is, that he would give it to the world, and with your permission, through the medium of the Farmer, that we who are anxious to know the truth may not be duped any longer. H.

New York State Agricultural Society.

JUDGES ON THE PREMIUM LIST.

At a meeting of the Executive Committee of the Society, held at Buffalo on the 22d ult., the following Judges were appointed for the September Show:—

FOR CATTLE.

On Short Horns—Hon. Allen Trimble, Highland Co., Ohio; John Wetenhall, Nelson, C. W.; John F. Sheafe, New Hamburg.

Herculeans, &c.—L. G. Bingham, Williston, Vt.; Frederick Ingersoll, Vernon; A. B. Dickinson, Hornby.

Natives and Crosses—Michael Sullivan, Columbus, Ohio; John Johnston, Seneca Co.; Thomas Kinsman, Kinsman, Ohio.

Working Oxen—Wm. Fuller, Skaneateles; A. J. Wynkoop, Chemung; H. N. Carey, Marcy.

Steers Three Years old—S. S. Ellsworth, Penn Yan; Edward Munson, Sennett; Myron Adams, East Bloomfield.

Steers one and two years old—S. W. Jewett, Weybridge, Vt.; Hiram Ashley, Allen's Corners; B. A. Hall, New Lebanon.

Fat Cattle and Sheep—Aaron Clement, Philadelphia; Thomas F. Devoe, Jefferson Market, N. Y.; Gen. Wm. Nash, New Haven, Vt.

Milk Cows—Hugh Brodie, Near Montreal, C. E.; Joseph Bennett, Cooperstown; A. Woodruff, Strykersville.

HORSES.

Of all Work—J. B. Burnet, Syracuse; Henry Rhodes, South Trenton; Ela Merriam, Leyden.

Draught Horses—B. N. Huntington, Rome; A. M. Clarke, Watertown; T. C. Nye, Madison.

Blood Horses—John Taylor Cooper, Albany; Hou. W. H. Boulton, Toronto, C. W.; Elias Cost, Oaks Corners.

Three and two years old—D. Hamilton, Watervliet; Isaac T. Grant, Junction; Lyman Q. Sherwood, Auburn.

Matched Horses—Mr. Landon, Congress Hall, Albany; Erastus Beach, Catskill; Lewis Joy, South Trenton; Jas. M. Marvin, Saratoga Springs, Stephen Clarke, Waterford.

Geldings—M. J. Hayes, Montreal; Lester Barker, Clinton; Henry C. Miller, Hudson; J. Lennebacker, Utica; W. A. Beach, Saratoga Springs.

SHEEP.

Long Woolled—Philip Reybold, Del. City; Col Carmichael, Sing Sing; John Kennedy, Farmer.

Middle Woolled—S. Wait, Montgomery, Orange Co.; Richard Gapper, Toronto, C. W.; Isaac Dillon, Zanesville, Ohio.

Merinos—Robert R. Reed, Washington, Pa., Mr. Hildebrand, Massilon, Ohio; John F. Gilkey, Kalamazoo, Mich. *Saxons and Shepherd Dogs*—S. C. Scoville, Salisbury, Ct.; Thomas Noble, Massilon, Ohio; Wm. H. Ladd, Richmond, Ohio.

Swine—Benjamin Enos, De Ruyter; O. C. Chamberlain, Richfield Springs, Otsego Co.; Roswell Carter, Chicago.

Poultry—Henry Vail, Troy; F. C. Moses, Skaneateles; Rev. Mr. Anderson, Waterloo, C. W.

Plows, &c.—J. Stanton Gould, Hudson; Wm. Buel, Rochester; James M. Ellis, Onondaga.

To prepare ground and teams for trial of plows and plowing match—Henry W. Rogers, Buffalo; Daniel Reed Wheeler, Ellicottville; Alva Jefferson, Darien Centre.

Plowing Match—Squire M. Brown, Elbridge, Onondaga Co.; Franklin Rogers, Seneca Co., John Mallory, Benton, Yates Co.; Wm. Otley, Oaks Corners, Peter Crispel, jr., Hurley, Ulster Co.

Farm Implements No 1—Amos Osborn, Albany; Tallmage Delafield, Oakland; Tracy Pardee, Oakfield, Gen. Co.

Farm Implements No. 2—Amos Briggs, Schaghticoke; J. R. Speed, Caroline; E. Marks, Geddes.

Butter—Joseph A. Carey, Albany; Elisha W. Sheldon, Sennett; E. R. Evans, Marcy.

Cheese—Lemuel Hulbert, Winchester, Ct.; Thomas Burch, Little Falls; Harrison Blodget, Denmark.

Sugar and Honey—Jason Sexton, Chas. C. Haddock, George A. Moore, Buffalo.

Silk and Silk Goods—Henry Hamilton, Manly Colton, E. Kenneth, Buffalo.

Domestic Manufacture No. 1—Woolen—Chas. Lee, Penn Yan; Linus D'Wolf, Middlebury, Wyoming, C. C.; Silas Parsons, Lockport.

Manufactures No. 2, Linen—Martin O. Coe, Le Roy; Harry Thompson, Black Rock; George W. Tew, Silver Creek; C. N. Cement, Albany.

Manufactures other than Household—O. Hungerford, Watertown; Frederick Hollister, Utica; E. D. Efner, Buffalo.

Needle, Shell and Wax Work—Mrs. J. M. Sherwood, Auburn; Mrs. D. E. Evans, Batavia; Mrs. Adam Fergusson, Waterdown, C. W.; Mrs. Jacob Gould, Rochester; Miss E. Wadsworth, Genesee; Peter B. Porter, Niagara Falls, Secretary.

Flowers—Dr. Herman Wendell, Albany; James Dugall, Amherstburgh, C. W.; M. B. Bateham, Columbus, Ohio; Artemas Bigelow, Penn Yan; J. A. Harris, Cleveland, O.

FRUIT.

Apples, Quinces, Melons, Cranberries—Dr. Kirtland, Rockport, Ohio; Shepherd Knapp, New York; Martin Springer, Piqua Town, Ohio.

Peaches, Plums, Nectarines, Apricots, Grapes—N. Longworth, Cincinnati; Charles S. Wilson, Utica; Reuben Wood, Cleveland, O.

Pears—Gen. H. A. S. Dearborn, Hawthorn Cottage, Roxbury Mass.; George Hoadly, Cleveland; B. V. French, Braintree, Mass.

Foreign Fruit—David Thomas, Greatfield; Charles Downing, Newburgh; J. W. Bissel, Rochester.

Vegetables—O. Phelps, Canandaigua; James Woodruff, Detroit; Rev. C. E. Goodrich, Utica; Ira Hopkins, Auburn.

Paintings and Drawings—James Watson Williams, Utica; George Platt, New York; John A. Granger, Canandaigua.

Annual Paintings—Chas. Henry Hall, New York; Richard L. Allen, New Orleans; J. M. D. McIntyre, Albany.

Fruit Paintings—Prof. J. Jackson, Schenectady; F. J. Betts, Newburgh; N. Goodsell, Rochester; H. H. Coit, Euclid, Ohio; J. W. Bailey, Plattsburgh.

Stoves—L. B. Langworthy, Rochester; M. D. Burnett, Syracuse; Orange Sackett, York, Livingston Co.

Miscellaneous Articles—Zadock Pratt, Prattsville; Albert H. Porter, Niagara Falls; Ebenezer Mack, Ithaca.

Discretionary Premiums No. 1—J. Delafield, Oakland; Wm. R. Gwinn, Medina; Charles J. Orton, Fredonix.

Discretionary Premiums No. 2—Lynan A. Spalding, Lockport; C. C. Dennis, Auburn; Jacob Gould, Rochester.

Discretionary Premiums No. 3. Implements of Music, &c.—Geo. Dutton, Utica; Chas. Wilson, Rochester; Robert Denton, Buffalo.

Samples Grain, &c.—George W. Patterson, Westfield; Philo Durfee, Buffalo; John McVean, Wheatland.

Implements of manufacture for preserving flour, meal, &c.—S. R. Hutchinson, Cleveland, Ohio; Arthur Root, Albany; John F. Porter, St. Josephs, Michigan.

Foreign Cattle—W. H. Sotham, Black Rock; Lewis Eaton, Buffalo; John Boies, Homer.

Horses—Hon. Adam Fergusson, Waterdown, C. W. J. T. Blanchard, Saratoga Springs; W. P. Nottingham, Palmyra.

Sheep—Long woolled and Middle woolled—Sanford Howard, Albany; Richard Radley, Stafford, Genesee Co.; L. D. Clift, Carmel, Putnam Co.

Merino and Saxons—Robert S. Rose, Richmond; N. Y. Tilden, New Lebanon; Samuel Colt, Genesee.

Fine Woolled—H. Blanchard, Kinderhook; R. R. Reed, Washington, Penn.; S. N. Dexter, Whitestown; Bronson Murray, Ottawa, Illinois; John R. Cunningham, Richmond, Ohio.

Sweepestakes—Cattle—Dr. A. Watts, Chilicothe, Ohio; Henry Parsons, Guelph, C. W.; Wm. Parsons, Lockport.

Committee on Railroad and Steamboat Transportation, &c.—B. P. Johnson, Albany; J. B. Burnett, Syracuse; J. M. Sherwood, Auburn; T. C. Peters, Buffalo.

A resolution was adopted to hold a Pomological Exhibition at the Annual Meeting of the Society, in Albany, in January next.

COLORING WOOD.—French cabinet makers can now make wood of any color they please, by letting the roots of the trees absorb the colored fluids the year before it is cut down. A solution of iron passed up one root, and of prussiate of potash up the other, will give the wood a permanent blue color.

EDITOR'S TABLE.

COMMUNICATIONS have been received during the past month, from Johnson Servis, W. R. Coppock, L. Wetherell, M. M. Rodgers, B. Hodge, S. W., —, and H.

ACKNOWLEDGMENTS.—We are indebted to Hon. GEO. P. MARSH, for a copy of his address before the Rutland County (Vt.) Agricultural Society.—To W. KEESE, Esq., for a pamphlet containing proceedings of Clinton County Agricultural Society for 1847, and Rules, Premium List, &c., for 1848.—To Hon. E. B. HOLMES for Annual Report of Commissioner of the General Land Office.—To E. DARROW, Agent, Rochester, for No. 12 of the American Architect.—To Hon. E. BURKE, for a copy of the Report of the Commissioner of Patents for 1847.—To —, for pamphlet containing Premium List, &c., of Yates Co. Agricultural Society for 1848.

THE June number,—the last of the 3d volume,—of the "Farmer's Library and Monthly Journal of Agriculture" announces that its veteran editor, Col. J. B. SKINNER, has purchased the work of Messrs. GREELY & McELRATH, Col. S. states that "the work will be continued in Philadelphia, under the title of the PLOW, THE LOOM AND THE ANVIL, as advocating cordial alliance and mutual support among all the great branches of American Industry, for which we possess appropriate and adequate resources." The price is to be reduced from \$5 to \$3 per annum—two copies for \$5, and five copies for \$10. The new volume commences this month. Embracing all the subjects foreshadowed in its unique title, the work cannot fail of possessing much value to the producing classes—the substantial portion of community. Wishing its experienced editor abundant success in his new enterprise, we commend the *Plow, Loom and Anvil* to the support of all interested. Address the Editor, or ZEIBER & Co., Philadelphia, Pa.

THE FARMER'S CABINET, published at Philadelphia, is to be discontinued at the close of its present volume—this month. It has been well conducted for several years, and we regret to part company with its editor, Mr. JOSIAH TATUM. May success attend him in other pursuits.

GRAND RIVER (MICH.) PLASTER.—Having seen it successfully used in central Michigan, we know this Plaster to be an excellent fertilizer. For the benefit of our two thousand Michigan subscribers, we copy the following item from a late number of the Grand River Eagle:

"MR. E. W. HUDSON of Detroit advertises 1,350 bbls. of "Grand River Plaster" just received and for sale. Did the farmers of that section rate the article at its true value, were they sensible of the extent to which it may be made to fertilize the soil, Mr. Hudson might have found it an object to advertise twenty times that amount. It is imbedded in inexhaustible quantities here yet. Farmers and dealers have only to hint their wants to H. R. WILLIAMS, and, like himself, in less than no time it will be all over the State. In this as in all other matters, Mr. Williams opens a liberal hand and deals out bountifully to all that ask of him."

WEALTH OF THE UNION.—The Commissioner of Patents, in his recent report, gives some interesting statistical facts respecting the wealth of the Union. The population is set down at 20,746,000; and the whole amount of personal and real property is estimated at \$3,294,560,000. New York is the richest State, her property being estimated at \$1,12,000,000.

AGRICULTURAL FAIRS FOR 1848.—We give below the time and place designated for holding Fairs the ensuing fall. Several Societies have not yet determined the time, and from others we have received no information:

New York State,	Buffalo,	Sept. 5, 6 and 7.
Fulton County,	Johnstown,	Oct. 4 and 5.
Jefferson "	Watertown,	Sept. 27 and 28.
Orleans "	Albion,	Sept. 28 and 29.
Ontario "	Cauandaigua,	Oct. 10 and 11.
Oswego, "	Pulaski,	Sept. 27 and 28.
Onsego, "	Cooperstown,	Sept. 28 and 29.
Monroe "	Rochester,	Oct. 4 and 5.
Rensselaer "	Troy,	Sept. 20 and 21.
Saratoga "	Ballston Spa,	Sept. 26 and 27.
Seneca "	Seneca Falls,	Oct. 5 and 6.
Wyoming "	Warsaw,	Sept. 27 and 28.
Yates "	Penn Yan,	Sept. 29 and 30.
Windsor Co., Vt.,	No. Springfield,	Oct. 4 and 5.

LIGHTNING RODS.—In an article on the importance of protecting farm buildings from destruction by lightning, the editor of the *Vrairie Farmer* gives some valuable hints on the construction of rods for that purpose. The matter is important, and worthy of particular attention at the present time. Our contemporary states that—

A sufficient protector, 50 feet in length, can be furnished for \$3 or less. A man's hat costs him \$4 to keep off the sun and rain from his head. A bonnet for his wife costs him from \$2 to \$15, and it will scarcely keep off the rain at that. Why should not \$3 be expended for protection against the most active, terrific and fatal of all the agents of nature, encountered by man, especially when that protection extends to life as well as property? Procrastination, ignorance, superstition, or neglect is fatal.

We have heretofore given directions for putting up a simple rod, but as many of our readers have never seen these directions, and never will, we repeat them in short hand.

Procure round iron rods of some size, known as 5.16, $\frac{3}{4}$ or $\frac{1}{2}$ inch—let a blacksmith weld the pieces together and sharpen the upper end to receive a tip of silver, which may be obtained at the silversmith's for 75 cents or \$1. Dig down to permanent moisture for the lower end of the rod, whether it be three or ten feet; or what is better, let the rod go down into the well, if it is feasible. It will not be necessary to dig deeper than ten feet in any known circumstances. Fasten the rod to the building by passing it through wooden blocks, which are nailed to the building, and on the top place the tip of silver. Let the rod project over the building according to the size of the latter. It will protect a space equal to twice its length each way—that is, if the building be forty feet in length, and the rod be in the centre, let it project ten feet above the building. If there is a chimney any where near the centre, fasten it to that; or if a chimney is so situated as to carry the rod to a right projection, which may be judged of in the circumstances, it is the best preventive. Cover the rod with paint made of lamp black and oil, to protect it from rust, and the work is done.

NEW CARRIAGE.—The Worcester Telegraph, says that Mr. Isaac Woodstock of that place, has made a most important improvement in a two wheel carriage as regards both ease in riding and beauty in appearance. The advantages which it possesses over a common built carriage, consist in the compact combination of a chaise or buggy body, with an axle, pair of shafts, and half elliptic springs, so arranged that the entire weight of the body and its load is suspended to the axle, neither resting upon or fatiguing the horse, and so also that the motion of the body of the vehicle is kept perfectly steady, and is prevented from violent jerks or vibrations, however rough or uneven the road may be. It is also constructed so as to pass the weight under the axle, instead of over, as in the old way. It balances on level ground, bears upon the horse in ascending, relieves him of the weight in descending a hill.

A SOAP PLANT.—At a recent meeting of the New York Farmers Club, Luet. Washington A. Bartlett, U. S. N., presented two bulbs of the *Amole* or Soap Plant of California. The bulbs are used throughout California for washing every description of clothing, in cold running water. In using them as soap, the women cut off the roots from the bulbs and rub them on the clothes, and a rich and strong lather is formed, which cleanses them most thoroughly. To propagate the plant, the bulbs are set in a moist, rich soil, and will grow most luxuriantly in the soft bottoms of valleys or bordering running streams.

WOOL TRADE OF MICHIGAN.—The wool trade of Michigan increases rapidly. The crop of the State last year was estimated at 1,700,000 pounds, of which 1,000,000 was a surplus for exportation. In 1841 the amount exported did not much exceed 20,000 pounds. The stock of sheep has been largely increased during the past season, and the surplus wool of this year, it is presumed, will reach 1,500,000 pounds.

ENGLISH HORSES.—By a late census of England, the number of horses in England has been found to have diminished from 1,000,000 to 200,000 within the last ten years; in other words, the Railroads have dispensed with the use of 800,000 horses, and these animals, as well as oxen, are now scarcely used for transportation, and thus the grain and food the 800,000 horses formerly consumed have been dispensed with, and the land used for the growth of hay and grass is devoted to the growth of grain alone for the supply of bread.

HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

EVEN at this day there are not a few but a very large number of persons, in every part of the country, who continue to look upon Horticulture as a sort of expensive luxury. Not long ago, a very serious, and as he supposed himself to be, philosophic sort of personage, remarked to us, that, "if the taste for gardening should continue to increase, as it has done for a few years past, the country would be ruined!" This was his solemn conviction, poor man. We told him politely he was *mistaken*; we ought to have told him plainly the fact that it was a shame for him to be so *ignorant*. That individuals may allow their tastes to carry them beyond their means in gardening, as in other matters, we do not deny—though instances of this kind, in this country, are yet "few and far between." But the increase of taste for gardening in general, instead of being a drawback or burthen upon the resources of the country, will add measurably to the national wealth, and is really at the present moment augmenting it far beyond what most people seem to be aware. For instance, the Report of the Commissioner of Patents for the year 1847, just published, estimates the amount of *orchard products* at \$8,853,422; *products of gardens* estimated at \$45,000,000; *products of nurseries*, \$724,111; making the aggregate amount of horticultural productions for the year \$54,577,533. And this we think is a low estimate. The last item, nurseries, is evidently too low. The Horticulturist states, quoting also from Mr. BURKE'S Report, the horticultural products amount to \$459,577,533, which we think he will find an error of only about \$400,000,000 or more. But *fifty-four millions and a half of dollars* is no small item.

And this is no exaggerated or imaginary result, put forth by some interested party, or hot headed enthusiast, but facts and figures carefully brought together by Mr. BURKE, who, it is well known, fills his office with great ability, and who takes a deep interest in the rural affairs of our country, as his reports show, and as we know from a brief personal interview, during his visit to Western New York, last summer.

But American Horticulture is in its infancy. Until within two years there was but one journal devoted exclusively to the promotion of Horticultural Science in the country, and that received but a feeble support. Now there are two, and the Agricultural Journals are all giving more or less attention to gardening matters—some, following the plan of this journal, give it a separate place in their papers. A year or two ago, there was but two or three Horticultural Societies in existence, worth naming. Now, there is

scarcely a large town in the country but has one; there are 7 or 8 in this state alone; and at the present moment, as we peruse our exchanges, we find notices of Horticultural Societies and Exhibitions not only "from Maine to Georgia," but throughout the whole land, North, South, East and West.

These journals, and these societies—these weekly, monthly and yearly exhibitions of the rich and beautiful products of the garden—are exercising an immense influence, perceptible wherever we cast our eyes, and cannot fail in time to diffuse a taste for, and a knowledge of garden culture to the remotest corners, and into every household—swelling annually to a great sum the aggregate amount of garden and orchard products, and consequently augmenting the national wealth. But important as horticulture is in this country, as a branch of productive industry, it has other great claims to public attention. It contributes in a greater degree than any of us can appreciate, to the health, comfort and happiness of all classes—rich and poor—in town and country. With its magic wand, it converts the common into fruitful gardens and blooming parterres. It collects from every part of the globe fruits and flowers, to enrich and adorn civilized life. It plants our streets and parks with trees that yield their grateful shade and shelter. It trains the Scarlet Runner, and Morning Glory by the windows of the humble cot, making what would be dreary and desolate, smile with beauty—and makes of the grounds of the more wealthy, a second Eden. In fine, it spreads beauty everywhere, and aids powerfully in civilizing and refining men, and attaching all to home and country.

The immortal COWPER, whose heart was full of love for nature, and gardening, in the following lines, which we must be pardoned for quoting, conveys an impressive and delightful lesson, that cannot fail to be appreciated by every one who cultivates his own soil in the right spirit:

"To study culture, and with artful toil,
To meliorate and tame the stubborn soil;
To give dissimilar, yet fruitful lands,
The grain, or herb or plant that each demands:
To cherish virtue in an humble state,
And share the joys your bounty may create:
To mark the matchless workings of the power
That shuts within its seed the future flower;
Bids these in form of elegance excel,
In color these, and those delight the smell:
Sends forth the daughter of the skies,
To dance on earth and charm all human eyes,
To teach the canvas innocent deceit,
Or lay the landscape on the snowy sheet.—
These, these are arts pursued without a crime
That leaves no stain upon the wing of time."

Could ideas more comprehensive be conceived, or more agreeably expressed? At the present moment there is a great movement agitating the public mind in regard to the amelioration of man's worldly condition. A thousand theories relating to government, association and direction of labor and capital are suggested;

and however much these may affect the independence of the individual, or secure to him the enjoyment of his just rights, we must in the main, look to nature for the means to extend comfort to the increasing masses of the human family. Whether we live under a monarchical or republican form of government, the means of human subsistence must be drawn from the soil. An able reviewer has lately remarked—

A great and wondrous attempt is making in civilized Europe at the present time : neither more nor less than an attempt to stave off, *ad infinitum*, the tremendous visitation of war ; and, by removing or alleviating the positive checks to the growth of population, to diminish the stringency of the preventiveness, and to subsist continually increasing masses on a continually increasing scale of comfort. May it be successful ! But the only conditions on which it can be so are, that nature be laid yearly more and more under contribution to human wants : and that the masses themselves understand and go along with the exertions making in their favour in a spirit of amicable and rational conformity. To no other quarter than to the progress of science can we look for the least glimpse of a fulfilment of the first of these conditions. Neither the activity of hope, nor the energy of despair, acting by stationary means on unvarying elements, can coerce them into a geometrically increasing productiveness. Science must wave her magic wand, and point unceasingly her divining rod. The task now laid on her, however, is not of her own seeking. She declines altogether so dread a responsibility, while yet declaring her readiness to aid, to the utmost of her powers : claiming only the privilege, essential to their available exertion, of free, undisturbed, and dispassionate thought, and calling upon every class to do its duty ; the higher in aiding her applications, the lower in conforming to her rules.

This is a sound and rational view, and one which commends itself to the calm consideration of every patriot and philanthropist.

America has already furnished a model form of government, and she has the means in her varied climate, fertile soil, and vast resources, and every possible advantage of showing a model system of culture, both of the field and garden. The spirit now awakened gives reason for bright anticipations that will without doubt be ultimately realized, if we all act well our part.

The Earliest Cherries.

BAUMANN'S MAY.—*Bigarreau de Mai.*

IN Western New York this is the first or earliest Cherry ; deservedly popular as a very early and productive fruit. This season it commenced ripening about the 5th of June, and continued in use till the 15th. It usually sells in market for \$4 to \$6 per bushel.

Fruit rather small, oval, heart-shaped. Skin light red until fully ripe, when it becomes a quite dark reddish brown, nearly black. Stalk long, $1\frac{1}{2}$ to $1\frac{3}{4}$ inches, set in a narrow, well marked cavity.—Flesh dark colored, juicy and of good flavor. The trees are free

growers and attain a large size. The young trees in the nursery are easily distinguished by



a sort of downward curve the branches usually assume. Introduced from France, a few years ago, by Col. WILDER of Boston.

THE EARLY PURPLE GUIGNE.

THIS is a larger fruit than the Bauman's May, considered to be of superior quality, and ripens about the same time. Fruit about medium size. Skin dark red, becoming dark blackish purple when fully ripe. Flesh dark, juicy, sweet and good flavored. Stalk over 2 inches long. The tree is distinguished by the remarkably long petioles or stalks of the leaves, as well as by the pendulous habit of the more slender branches.

KNIGHT'S EARLY BLACK.

A superb black cherry—one of the very best.—Ripe 20th of June, here ; as far south as Philadelphia, ripe about the 1st.

Fruit large, obtuse heart shaped, rather irregular in outline. Stalk stout and short, $1\frac{1}{4}$ to $1\frac{1}{2}$ inches, in a narrow deep cavity.—Skin nearly black, when at maturity. Flesh purple and abounding with a rich, sweet and high flavored juice.

This cherry resembles the *Black Eagle*, but has a shorter stalk, more deeply set, and it ripens a week or more earlier.—It is a hybrid between the *Bigarreau* or *Yellow Spanish* and the *May Duke*. Originated by Mr. KNIGHT, of England, about 1810. The tree has a spreading habit, like the *Bigarreau*, is a vigorous grower, and the young trees are recognized at once by the horizontal of the branches.

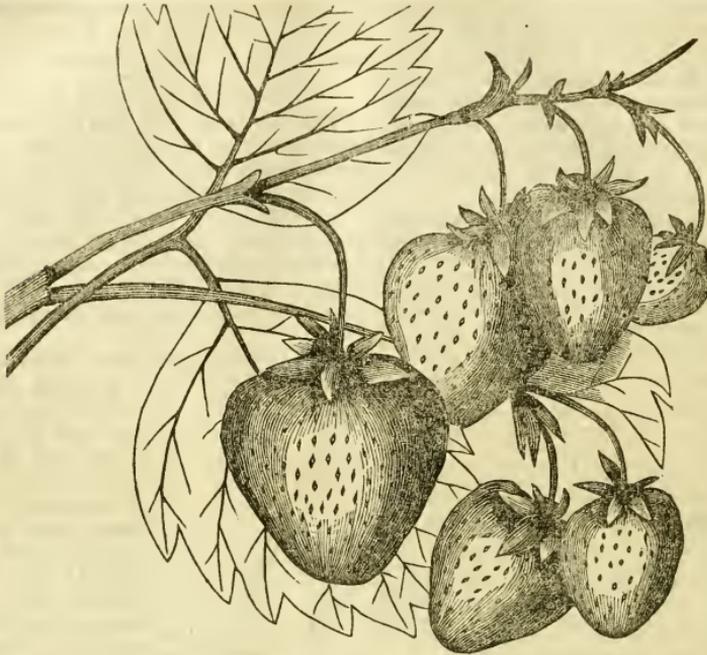


THE EARLY WHITE-HEART.

THIS is a very pretty little fruit, of fair quality, coming in just as Bauman's May goes out. In use this season, in Rochester, June 15.

Skin pale yellowish white in the shade, tinged with red in the sun. Flesh tender, sweet and agreeable. It has been said to be a shy bearer, but with us the crop is fair.

CULTIVATION OF THE STRAWBERRY.—In order to show the importance of cultivating the strawberry, we give the following statistics:—In 26 days of last summer, 1847, 4572 bushels sold in New York,—514 in one day : 80,000 baskets, equal to 833 bushels, weighing 25 tons, were brought in one day over the Erie railroad.—Whole number of baskets sold in New York, equal to 602,640, being an increase of 212,000, or 24 per cent. over last year, (1846) value \$20,000 in a season!—*Jour. of Ag. and Science.*



BURR'S NEW PINE STRAWBERRY.

Mr. JOHN BURR, of Columbus, Ohio, a few years ago originated from seed some six or eight varieties of Strawberries, all of which had peculiar merits and were very favorably noticed by Committees of Horticultural Societies, as well as by individuals. Amongst all of these the *New Pine*, the subject of this notice was generally and unanimously conceded to be the best.

When at Columbus, last season we heard much said in commendation of Mr. BURR'S Strawberries, and particularly of this *New Pine*, so that our expectations regarding it were raised pretty high. Now we are happy to state, that, so far it has sustained its Ohio reputation well. M. G. WARNER, Esq.,* of this city, who was more fortunate than many of his neighbors, in saving the plants sent out by Mr. BURR last autumn, has exhibited fine specimens at our Horticultural Exhibitions, and we have examined the plants in his garden, loaded with fruit, and we have no hesitation in saying that it is really a valuable acquisition.

The plant is very hardy, having passed through the last severe winter without sustaining the least injury—grows very vigorously, has large handsome foliage, and is a great bearer, producing great bunches of perfect, uniform fruit. Fruit large—not so large as the largest of Hov-

ey's Seedling, but more uniform in size, and regular in form; of a pale red color and high aromatic flavor, of unsurpassed richness; flowers pistillate: produced, we believe from seed of Hovey's Seedling, fertilized by a staminate seedling of Mr. BURR'S, known as Burr's Seedling.

As far as it is proper for us to judge of this strawberry, at this time, we think, all things considered, that it has no superior; and those who plant it in well prepared soil cannot fail to reap a rich and abundant crop.

The Hemlock Spruce as a Hedge Plant.

DEAR SIR:—In the perusal of some numbers of the *Genesee Farmer*, I noticed, (in an article on Evergreen Hedges, and the plants most suitable for making them,) that no mention is made of the *Abies Canadensis*, or Hemlock, as such; which, in my humble opinion, is well worthy of public notice and extensive culture as a Hedge Plant.

I had in my rambles through the woods, particularly where the hemlock abounds, often noticed where nature had placed two or three of them in a line, that from its naturally fine habit of growth, accompanied with the beauty and density of its foliage, it was a plant well adapted for hedging. But in this I am now fully persuaded, after visiting the well known establishment of Messrs. Leslie & Co., of the Toronto

* Mr. WARNER, as will be perceived by his advertisement, has a limited supply of plants for sale. Those who may order them from him may rely on being supplied with the genuine article, or none.

Nursery, C. W., where a beautiful specimen of the same may be seen. It is at present about 150 feet long, 5 feet high, three feet thick at the base, tapering gradually towards the summit. It was, I am told by the proprietors, planted in the month of May, 1844, in a single row; the trees were then about 18 inches high, and planted one foot apart, and are now, as before remarked, 5 feet high.

A great deal more could be said on the beauty and utility of the Hemlock, but as brief as this may appear, I am persuaded that it will prove enough to encourage and convince many proprietors of neat cottages that an Evergreen Hedge, and particularly one so neat and cheap as this will prove to be, is at all times preferable to the unsightly rails so often seen disfiguring their dwellings. It is in the hopes of the same that I have taken the liberty of offering this to your notice.

Yours truly,

June, 1848.

ACHILLES I. LANGEIER.

NOTE.—The *Hemlock Spruce*, although very few seem to be aware of it, is one of the most beautiful evergreen trees indigenous to this country—found abundantly, too, in almost every section, from the extreme North to the Carolinas. Looking at this tree, as we frequently find it, in dense woods, with dead and broken limbs, and even trunks, it is an unsightly object; and this, in a measure, may account for the neglect with which it is treated; but when we find it standing alone, on dry ground, we have a charming tree. LUTON says—“In England the Hemlock Spruce forms one of the most ornamental of the Fir family; being among needle leaved evergreen trees what the weeping willow is among the willow.”

For the formation of a beautiful green hedge it cannot be surpassed. It has not the power of resistance of the Norway spruce, and will not answer the purpose of fencing so well; but where great strength is not required, and ornament the chief desideratum, the Hemlock will answer admirably. The specimen our correspondent alludes to, in the Toronto Nursery, has often attracted our admiration. It has been 4 years planted, shorn only twice, and is at this moment a green wall, 5 feet high, without a blemish—one of the most elegant enclosures for a lawn or flower garden imaginable.—Ed.

HOVEY'S FRUITS OF AMERICA.—Number five of this beautiful work has appeared. The plates, consisting of *Late Duke Cherry*, *Louise Bonne de Jersey* and *Belle Lucrative Pears*, and *Porter Apple*, are elegant pictures, and we think quite as correct representations as Mr. HOVEY has yet produced. This number shows a good list of additional subscribers—a fact we are very happy to notice. Number six will be on hand soon, and will contain the *Early York Peach*, and *Le Care*, *Rosteizer* and *Flemish Beauty Pears*.

Royal octavo numbers, \$1 each; imperial quarto, \$2.

A NEW FRUIT has been introduced at Charleston, S. C., from Japan. It is an evergreen, and bears flowers of a delightful almond-like fragrance, twice a year. Last summer, the fruit in small quantity came to maturity in July.—This year it bore more luxuriantly, and the fruit is now ripe. It is of a rich orange color, about the size and shape of the nectarine, although a little more elongated.

STRAWBERRY PLANTATIONS may be made any time from the present, till the first of October. If possible moist, dark weather should be selected, so as to avoid the necessity of watering and shading, so indispensable in dry weather. The ground should be trenched two feet deep, or sub-soil plowed, and thoroughly manured with the best old well rotted manure to be obtained.



1. Staminate, or perfect, fruit bearing. | 2. Staminate barren. | 3. Pistillate—fruitful if near staminate.

Among *staminate* varieties, or those having flowers, (see figure,) that produce a good crop without being fertilized by others, are the *Large Early Scarlet*, *Boston Pine*, *Virginia Scarlet*, and the *Alpines*. Among *pistillates*, the best we have seen are *Burr's New Pine* and *Hovey's Seedling*. These being deficient in stamens, require a staminate plant to every ten or twelve in planting.

Strawberries at the present moment, (June 27,) are selling here for 1s 6d to 2s per quart, when offered for sale at all; and these are usually *Duke of Kent Scarlet*, about as large as garden peas, being from starved plantations. There is no reason whatever, but people's negligence, why strawberries, large and delicious, should not abound in all parts of the country. Let every one who is not well supplied see to it now in season.

Public Parks of Rochester.

A WRITER in the Rochester American, whom we suppose to be L. WETHERELL, Esq., makes the following statement in regard to the public parks of Rochester:

The following is an aggregate of all Elms in all the Parks, and so of the other kinds:

Elm, (<i>Ulmus Americana</i>),	51 trees.
Maple (<i>Acer rubrum</i> , <i>A. dasycarpum</i> , and <i>A. Saccharinum</i>),	248 "
Buttonwood, (<i>Plantanus occidentalis</i>),	101 "
Ash, (<i>Farxinus Americana</i>),	11 "
Oak, (<i>Quercus Alba</i> , and <i>Q. tinctoria</i>),	4 "
Bass wood, (<i>Linden Americana</i>),	17 "
Willow, (<i>Salix Fragilis</i> , and <i>S. Babylonica</i>),	4 "
Ironwood, (<i>Ostrya Virginica</i>),	2 "
Unknown,	2 "
Total dead,	272 "
Total showing symptoms of life	440 "

More than one third of the whole number.

“What is every body's business is nobody's” is a trite saying, and the truth of it is well illustrated in the condition and management of the public property in Rochester. It is delightful to see our parks embellished with dead trees!

SEVERAL notices of Horticultural Exhibitions are necessarily deferred till next month.

THE ROSE:—Its History, Poetry, Culture and Classification. By S. B. PARSONS.

THIS delightful time of Roses, when the gardens are painted with their beauty, and the air laden with their perfume, reminds us of a duty we have too long deferred, that of presenting this beautiful book to the attention of our readers. As the author truly says:

The beauty of the Rose has preserved it and its reputation for many ages. The most populous nations, the largest cities, the most wealthy and powerful kingdoms, have disappeared from the earth, or have been involved in the revolutions and subversions of empire, while a simple flower has escaped them all and still remains to tell its story. It has seen a hundred generations succeed each other, and pass away; it has traveled through ages without changing its destiny or losing its character: the homage rendered and the love borne it has been always the same; now, as in the earliest periods of the world's history, it is decreed the first place in the floral kingdom. In these days, as in those of antiquity, it is *par excellence*, the Queen of flowers, because it is always the most beautiful, and because no other flower can furnish half its charms. To elegance and beauty of form it unites the freshness and brilliance of the most agreeable colors, and, as if nature had showered upon it all her most precious gifts, it adds to its other qualities a delightful perfumery, which alone would suffice to entitle it to a distinguished place among the beautiful and pleasant things of the vegetable kingdom.

Throughout all ages the Rose has been the acknowledged "Queen of Flowers," and at this day, after the entire globe has been searched for floral novelties and beauties, it stands pre-eminently so. In France and England it is at the head of all ornamental plants. And the appearance of such a work as this before us, and the satisfaction with which it has been generally received by horticulturists and patrons of horticulture in this country, indicate that it will soon, if it does not already, occupy the same position here. Several other works have, within a few years past, been published on the Rose in this country; but this one of Mr. PARSONS is every way so decidedly superior as to be beyond comparison. The others have mainly been designed for the cultivator, and have consequently been confined to the practical classification, culture and description of varieties—but this embraces the whole subject, History, Uses, Poetry, Culture, Propagation, Diseases, and practical and scientific Classification, with descriptions of all the best varieties introduced at home or abroad up to the present time, or at least up to 1847.

The typographical part of the work is in WILEY & PUTNAM'S best style; paper smooth and white, type large enough, with ample margins, and embellished with very fine colored plates of the two best roses, *La Reine* and *Chromatella*, by Parisian artists—so that the work possesses many and varied attractions that commend it not only to the mere gardener, nurseryman, or amateur cultivator, but to every person of taste in town or country who can afford to pay \$1.50 for a very useful, interesting and beautiful book. The reader for amusement or pastime will find the historical part more interesting than the best of Bulwer's or

James' novels. Here the rose is traced from the days of Solomon, and a thousand interesting anecdotes and beautiful fancies related of it among the various nations and people of the earth, highly illustrative of their respective manners, customs and tastes.

For the ladies, who are said to love the "*poetry of flowers, and flowers of poetry,*" as well as for the more imaginative of our own sex, Mr. PARSONS has culled from various fields into a bouquet, the sweetest poetry that has been written or translated into our language, on the Rose. These gems of poesy cover some 60 pages of the book, and as the author says, "those whose ears are not open to pleasant sounds will endure this, for the sake of the more practical matters elsewhere." The whole work contains 280 pages, of which about one half is included in the history and poetry, and the other half what may be termed practical.

We are inclined to think that the chapter on Climbing Roses is rather meagre. This is a most useful and popular division of the rose family, and is every year attracting more and more attention: and therefore we think the value of the book would have been enhanced if this chapter had been more extended and minute, embracing the "training of Climbing Roses," found at another place, and illustrating by cuts the most tasteful, best and cheapest modes of training. We find the index, also, defective. The index should direct us at once to every class and every variety in the book, but it does neither. For instance, we wish to refer to "Chromatella Rose;" the only guide in the index is "Garden Classification," page 237. We turn to 237 and then we turn page after page till we have turned 20, when we come to Chromatella. To us and, others like us, who are not too largely blessed with leisure, this is annoying. Nothing is more desirable in a book of this kind, usually wanted, not to be read and laid on the shelf, but to be referred to frequently, than a full and complete table of contents, so that any subject can be instantly referred to. This is a great feature in all of Loudon's works. In his immense Encyclopedias, his Arboretum, comprising 8 large volumes, any subject can be as easily and as readily found as any particular letter in the alphabet. These things may be corrected in a future edition of Mr. PARSONS' work.

The Northern Spy Apple.

In acknowledging the receipt of some specimens of this fruit in the last number of the Farmer, we incidentally alluded to Prof. Corcock's Horticultural Festival, where the *Esopus Spitzenburg* Apple was adopted as the standard of excellence, by which to estimate the qualities of others. It has been supposed from our remarks, that we were somewhat mistaken in re-

gard to the opinions of the gentlemen present, and we are therefore happy to give the following note from Mr. COPPOCK, which sets the matter right, and is otherwise interesting:—

FRIEND BARRY:—In the last (June) number of your very excellent Magazine, you mentioned having received from Mr. JOHNSON some very superior Northern Spy Apples, and observe that had I and the gentlemen composing the pomological discussions held at my house in March last, seen these specimens, the selection of the *Esopus Spitzenburg*, which we then took as a standard criterion whereby some 40 other varieties might be judged, would certainly have been reversed in its favor.

From these remarks you have evidently mistaken the opinions of myself and many of the gentlemen at that time present, and indirectly charged us with libelling a glorious friend. The *Esopus Spitzenburg* is, as both you and me, and all agree, when taking into consideration all its qualities, of rich flavor, growth and keep, a most excellent and superb apple: and from the fact that it is so generally well known, and admitted to be such, and the Northern Spy comparatively (although rapidly making acquaintance) a new apple—was the reason principally why it was selected. In our classification you will recollect the Northern Spy was ranked A, No. 1—a pretty strong mark of favoritism, which it undoubtedly deserves, notwithstanding some of our highly respectable neighbors think otherwise. This apple was exhibited with others at our May Exhibition, of the Buffalo Horticultural Society, both by our friend J. H. WATTS, Esq., of your place, and myself, and those persons who had not previously known it were particularly struck with its excellent qualities. As a farther evidence of its rank with us, I would mention that it has sold here at \$8 per barrel, and retailed in the streets at four cents each. I have a few of the same sort left, for our Pomological Convention. Truly yours,

Buffalo, June 12, 1848.

W. R. COPPOCK.

Since the above was in type we have received a communication from Col. HODGE, of the Buffalo Nursery, of similar import. He says:

"We adopt the *Esopus Spitzenburg* as a standard by which to judge other fruits. We do not say that it is superior to all others, but that, all things considered, it is of equal value to any other.

The Northern Spy with us stands high—no apple more so. It is not so extensively known as the *Spitzenburg*. It possesses all of the good qualities of a most superior fruit. There are several large trees now in bearing in this neighborhood;—was introduced here some eight or ten years since. The trees are productive and fine growers, the apples large and fine. No apple retains its juices and flavor better—a good keeper; and in the month of April and May, and even into June, I had almost said superior to any other. No apple sells higher, or even as high, in the market.

Some three or four years since an article appeared in the *Genesee Farmer* saying that a man who had gathered 90 barrels of the Spy found them so small and inferior that only 17 barrels were fit for the market. This article prevented many from procuring, or cultivating this fruit. We thought of "*Morus Multicaulis*," and "*Chinese Tree Corn*." We had already been humbugged enough, and concluded to wait a while. Two years ago I found Mr. DOWNING and other prominent pomologists of the opinion that this apple would prove inferior. But now, I believe that nearly all consider it as "A, No. 1."

In this same report, (April number of the *Horticulturist*) that I have referred to, it is stated that the "*Rhode Island Greening* does not always hold, in Western New York, the color and flavor of the land of its origin." From this paragraph I must beg leave to dissent. The *true Rhode Island Greening* is of as rich flavor here as in Rhode Island. I feel confident on this point. Let the next autumn show determine this. I challenge proof to the contrary. I do not place this fruit in *favor* as number one; but in all other points as first rate. No apple is more productive, often producing wonderful crops. As a market fruit it stands pre-eminent.

B. HODGE.

Buffalo Nursery, June, 1848.

LADIES' DEPARTMENT.

Items in Domestic Economy.

To Color and Preserve Brass Ornaments.—Brass ornaments when not gilt or lacquered, may be cleansed, and a fine color given to them by two simple processes. The first is to beat salamoniac into a fine powder, then to moisten it with soft water, rubbing it on the ornaments, which must be afterwards rubbed dry with bran and whiting. The second is to wash the brass work with roche alum boiled to a strong lie, in the proportion of an ounce to a pint; when dry it must be rubbed with fine tripoli. Either of these processes will give to brass the brilliancy of gold.

Sweeping Carpets.—Do not have carpets swept any oftener than is absolutely necessary. After dinner sweep the crumbs into a dusting pan with your hearth brush; and if you have been sewing, pick up the shreds by hand. A carpet can be kept very neat in this way, and a broom wears it very much.

Preserving Cheeses.—If you have a greater quantity of cheese in the house than is likely to be soon used, cover them carefully with paper, fastened on with flour paste, so as to exclude the air. They should be kept in a dry, cool place.

Remedy for Moths.—After the last of May or first of June, the little millers which lay moth eggs begin to appear. Therefore brush all your woollens and pack them away in a dark place covered with linen. Pepper, red-cedar chips, tobacco—indeed almost any strong spicy smell is good to keep moths out of your chests and drawers. But nothing is as good as camphor. Sprinkle your woollens with camphorated spirit, and scatter pieces of camphor-gum among them, and you will never be troubled with moths.

Cleansing Feather Beds.—If feather beds smell badly or become heavy from want of proper preservation of the feathers or from old age, empty them and wash the feathers thoroughly in a tub of suds; spread them in your garet to dry, and they will be as light and good as new.

Earthen Ware.—It is a good plan to put new earthen ware into cold water, and let it heat gradually until it boils,—then cool again. Brown earthen ware in particular may be toughened in this way. A handful of rye or wheat bran, thrown in while it is boiling, will preserve the glazing so that it will not be destroyed by acid or salt.

Britannia Ware.—Britannia ware should be first rubbed gently with a woolen cloth and sweet oil, then washed in warm suds, and rubbed with soft leather and whiting. Thus treated it will retain its beauty to the last.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat, -----	\$1 13	1 22	Pork, bbl. mess 10	50	11 00
Barley, -----	40	44	Pork, cwt., -----	5	00 5 25
Oats, -----	35	40	Beef, cwt., -----	4	50 5 00
Flour, -----	5 25	5 75	Lard, lb., -----	6	7
Beans, -----	33	1 00	Butter, lb., -----	11	12
Apples, bush.	25	50	Cheese, lb., -----	5	6
Potatoes, -----	30	90	Eggs, doz., -----	11	12
Clover Seed, 4	00	4 75	Poultry, -----	7	8
Timothy, -----	1 50	2 50	Tallow, -----	7	8
Hay, ton, -----	10 00	12 50	Maple Sugar, -----	7	8
Wood, cord, -----	2 00	3 50	Sheep Skins, -----	38	1 00
Salt, bbl., -----	1 25	1 33	Green Hides, lb	4	
Hams, lb., -----	6	7	Dry " -----	7	8
			Calf Skins, -----	9	

WOOL.—But little Wool has been brought into market, in comparison with the same period in former years. The price is from 6 to 8 cents per pound less than last season. From 12 to 15,000 pounds have been sold within the past two days, at prices varying from 18 to 25 cents per pound.

Rochester, June 27, 1843.

New York Market.

New-York, June 26—7 P. M.

FLOUR AND MEAL.—The market for Flour was without marked change, and the demand limited. The transactions were about 4,000 barrels at \$5.25 for Oswego, and common State \$5.57½, and \$5.50 for good State and Michigan brands. The quotations show no change, but if any thing the market was the time on the paper of the buyer.

The home trade was not very active. A fair extent of sales took place of brands of Ohio and State better than common at \$5.87½@6.00. The better grades of Flour sustain prices well Rye Flour \$3.75@3.81½. Sales 3 or 400 barrels.

Meal remains quiet. 4 or 500 barrels Jersey sold at \$2.50.

WHEAT.—The market without change and quiet. It was offered at previous rates. A sale of 1000 bushels white at \$1.20, 1000 do. on private terms, and another parcel of Wisconsin at about \$1.

CORN.—The market for Corn was unsettled by the foreign news. There were no sales reported. A good sample could probably have been sold at 53 cents, and 54 was asked. A sale of 10,000 bushels mixed, in store, was made on private terms. 500 do. common mixed at 50c. 3,000 do. common at 48¢@49c., and 5,000 do Southern flat yellow at 56c.

RYE IS 75c., and steady. OATS—40¢@41c. for northern. PROVISIONS.—The market for Pork is dull. Sales 400 bbls. at \$8.12½@10.75. Sales 200 bbls., some fine, at \$7.00. The market was quoted lower at the close.

ASHES—\$4.87½@5.57½. 100 bbls. sold.

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COOKING FOOD FOR DOMESTIC ANIMALS.—

On this subject Professor Lindley, who must be relied on as a man of science and a practical farmer, says:—It has been of late much recommended to feed Cattle on cooked food; not to give them all their food thus prepared—this would be too expensive—but the farinaceous portion of it merely; that is, to replace their oil cake by a cooked meal of Linseed and Beans, or Linseed and Barley. The advantages of the practice are perfectly consistent with the theory of nutrition, and, what most of our readers will probably consider of even greater importance, they are consistent with experience. Of this, abundant evidence exists. Our own experience for the last few years is sufficient for our own assurance; and that which has been published on the subject is, we think, sufficient for the assurance of others. The most of this will be found in a little tract lately issued, which states the theory of the subject very satisfactorily, and the different methods of practising it very clearly. The cases described are selected from the counties of Norfolk, Suffolk, Cornwall, York, Wigton, and Dumfries: some of them are new to us, others have already appeared in our columns. They all point to the fact that the use of cooked food is greatly more efficient and economical than the uncooked.

PRESERVING CURRANTS.—Currants and gooseberries may be preserved the year round as fresh and sweet as when taken from the bush. The fruit should be plucked while green, or before the berries assume the red color which precedes and heralds maturity, and put into dry glass bottles, which should be corked and sealed tight, and placed in the cellar, or some other cool place.

PRESERVATION OF CUCUMBERS.—In Germany and Poland, it is said barrels of cucumbers, of various sizes, and ages, headed up water tight, are preserved fresh, from one year to another, by immersing them in deep wells, where the uniform temperature and exclusion of the air seem to be the preserving agents.

Marble Fire Places.—If you happen to live in a house which has marble fire-places, never wash them with suds; this destroys the polish in time. They should be dusted; the spots taken off with a nice oiled cloth, and then rubbed dry with a soft rag.

Competitors for our August Premiums.

But few persons have become competitors for these premiums. We give below the names of the regular competitors who have obtained 10 subscribers or over, since the 1st of May:—

W. P. Tucker,	30	O. Palmer,	14
A. M. McLenn,	24	R. S. Osborn,	10
O. W. Randall,	29	Washington Hadley,	10
James Ross,	19	A. P. Ferry,	10

Our friends will observe, by reference to the first page of this number, that the premiums offered are worth contending for—and that there is yet abundant opportunity to obtain subscribers before the time expires, the 20th of Aug.

GENESEE FARMER.

Vol. 9.

ROCHESTER, N. Y. — AUGUST, 1848.

No. 8.

THE GENESEE FARMER:

Issued on the first of each month, at Rochester, N. Y., by
D. D. T. MOORE, PROPRIETOR.

DANIEL LEE & D. D. T. MOORE, Editors.

P. BARRY, Conductor of Horticultural Department.

FIFTY CENTS A YEAR:

Five copies for \$2. and any larger number at the same rate, if directed to individuals. Eight copies for \$3, if only directed to one person—and any larger number, addressed in like manner, at the same rate. All subscriptions payable in advance, and to commence with the volume. *Q* Back numbers supplied to new subscribers.

[Editorial Correspondence of the Genesee Farmer.]

Corn Culture.—Lime, Deep Tillage, &c.

Not long since it was stated in the public prints that WILLIAM POLK, a brother of the President was the largest corn grower in the United States, his usual crop being about 100,000 bushels. He plants in Arkansas. It now turns out that a North Carolina planter raises about twice as much; and for aught we know, some man will be found who raises more corn than both these princely farmers. While there is no one producer of this great American staple on the Savannah, that grows 100,000 bushels in a season, there are many who do nothing but raise corn; and by concentrating all their attention and capital on a single branch of agriculture, they succeed in making improvements in that department, which other farmers may study to advantage.

An implement called a "corn planter," and manufactured we believe by Mr. BACHELDER, of Baltimore, has been used here this season with great success. With it, a hand and mule can put in well 100 acres in ten days. It drops and covers the seed, and rolls the ground. Great care is taken to have each kernel in the exact line of the row, and no seed nearer than three inches to its fellow, in the same hill, where more than one stock is permitted to grow. The rows are worked only one way on the bottoms, and stand from five to six feet apart. By having every stem of corn in a straight line, the hills can be plowed close to on either side, so as to stir all the land and not use the hoe at all. To hoe corn is an expensive operation, and by doing as we have stated, no weeds or grass can grow, and the crop is alike clean, beautiful and abundant at the harvest. It is cheaply raised.

As five good hands with Bachelder's planters can plant 500 acres in ten days, the after culture constitutes the principal labor of making this grain. The corn is plowed out with three small

plows set in gang and drawn by a single mule twice in each row—turning the three shallow furrows towards the hills or drills, as the case may be. A baulk is left between the rows of from 12 to 20 inches, which is cut up and mostly left near its old position—turned a little to the right and left—with a sharp cutting instrument something like a "buzzard." Notwithstanding the rows of corn are six feet apart, the mule has to pass only three times between each to till well the whole ground once over. In this way a field is gone over three or four times in the course of a season. As a general thing, the corn crop on the Savannah is very good this year.

EX-GOV. HAMMOND, who plants on the river about 18 miles below Augusta, has made many large and interesting experiments with marl, or unburnt lime. He has written a good deal on the subject in past years. The benefits of liming are still very apparent, although in some instances too much was used. None of this shell lime was burnt; but it was spread broadcast at the rate of from 100 to 300 bushels per acre, as it was dug from "Shell Bluff." This Bluff is a remarkable marine deposit of giant oyster shells, and the debris of other molusca, many feet in thickness. The rock extends through the state of Georgia, and nearly, if not quite through the adjoining ones of Alabama and South Carolina. Others have tried liming in this region, and all, so far as we have been able to learn, with satisfactory results.

There are many readers of the Genesee Farmer whose meadows, pastures and cultivated fields lack lime. It is not necessary to apply 100 bushels to an acre, nor 50, nor even 25, to obtain a decided advantage from the use of this well known fertilizer. The price of this article varies so much in different localities that no uniform directions as to quantity to be used can safely be given. An ordinary crop of corn, wheat or clover will not remove over 100 lbs. of this mineral from an acre. If a farmer shall apply 200 lbs. a year, although some of it will wash away into ditches, creeks and rivers, still on the whole, his soil will gradually gain in lime. It becomes thoroughly incorporated with the clay, sand and organic matter, corrects all sourness, and promotes the decomposition of the before insoluble silicates of potash, soda and magnesia. All soils that abound in these alkalies and alkaline earths are uniformly fertile, unless too wet. An excess of moisture does immense injury to the agriculturists of this

country, in every state of the Union. Gov. HAMMOND has done more than almost any other man South in the way of draining low lands. His magnificent crops demonstrate the soundness and good economy of this practice. Ditches should be at least three feet deep. At the South, the uniform custom is to make open drains even in cities. The ground is so level and full of fine sand, that the drains fill up and become worthless, if covered as is practiced at the North, and in England and Scotland.

After thorough draining, deep tillage and always having a growing crop on the land are matters of inestimable importance. This subject can hardly be too much talked of, and studied by practical farmers. Deep tillage, what is it? How does it enrich the surface soil, and augment the annual crops of the husbandman? It enables the atmosphere with its natural moisture, its oxygen, carbonic acid and ammonia—with all the gaseous elements of plants and animals which die and decompose on the ground—to penetrate deep into the earth, loosened and mellowed as it should be by subsoil plowing.

Porous loam, clay, mould, marls, and even sand and gravelly earths, have the power to condense both the vapors and pure gasses contained in the air—to absorb and fix them in the soil where they perform most important chemical functions in the laboratory of nature. In the first place we desire the reader to bear in mind that the gasses which pervade the atmosphere are the elements of wheat, corn, clover and flesh, for which God has given to the earth a strong natural affinity. Hence, if a dead pig be buried in a soil a foot deep, you get no smell from the same, which is not the case if the carcass lie and rot on the ground. A shallow soil with the hard-pan close to the surface will absorb a small dose of these fertilizing constituents of dead plants and animals. No matter how richly laden a shower may be with the elements of a crop, a poorly plowed, a shallow tilled piece of ground can absorb and hold very little of the much needed moisture, and other food of starving grain.

During the heat of summer, when the farmer makes his crops, an immense amount of insensible moisture evaporates from the surface of the earth, and especially from the leaves of trees and smaller vegetables. A tight vessel that will catch and hold all the rain that falls during the six warmest months in the year, standing out fairly to the weather, will be dry more than half of the time, in ordinary seasons. Evaporation greatly exceeds the fall of rain, during the time when cultivated plants are grown. This excess of evaporation causes springs to dry up, creeks and rivers to run small in summer and autumn. As a tight jug will prevent water from running in, as well as running out, so a compact, impervious subsoil will prevent the ascent of moisture

in dry weather to supply the roots of plants with their indispensable water, as well as obstruct the descent of water when in excess on fields.

Nothing is plainer than the fact that, when the rains of spring and fall, and the snows of winter, saturate the earth with moisture for many feet in depth, the water that descends into the ground carries in solution all the soluble organic and inorganic elements of plants, down so far as it runs. Dissolve an ounce of salt in a gallon of water, and wherever the water permeates, the salt goes with it. You must *evaporate* the water to separate the salt.

Providence has made the subsoil and the earth below it a vast reservoir of water more or less impregnated with those things that combine in cultivated plants—in human food—to form ultimately, the bones, brains, flesh and blood of man and of all inferior animals. Kind reader, would you organise these constituents of grain and grass largely and cheaply in your growing crops? Then break the *undercrust*, that the moisture below with its salts of lime, its dissolved bones, potash, soda, magnesia, chlorine, sulphur, phosphorus, iron, carbon and nitrogen, may come up to the thirsty roots of your plants, and fully nourish the same. A deep tilled soil imbibes more solar heat in summer than a shallow plowed one. Being warmer, chemical changes are more rapid—more food is prepared for your crops in a given time. The mean temperature of the earth in Georgia is from 12 to 18 degrees higher than in New York; and corn is now from 12 to 18* feet high on the Savannah bottoms.

After corn is planted, or the seeds of wheat, barley, rye and oats are covered, there is an advantage in rolling the ground to compress the earth about the seeds; and to check the too rapid evaporation at the surface of the tilled land. We have studied this matter of solar evaporation with care, in more States than one.

To enrich a farm, by accumulating thereon the raw materials for making cheap bread, milk, meat and clothing, every acre, forest, meadow, pasture and plow-land, should have, during as much of the time as is practicable, a large burden of *growing* vegetation to organise and fix in a tangible shape all the constituents of crops as they exist in the ever moving air, and in the surface and subsoil. If not fixed, they will be lost to the farmer. Air and water are never stagnant and still over, and in the earth, of a healthy neighborhood. So soon as one crop is off, another should be in, to collect and save the dissolving mould, the salt of lime, potash, &c, in the soil—to extract fertilizing minerals from the subsoil, and gasses from the atmosphere. If these auxiliary crops are not needed for hay,

* We suspect there is some mistake in these figures—but we "follow copy," and leave our associate to confirm or correct the statement.—HOME ED.

nor pasture, nor soiling, nor to sell in market, plow them in, and sow more seed still farther to enrich your land. Vegetable Vitality, constantly adding weight and substance to the sum total of organized matter on your plantations, is the great and mysterious power, which God has provided for industrious, reasoning man to work with, and supply his ever increasing numbers with an abundance of food and clothing. Vegetable life, to be useful in the highest degree to our race, must be active in the highest degree—not dormant most of the year, and only half developed when cultivated plants are pretending to grow. Our excellent friend "S. W." is right in his hit in the last Farmer, at "the hereditary errors of farmers" in regard to having plowed fields lie long in naked fallows. This system of protracted summer fallows has, in peculiar cases, some advantages. These we have not room to specify; nor need we, for the readers of this Journal generally understand this branch of our subject.

Augusta, Ga., July, 1848.

Subsoil Plowing.

BY JOHN MALLORY, of Yates County.

PLOWING is one of the most important branches of agriculture—necessary even to its existence. The improvement of practical agriculture, is in proportion to the improvement made in the art of plowing. The principles which chemistry has revealed may be made abortive—their results defective—by improper plowing.

The object to be obtained from plowing is three fold: 1st, to pulverize the soil; 2d, to expose a great depth of soil to the action of the atmosphere; 3d, to hold the many fertilizing substances brought down by rain and snow, and absorbed by the soil.

It becomes necessary to pulverise the soil, so that the roots of plants may extend in all directions, freely and to a great distance. The atmosphere coming in contact with deep and well pulverized earth, imparts heat and moisture, and, acting upon the soil, assists in liberating its salts and in bringing it into that condition which is best fitted for the growth of crops.

A small portion of water, during rains more or less heavy, sinks into the soil when shallow plowed; such soil is sooner affected by the drouth, and is dry at a greater depth than deep earths, as may be shown by an examination of shallow and deep plowing in a time of drouth. Common plowing does not reach sufficiently deep to accomplish all that is desired; but deep plowing and its good results are effected by following the common plow with the subsoil plow. It simply loosens the subsoil, and leaves it in that state that roots can enter it, that air can permeate it, and water be absorbed by it.

A subsequent plowing, with the common plow, can then easily intermix the surface and subsoil. Plowing may thus be effected sixteen and twenty inches deep.

I have found from frequent examination of the roots of the corn, wheat and oats, during the last four or five years, that they generally incline to grow downwards, some of the roots even straight down until they reach the subsoil, then after penetrating an eighth or a fourth of an inch, turn horizontally. I traced the root of a wheat plant which had extended sixteen inches nearly perpendicular, in less than three months after it had been sowed, on ground previously subsoiled. It is interesting to take the spade and examine the roots of crops, at any stage of their growth, in order to compare the effects of common or shallow with those of subsoil plowing. To see the roots of corn pushing boldly downwards eighteen inches in search of food, eight inches of which had never been penetrated except by the noble oak and hickory, and occasionally by the searching taproot of clover, as I have witnessed this past summer, affords pleasure as well as instruction to the farmer, who takes pride in showing fat swine or stall fed oxen.

I subsoiled three fourths of an acre through the middle of an eight acre lot, in June, 1846, for wheat. The field was plowed but once, and cultivated several times previous to sowing the wheat. I am not able to give the result accurately, in consequence of cutting the grain with a reaper, by which I was unable to keep the wheat separate. The difference was quite perceptible at the time of harvesting, it stood thicker on the ground, and the berry was of a better quality than the adjoining on ground not subsoiled.

In May last I subsoiled one and a half acres of corn, in a field containing six acres. It had been a timothy meadow for four years. The soil was clay loam, subsoil a tenacious clay; a part of the subsoiled ground was a swale previously ditched, a part was a ridge, the balance a wet swale, with a compact, impervious subsoil. Twenty loads of unfermented manure was applied to the acre. It was plowed in May five inches deep, and subsoiled nine inches more.

I saw no difference in the corn until August, which was then very perceptible during the drouth of that month. The corn upon the subsoiled part had retained all its beautiful freshness, bearing a healthy perpendicular tassel, and having the appearance through the day of having been refreshed with a shower of rain the previous evening. That on the unsubsoiled parts, yielded to the drouth, the tassels drooped, and the leaves became dry and rolled. After an examination of the soil and subsoil about this time with the spade, the difference in the parts became no longer a mystery.

The earth was moist on the subsoiled portion,

within a fourth of an inch of the surface; on the unsoiled, it was dry to the depth of an inch, the balance below dryer than the former. In the one the subsoil was filled with corn roots in search of food and water, in the other they were turned aside by the subsoil. The corn on the wet swale was as good if not better than any portion of the field. Judging from the present crop, I am of the opinion, that subsoiling this wet swale was an advantage to the crop of one hundred per cent, notwithstanding the objection raised by some, to subsoiling wet land without ditching.

In consequence of an experiment by which I wished to test two varieties of corn, which crossed the field in an opposite direction to that of the subsoiling, I only compared three rows of shocks, five rows in each shock, each row of shocks gathered from twenty-one rods of ground. The result was as follows:

No. 1. not subsoiled, gave.....	606 lbs. of ears.
2. 3 rows subsoiled, 2 rows not, ...	646 " "
3. subsoiled,	676 " "

The subsoiled gave at the rate of 73 bushels to the acre; that not subsoiled 65 bushels per acre; a difference sufficient to pay for subsoiling. I considered the subsoiled part as having been previously inferior for corn. I aimed to be accurate; if there was any difference in the previous condition of the soil, or in estimating the results of the experiment, it was in favor of the unsoiled portion. From the observation of the effects of subsoiling, so far as it has been practiced by myself and others, my mind has become settled in the conviction, that subsoil plowing upon most, if not all of the land of this county, will prove very beneficial for corn and all crops usually raised by us.

I may be mistaken, but I fully believe, that subsoiling thoroughly performed, will prove more profitable to farmers for the outlay, than any other one improvement. I have never anticipated much improvement from it, until after one crop of clover. Then, I expect a complete preparation of the soil for wheat. It is unnecessary for me to describe, with what ease a clover root will penetrate the loosened subsoil, and even go further in search of food, gaining strength with every additional inch of depth, bringing the salts of the lower strata to the surface for its use, and affording by its decay, when turned under by the plow, rich stores of food for wheat. In conclusion, I would recommend subsoiling in the spring and fall, or when the ground is wet sufficiently deep, at any time in the summer. It does well for a summer fallow, if broken up early. It is beneficial to any crop. The expense is about the same as for breaking up sod ground. And finally, if this short and imperfect essay shall persuade one farmer of this county to practice deep tillage with subsoiling, the object of the writer will be attained.—*Transactions N. Y. State Ag. Society, for 1847.*

A Word about the State Fair at Buffalo.

THERE will be a goodly number of gentlemen attend this grand Rural Jubilee from the South, and other portions of this broad Republic; and the writer is particularly anxious that the agriculture of Western New York—its domestic animals, dairies and fruits, shall be most honorably represented at the approaching Exhibition. Before the Erie Canal was completed, his humble tent was pitched in that portion of his native State. Western New York is the garden of this Union; and the tillers of her fertile soil are not surpassed in this wide world, by any similar class, for intelligence, public spirit, virtue, and all the traits of character which distinguish a highly civilized, Christian people.

Friends! your agricultural reputation is at stake. The fair at Saratoga last Autumn was in some degree a failure. What the most distinguished and useful Agricultural Society in America lost in character at its last public exhibition, *you are expected to regain with interest.* We have all confidence in the President, Secretary, and other officers of the Society. They are all gentlemen of large experience in such matters, and will provide ample and satisfactory accommodations for every thing to be shown at the Fair. A long residence in the city of Buffalo warrants us in assuring the thousands of readers of the Farmer that they will be justly treated during their attendance at this Festival, by the Hotel keepers and others. The Queen City of the Lakes knows her duty in the premises; and it will be discharged to the letter. Expecting that the Buffaloes will all be turned out to grass, to give strangers a resting place under shelter, we speak for a little room to lie on the floor of some old friend.

We like the idea of Messrs L. F. ALLEN and J. M. SHERWOOD, in offering to sell at the Fair a portion of their celebrated pure blood cattle and sheep. Several gentlemen at the South have spoken to us to purchase stock for them; but we say to all, go, see and buy for yourselves. A lot of Ayrshire cattle, directly from the North of England, which landed at Charleston, and were going to Tennessee, passed through this city a few days since. We hear a good deal of inquiry for Devons. Our friend GARBUTT must be on hand.

Augusta, Ga., July, 1848.

EARLY WALCHEREN CAULIFLOWER.—This delicious new Cauliflower has been furnished abundantly in market, since the 12th or 14th of July, by Mr. DONNELAN of Greece. Mr. D. says that in earliness and delicacy of flavor it surpasses all others. To our taste it is certainly superior to any we have used. Every man who has a garden should cultivate it.

Pay Your Debts.

THE success of various individuals through life is dependent in a great degree upon the punctuality they exercise in regard to the payment of their debts. Talk as much as you please about the "keep out of debt" system, it is attainable only by a few. We very much doubt whether there is a person living who is entirely out of debt. Not that all owe money—that is of but partial consequence. When we see persons all money, and who can think of nothing but riches, we almost wish them the fate of the poor starving traveler in the desert, who, upon seeing a little bag lie upon the ground grasped it with eagerness, hoping it contained food, but finding it filled with gold, threw it down with mortification, exclaiming "alas, it is nothing but gold."

We are indebted to our Creator, to our parents and friends—but that to which I would more particularly call the farmer's attention in this article, is his indebtedness to the soil he tills. The soil is the farmer's great creditor, from which he is every day borrowing; and, in proportion to the punctuality with which he "pays up," will it lend him again. We know of farmers, (or those who call themselves such,) who have been continually borrowing from the soil these twelve or fifteen years, without ever thinking of even paying the interest, although it amounts only to a few loads of manure annually. At first their loans were quite large, as this great creditor seems to believe every man honest till he finds him to be a rogue. But every year he has been dealing out to him less and less, until of late it is almost impossible to prevail upon him to unlock his great safe, and help to replenish their already sinking fortunes.

This SOIL is a very singular old creditor. His books are all open for at least some six or seven months in the year, and are only closed when the snows of winter render him incapable of doing farther business. His accounts are all written in a plain, bold hand, so that any one passing through a section of country, although an entire stranger, can tell at a glance whether the farmer "pays up."

Let us take a short ride and see how his books stand with some of our neighbors. Do you see that beautiful piece of grain on your right, as it waves its heavy laden treasures to the breeze—those beautiful cattle that look so sleek and comfortable in their rich green pastures—that neat little house, the home of that well clad and intelligent family? These are neighbor A's. He is a man that never borrows a crop of grain or any thing else from the soil without returning a fair equivalent, and this curious old gentleman, seeing neighbor A's punctuality, seems determined to get him in debt, by lending him more

and more every year. But our word for it, neighbor A. will continue to pay punctually, and advance rapidly in wealth and prosperity.

Now let us go a little farther, and see the farm of—should I say *farmer* B. There is a piece of land that looks as though it had been sown to some kind of grain or other, one can hardly tell what. The heads are so few and far between that it would take all the Drum Majors in Mexico to drum enough together to form a respectable looking line, (and, by the by, we think this would be a more honorable business than assisting to kill innocent men, women and children.) His cattle look as though the crows were about to foreclose their mortgages, and secure them for their own especial use; his house would hardly do for a pig-sty, and his family—but I will stop here. Go and see them for yourselves.

Mr. B's farm and circumstances were at first as good as neighbor B's. But he has been continually borrowing from the soil, without ever thinking of even paying the interest, till it will trust him no longer. He is now about the same as "used up," for you may rely upon it that as soon as your soil refuses to trust you, your other creditors will be but few, and not very obliging.

Farmers, do not keep annually borrowing from your soil without returning a fair equivalent. Pay *all* your debts punctually, (not even forgetting your subscriptions to the Genesee Farmer,) and you will be prosperous, contented and happy.

S. P. CHAPMAN.

Clockville, N. Y., July, 1848.

PLEURO-PNEUMONIA.—Mr. Milward, a member of the Council residing at Thurgarton Priory, Nottinghamshire, enclosed for the information of the members the following statement of treatment of cattle in cases of pleuro-pneumonia, which he stated had not been known to fail in a single instance, in effecting a recovery of the animal suffering under its attacks. The statement was copied from a letter received from Mr. Clater, of East Retford, a name well known and appreciated, as connected with a popular work on the diseases and treatment of cattle.

"On the *first appearance* of the disease, bleed freely; then give $\frac{1}{2}$ lb. of Epsom salts, 4 oz. of sulphur, 1 oz. of nitre, and 2 drachms of emetic tartar, in 3 pints of gruel. Keep the animal warm and clean. Should the symptoms not appear to abate in 12 hours, give the following drink: $\frac{1}{2}$ oz. of nitre, 1 drachm of camphor, 1 drachm of emetic tartar, and 2 drachms of powdered ginger, in a pint of gruel; and repeat this drink every 8 hours until the oppression in breathing has nearly subsided. If the bowels do not act properly, repeat the first drink in 3 pints of gruel, omitting the emetic tartar. Feed sparingly on bran-mashes, grains, and gruel, with crushed linseed; but with no roots if there be any inflammation."—*Foreign paper.*

Agricultural Ramble.—Things by the Way.

HAVING taken a trip through a portion of this State and of Canada, I have thought that a brief description of things by the way might be interesting to your readers.

We left Troy by rail-road and took packet at the Borough, 12 miles distant, and found a goodly number of farmers on board—representing several districts of New York, Vermont, Illinois, &c. The appearance of the country on the borders of the canal through Saratoga and Washington, (in June,) was in most respects good, though taken together the farming cannot be set down as first rate. The crops of oats, rye and grass generally appeared well. Corn was rather backward, but there will be time enough for it to mature, should the season be favorable. We passed the farm of Judge CHEEVER, in Stillwater, which gives evidence of systematic and successful cultivation.

The passage from White Hall, down Lake Champlain was fine, and the appearance of the country showed that hardy and intelligent farmers were at work wherever opportunity offered to improve the soil. I found on board the steamer Saranac, many intelligent practical men—among others, the Governor of Vermont. There is a peculiarity about these New England men that commends them to you at once.—Their uniform intelligence and familiarity with every thing relating to the interests of the farmer and the improvement of the soil. It is this that places them ahead wherever they go. They inform themselves as to the peculiar wants of their locality, and their energy is at once put in requisition to supply all deficiencies.

At Plattsburgh I spent the afternoon, and visited J. W. BAILEY, Esq., and examined his grounds. He has just got under way a very fine nursery, and every thing around his farm, nursery grounds and buildings, betokens the man of taste and of science. Some of the finest fruit in the state is grown in this county, and the Montreal market affords a steady demand for all that is raised, and at prices equal if not better than at New York or Boston. There are many excellent farmers in this portion of the State, and attention is given to the rearing of improved stock. One of the most flourishing Agricultural Societies in the state is that of Clinton County.

From Plattsburgh I took the steamer to St. Johns, Canada. After passing Rouse's Point, the last place on the American side, the country becomes level, and is cultivated by the French Canadians much after the manner of their forefathers. Their farms are very narrow, running back from the river from one to three miles. The houses are mostly small and white-washed, and being built near the banks of the river, present the appearance almost of a village the

whole distance. The crops looked tolerably well, but gave indications of want of care and attention to the preparation and manuring of the ground.

From St. Johns to La Prairie the rail-road passes over a level country, occupied by the French Canadians, and gives sad evidence of a neglected husbandry. A few Yankees sprinkled among them would soon upturn the subsoil, scatter broadcast the manure, and the result would be flourishing crops of wheat, such as formerly grew here, but are now rarely seen.

From Montreal to Quebec, the river is lined with the white farm houses—the lands being laid out as below Rouse's Point. The appearance from the river is very imposing—and was the system of cultivation such as it should be, few portions of our country would present more fruitful fields than the banks of the St. Lawrence. In the eastern section of the lower Province there are many American and Scotch farmers, whose farms show that all that is wanting here, is industry and skill to secure the most abundant returns.

In the neighborhood of Montreal, there are many highly cultivated and productive farms, which yield to their owners a large return. I visited many of these, among others that of M. J. HAYES, and Mr. HUGH BRODIE, and found on several of them the best system adopted, both as to manuring, plowing, seeding, and rotation of crops; and the results here, as every where else from like cause, are entirely satisfactory. I intended to have visited the farm of Maj. CAMPBELL, President of the Provincial Agricultural Society, which is said to be in a very high state of cultivation, but was prevented by unfavorable weather. I saw him, however, and received an interesting account of his method of farming, and a kind invitation, should I visit Montreal again, to witness the success of his labors. To many gentlemen at Montreal I was greatly indebted for their kind attentions, and was glad indeed to find so much interest awakened on the subject of agriculture. Lord ELGIN, the Governor General, takes much interest in the improvement of agriculture.

In some parts of Canada East the grass-hoppers were making terrible ravages with the crops. The following description I cut out of a pastoral letter of the Bishop of Montreal to his Diocese:

"They are in great numbers, and so voracious that their passage through the fields is like a conflagration that sweeps every thing clean.

Descending from the sandy ridges, where they have begun by devouring the full rye, they throw themselves with a kind of fury, not only on the young grains, but also on the herbs, the potatoes, the onions, and on all kinds of vegetables. One sees eight or ten of them attack, at the same time, the same ear, which speedily falls under their teeth. The meadows that they traverse like armies in array, are so burnt or infected, that animals can no longer feed there; and when after having ruined a field, they invade the neighbouring farm which, in its turn, is about to become their pasture, the fences are so covered, that we cannot distinguish the uprights from the rails, and the eye perceives

nothing but heaps of insects, which the breath of the wrath of God has evidently driven nearer and still nearer to warn His people of the misfortune which awaits them."

In Canada West I found in general a better state of things. There are very many most excellent farmers, and they carry on their operations with great care—and the crops upon the ground bear evidence of most thorough cultivation. The crops generally appear well, and the farmers will have no occasion to complain of the coming harvest.

In Niagara and Erie counties, N. Y., the crops appeared good upon the whole; the grass, however, will be a light yield, and the wheat crop about an average one. Many fields look exceedingly well, while others bear evidence of the effects of the winter. I did not learn that the fly was doing much damage in these counties.

I visited the *Ebenezer Settlement* of Germans, about 7 miles from Buffalo. Their crops looked remarkably well. The wheat generally very fine—oats, barley, corn and potatoes, excellent. They were in the midst of their haying, and their crop was a good one—better than the average of the country around.

This settlement is somewhat upon the community plan. They have about 12,000 acres of land—have three settlements—have factories and other works—and manufacture not only for their own use but for market. They take their meals in common—houses for that purpose being prepared which accommodate ten or a dozen families. The families have their lodging houses separate. Every thing seems to progress with great regularity, and all about them appears to be particularly neat, and every thing is well done. They raise a large quantity of vegetables, and contribute largely to the supply of the Buffalo market. Great care is observed in the preservation of manure. They use poudrette in raising their vegetables, and the great and rapid growth shows the great value of night soil, which, in most parts of our country, is entirely lost.

Here I found a painter of *Fruits*, engaged in painting and engraving specimens for the Massachusetts Horticultural Society. His work is done to the life, and it seemed to me the State Agricultural Society would truly subserve the interest of the great cause they have in charge, by procuring paintings of the fruits of the State, to be deposited in their rooms for examination. Since my return I have seen some of the specimens prepared for Professor EMMONS' work on Natural History, for the State, and they are, I think, in every respect equal to those painted at the Ebenezer.

From Buffalo to Rochester the crops appear tolerably well. I visited the farm of Judge BUEL, President of the Monroe County Agricultural Society, near Rochester. Here I found 65 acres of corn, and much larger than any I

had yet seen, and should the season be an ordinary one, I presume the yield will exceed 5,000 bushels. The fields were entirely freed from weeds, and every thing had been done to give the corn a fair chance, and it was evidently making the best use of the opportunity afforded it. Judge B.'s wheat looked well, and was fast ripening for the harvest. I observed here growing, some wheat, the samples of which had been furnished by the State Society. It would greatly subserve the agricultural interest if more farmers could be enlisted to test the seeds which are annually distributed from the Agricultural Rooms, and report the result to the Society. The Judge's farm is in fine order; his buildings are extensive, and every thing has a place, and is in its place; and one would suppose from looking over his fine fields, and witnessing his splendid crops, that here contentment might be found, (as I doubt not it is,) in the home of the enterprising, systematic and successful American Farmer.

I observed here, as I had in other parts of the country the potato crop. It is generally very promising, and as yet there are no indications of disease. Early planting I found resorted to in every section through which I passed, the testimony every where being, that the early varieties have almost entirely escaped, even where the disease was most prevalent.

On board of one of the packets during my tour, a very interesting discussion arose as to the best time for cutting Timothy. A New York and a Vermont farmer took opposite sides of the question, and discussed it with much zeal. The New York farmer insisted, that the best time to cut, was while the grass was in the blow, and before the seed ripened, and that the hay would be better and the land much less exhausted, and that this was the only method by which a second crop could be secured. The Vermont farmer insisted that it was necessary for the seed to ripen fully before the grass would be prepared to make the most perfect hay, and that this was the only method to prevent the necessity of plowing up frequently the meadows. Various incidental arguments were advanced. The conclusion arrived at by the auditors was, that upon the whole, the early cutting was, as a general rule, the best—and such I found on inquiry, to be the opinion of the farmers in most cases throughout my entire tour.

From the cursory view taken in my tour, I think the prospects for a good crop of the various grains cultivated is favorable; and the farmers of New York may reasonably expect that a large surplus will be on hand for sale and export. I might allude to many cases of improved and improving husbandry which passed under my view, but have already occupied more space than I intended in your columns.

A TRAVELER.

Long Island Farming, Soil, &c.

MESSRS. EDITORS:—Perhaps the following imperfect sketch of a short ramble on Long Island may not be wholly without interest to some of your readers in Western New York. I had got the impression from some source, but I cannot tell where, that when I came to Long Island I should find the country covered with luxuriant green crops and waving fields of grain; but as yet I have been disappointed in that expectation. I also supposed that the soil and climate here were adapted to the cultivation of fruit but in this respect my anticipations have not been fully realized.

Coming east from Brooklyn, not long since, I took the railway and came to Riverhead—a distance of seventy-four miles. Leaving Brooklyn we passed occasional pieces of rye, but few pieces of wheat: corn and potatoes appeared well, especially the former, which I think exceeds the corn in Monroe county. But few of the meadows would be considered fair, and the pastures would have been almost bare if they had not been covered with the daisy; this daisy was also thick in the meadows. Coming on further east the country assumed a poorer and still poorer appearance as we proceeded—there were fewer inhabitants, fewer cultivated fields, and less cleared land, until there was scarcely a fence to be seen, and the railway stations in several instances consisted of a solitary house, with roads leading from it through the woods, to the north and south sides of the Island. But the timber even bears witness against the uncleared land, for it consists of scrubs of oaks and pines, ranging from ten to twenty feet in height.

I had an excellent opportunity of observing the soil where the excavations had been made in grading the road, and so far as I could discover, it appeared to be nothing but a deposit of sand and gravel, of a yellowish white color, and containing very little vegetable earth. I should in justice state, however, that the railroad is said to pass through the poorest part of the Island—the most fertile portions being confined to the northern and southern coasts.

Leaving Riverhead, I crossed what might be called a pine desert or plain. It is a sandy plain five or six miles in width, and covered with scrags of pines, from two to eight feet in height. As we came within two or three miles of the coast the country appeared much better, and I found it quite thickly settled near the coast.

The principal crops cultivated at this place, on the south side of the Island, are rye, corn, oats, buckwheat and potatoes. Sometimes wheat is sown, but it is not always sure. There are no apples, pears, peaches, plums or cherries cultivated here; but I understand that fruit does well on the north side, and also farther east of

this, at Easthampton. Wheat is also cultivated successfully in some parts of the Island, I believe.

The most valuable manures, aside from the product of the barn yard, are ashes, fish and lime. Ashes have a very good effect, and fish are used extensively in manuring rye and corn. Leached ashes cost here fourteen cents a bushel. The fish generally put on the land are burkers or shad, and they will average perhaps a pound a piece. From ten to fifteen hundred of these are put on an acre. They are sometimes put on a day or two before plowing, and when the process of decay has commenced, they are plowed under. For corn and potatoes they are generally strewn upon the top of the ground, and covered with the hoe at the time of hoeing. These fish, at a time of fishing, can be bought for ten shillings per load, and a load contains about two thousand fish. Plaster is not used at all.

The people here are now engaged in harvesting, and the crops appear well, but their surplus produce is comparatively small to that of the farmers in Monroe county. W. G.—

Quogue, L. I., N. Y., July, 1848.

The Hessian Fly.

JOHN N. WHEELER, an extensive farmer of Flowerfield, St. Josephs Co., Mich., sends the following description of the formation of the wheat insect to the Genesee Farmer:—

“The fly lays an egg, generally on the first leaf of wheat that appears after sowing, but seldom as late as the appearance of the third leaf. The egg is deposited near the top of the leaf; it is of the color and shape of the red-top grass seed, and about half the size. It slides down the creases of the leaves to the root, or near it, leaving a glazing in its descent by which its presence in the stalk below can be known. It then turns into a red insect, looking like a small spider; from this to a white egg, which turns to a flax seed colour, which produces the worm.”

The writer of the above may be mistaken in the details of the different transformations, but he gave me, verbally, a very philosophical reason why late sown wheat was less liable to be injured by the fly than the early sown; to wit: The fly lays its egg only in warm favorable weather; that wheat which has attained its third leaf during a previous cool state of weather is out of danger. Farmers, have your ground in first rate order, with a sprinkling of warm, quickening manure, and sow late, if you wish to avoid the fly. The same mode of culture will give a strong root to resist the action of the frost.

AGRICOLA.

If you wish to avoid being dunned, follow this prescription—*Never run in debt.*

Botany.—Construction of Flowers.

Parts of a Flower—Nature of Stamens and Pistils, their situation—Kinds of Flowers—Why some are barren, and others fertile—Strawberry, and other plants curious.

Besides the *floral envelopes*, or the calyx and corol which are the attractive portions of a flower, there are two others, without which no fruit will be produced. These are *stamens* and *pistils*. Of these the pistils have a direct connection with the seed or fruit, but must be fertilized by the pollen from the stamens, or no fruit will be produced. Hence it is that the stamens and pistils are called the *essential* organs of flowers, *essential* to the production of fruit, the great and immediate object of vegetation.

The distinctive nature of these two organs was not known or considered of any scientific importance till the last century. On it LINNEUS founded his system of botanic classification. It required no small effort, however, to convince learned men of this difference, and to reduce the knowledge to practical use. Like the gravitation of NEWTON, this had to fight its way to the minds and convictions of men, till both were firmly established, and became fundamental in physical and vegetable philosophy. The growers of strawberries have come to recognize this distinction, and are obliged to act on its reality to insure success.

In most flowers the *stamens* and *pistils* are associated together, and this is the common method of securing the fertilization of the pistils by the pollen. Such flowers are called *perfect* flowers, because each flower has in itself the elements of reproduction. Such are *fertile* flowers.

Some flowers have only stamens and are called *staminate*, (and not *perfect*) flowers: they are necessarily *barren* flowers—cannot bear fruit.

Some other flowers bear only pistils, and hence are called *pistillate* flowers. These will prove to be unproductive of fruit, unless they obtain pollen from some neighboring stamens.

The strawberry, as cultivated, contains these three kinds of flowers, the *perfect*, the *staminate*, and the *pistillate*. It is probable that examination would prove there are very few of the last, that is, of those who are *merely pistillate*. But on some varieties the *merely staminate* are abundant, and thus disappoint the expectations of the cultivator. Occasionally a whole bed of strawberry blossoms yield no fruit. Knowledge of these differences becomes important, and thus art employs this knowledge for practical benefit.

Some plants have their stamens in one flower, and their pistils in another, on the same plant, or a part of their flowers are only staminate, and another part only pistillate. The common Indian corn has the stamens in the tassels, while the pistils are the silk of the ear. On the cucumber, squash, water-melon, pumpkin and gourd, we

find the same arrangement; and if all the insects that now infest them were destroyed, and thus prevented from bearing the pollen to the pistils, no fruit would be found.

In other cases, we find the stamens in flowers on one plant, and the pistils in flowers on another. The willow, poplar, hemp, and many others, are instances. The yellow or house willow is found cultivated only with the pistillate flowers. The Lombardy poplar is found only with the staminate flowers in our country, as the pistillate plant never has been imported from Italy. The cultivated hop bears pistillate flowers only, and the staminate is rarely seen. Of the *hemp*, inestimable for cordage, the plant bearing the stamens dies soon as the pollen has been imparted to the pistils, and only the pistillate plant is used for its seed and strong fibres. On the other hand, flax has perfect flowers; and stamens and pistils, seed and flax, are the product of one plant.

There is no wonderful peculiarity then in the flowers of the strawberry. Some species of our beautiful *meadow rue* have perfect flowers on one plant, all staminate on another, and all pistillate on a third. So various and beautiful are the ways in which the great ends of vegetation are accomplished. C. D.

Rochester, July, 1848.

WOOL MATTRESSES.—Mr. Ancrum, of Ashley, Pike county, Mo., has a communication published in the Report of Mr. Burke, Commissioner of Patents, on the subject of wool mattresses. It is new to us, never having seen one.

Mr. Ancrum says that they make the "healthiest, the warmest, the most luxurious, the cheapest and most economical bed that can be made," and that it is superior to any other material for a bed for men, women, and children of all ages and sexes, and that man recovers much sooner from fatigue on such a bed than on any other.

This is a high recommendation, and as wool is rather a drug in the market, hadn't it better be made up into *feather beds*?—*Maine Farmer.*

RATIONALE OF CLIMATE.—However great may be the fluctuations of temperature in the same months and seasons—however sultry the summer or cold the winter, in any particular year, its mean temperature varies but little from the climatic or average actual mean of the locality, when once correctly ascertained; and, even the greatest variation between one year, and any other the most opposite in character, and extending over a long period of time, when accurately expressed in figures, appears so trivial, that except to the meteorologist it fails to convey any adequate idea of the excess or deficiency of heat, or of the absolute difference in temperature between the periods in question.—*Jameson's Jour.*

Manufacture of Navy Butter for Foreign Stations.

The manufacture of butter for the navy of the United States on foreign stations, requiring 60,000 lbs. annually, having been brought to the notice of the Executive Committee of the New York State Agricultural Society, they deem it of sufficient importance to our dairymen to investigate the subject. In the proposals issued by the bureau of provisions and clothing of the navy department, in describing the quality of butter to be delivered, it is said, "the butter must be of the description, quality, and manufacture of the present navy butter, made in the mode of *Irish rose butter*." The milk must be thoroughly worked out, and the butter cleansed of all impurities, and extraneous substances, and be put up in seasoned, white-oak firkins, containing about 80 lbs. each, well and strongly hooped, so as to be perfectly air and pickle tight. Persons offering proposals are required to produce satisfactory evidence that their butter will stand the test of tropical climates, and preserve their sweet and wholesome qualities for years, &c."

On inquiry, it was ascertained that the butter, which has been furnished under this contract, has usually been what is called Orange county butter; and the gentleman who has special charge of this department is of opinion that *no butter made out of Orange county* will resist the action of tropical climates, and preserve its qualities for years.—From the statement in the proposals that the butter to be made "in the mode of *Irish rose butter*," it was deemed important to ascertain how *Irish rose butter* was made (if there was any such butter,) of which the committee were entirely uninformed. The secretary opened a correspondence with gentlemen in Liverpool and Ireland in relation to this subject, and a portion of the result of the correspondence is hereunto annexed.

The question, *whether all the butter to be used on distant foreign voyages, and on foreign stations, by the military and commercial marine, must be made in the county of Orange*, becomes more and more important, as our commerce annually extends. It is doubtless true that the soil and climate have an influence upon the quality of the butter. The grasses in particular localities are better adapted to the production of a superior article than in others; but it has been supposed that the region peculiarly adapted to the production of good butter in this state, instead of being confined to a *single county*, extends to quite a number of counties; and it is not believed that there is any such peculiarity connected with Orange county as to give it pre-eminence over other counties in the Catskill Mountain range, and some other localities in the state.

It has been the object of the society to ascertain what localities are best adapted to the dairy, and for that purpose liberal premiums have been

offered, requiring a minute and careful detail of all the circumstances connected with the soil, climate, water, grasses, &c., so that it might be ascertained what locality is best suited to the dairy; and it is hoped that such results will be arrived at as will reasonably demonstrate all that is desired.

In the geological survey of this state, particular attention was given to this subject, by one of the geologists, Professor Mather, of the first geological district, which included the counties of Washington, Saratoga, Schenectady, Schoharie, and Delaware, and all east and south of this line in the state. In speaking of the agricultural character of the Catskill division, he says:

"This country is admirably adapted for grazing, both for cattle and sheep, and the fine sweet grass and cold springs, offer as great facilities for making excellent butter as the world affords. A *large proportion* of the butter sold under the name of *Goshen butter*, which is celebrated for its superior qualities, is made in the mountainous region of *Delaware, Sullivan, Ulster, and Greene counties*."

There are several other counties in this state, where butter of the very best quality is made, which has stood the test of tropical climates, and some of the butter from these counties commands as high prices as any in our markets. From their geological character we should expect this. There can be no doubt that the butter from a great number of localities in the state will prove equally serviceable as from any of the counties of the Catskill Mountain range, if the same attention is given to its manufacture as is given by the best Orange Co. dairymen, and reference is made to the extracts from letters from several butter dealers in New York, which clearly establish this.

From the county of Chenango, a contract was made, in 1847, by way of experiment merely, for ten thousand pounds for the use of the navy. The butter under this contract has been delivered and inspected, and the gentleman who inspects butter for the navy, on examining and inspecting this lot, speaks of it "as excellent butter for *Northern New York butter*, but also *speaks of the inability of any butter* to stand the test of foreign climates and time, *that was not made in Orange county*." This is the opinion fully entertained, we are assured, by all the gentlemen of the navy department who have charge of this bureau. It is of vital importance that measures be taken to correct this error, if error it be, as the opinion is honestly entertained.

By the contract which is made for the manufacture and delivery of the butter for the navy, it is provided that it "shall be made according to the most approved *Irish method*; the milk to be thoroughly worked out and the butter cleansed of all impurities, &c." Not a word in the con-

tract about *Irish rose butter* which is prominent in the proposals for contracts. Why was this so drawn. Was it to prevent those who never heard of *Irish rose butter* who might otherwise have been inclined to offer proposals, not to do so, being ignorant of how *Irish rose butter* was made? It is presumed it must have been inserted through inadvertence on the part of the persons preparing the notices. But from whatever reason it was inserted, *its effect has been*, beyond all question, to prevent persons from offering proposals, who otherwise might have done so. Inquiries have been made at the rooms of the society for information as to *Irish rose butter*, but no person in this section of the state could give any information on the subject, and from the correspondence from Ireland, it seems equally difficult to give any account of it in Ireland itself. A letter from Cork, where the butter for the British navy is purchased and inspected in open market, says: "The term 'rose butter' we know not the derivation of." "There is only *one description* shipped here, and all is brought in for inspection to a public market in this city."

A correspondence was opened with Brown, Shipley & Co., of Liverpool, an extensive mercantile house engaged in the American trade, and letters have been received from them on the subject of *Irish rose butter*, and of the method of manufacturing butter for the British navy. This is manufactured chiefly in the counties of Cork, Limerick, and Kerry, in Ireland.

Extract of a letter received by the firm above referred to, from Clonmel, Ireland, dated July, 1847, answering their inquiry about Irish butter: "We are this morning in receipt of your favor of 29th ult., and in reply, we give you all the information we can, as to how butter is manufactured in this neighborhood. Our best makers have large, airy, cool dairies, and churn twice or three times a week, which depends on the heat of the weather. Caution must be used not to allow the cream to be too long in the tubs and pans, or until it gets sour, as the butter will then be inferior and what is termed *cheesy*. The buttermilk must be well washed out of the butter, and when salted, be packed *firm* into the firkins. These, with great cleanliness, are the principal things to be looked after in the manufacture, otherwise your butter will not keep its quality. The quantity of fine salt is 3 lbs. to the firkin, containing about 65 lbs. The butter in this district is made expressly for the London and north of England markets; in the former, at certain periods of the year, it takes precedence of the Dutch. We never heard of *rose butter*, but we know one of the Waterford houses brands the best quality he ships with a rose. The navy is supplied with butter exclusively from Cork, where a larger quantity of salt is used in the manufacture, and where it is made up expressly for foreign exportation."—*Transactions, for 1847.*

Hints to Writers and Readers.—Under Draining.

MESSRS. EDITORS:—I am satisfied that the generality of farmers are by no means as ignorant of their occupation and interest as they are often represented to be; and in my opinion they have not that low, degraded opinion of their understanding or calling that is frequently attached to them. That farmers, like every thing else which belongs to earth, are imperfect, and need improvement, is admitted; and that there have been some very important improvements in the management of the farm, introduced within a few years past, is also admitted—such as alternation of crops, sowing clover seed, under draining, &c. But it strikes me that great injury has been done to the farming interest by the many impositions that have been practised upon the credulous farmers, by speculators, in selling articles and animals at extravagant prices, many of which have proved worse than useless. Now telling us that we want instruction is not the thing; we want the *instruction*, or that which will instruct us. And we desire a certain kind of instruction, too. If a man informs us that, by a certain process, we can raise five bushels of wheat more on an acre, we wish to know whether that process will cost more than five dollars per acre. If it does, we call it no improvement, &c.

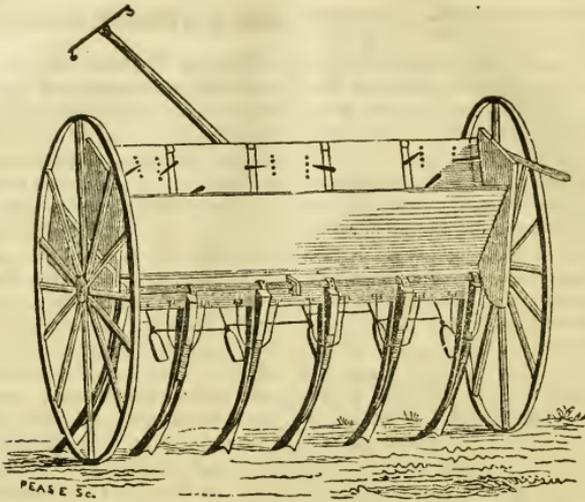
Now, as I think I know a few things as well as others, and as I am as willing that others should learn as myself, I will send you a little of my practice on UNDER DRAINING.

I find a great saving of labor in draining by using the plow in the following manner: Strike out a land about twelve feet wide, turn the furrow outward, and plow to the centre, where will be a broad, open furrow. Then begin again, just within the outside furrows, and plow it over again. When you get to your open furrow this time, you will plow it six or eight inches deeper. Then go over it again, beginning a little nearer the centre, and so on. Three plowings will settle it from fourteen to twenty inches. If necessary run your plow a few times along the center with your traces lengthened, and your ring in the upper notch of the clevis, and your drain is almost done. A man then, having a round pointed shovel with a long handle, and a square pointed pick, will finish off from ten to twenty rods in a day. Where the current of water is small, I stoned up in the following manner: fling in from the wagon small cobble stones, loosely in the bottom, and a flat one on them, and finish off with fine stones, say eight or ten inches in the whole, and cover with straw and dirt.

A. CALVERT.

Reading Center, N. Y., July, 1843.

In dry weather, water vegetables and flowers daily, just before sunset.



SMITH'S PATENT LEVER DRILL OR GRAIN PLANTER.

THE above figure represents a Lever Grain Drill invented by Mr. H. W. SMITH, of Pennsylvania. It was patented in November, 1846. We extract the following description from a communication written by the proprietor and manufacturer of the machine, and published in the volume of Transactions for 1847:—

This Drill has some new mechanical principles, or combinations of principles not before in use. The wheels are of new and simple construction. The axles of cast iron, extending half the width of the machine, with a flange some six inches in diameter on the end, which, with a cast iron plate of the same dimensions screwed on the wheels, retains the spokes and forms the hub. These wheels and axles may be adapted to carriages, wagons, &c. On the axles are cast also the cylinders, three on each, in which indentations or holes are drilled to carry the grain through the valves out of the hopper, a box extending the width of the machine into tubes through which it is deposited in the furrow. It has a lever by which all the teeth can be lifted out of the ground for the purpose of turning in the field, or passing over a rock, or packing to remove to and from the field by a single operation, and two others to close the valves and shut off the feed at the same time.

It has a graduated index, by which it can be set to pass any given quantity of seed per acre, or altered from one quantity to another in a few seconds. *This cannot be done by any other machine, so as to insure uniformity and certainty, without some mathematical calculation, and much time in testing its accuracy.* The teeth are long to prevent clogging, and can be easily cleared by the operator in case they should gather grass, &c. They are bent something like cultivator teeth, and are made to cut a furrow three inches wide at the bottom, where the seed is deposited at any required depth through the tubes which are fastened to the back of the teeth, six in number, and the furrows are cut nine inches from center to center; the depth can be adjusted by a regulator, in which the end of the pole is inserted. After the seed is deposited, the earth falls back and covers it.

The operation of this machine, after the seed is planted, leaves a slight furrow, the sides of which are abraded by the action of every shower, and a portion of the soil is periodically carried on and around the roots of the grain, covering them a little more, and thus by a course of natural cultivation the surface is kept new, no incrustation takes place to retard the growth of the young and tender plant,

and atmosphere and gasses readily permeate the soil, and the continued accumulation of earth on the roots, prevents destruction, or heaving out by frost.

With this machine, a boy and a pair of horses, ten acres per day are readily planted, and five pecks of seed are equivalent to two bushels per acre sown broadcast.

The Drill is manufactured by Mr. C. MASTEN of Syracuse, N. Y. See advertisement in this number of the Farmer.

WASH FOR BUILDINGS.—The following recipe was sent by a gentleman of New Orleans to his friend in Philadelphia, who writes that the wash was satisfactorily tested upon the roof of the Phoenix Foundry, in that neighborhood. It is not only a protection against fire, but renders brick work impervious to water. The basis is lime, which must first be slacked with hot water in a tub, to keep in the steam. It should then be passed, while in a semi-fluid state, through a fine sieve. Take six quarts of the fine lime, and one quart of clean rock salt for each gallon of water—the salt to be dissolved by boiling, and the impurities to be skimmed off. To five gallons of this mixture, (salt and lime,) add one pound of alum, half a pound of copperas, three-fourths of a pound of potash, (the last to be added gradually,) four quarts of fine sand, or hard wood ashes. Add coloring matter to suit the fancy.

It should be applied with a brush. It looks as well as paint, and is as lasting as slate. It stops small leaks, prevents moss from growing, and renders the work incombustible.—N. Y. Farmer

GLASS MILK PANS are coming into general use in England, and are advertised at 2s. each, when 12 inches in diameter, and 6s. when 26 inches in diameter.

[From the Report of the Commissioner of Patents.]

Tabular Estimate of the Crops for 1847.

STATE OR TERRITORY.	Population in 1840.	Percent estimated popl.	Wheat.	Barley.	Oats.	Rye.	Buckwheat.	Indian Corn.
			Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Maine,	501,973	600,000	890,000	236,650	1,720,000	195,000	76,000	2,290,000
New Hampshire, ..	234,574	300,000	610,000	129,150	2,100,000	460,000	169,000	2,230,000
Massachusetts, ..	737,699	850,000	256,000	170,100	2,000,000	620,000	133,000	3,410,000
Rhode Island,	108,330	130,000	4,500	54,000	210,000	50,000	4,500	800,000
Connecticut,	309,978	330,000	125,000	28,000	1,810,000	1,200,000	480,000	3,180,000
Vermont,	291,943	302,000	664,000	55,000	2,905,000	2,905,000	330,000	2,100,000
New York,	2,428,921	2,780,000	14,500,000	3,931,000	26,200,000	3,650,000	3,660,000	16,000,000
New Jersey,	373,306	416,000	1,100,000	10,000	5,223,000	3,050,000	980,000	8,000,000
Pennsylvania,	4,724,033	2,125,000	14,150,000	150,000	13,835,000	12,000,000	3,600,000	20,200,000
Delaware,	78,085	80,000	410,000	4,400	650,000	55,000	14,000	3,620,000
Maryland,	470,019	405,000	4,960,000	2,900	1,860,000	975,000	115,000	8,300,000
Virginia,	1,239,797	1,270,000	12,000,000	90,000	10,000,000	1,500,000	260,000	36,500,000
North Carolina, ..	754,419	765,000	2,350,000	4,900	3,507,000	235,000	18,000	25,000,000
South Carolina, ..	594,398	605,000	1,300,000	4,500	1,000,000	54,000	---	10,600,000
Georgia,	691,392	800,000	1,350,000	12,300	1,140,000	70,000	---	25,000,000
Alabama,	590,756	690,000	1,200,000	7,500	1,831,000	75,000	---	26,000,000
Mississippi,	375,651	640,000	500,000	2,000	1,378,000	23,000	---	16,000,000
Louisiana,	352,411	470,000	---	---	---	2,200	---	9,000,000
Tennessee,	329,210	950,000	8,750,000	6,500	9,918,000	390,000	23,000	74,000,000
Kentucky,	779,828	855,000	6,000,000	18,000	14,100,000	2,650,000	16,000	62,000,000
Ohio,	1,519,467	1,850,000	46,800,000	240,000	26,500,000	1,000,000	1,200,000	66,000,000
Indiana,	685,866	960,000	7,500,000	39,000	15,290,000	350,000	100,000	38,000,000
Illinois,	476,183	735,000	4,900,000	116,000	4,200,000	155,000	120,000	33,000,000
Missouri,	483,112	600,000	1,750,000	13,000	6,020,000	86,000	25,000	25,000,000
Arkansas,	77,574	152,400	200,000	1,000	415,000	10,000	---	7,000,000
Michigan,	212,267	370,000	3,000,000	210,000	5,500,000	90,000	290,000	6,500,000
Florida,	54,477	75,000	---	---	10,000	---	---	1,000,000
Wisconsin Ter., ..	30,945	215,000	1,200,000	30,000	1,500,000	8,000	30,000	1,000,000
Iowa Territory, ..	43,112	120,000	1,000,000	350,000	1,000,000	12,000	20,000	2,900,000
Texas,	---	140,000	1,110,000	---	---	---	---	1,500,000
District Columbia, ..	43,712	46,000	16,000	---	15,000	7,500	---	45,000
Oregon,	---	20,000	50,000	---	---	---	---	525,000
	17,069,452	20,746,000	114,245,050	5,649,950	167,867,000	29,223,000	11,673,500	539,350,000

STATE OR TERRITORY.	Potatoes.	Hay.	Hemp.	Tobacco.	Cotton.	Rice.	Cocoons.	Sugar.
	Bushels.	Tons.	Tons.	Pounds.	Pounds.	Pounds.	Pounds	Pounds.
Maine,	7,800,000	1,113,000	---	---	---	---	555	500,000
New Hampshire, ..	4,655,000	606,000	---	---	---	---	830	2,225,000
Massachusetts, ..	4,303,000	682,000	---	135,000	---	---	40,000	530,000
Rhode Island,	730,000	71,000	---	---	---	---	860	---
Connecticut,	2,832,000	550,000	---	806,000	---	---	290,000	45,000
Vermont,	7,085,000	1,250,000	---	---	---	---	8,000	10,500,000
New York,	24,000,000	3,800,000	---	30,000	---	---	5,000	12,000,000
New Jersey,	1,850,000	434,000	---	---	---	---	4,500	---
Pennsylvania,	7,600,000	1,728,000	---	600,000	---	---	35,000	2,000,000
Delaware,	160,000	20,000	---	---	---	---	3,600	---
Maryland,	900,000	125,000	---	25,000,000	---	---	7,900	---
Virginia,	2,950,000	400,000	---	50,000,000	2,500,000	3,000	6,350	1,750,000
North Carolina, ..	2,600,000	130,000	---	14,000,000	42,000,000	3,500,000	6,200	15,000
South Carolina, ..	3,500,000	30,000	---	35,000	100,000,000	78,000,000	5,800	35,000
Georgia,	1,840,000	24,000	---	205,000	10,000,000	15,500,000	6,000	370,000
Alabama,	2,150,000	18,000	---	350,000	160,000,000	300,000	5,880	15,000
Mississippi,	2,050,000	800	---	200,000	250,000,000	1,000,000	250	---
Louisiana,	1,300,000	27,000	---	135,000	195,000,000	4,000,000	1,200	275,000,000
Tennessee,	2,700,000	45,000	1,000	35,000,000	35,000,000	10,000	20,000	530,000
Kentucky,	1,810,000	130,000	15,000	65,000,000	2,000,000	20,000	4,400	2,000,000
Ohio,	4,644,000	1,400,000	600	9,000,000	---	---	35,000	5,000,000
Indiana,	2,350,000	385,000	550	3,880,000	---	---	800	6,400,000
Illinois,	2,100,000	365,000	600	2,288,000	---	7,500	3,200	615,000
Missouri,	1,050,000	80,000	10,000	14,000,000	---	---	200	500,000
Arkansas,	520,000	1,100	---	200,000	20,000,000	---	260	5,000
Michigan,	4,890,000	260,000	---	---	---	---	1,500	3,260,000
Florida,	350,000	1,200	---	300,000	15,000,000	700,000	500	300,000
Wisconsin Ter., ..	1,080,000	96,000	---	---	---	---	40	350,000
Iowa Territory, ..	850,000	40,000	---	---	---	---	---	175,000
Texas,	200,800	---	---	---	10,000,000	---	---	20,000
District Columbia, ..	20,000	1,800	---	---	---	---	600	---
Oregon,	---	---	---	---	---	---	---	---
	100,965,000	13,819,900	27,750	220,164,000	1,041,500,000	103,040,500	404,600	324,940,500

Progress of Agricultural Improvement.

AG. JOURNALS, SOCIETIES, EXHIBITIONS, &c.

THE progress of agricultural knowledge and improvement must not be left without a remark or two, as this is one of those constant elements, which exercise an important influence upon the aspect of our agricultural industry.

This knowledge is diffused in no small degree by the Agricultural Journals, some of which are conducted with distinguished ability, and embody not only selections from foreign works, but also original essays and suggestions of great value. It is with pleasure that we own our indebtedness to many of them for the aid which we have received not only in common with the public in general, but especially by the correspondence and contributions of their editors. The operation of our labors also, in this great field, we believe, notwithstanding the fears of some, has been favorable to the extension of this species of literature. We judge so from the evidence furnished in our correspondence. The spread of knowledge, useful knowledge, more and more widely claims and ever receives our advocacy. It would be a solecism indeed, were we to act on a different principle, as from this office there is continually going forth, new modifications and combinations of matter, and fruits of genius, to add to the stock of the world's engineering of improvement.

Several new journals devoted to the interests of agriculture have been commenced since the list was prepared, which is found in the report of 1845. Another pleasing feature in the progress of this literature, is the increasing disposition manifested by the publishers and editors of the *political and literary journals* to give a column or more to agriculture and its kindred sciences. Many are the newspapers which have adopted this plan, and very generally some of the best suggestions which make their appearance in the agricultural journals, thus find their way to multitudes at remote distances, which they could otherwise never reach. The titles of numerous public journals now have associated with them the name "Farmers," showing the hold which their claims are gaining on the press of our country. We hail it as an auspicious sign, for with these yeomanry of our country, the stalwart sons of the soil, are identified our best hopes of the ultimate progress of our common well-beloved Union.

The press is likewise continually sending forth many volumes, as well original as reprints of foreign works, which are finding their way silently among the agriculturists of our country, and enlightening their minds as to the great principles of the science, and furnishing various knowledge of a practical kind. These aid to train our husbandmen to think, to reason—and

although there is still too much prejudice and ignorance, yet we cannot but believe there is a continually advancing progress in the operation of these elements of industrial science on the great mass of our agricultural population. Experiments assume the shape of more reliable attestations to the truth or error of theories, and hypothesis gradually take the form of well-supported systems. The freedom we here claim and exercise, of discussing every thing which presents its claims to be received as favorable to the public welfare, is most admirably suited to bring into exercise the dormant intellects and arouse the otherwise awakened energies of our fellow-countrymen on a topic so closely blended as is agriculture, with their own and their neighbors' weal.

As another method of improvement, we cannot pass over the numerous, and as we are happy to add, *increasingly numerous agricultural societies and farmers' clubs* in our country. Many of the states have flourishing state societies, and even where these do not exist, we find county or district societies. As we have already intimated, these associations are multiplying. Every year adds to their number and efficiency. They exercise a happy influence, and promote agricultural improvements in more ways than one. The fairs or exhibitions which usually form one part of their instrumentality, hold out inducements to the competitors to aim at higher excellence. The visit of the committees to the farms entered for premium, naturally calls forth effort to arrange every thing in the best order, to remove unsightly evidences of carelessness and sloth, and to turn every means of cultivation to the best advantage. The spirit of order, neatness, industry, and thrift is inspired, and a new state of things, even beyond their own anticipations, testifies to the presence of an influence perhaps before unfelt. Nor is this all: the subject of it reaps a further and rich reward in the additional value of his products in the market, and thus a real state of prosperity is induced which might possibly not have otherwise existed.

The same effect in a measure attends on all of the various methods by which the husbandman's aim is directed to higher excellence; whether in the exhibition of animals and their products, his skill in driving the plow through the tough soil, or the display he is enabled to make of the various fruits of the earth, which he has brought to win for him the applause of his fellow-citizens. His and their modes of culture, of stock-breeding, of home husbandry, are compared; new thoughts are struck out by the collision of mind with mind; and he must be a casual observer indeed, an anomaly among thousands, if he does not bear back to his own farm or plantation some new knowledge, some suggestions, that may aid his judgment and better his practice. When men thus meet in masses,

and often, as is the case in these agricultural fairs, from widely extended districts, and even from the different extremities of our country; when one great subject is the reigning topic of discourse, and all the arrangements are devoted to promote its discussion, it is impossible that even those of slower mood should not feel their blood quickened, an interest excited, enthusiasm kindled, and a glow of generous sympathy be felt for each other and their kindred pursuits. Those who have worn the badges of their different sects or parties, for a time lay them aside and mingle together as the brotherhood of the soil; and while they learn to respect and esteem each other as sharing in the same great pursuits of life, they smooth down the asperities of conflicting opinions, and the hand-grasp they have given or taken when they beheld or learned to recognize each other in another guise than before, will linger in memory when the scene and apparent pageantry as it may be regarded by some, has passed away. The influence of this to bind together those from different parts of our Union should not be despised, but cherished as a hallowed one, which may contribute somewhat to allay the troubled waters, and breathe its peaceful spirit, calm, like the pursuits from which it springs, through all the elements of strife, till the voice of its utterance is heard and obeyed.

As a part of this apparatus of means for agricultural improvement, the conventions which are held in the capitals of some of the States during the session of the legislatures, deserves a distinct notice. It is a gratifying sight to see our legislators of the state sovereignties thus meeting for discussion and mutual improvement in this earliest profession of mankind, and we rejoice to perceive that the practice is spreading. Will the time be long before such a convention will hold its meetings during the period of the session of every state legislature, and the practical farmer, and the man of scientific pursuits and profession, as it were together ascend from the arena of hot debate to recreate their wearied feelings in the healthful interchange of their intellectual and experimental stores on the broad and elevated grounds where they may cheer their hearts with the prospect of waving harvest-fields, smiling abodes of plenty, rejoicing flocks and herds, and industrious, happy men?

The reports of the associations and societies, to which we have alluded, belong also to the literature of this branch of national industry, and form, from time to time, volumes of great value for reference, as they embody the results of much practical experience, often, too, guided by science and extensive knowledge. It was our intention to have obtained a list of all the agricultural societies and farmers' clubs in our country, and published in an appendix; but our list though a large one, is not deemed sufficiently

perfect, and it must, therefore, be reserved for some future period. It would be interesting to know the number of their members, the amount they yearly distribute in premiums, perhaps the estimated value of the exhibitions, the number of cattle and other domestic animals, the weight and valuation of the best specimens of these, the average of the finest crops and a few items more, which might present a bird's eye view of the results of their influence. Probably such a plan may only be accomplished by the gradual ingathering and summing up of years; but we are persuaded it would form an item of no common interest in a report on the agricultural aspect of our country.—*Report of the Commissioner of Patents, for 1847.*

Preservation of Manure.

S. A. LAW, Esq., in his address before the Delaware county, (N. Y.) Agricultural Society, makes the following sensible remarks in regard to the preservation of manures:

“While the full value of manures is admitted, how few farmers have their yards so constructed as to prepare and preserve the greatest amount of fertilizing compost. Instead of barn and stable yards made lowest in the middle, to retain those liquids which chemical analysis and actual experience have shown to be more valuable, and to contain in a more concentrated form, the elements of vegetation than solid manure, most farm yards are on sloping ground, as if constructed purposely for waste—and not unfrequently with a rivulet near by, to carry away all that may wash into it; instead of yards in the fall of the year, filled with compost from the swamp, or from ditches, to be converted into manure, we see them empty, and usually provided with a ditch to carry off all moisture. Farmers who mean to be economical—who indulge in so unnecessary expense—and who would hesitate to spend a shilling for the gratification of a depraved appetite, by such practices as I have referred to, throw away dollars. Swamp mud, turf, leaves, weeds, and in fine, all the refuse of a farm, useless as manure in a natural state, when placed in the barn-yard or pig-sty, and thoroughly incorporated with materials there, becomes the best of manure, amply repaying the farmer for the time spent in collecting them.”

AGRICULTURAL PAPERS.—A correspondent of the Ohio Cultivator states the case of a farmer who lost \$150 by neglecting to take that paper. He had taken it formerly, but concluded that he could do without it. After he had discontinued it, certain practitioners of Neurotomy on horses were traversing that State, and the paper cautioned the farming public repeatedly against the practice. But this farmer did not see these precautionary remarks, and suffered two fine horses to be operated upon, paying him ten dollars, which resulted in the entire ruin of his two horses. Farmers must not expect to be guarded against impositions, unless they inform themselves.

Notes by S. W.

"The harvest is great, but the laborers are few."

A FARMER says he was called up after going to bed, by a neighbor with a long face, who said he had 30 acres of wheat ripe, and he could hire no cradlers. He now wanted the aid of Hussey's Reaper, which alone could enable him to defy the caprice and extortion of that class of *artists* yclept cradlers, many of whom now demand two dollars a day and "roast beef."

'Tis true that the greater portion of male immigrants, make awkward farm laborers; but many of them who have been farm laborers even in the Emerald Isle, soon become expert farmers' help here.

Our Seneca County farmers are much indebted to JOHN DELAFIELD, of Oakland Farm, for many things which go to alleviate and lighten the toil and responsibility incidental to a farmers calling. He has introduced into his neighborhood many of the better class of Irish farm laborers. He says, at mowing they are a little awkward with our long scythes the first day, but on the second or third day they can generally keep up with a practiced Yankee. Mr. D. is importing from England a tile machine, which it is said will mould 12,000 ditching tile per day. An establishment here furnishing tile at that rate, will do much towards accelerating the progress of under-draining our flat lands—a consummation which is to give a new impetus to vegetable growth, and an improvement in tillage, which is yet to cast anything but commendation upon the present system of farming. Ours now is labor unemployed, or if bestowed, unrequited.

July 25. Since writing the above I have been south as far as the first towns in Tompkins County. Nearly all the wheat is cut; every crop, grass or grain, promises a very good yield. One farmer who boasted of his corn, seemed incredulous when I told him that I had more ears in full silk on one rod square, than he had on four rods. His field was well tilled, but the drab shaly soil, lacked that extra organic manure, without which the maximum yield of Indian corn cannot be had. I now felt more than ever the true value of a clay soil. One of the greatest enigmas to me in rural economy is, why so many farmers of apparent common sense, will consent to work so many acres of corn to so little profit. One fourth part of the labor, with forty loads of manure, on one worn acre, will produce as much corn as four acres with the same manure. Then again, a few days work early applied, often insures a good crop, which is nearly lost by a late application of the same labor. I have sometimes thought it would be a blessing to some self-styled farmers, to have no more land than they tilled well. But then,

again, who has not seen the single acre entirely neglected? Stern necessity alone can make man uniformly economical of nature's blessings. The day will come, or at least it may come, when Seneca county will be made to produce a thousand to one of its present edible productions, grass alone excepted. And yet this county is hardly second to any other county in Western New York, in rural productions at this day.

CHEATING THE WORMS.—A masterly farmer on the flat lands of Romulus, told me he had a lot of two acres, heavy pebbly loam, which had been pastured by cattle, sheep and hogs, until it was weedy, sward bound, and useless. He broke it up and planted it with Indian corn; the worms eat up the growing corn. He now plowed and sowed it with buckwheat, the same season; the worms injured this crop. In the spring he again planted the same field with corn; finding the worms in every hill before the 1st of June, he planted again with the hoe between each hill, alternately. The worms confined themselves to the first hills, and he harvested 200 bushels of ears to the acre from the last planting. He once after practiced the same device with like success; but the worms have at length been starved out by good tillage.

If the bugs attack your garden vines, pull up one or two vines to a hill; the bugs will leave the healthy to feed on the prostrate vines; upon a principle well known in animated nature, where the strong always prey upon the weak. The healthy vines will soon get beyond the reach of the bugs; but it is better to kill all the bugs when congregated on the dying vines.

S. W.

BEST PLAN OF A BARN.—It has been remarked that no building on the farm in the northern states is of more importance than the barn.—Those who have had the charge of cattle during our long winters, can at once see that much time and hard labor could be saved by a judicious arrangement of stalls, and bays, granaries, &c., so that every creature could be fed by taking as few steps as possible. One very important thing to be considered, is the best mode of preserving as well as collecting manure, so that it shall retain all its valuable properties in the spring and be easily got out. We like the plan of having a barn on the side of a hill, and so arranged that you may drive your team or cart load pretty near the ridge pole, and thus pitch most of your hay down, instead of up. Having your stalls near, you can continue to pitch the hay down, and if you have a cellar beneath, you can throw the manure down also, and thus make the attraction of gravitation perform much of the labor of transportation from the mow to the manure cart.—*American Journal of Ag. and Science.*

EDITOR'S TABLE.

COMMUNICATIONS have been received, during the past month, from S. P. Chapman, A Traveler, C. K. Hobbie, C. D., A Prince to Science, A. Calvert, W. G.—, Agricola, W. M. R. Friend, Lincoln Fay, S. W., J. W. Dickinson, J. A. Carpenter, A. Bryant, H., John Coryell, and Isaac Knox, Jr.

TRANSACTIONS OF THE N. Y. STATE AGRICULTURAL SOCIETY, FOR 1847.—A copy of this work has been received from the Secretary, B. P. JOHNSON, Esq. It is a handsomely printed and neatly bound octavo of 300 pages, being larger than any previous volume of the Society's Transactions. In addition to the proceedings of the State Society, and reports embracing the doings and condition of County Societies, the work contains various essays and communications on important subjects. The essays are written by gentlemen of ability, and will impart much valuable information to those engaged in rural pursuits. The volume is illustrated with handsome and appropriate engravings, which, with the general arrangement of the contents, will add to the value and interest of its pages.

The industrious and efficient Secretary of the Society is entitled to much credit for the judicious arrangement and matter of this volume. A large portion of it was written, and the remainder prepared for publication by Mr. JOHNSON, whose judgment and experience eminently qualify him for the proper discharge of the important duties of his office.

REPORT OF THE COMMISSIONER OF PATENTS FOR 1847.—Copies of this document have been received from Hon. E. BURKE, the Commissioner of Patents, and D. GOLD, Esq. It contains about 650 pages, is well illustrated with wood and steel engravings, and bound in muslin. The volume reflects credit upon the Commissioner, and other officers of the Department from which it emanates, and is in many respects superior to any preceding Report. It embodies a vast amount of statistical information relative to the trade and products of the country, together with several original papers of great value. The report has evidently been compiled with much care and labor, and a regard to accuracy. The agricultural intelligence, statistical matter, &c. embraced in its pages, will render the work interesting and valuable.

STATE FAIR AT BUFFALO.—Our readers are reminded that the Fair is to commence on *Tuesday, the 5th of Sept.*, and continue three days—the 5th, 6th and 7th.

We understand that meetings will be held every evening during the Fair, at not less than *four different places* in the city, where Addresses will be delivered, and free conversation on the subject of Agriculture, Pomology, &c. be had. This is an important feature, and will undoubtedly add much interest to the occasion.

Arrangements have been made with the different Railroad Companies, by which all animals and articles designed for exhibition will be transported to and from Buffalo, *free of charge*—and only half the usual fares will be charged to persons attending the Fair.

The principal hotel and boarding-house keepers in Buffalo, have agreed to board and lodge guests during the Fair on reasonable terms—from 75 cents to \$2 per day—and we presume all who attend can be accommodated.

AGRICULTURAL FAIRS FOR 1848.—We give below the time and place designated for holding Fairs the ensuing fall. Several Societies have not yet determined the time, and from others we have received no information:

New York State,	Buffalo,	Sept. 5, 6 and 7.
Fulton County,	Johnstown,	Oct. 4 and 5.
Jefferson "	Watertown,	Sept. 27 and 28.
Orleans "	Albion,	Sept. 23 and 29.
Ontario "	Canandaigua,	Oct. 10 and 11.
Oswego "	Pulaski,	Sept. 27 and 28.
Otsego "	Cooperstown,	Sept. 23 and 29.
Monroe "	Rochester,	Oct. 4 and 5.
Rensselaer "	Troy,	Sept. 20 and 21.
Saratoga "	Ballston Spa.,	Sept. 26 and 27.
Seneca "	Seneca Falls,	Oct. 5 and 6.
Wyoming "	Warsaw,	Sept. 27 and 28.
Yates "	Penn Yan,	Sept. 29 and 30.
Windsor Co., Vt.,	No. Springfield,	Oct. 4 and 5.

We hope that the Secretaries of Societies not mentioned above will furnish us information relative to their Fairs, in time for publication in our next number.

THE WEATHER AND CROPS.—The past month has been one of peculiar interest to the farmer. His hopes have been realized, in reaping a rich reward for past labors.— Though we have had frequent and copious rains the weather has generally been propitious, and the harvest is nearly completed without loss. With here and there an exception, as usual, the Wheat Crop is a fair and in many instances an abundant one, and universally of good quality. In many sections of the State early drouth retarded the growth of the hay crop, though sufficient will probably be secured to meet all wants. The crops now growing, Oats, Corn, Potatoes, &c., seldom look better at this season—the late warm rains having increased their vitality. Occasionally we hear a complaint of the potato disease, but the crop generally presents a healthy and promising appearance.

The Wheat Crop is spoken of as excellent throughout the country, and has generally matured and been harvested without injury—though we have accounts of damage by rain in southern Ohio, and one or two other sections.

HARDWARE, AG. IMPLEMENTS, &c.—Those of our readers who may desire to purchase hardware or agricultural implements, are referred to the advertisement of Messrs. NOTT, ELLIOTT & FITCH. Their establishment, located at No. 23 Buffalo street, Rochester, is one of the most extensive in Western New York. They have a large and excellent stock of implements, tools, &c. of the most improved style and make. The proprietors have spared no expense in furnishing their commodious sale rooms with a complete assortment, and we commend their enterprise to the attention and patronage of our agricultural friends.

PEACHES IN NEW ENGLAND.—The crop of peaches in New England, says the Boston Cultivator, will probably be the lightest that we have seen since the year 1843. We shall not probably have more than one tenth of a usual crop of this fruit this season, notwithstanding there is now in the country large enough to bear, twice as many trees as there were two or three years ago. And we should not be surprised if we had only one twentieth of a usual crop.

A PROTEAN STOVE.—The Scientific American thus describes a new stove, recently invented by G. G. W. Carleton, of Brunswick, Maine. It occupies but a small space, and by one arrangement, it is made a wood, or a coal air-tight or a draught Cooking Stove, with a large wash boiler and apertures for boiling, and frying kettles, &c., besides affording opportunities for broiling or roasting before an open fire and with no fear from the smoke or scent of the savory viands being imparted to the apartment. Under a slight change of its arrangements, it becomes a common cooking range, capable of performing all the desired offices of that useful appendage, and calculated for the use of either wood or coal. Another change, and it becomes a grate, snugly enclosed within the jambs of a fire-place, filled with bright coals dispensing comfort and cheerfulness to the apartment. Another change, and all the comforts of the agreeable open fire-place are secured, not omitting even the convenient mantle-piece. In short, it assumes as many different appearances as a harlequin, and is very simple, neat and ornamental.

BROOM CORN SUPERSEDED.—A mechanic at the Ramapo river, N. J., has invented a machine for making brooms, which, according to the Journal of Commerce, threatens to exterminate broom corn. It takes a billet of white ash, and in a trice cuts it fine like the Manila grass, as used for brushes. The brooms can be made for two cents each, and are said to work quite as well as corn brooms, and to be much more enduring.

NAILS FOR SHINGLING.—At an agricultural conversation of the Massachusetts Legislature of late, on the subject of farm buildings, it was agreed by nearly all the speakers that the shingle nails in use of late are of the most miserable sort lasting only from three to four years, while those in use twenty years since are good now. Farmers in building would do well to look into this thing. A roof which will only last three years is a nuisance, and good nails can be as easily furnished as poor ones, if demanded.

The Farmer's Cabinet says, if any person should be stung by a bee or other insect, rub some spirits of turpentine upon the place, and the pain will nearly cease in one minute.

THE POTATO ROT has appeared upon Staten Island, where whole fields are wilting. Many of the farmers are cutting off the tops, with the hope of preserving their crops.

HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

Pomological Convention.

WE wish to remind those of the readers of the Farmer who feel interested in Fruits and Fruit Culture, that on the first of September next, a few days previous to the opening of the State Fair, a Pomological Convention is to be held in Buffalo. We consider it rather unfortunate that a later period was not chosen, so as to have brought in a more extensive and varied collection of fruits. Still the occasion will be one of great interest. There will undoubtedly be a fine display of Peaches, Plums, early Pears, Apples, &c., affording an excellent opportunity for comparisons, and for an interchange of opinions and experience among cultivators. We hope that our friends in Ohio will be well represented. Western New York must consider herself bound to make the Exhibition interesting and useful, and we believe she will, as far as possible at that season.

But there must be no holding back. Those who have but *one* good fruit to contribute, of peach, plum, pear or apple, can easily send it, if they cannot go themselves. The Buffalo people will extend every facility for having articles forwarded. We hope to see large numbers of our eastern friends on the occasion. They will have an opportunity of seeing what is going on in the woods.

Hints for the Month.

BUDDING FRUIT TREES may be performed all this month. Plums and cherries should be done first, and pears, apples, peaches, &c., in succession. Where only a few are to be done, as with amateurs, a dark cool day may be chosen.

STRAWBERRY PLANTATIONS may be made all the month, in dark cool days, and particularly before and after showers. It may be advisable to shade the bed after planting, with pine branches, or something of that kind, until the plants begin to root.

We need hardly caution any one against running after some novelty, without any established merit. On page 185 of our last number a few really good sorts are mentioned. We find that we cannot speak too highly of *Burr's New Pine*; no collection should be without it. For a full account of it see last number.

Strawberry beds are often ruined by being allowed to run wild with weeds, after the fruit is gathered. The true and economical way is keep them clean, always. A slight hoeing once in a week or two will do it.

RASPBERRIES.—After they have done bearing, the old canes should be cut away, and the new

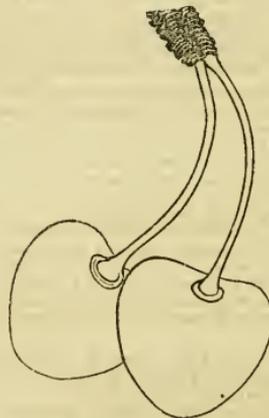
ones for next year's bearing tied neatly to stakes, and the ground kept in good order. Such attention as this would prevent much of the barrenness complained of by some people, who allow the raspberries to form a complete thicket of suckers.

The *Franconia* is a fine fruit and very hardy. The *Fastloff* is also fine; but we have yet seen nothing much superior to the real *Red and White Antwerp*.

Description of Three Fine Cherries.

BURR'S SEEDLING.

This is a new seedling fruit, originated by Mr. ZERA BURR, of Perrinton, well known in Western New York as a fruit grower, and recently as a nurseryman.



It has now borne for six years, and though in no way remarkable, yet claims a place among our best cherries. It is an accidental production. Mr. B. has been, for a long time, in the habit of saving and planting the stones of the best cherries, and of fruiting such as looked any way distinct or promising.

Such is the origin of this.

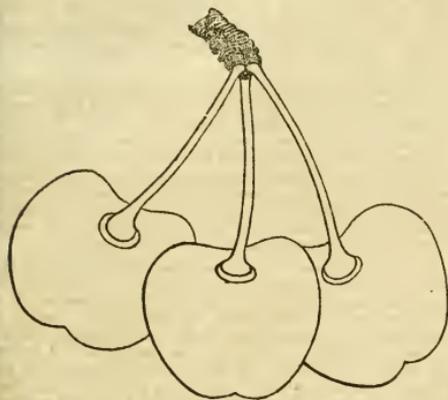
The tree is vigorous, upright, and compact in habit, forming a round head, and, as far as we have observed, flattened on the top. Leaves large, sharply acuminate, regularly and finely serrated. Petioles long. Fruit above medium size, heart-shaped, tapering to the point, somewhat like the Elton; a slight suture on the side which is flattened; suture marked by a delicate red line, extending from the stem to the point. Skin light red, delicately mottled on the sunny side; white, tinged with red, in the shade. Stem slender, an inch and a half long, inserted pretty deeply. Flesh whitish, adhering to the stone, of fine texture, juicy, tender and sweet. Ripe last week in June.

ELKHORN.

This is a magnificent cherry, ripening middle of July, or 10 days to a fortnight after nearly all the large and Sweet Hearts and Bigarreaus are gone, and fills up the space between them and the late sorts, such as Carnation, Morellos, Belle Magnifique, &c.

The tree is a vigorous grower, and an enormous bearer, the branches literally borne down

with the weight of fruit. Fruit large, obtuse heart shaped, about the size of Black Tartarian, not quite so long, broader, more compressed on the sides, and the surface more regular. Stalk stout, short and pretty deeply set. Skin, when



cherries cultivated. It was produced accidentally in the garden of S. DOWNER, Esq., of Dorchester, Mass. It is said to have grown up among Mazzard Seedlings, intended for stocks, and the buds not taking in this, it was allowed to bear fruit, and produced this now widely known and estimable fruit.

Tree very hardy, vigorous, with a spreading habit. Fruit above medium size, roundish, borne in clusters. Skin thin, smooth and bright red. Stem long and slender, set in a slight depression. Flesh tender, melting, juicy and sweet; flavor unsurpassed. In use the two first weeks of July—or, in this region about the 10th or 12th.

Mr. DOWNING says, "all things considered this is the most valuable cherry."

Descriptions of 25 Select Varieties of the Strawberry.

BY WM. R. PRINCE.

Profuse Scarlet.—A Seedling from that favorite and earliest market variety, the Large Early Scarlet. The fruit is at maturity at the same period, and is of larger size than its parent, which it closely resembles in form, color and flavor. The parent is hermaphrodite, and only a moderate bearer, but the present variety is *pistillate*, and bears profusely, thus furnishing a most desirable acquisition, and one that has been anxiously sought for. Flowers small.

Bishop's Seedling, or Orange.—This is very different from the crimson variety erroneously so called, being a beautiful orange scarlet, unsurpassed in its profusion of clusters by any other; medium size, rounded. Flowers medium. *Pistillate*.

Black Prince.—Large, rounded, slightly projecting at the center; blackish crimson, very dark; in large clusters; very showy, sweet and excellent when fully ripe. Flowers medium. *Pistillate*.

Charlotte.—Large, obovate, or rounded, dark scarlet, sweet, delicious, sprightly flavor, and very superior to most varieties; exceedingly productive. Some straw should be laid on the ground as the size and abundance of the fruit causes it often to rest on the earth. The foliage is broad and luxuriant, even more so than Hovey's Seedling, to which its habit greatly assimilates. Flowers medium. *Pistillate*.

Crimson Cone.—Large, elongated cone, very beautiful, good flavor and fragrant; keeps remarkably well, and is estimable for market; very productive. A remarkably vigorous plant. Flowers above medium. *Pistillate*.

Crimson Pine.—Rather larger than the Hudson, of same form and color; handsome; very productive; suitable for market. Flowers medium. Hermaphrodite and *pistillate* on distinct plants.

Cornucopia.—A magnificent seedling from the Hudson; very large, conical, scarlet, good flavor, very productive; fine for market. Flowers medium. *Pistillate*.

Eberlein.—Early, medium size, conical, dark scarlet, remarkably productive; averages larger than the Large Early Scarlet, ripens next after it and the Profuse Scarlet, and at the same period as the Iowa. Flowers medium, Hermaphrodite.

Burr's New Pine.—Very large, obovate or rounded, light crimson, beautiful, very sweet and fine flavor, detaches easily; very productive. Flowers large for the sex. *Pistillate*.

Burr's Rival Hudson.—Large, showy, dark scarlet, red inside, long pointed cone, in form and flavor resembling its parent the old Hudson; good flavor when fully ripe; grows in large clusters; very productive. The plant is very vigorous with dark green foliage. Flowers medium. *Pistillate*.

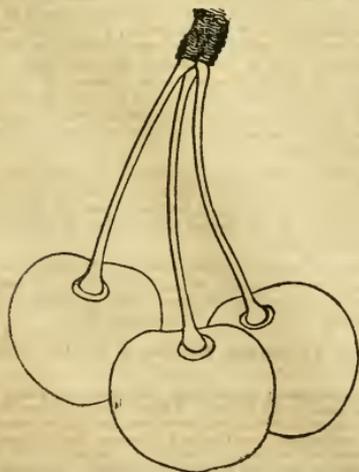
Brilliant.—Large, conical, deep crimson, beautiful, excellent flavor; productive. The plant is very vigorous, and a seedling of the Crimson Cone. Flowers large. Hermaphrodite.

Cushing.—One of Dr. Brinklee's seedlings, very large,

fully ripe appearing quite black at a distance, but when closely examined showing an obscure ground work of red, giving the fruit a rich, dark, mahogany color. Flesh very firm, of a singular liver-like consistence; dark red, juicy and agreeable, though deficient in flavor, adhering slightly to the stone, and quite dark, nearly black around the stone. It is described in Prince's Pomological Manual as being brought from Maryland, by the late WM. PRINCE, who there found it in the garden of a hotel. The productiveness and vigor of the trees, and large size, firmness and beauty of the fruit, render it peculiarly suitable for market growers.

DOWNER'S LATE RED.

This famous American fruit is now admitted by all who know it, to be one of the very best



light scarlet, obtuse cone, fine flavor, productive. Flowers large. Hermaphrodite.

Iowa.—Large, broad, rounded, sometimes depressed, seed deeply imbedded, beautiful light orange scarlet; not high flavored but pleasant; early and productive; a peculiar fruit. Flowers medium or under. Hermaphrodite.

Magnifique.—Very large, orange scarlet, rounded, splendid, pleasant flavor, very productive; an extraordinary fruit. Pistillate.

Prolific Swainstone.—Large, ovate, scarlet, fine flavor, productive; an improvement on the old Swainstone, its parent. Flowers large. Hermaphrodite.

Montevideo Pine.—A distinct species, producing fruit of monstrous size, and of conical form, sometimes variable, high pine apple flavor; ripens late and continues 10 or 12 days after the other large varieties have passed. The plant is the strongest in growth of all strawberries foliage large and vigorous, petioles, peduncles and runners, strong and downy; the blossoms very large, often the size of a dollar. It succeeds here, and is well suited to the Southern States, to which it must prove a most desirable acquisition, as many northern varieties do not thrive there. Above a dozen splendid varieties have been produced from the seed of this estimable parent. Hermaphrodite.

Primate.—A seedling from the Prince Albert, and of extraordinary character, being the only hermaphrodite variety that produces large fruit and large crops; form conical, deep scarlet, splendid, good flavor, very productive; fine for market. Flowers medium.

Primordial.—Early, large, elongated cone, deep scarlet, beautiful, very productive; ripens with the Eberlein next after the Large Early and Profuse Scarlet. Flowers small. Pistillate.

Prolific Hudson.—Medium to large, short cone, crimson, good flavor, very productive, ripens gradually; don't rot. Flowers medium. Pistillate.

Refulgent.—Medium to large, peculiar form, ovate with a neck, beautiful bright scarlet, fine flavor, highly productive and estimable. Flowers small. Pistillate.

Unique Scarlet.—Large, purse shaped, light scarlet, sweet, rich delicious flavor; a peculiar fruit. Flowers medium. Hermaphrodite.

Unique Prairie.—Called in Ohio, Necked Pine, but as it is a native of the Western States, and has no affinity whatever with the Pine family, I have dropped the latter title. It is of peculiar form, ovate, with a distinct neck, medium or rather large, light scarlet, indifferent flavor, and too acid unless well sugared, or as preserves. Foliage dark green, deeply grooved. Flowers medium. Pistillate.

Taylor's Seedling, is another prairie variety; medium to large, long oval, with a distinct neck, light bright orange scarlet, sweet and pleasant when fully ripe, but not high flavored; ripe soon after the Iowa. Flowers medium. Pistillate.

Cluster Hudson.—Large, conical, scarlet, same size and form as old Hudson, milder flavor, and quite as prolific; a first rate market fruit. Flowers small. Pistillate.

Jenny's Seedling.—Rather large, obovate or rounded, crimson at maturity, rather acid until fully ripe, then sweet and good flavor, very productive. Flowers large for the sex. Pistillate.

Le Baron.—Medium to large, conical, dark crimson, sweet, fine flavor, productive. Flowers small. Hermaphrodite.

Bishop's Globe.—An early variety, ripening with the Iowa, soon after the Large Early and Profuse Scarlet; of medium size, short, obtuse cone, or rounded, bright light scarlet, peculiar in color, little flavor, very productive, trusses near the ground, and in this respect very different from Bishop's Seedling, which has elevated trusses. Flowers medium. Pistillate.

NOTE.—As the blossoms of staminate and hermaphrodite varieties average double the size of those borne by pistillate plants, the terms large, medium and small are always applied relatively to the general size of each sex.

Linnean Botanic Gardens and Nurseries,
Flushing, N. Y., July, 1848.

Pear Tree Blight.

MR. EDITOR:—I wish to know if you or any of the numerous readers of the Farmer, have observed the destructive insect upon the Pear tree, which I enclose you, and

which, if you please, you will examine, describe, and name for the benefit of your readers. For a few years past there has been an almost entire failure of the pear crop with us. What trees have not died outright with the blight, stand almost stationary, and neither grow nor fruit much. Our pear tree doctors have recommended special manures, root pruning, i on cinders, leached ashes, whitewashing, &c. All of which I have faithfully tried, but yet my diseased trees look as if they had the consumption, and die they will. Having an orchard of two or three hundred trees, I have felt much anxiety to know the cause of such a sweeping disease of the pear.

When Mr. Downing first published his theory of the frozen sap blight, I became pretty much a convert to his theory; it seemed to be supported by so many facts. Yet there was with me some hard questions to solve. Trees in this section have suffered quite as much on a dry stoney gravel and sand ridge, 30 feet above any water, as on deep alluvial or moist soils. All kinds of soil and situations here in Chautauque county seem to suffer alike, (and we have a great variety)—particularly if the trees have been taken from orchards or nurseries where the disease prevails.

Is it not curious that no situation is exempt from the frozen sap blight where the disease exists? And again we find whole orchards or lots of healthy thrifty trees of 20 or 30 years standing untouched by the blight. Again, if freezing be the cause of the blight, how happens it that a tree severely blighted will affect its neighbors? A tree of the Summer Vergalieu, in my nursery, blighted to the ground; one of the same kind next to it about one half blighted; on the other side, limbs of a natural seedling died also. The same occurred in a row of Maria Louisa—and in another row a fine natural stock entirely died, causing limbs of other trees to die on either side.

Such facts as the above have established me in the belief that the blight is more or less contagious.

You will readily perceive that the insects I enclose you, is not the aphid, bark louse,* slug, or the small green hopping insect which causes a vast deal of leaf blight of the apple, pear, plum, horse chestnut, and many other shrubs. Neither is it the Scobytus Pyri of Professor Peck, which eats round the branch under the bark.

I have not been able to find the insect in question on any other tree than the pear, and have found them on the pear in all cases where the trees were decaying. Being at Dr. Kirkland's, at Cleveland, the other day, I examined his healthy trees and found none of the insects; but on requesting him to show me some of his diseased trees, I readily found plenty of insects, which I showed to the Doctor. You will see the insects are mostly on the fruit spurs at the foot of the leaf, and when very numerous on the small limbs nearly of the color of the bark. They seem to eat out the small buds, and so numerous are they on some of my trees that they have eaten out three-fourths of the small buds on the fruit spurs. Supposing, then the insect to be as poisonous to the pear as the squash or large black stinking bug is to the cucumber, (which will, almost without leaving its mark on the vine, cause it to wilt and never recover,) is it not possible that the juices of the pear tree may be so poisoned as to produce all the blight seen in our trees? This much I am sure of, my trees are dying by the effects of the above insect, as no iron stunts, root pruning or manuring in the least revives my stunted, insect eaten trees.

I am washing and syringing some of my trees with a decoction of tobacco, which kills all it touches. I find they have multiplied rapidly for a few days past on my young trees—particularly on tender kinds, such as the Bartlett, Passe Colmar, &c.

I leave the subject, hoping that you, or some more able investigator than myself, will examine, describe and give us the most efficient and cheapest mode of exterminating the above insect.

Yours respectfully,

LINCOLN FAY.

Chautauque Co. Nursery, Portland, N. Y., July, 1848.

* It is undoubtedly a bark louse. We see it every day, but it is not the cause of the blight. When a large number of them take possession of a fruit spur, or end of a branch, they will soon deprive it of its juices, and cause it to assume the blackened and burnt appearance of the spur enclosed in your letter. We invite the attention of fruit and tree growers to this, so far, mysterious malady.—Ed.

Answers to Correspondents.

A FRIEND TO SCIENCE, &c., Starkey, N. Y. Get "Downing's Fruit and Fruit Trees," the most complete American work of this subject. JOHN J. THOMAS is preparing a new and greatly improved edition of his "Fruit Culturist," which will be published soon, and will be a valuable work. You ought also to have "Lindley's Theory of Horticulture," and Harris' "Treatise on Insects." We shall probably publish in a future number such a list of fruits as you speak of.

C. K. HOBIE, Irondequoit. Excessive pruning of large trees, in the winter or spring, often produces a feeble and sickly looking growth the following season—the balance between the leaves and roots being destroyed. The leaves are the lungs, as it were, of trees, and their expansion in spring calls the roots into action. It is therefore evident that the removal of an immoderate portion of leaf buds in pruning must be injurious. Trees over pruned in a growing state, instantly cease to grow, the leaves droop, and the bark becomes shrivelled. In either case, the only remedy that occurs to us is to let them alone—simply keeping the ground in good order around them.

Horticultural Exhibitions.

We cannot undertake to publish, in detail, the accounts of Horticultural Exhibitions, as a large portion of such reports possess merely a local interest. What we can do, and desire to do, is to give such a condensed account, and note such particular items as will be interesting to all, and are calculated to keep the readers of the Farmer advised respecting the progress of Horticulture throughout the country. This is all.

AURORA, (CAYUGA CO.) HORT. SOCIETY.

This flourishing Society commenced its fourth year by an exhibition, on the 19th of May. The Report says:

The extent and beauty of the collection evinced the influence which this association, during the few years of its existence, has exerted upon this and the surrounding community, in introducing many new and improved varieties of plants and vegetables—in adopting improved modes of culture, and in the production and propagation of many rare and beautiful seedlings. Such portions of the spacious Hall of the academy as were not occupied by plants and flowers, were filled with a highly intelligent audience, who spent the afternoon in examining the beautiful collection and in listening to instructive and eloquent remarks from Salem Town and the Rev. Edward Taylor.

David Thomas, the President, exhibited upwards of 60 different species and varieties of flowering shrubs and plants, 110 varieties of tulips, besides pansies, &c.—Henry Morgan, Esq., some 20 varieties of shrubs and plants, and 60 to 80 of tulips—Dr. Thompson, some 20 varieties of shrubs and flowers, and 80 of tulips, beside immensely large pansies. Some 8 or 9 other ladies and gentlemen contributed bouquets of tulips and miscellaneous flowers. Mr. I. Jacobs presented King and Red Ashman apples, and Isabella and Catawba grapes, well preserved—W. R. Atwood, two Cyprian squashes, and a basket of Newtown Pippin Apples.

ALBANY AND RENNELAER SOCIETY.

The first exhibition of this Society for the season was held at Albany on the 14th of June. The weather for some time previous had been unfavorable, but the display of fruits was fair, and that of flowers and vegetables excellent.

The Strawberries exhibited we find to be Virginia Scarlet, Iowa, Ross' Phoenix, Black Prince, Bishop's Orange, Hovey's Seedling, Boston Pine Cincinnati Pine, Royal Pine, and Alpine. Dr. Herman Wendell presented in his collection flowers and unripe fruit of the much talked of *Beehive*; the plants having been imported this season, were not sufficiently strong to produce fruit that might be fairly judged. [We see it stated by a Mr. Suow in the Gardener's Chronicle, that this "Beehive" is nothing but the Grove End Scarlet, and he asks Mr. Mathewson who introduced it, to refund his money. Mr. Mathewson insists upon its being really new, and superior to any thing else.] The Committee awarded the first premium of \$2 to V. P. Douw, of Greenbush, for beautiful specimens of Ross' Phoenix; and the second premium of \$1 to E. P. Prentice, of Mt. Hope, for Bishop's Orange.

Of flowers there was a splendid display. J. Wilson exhibited 75 varieties of Roses; Dr. Herman Wendell 25 varieties, besides phloxes, pansies, pinks, poenies, &c. Charles H. Merritt, of Troy, and several others, exhibited collections of roses and perennial flowers. James Wilson took all the rose premiums, for the following varieties, viz: Persian Yellow, Gen. Foy, Village Maid, Washington, Pompon Bicolor, Cerise Superba, Nelly, Donna Sol, London Pride, Margolin, La Tour D'Auvergne and Leopold, \$2—for the best six distinct varieties, Cristata Moss, Great Western, Leda, Queen, Danviers, Princess Lambelle, \$1.

The display of vegetables embraced peas, cucumbers, cabbages, beets, cauliflowers, lettuce, parsley, cellery, rhubarb, &c. Dr. Herman Wendell exhibited stems of the Hoosung, a new vegetable recently introduced from China by the London Horticultural Society—also new four varieties of Lettuce, for which he was awarded a discretionary premium.

This Society held its SECOND EXHIBITION on the 12th of July. In the Fruit Department, the leading articles were Gooseberries, Raspberries and Currants—of these there were five collections exhibited, by Joel Rathbone, of Kenwood; Wm. Newcomb, of Pittstown; V. P. Douw, Henry Vail, of Mount Ida; Dr. Herman Wendell, James Wilson, of Albany, and others.

Of Cherries, the English Morello alone was exhibited. The Committee state that "owing to the extreme vicissitudes of the last winter, the cherry trees in this whole vicinity, with the exception of an isolated instance, in well protected yards in the cities, have not borne fruit this year."

For the best and finest flavored Currants, the first premium was awarded to Jas Wilson, for Knight's Sweet Red, and the 2d to H. Wendell, for White Dutch. For Gooseberries, the first and second premiums were awarded to Henry

Vail, for White Eagle, and Edwards' Jolly Tar. For Raspberries, first premium to Henry Vail, for New Red Antwerp; second to V. P. Douw, for old Red Antwerp.

The display of plants and flowers was excellent. The following award of Premiums gives the names of the best articles :

Carnation and Picoetes—For the best 6 var. to Wm. Boswell of Troy, for Empress, Portia, Euterpe, Flora, Incomparable and Desdemona, \$2. For the best three varieties, to Dr. Herman Wendell, for Ariadne, Ceres and Josephine, \$1.

Dahlias—For the best display, to Wm. Newcomb, \$2.—For the best twelve varieties, to Wm. Newcomb, for Caleb Cope, Conductor, Constantia, Mrs. Shelly, Essex Goldfinch, Princess Radzville, Iris, Ithuriel, Beeswing, Lady Featherstone, Marquis of Aylesbury and Dowager Lady Cooper, \$2. For the best six, to D. T. Vail of Mount Ida, for Hamlet, Mrs. Shelly, Model, Marquis of Aylesbury, Princess Radzville and Venusta, \$1.

For the best display of Perennial, Biennial and Annuals, to Wm. Newcomb, \$2.

For the best six Green House plants, in pots, to L. Menard, for Agapanthus Umbellata, Begonia Sanguinea, Clethra Arhorea, Fuchsia Chapivieri, Gloxinia Cocinea and Veronica Speciosa, \$2.

Floral ornaments were numerous and fine.

The vegetables on this occasion were, for the season, highly creditable, embracing Sweet Corn, ripe Tomatoes, String Beans, Peppers, Cellery, Kohl Rabi, Lentils, Salsify, &c. Dr. Herman Wendell exhibited a brace of Victory of Bath Cucumbers, 12 inches long, and a brace of Latters Victory of England, 10 inches long.

SOCIETY OF THE GENESEE VALLEY.

This society held its second exhibition for the season, on the 15th of June. The display of Strawberries and Roses were superb; of vegetables and other things very fair. A respectable number of members and visitors were in attendance during the afternoon and evening. We clip the following from the Report of the Fruit Committee, showing that in all there were as many as 25 varieties of strawberries exhibited.

The Committee are gratified to note great progress in strawberry culture since last season. The number of varieties and quality of the berries surpassed by far anything yet seen in Rochester.

The nice discrimination manifested by cultivators, and the great degree of attention given to minute comparisons, show that a start has been made in this branch of culture, not in a hap hazard way, but with a degree of intelligence and skill that cannot fail to ensure success to our cultivators and reflect honor on them and on their Society. M. G. Warner, Esq., who is embarking somewhat extensively in the strawberry culture, presented, as will be seen by the following list, ten varieties, all perfect and beautiful specimens of their kinds, including four of Burr's (Ohio) new seedlings. Among these, the New Pine, so far, for vigorous growth, productiveness and flavor, stands first. It was very generally conceded to be the finest flavored and handsomest berry in the room. The Black Prince, shown by Bissell, Hooker & Sloane, has proved to be a high flavored delicious fruit, and quite productive—one of the very best. The Boston Pine was in several collections. It is a fine berry, and all concede it to be a prolific bearer. Alice Maude—a few specimens only were shown by Ellwanger & Barry. Fruit large, irregular in shape, but quite prolific.

Hovey's Seedling was shown in nearly all collections.—Fruit large and fine; picked specimens, as usually shown, surpassing all others in appearance, (except the Ross Phoenix of Judge Miller.) In no case, however, have we seen it, or heard of it being so great a bearer or so uniform in size as many others.

The Large Early Scarlet, an old favorite in every collection, the universal expression is that it has yet no superior for a sure, uniform good crop, under all circumstances.

Ross's Phoenix were exhibited by Judge Miller—really superb; altogether the finest dish of strawberries we have seen.

We avoid speaking particularly of several other rare varieties, such as Swainstone seedling &c., as they have not been cultivated enough here to admit of a fair opinion being formed.

Ellwanger & Barry exhibited a dish of seedlings, the first fruit from seed sown in 1846. The berries were of good size, very handsome, and varied in form and character.—They attracted much attention. More time is required to test their merits.

The following is a list of the contributors and varieties :
By M. G. Warner, Esq.—Burr's Seedling, Columbus, New Pine, Rival Hudson, Methven, Austrian Scarlet, Prolific Hautbois, Bishop's Orange, Large Early Scarlet and Hovey's Seedling.

By Hon. Isaac Hills.—Ross's Phoenix, Hovey's seedling, Prolific Hautbois, Keen's seedling, Roseberry, Bishop's orange, Methven, Stoddard's red and white Alpine, Large early scarlet, Austrian scarlet.

By H. P. Norton Esq., Brockport.—Hovey's seedling, Bishop's Orange, Boston Pine, Prolific Hautbois, Large early scarlet, Stoddard's red and white Alpine, Newland's Alpine, and whitewood.

By Major John Williams.—Hovey's seedling, Large early Scarlet and red and white Alpine.

By Judge Samuel Miller.—Ross's Phoenix.

By W. Shepherd, Esq., Irondequoit.—Hovey's seedling—very fine.

By L. Farrar, Esq.—Hovey's seedling.

By Bissell, Hooker & Sloane—Nurserymea.—Black Prince, Hovey's seedling, Ross Phoenix, Boston Pine, Large early scarlet, Corse's seedling, Burr's seedling, Bishop's Orange, Crimson Core, Swainstone seedling, Hudson, Stoddard's red Alpine.

By Ellwanger & Barry.—Boston Pine, Alice Maude, Myatt's Eliza, Swainstone seedling, Burr's seedling, Large early scarlet, and a dish of seedlings.

By J. J. Thomas Esq., Macedon.—A fine collection, but they were so injured by carriage, that he did not exhibit them.

PREMIUMS AWARDED TO AMATEURS.

To M. G. Warner, Esq., for the greatest number of varieties, and best grown, \$3.

To Hon. Isaac Hills for the 2d best, \$2.

To John Williams, Esq., for the best quart, variety Hovey's seedling, \$3.

To H. P. Norton Esq., Brockport, for 2d best quart, \$2.

To Judge Samuel Miller, a superb dish of Ross Phoenix, brought in after the premiums were awarded, otherwise supposed to merit the first premium, a premium, of \$3.

To W. Shepherd, Irondequoit, for a dish of very fine Hovey's seedlings, a gratuity of \$3 but as the last were removed before the close of the exhibition, and without the consent of the Committee, the award will be withheld.

CHERRIES.—Very few were presented.

Mr. Zera Burr, showed five specimens of Bigarreau de May, full ripe.

E. P. Smith Esq., a dish of Early white Heart.

D. D. T. Moore, Esq., a fine dish of May Dukes.

The premiums on Cherries will be awarded at the regular cherry exhibition in July.

NURSERYMEN'S PREMIUMS.

To Bissell, Hooker & Sloane, for the greatest number of varieties of Strawberries—Diploma.

To Ellwanger and Barry, for a dish of seedling Strawberries—Diploma.

The Committee on Vegetables have made no Report that we have seen. We observed on the tables, however, from Mr. John Donnellan, of Greece, fine. Early Kent Peas, Victory of Suffolk Cucumbers, 18 inches long, and Roman Emperor, as long, and both well grown. Long Scarlet Radishes, the finest and smoothest we have seen; 4 new and fine varieties of Lettuce, viz: Addy's New Coss, Palestine, Malta and Imperial Cabbage—these were all well grown.

Also, Mammoth Rhubarb. From Mr. Mulholland, of Brighton, half a peck of nice June potatoes; 2 bunches Beets, and 2 dozen superb Onions. Mammoth Rhubarb was presented by Samuel Moulson.

Mr. Donnellan deserves especial notice. He has spared no expense in procuring, at home or abroad, every new and valuable addition to our list of Vegetables. We hope the Committee will see that his efforts are rewarded by the Society.

In the Floral Department there were upwards of 25 contributors of flowers in bouquets, vases, &c., all tasteful and elegant. We have to find fault with amateurs for not naming their roses and other flowers—unless they do this, no progress can really be made. John Donnellan exhibited a collection of Poenies, among them his fine semi-double fragrant Seedling, very fine. John J. Thomas, of Macedon, exhibited 50 varieties of Roses, including many varieties of Moss, Hybrid Perpetuals, and others new and rare. Ellwanger & Barry 74 varieties, exhibited singly, in vials, and named; also 12 varieties of Poenies, and 22 of Green House Plants.

The THIRD EXHIBITION of the season was held on the 1st of July.

It was intended mainly for cherries, and of these there was an excellent display. Upwards of 30 of the finest varieties were exhibited. Although, as the Committee remark, the earlier sorts had passed away, and the late ones were not yet in season, we doubt whether in any other section of this country so many fine varieties of cherries could be collected at one time. Want of room will not permit us to particularize.

BUFFALO HORTICULTURAL SOCIETY.

We had the pleasure of being present at the June exhibition of this Society. At an early hour on the day of exhibition we found President Coppock, and some 20 or more young ladies actively engaged in decorating the hall with wreaths and festoons. At noon their labors were completed, and the reception and arrangement of articles commenced. In an hour or two the hall was filled with beautiful bouquets, vases, baskets and pyramids of flowers—we counted over 150. Several fine dishes of Hovey's Seedling Strawberries were exhibited, besides other varieties. Black Tartarian Cherries from Ohio, and Early White Heart, and Holman's Duke were in several collections. A choice collection of Roses, named, were shown by B. Hodge, Esq., of the Buffalo Nurseries. Messrs. Bryant & Sons contributed some fine Rhubarb, and other vegetables, besides some pretty baskets of strawberries, &c. Fine Geraniums and other pot plants were shown by E. Tyler. From the Mt. Hope Gardens of Rochester, there was a large collection of Roses, named and exhibited singly, besides bouquets and cut flowers of various kinds.

LADIES' DEPARTMENT.

ENGLISH vs. AMERICAN GIRLS.—The English girl spends more than one-half of her waking hours in physical amusements which tend to develop and invigorate, and ripen the bodily powers. She rides, walks, drives, rows upon the water, runs, dances, plays, sings, and jumps the rope, throws the ball, hurls the quoit, draws the bow, keeps up the shuttlecock—and all this, without having it forever pressed on her mind that she is thereby wasting her time. She does this every day, until it becomes a habit which she will follow up through life. Her frame, as a necessary consequence, is larger, her muscular system better developed, her nervous system in better subordination, her strength more enduring, and the whole tone of her mind healthier. She may not know as much at the age of seventeen as does the American girl; as a general thing, she does not; but the growth of her intellect has been stimulated by no hot house culture, and though maturity comes later it will last proportionably longer. Eight hours each day of mental application, for girls between ten and nineteen years, or ten hours each day, as is sometimes required at school, with two hours for meals, one for religious duties, the remainder for physical exercises, are enough to break down the strongest constitution.

Indian Rye Bread.

Two quarts of Indian meal.
Two quarts of rye meal.
Three pints of milk, or water.
Two teaspoonful of salt.
Half a pint of strong fresh yeast.

Having sifted the rye and Indian meal into a large pan, mix them well together, adding the salt. Boil the milk or water in a sauce-pan, and when scalding hot pour it on the meal, and stir the whole very hard. If too stiff, add a little more warm water. Let it stand till it becomes only of a lukewarm heat, and then stir in the yeast. Knead the mixture into a stiff dough, and knead it long and hard for at least half an hour. Then cover the pan with a thick cloth that has been previously warmed, and set it near the fire to rise. When the dough is quite light, and cracked all over the top, take it out of the pan; divide the mass in half; make it into two loaves: knead each loaf well for ten minutes or more; and then cover and set them again near the fire, for about half an hour. By this time have the oven ready, put in the loaves directly, and bake them at least an hour and a half. This bread is considered very wholesome. Should you find the dough sour, you may rectify it by kneading in a little warm water.

Egg Pone.

Three eggs.
A quart of Indian meal.
A large tablespoonful of fresh butter.
A small teaspoonful of salt.
A half-pint (or more) of milk.

Beat the eggs very light, and mix them with the milk. Then stir in, gradually, the Indian meal; adding the salt and butter. It must not be a batter, but a soft dough, just thick enough to be stirred well with a spoon. If too thin, add more Indian meal; if too stiff, thin it with a little more milk. Beat or stir it long and hard. Butter a tin or iron pan. Put the mixture into it; and set the pan immediately into an oven, which must be moderately hot at first, and the heat increased afterwards. A Dutch oven is best for this purpose. It should bake an hour and a half or two hours, in proportion to its thickness. Send it to table hot, and cut into slices. Eat it with butter or molasses.

GENESEE FARMER.

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THE GENESEE FARMER:

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DANIEL LEE & D. D. T. MOORE, Editors.

P. BARRY, Conductor of Horticultural Department.

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[Editorial Correspondence of the Genesee Farmer.]

A Review of an Interesting Subject.

In our last paper the following paragraph occurs in the leading editorial :

Providence has made the subsoil and the earth below it a vast reservoir of water more or less impregnated with those things that combine in cultivated plants—in human food—to form ultimately, the bones, brains, flesh and blood of man and all inferior animals. Kind reader, would you organize these constituents of grain and grass largely and cheaply in your growing crops? Then break the *undercrust*, that the moisture below with its salts of lime, its dissolved bones, potash, soda, magnesia, chlorine, sulphur, phosphorus, iron, carbon and nitrogen, may come up to the thirsty roots of your plants, and fully nourish the same. A deep tilled soil imbibes more solar heat in summer than a shallow plowed one. Being warmer, chemical changes are more rapid—more food is prepared for your crops in a given time. The mean temperature of the earth in Georgia is from 12 to 13 degrees higher than in New York; and corn is now from 12 to 13² feet high on the Savannah bottoms.

To the above is appended the following note at the bottom of the column :

* We suspect there is some mistake in these figures—but we “follow copy,” and leave our associate to confirm or correct the statement.—HOME ED.

The “figures” right. We have not measured any cornstalks; but have no reason to discredit the statements of gentlemen who have done so, and inform us of the result. The usual practice is to give each stalk from 16 to 25 square feet of surface to grow upon. Thus, one stalk to the hill, and these five feet apart each way, allows 25 feet of ground for every cornstalk growing in the field. The crop which will yield the most bushels of grain per acre, within many miles of this city, is planted in rows *six feet* apart, in drills, averaging a stalk each foot in length. The field is a perfect swamp, although each plant has been stripped of its suckers and occupies six square feet. Our impression is that this field will not exceed some 50 bushels per acre, when harvested. A smaller variety of this grain brought from the North, would, we suspect, yield for a few years much larger crops. There is a vast disproportion between the seed organized and the growth of stems and leaves. The

latter seem to rob the ears of their just share of nutriment in this climate. *Why* a weight of plants which would give 60 bushels of corn in New York makes but 20 in Georgia, is a matter worth inquiring into. That the yield in the seed of wheat and corn plants bears no uniform relation to the weight of straw, is doubtless known to most of our readers.

The greatest evil complained of at the South in the business of corn culture is its “firing” by drouth at the time when the ear is forming. Solar heat is so intense, and the evaporation of water from the naked earth, (where it is naked,) and from the prodigious surface of the leaves of corn, weeds, or grass, is so rapid, that a succession of heavy rains is almost indispensable to make a fair crop. And such rains! Over nine inches of water fell in Savannah in three successive days not long since. A down-pouring of this kind must wash and leach out of the soil no small amount of its fertilizing elements, if they abound therein. We have recently spent a day on the plantation of Gov. HAMMOND, who related some striking instances of the sudden washing away of manure in loose, cultivated soils. This failure of manure at a critical time in one's crop is not confined to any state or climate. It is more common here and extreme, however, than at the North. What is true of manure is equally so of the constituents of corn naturally in the surface soil, when equally soluble. In discussing this subject at agricultural meetings, with gentlemen of learning and experience, they usually agree with the writer that deep tillage before planting, and taking especial pains not to lacerate the roots in after culture are the most rational preventives of the “firing of corn.”

In our former article we stated that “the mean temperature of the earth in Georgia, (near Augusta,) is from 12 to 18 degrees higher than in New York.” Farther investigations lead to the opinion that the difference is full 20 degrees. We shall have something more to say on this point when we return home, and verify our notions as to what is the mean temperature of the soil in Western New York, in summer, at one, two, and three feet below the surface. The best way to attain, so far as practicable, a due degree of heat and moisture around the roots of cultivated plants, is the object we are driving at. Too much or too little water; too much or too little heat, are alike injurious to the crops of the husbandman.

The power of the cultivator over these impor-

tant elements of nature is very limited; yet he can do something to dry the soils which are too wet, and warm those which are too cold; as well as to moisten those which are too dry, and cool those which are too hot. A dense growth of luxuriant vegetation, like a thick forest, both cools and moistens the earth beneath it. To destroy all vegetation is to encourage greater sterility. Nature enriches the surface soil, not by diminishing but by increasing the annual growth of vegetables. The most profitable ratio of increase, by skilful rotation, the use of fertilizers and scientific tillage, is a point that needs elucidation through the light of well conducted experiments. One object should be to augment the production of more seeds of corn, wheat, oats and barley in proportion to the stems and leaves of these cereal plants. A compost made of a mixture of night soil and leached, with a little gypsum, will doubtless favor such a result. What we have called "breaking the undercrust" to promote the ascent of water, with its elements of seeds held in solution, at the critical period when ears are organizing, is very important. Such deep tilled soils suffer less from the extremes of rain and dryness, as all experience verifies.

RURAL BARBECUES.

Among the objects of interest in Southern agriculture, the annual Barbecues given to the negroes on large plantations, are not the least worthy of note. On these occasions, fat calves, pigs, lambs, kids, turkeys, geese, ducks, chickens, doves, quails and fish "suffer some!" Good eating and a plenty of it, with large numbers to participate in the feast, who enjoy it with perfect gusto, is ever a pleasing spectacle. All neighboring planters and their overseers sit down to the first table. It is reset, and the "darkies" succeed, being often waited on by their overseers and other whites. This jubilee is held after corn and cotton crops are "laid by." Both of these promise more than an average harvest. New cotton has begun to appear in market. The rice crop is also promising. Many fields have now growing on them the third crop this season—first a crop of wheat, oats or millet, then a crop of hay made of native grasses, and now a crop of peas, to be followed by seeding in wheat or rye in November.

SOUTHERN GRASSES.

There is something curious about these indigenous plants. They do not begin to grow till after timothy, herdsgrass, wheat, rye and barley are ripe in this climate. For a crop of hay the land is plowed in June, harrowed, and *not* seeded. The grass is mown about the first of August, and yields from one to three tons of good hay, according to fertility. A friend, (a northern farmer,) has just cut and cured three tons on an

acre, worth \$30. He grows good clover, fine turnips, and manures high. A crop of peas is made after early corn. In truth, autumn scarcely ends before spring begins. Peas are cultivated for hay—cut and cured like clover. A northern dairyman could make a fortune here by making butter and cheese.

Augusta, Ga., August 10, 1848.

Butter for the Navy.

SINCE the publication of the Transactions I have received, through a friend at Binghampton, a communication from J. J. HAWLEY of that place, who has long been engaged in furnishing butter for shipment. His letter fully corroborates and establishes the facts which are stated in the article on Butter for the Navy, (page 43 of the Transactions, and published in the last number of the Farmer,)—that, in many parts of our State, butter is made that will stand the test of tropical climates equal to Orange county.—I think it is important to spread the facts before the farmers, and I therefore have presented the annexed extract from this letter for publication.

Yours, B. P. J.

Ag. Rooms, Albany, Aug., 1848.

The idea that no butter made out of Orange County will resist the action of tropical climates, and preserve its qualities for years, is an utter absurdity. I think that not one third of the butter in market as Orange County, is made in that locality. That county has during ten years past sent out hundreds of emigrants to the counties of Sullivan, Delaware, Chenango, Broome, Tioga, Tompkins and Chemung, and perhaps others in the State of New York, who have continued the manufacture of butter for market, who at the end of each season have been in the habit of transporting their butter in wagons across the country to the different points of shipment in Orange County, and there shipping as Orange County. Many of these persons had for years before emigrating, regular purchasers in New York of their butter, and who it was understood were to take their product each year, when made, and pay the highest market price for it. These relations were in many instances continued from many years previous to their emigrating from Orange County, and many now continue them without the least objection being made to the quality of the butter.

The term Orange County seems to be misunderstood. It does not mean, as I understand it, the *locality* where made, but a peculiar method of manufacture. The perfect neatness and cleanliness of every thing about the dairies; the churning the milk instead of the cream, and the attention to the quality and quantity of salt used, are their principal peculiarities. The churning of the milk I deem essential to butter

intended for long voyages. It gives it a peculiar firmness and fineness of texture, and wax-like appearance, when practiced, which butter made by churning the cream seldom or never has. These peculiarities can generally be detected by the eye. There is also a cream-like flavor to milk churned butter.

I believe the highest price for dairies paid in New York for several years past, has been paid for several dairies from Chemung County. Being at the table of a well known gourmand in New York, in the spring of 1847, I remarked upon the very fine quality of the butter. He replied that such butter could not be made out of Orange County. The conversation continued, till finally the original firkin was brought up, when I found it was branded "*John Holbert—Premium.*" [Mr. HOLBERT resides in *Chemung County*, and took the first premium at the State Fair at Saratoga, for the best butter made in June.] The gentleman told me he had his supply of butter of this dairy for several years, at an extra price of 33 cents per pound, of a particular grocer who alone sold it.

The opinion of the gentleman who has the charge of the butter department of the U. S. Navy, "that no butter made out of Orange County will resist the action of tropical climates," I know to be erroneous. A dairy made in the County of Broome has been sent abroad much of the time for 10 years past. In 1839, it was sold in St. Croix to the Governor, for 75 cents per pound. In 1840 it was sold in New Bedford and went a whaling voyage. I saw some of it, after the expiration of nearly 4 years from its manufacture, as *sweet*, and in as good condition as when made. The same dairy has since been sold in New Orleans, in Natches and Mobile, and there has never been any complaint as to its quality. I shipped some butter that was the product of this County to Canton in 1846, which, under very disadvantageous circumstances, opened as fresh as when made, and proved so good that the shippers have each year since applied to me for butter for cabin stores for their ships. I broke up the original firkins, and procured a quantity of small white oak kegs, which would contain from 15 to 25 pounds each, and repacked the butter, selecting the best from a large quantity; these kegs were placed in very large hogsheds, and filled in the interstices with rock salt, and placed in the hold of the vessel. This butter was opened eighteen months after its manufacture, in as good a condition as when made. The small kegs were not used in reference to the preservation of the butter, but merely for the convenience of retailing at Canton.

The export of butter for the supply of the different cities, that are along the Southern coast of Asia, is probably destined to be a very considerable business. The entire supply for the

immense cities in the possession of the British and East India Company being derived from Europe, and mostly from Ireland—but some little from Holland—and it is usually purchased at home at a price which would fully pay an American shipper at its destination.

The relative proportion of our county that is adapted to the production of the finer qualities of butter is probably as small as any other article of general necessity; but much of the State of New York will when properly cultivated, produce the variety of grasses necessary to give butter the peculiar flavor and aroma of Orange County, when properly manufactured.

The emigrants from Orange County before alluded to, all agree in opinion that as good butter can be made in these new localities as in Orange County. Minisink is cited in the circular as being the locality producing the best butter in Orange County. A Minisink dairy woman in this vicinity who had for many years the reputation of being one of the best in that town, made her first dairy of about 60 firkins here last season, and says it was *the best she ever made*. All the Orange County Emigrants agree in opinion (and many of them are persons of much experience and close observation in their business,) that in favorable situations they can produce as much butter, and of as good quality, as in Orange County.

ANOTHER FACT RELATIVE TO THE POTATOE DISEASE.—At the late meeting of the Executive Committee of the N. Y. State Agricultural Society, held at Buffalo, Mr. F. J. Betts, of Newburgh, communicated the following information relative to the disease of the potato:—I have this year planted potatoes in my forcing house, which ripened some three weeks since, and upon digging them I found several entirely rotten. I deem this fact of some importance in ascertaining the nature of the disease, as it certainly refutes some of the theories in respect to it. The house is kept at as even a temperature as practicable, without the use of artificial heat, and the ground is continually moist; neither sudden alterations of heat, therefore, nor sudden changes from dry to wet, can be the cause of the disease. The soil is made 3 1-2 feet deep, very rich, from an admixture of well-rotted manure, muck, and shell marl, and limed very heavily. Such are the facts, and they may assist in arriving at some just conclusions in respect to the disease.

CHIMNEYS, to prevent their smoking, should not, according to the antiquated idea, be carried up zig-zag, nor made narrower at the top than at the bottom; but according to modern art, must be built as nearly perpendicular as possible, be free from all roughness in the inside, and be a little wider at the top, than at the base.

[Editorial Correspondence.]

Ag'l Fair.—Wool Growing at the South.

STONE MOUNTAIN, Georgia, Aug. 13, 1853.

ONE of the largest Agricultural Fairs ever held in Georgia has just closed at this famous summer retreat. The Association embraces members who reside in South Carolina, Alabama and Tennessee, as well as in this Empire State of the South. About ten thousand persons have attended the exhibition.

"Stone Mountain" is itself an object of great attraction. It is an isolated granite rock, forced up by volcanic action below the earth's crust, to over 2,000 feet in height above the surrounding plain. The distance around the base of the rock is not more than two miles, I should judge. From the rounded apex quite down to the level surface of the earth, the granite is much weathered, and every where covered with different varieties of the moss tribe. In some places, where the rock is somewhat friable and more readily decomposed by the conjoint action of oxygen, carbonic acid, rains, frost and solar influence, basins have been formed, which hold moisture, sand, alumina, iron and other mineral elements of the abraded granite; and also a rich black mould derived from the debris of cryptogamic plants. This soil now bears oaks, chestnuts, pines, and other forest trees that exist in the neighborhood. The summit of the mountain can be reached only on one side. It is crowned with a wooden tower some 200 feet in height. It would not be very expensive to construct a good carriage road to the top, and erect a public house there. Being between three and four thousand feet above the ocean, the air is very cool for this climate, and remarkably pure and bracing. There are but a few acres on the top of the rock so level that one can safely walk over it. It is a great curiosity.

The Fair was honored by the presence of a few blooded stallions, mares and colts, and several well bred Durhams. Not a sheep was exhibited, and but few swine. The sheep is the most neglected animal at the South. When that extraordinary man, JOHN RANDOLPH, (who was a great lover of horses,) said that he "would go ten rods to kick a sheep," he but expressed the popular feeling that still prevails in all the planting communities that I have visited. The fleece of the sheep seems to be regarded as the competitor of cotton in clothing the people of all civilized nations. Cotton lands must be far more worn and washed, and less abundant, before any planters of the South will abandon cotton culture and dog husbandry for wool growing. For the latter business Northern Georgia, or the Cherokee country, possesses great natural advantages. There are very few wolves, but any quantity of vicious dogs. It is mostly a limestone region and just beginning to produce a good deal

of wheat. The competition for the liberal premiums offered for the best samples of this grain at the Fair, was much closer than I ever saw in the State of New York. Specimens were presented from South Carolina, Tennessee, Alabama and Georgia—amounting in all to 100 bushels or more. The red wheat took the first premium, in preference to the white flint, or "little white." So soon as the railway is completed from Nashville to the Georgia roads, which extend to the Atlantic cities of Savannah and Charleston, an immense amount of Tennessee flour, meal, pork, beef and tobacco will reach the seaboard by this new route. Spurs of the Alleghany Mountains are now being perforated for the strong iron horse to pass through, with his train of flying cars. Railroads at the South are doing a good business, and have the promise of a vast increase when completed. Travel on them is about twice as expensive per mile as at the North.

Cotton, corn, wheat and rice crops are better than an average this season, so far as it has extended. Wheat and corn are made; cotton and rice have some hazards still to encounter.

For the dairy business and raising cattle, Northern Georgia presents peculiar advantages, Cheese is scarce and high; whilst fat cattle can be sent to Charleston and other Atlantic cities very cheaply, by railroads. Grass grows well in the mountain districts, and land is very low in price. This is destined to be a great stock producing region—including portions of North and South Carolina, Georgia, Tennessee and Alabama. Men and women are said to live to laugh and wax fat more than one hundred years, i. e. white people. Negroes are said to live much longer. Those born and brought up on rice plantations on the sea coast, are an inferior race as compared with the up country blacks.

Go to the mountains in any nation to find men who are men. Thousands of low-land planters pass their summers, and spend much of their annual incomes in the hills and mountains at the north of them. This region is preferred because it is nearer home than Saratoga or New England; and families run no risk of having their servants enticed away from them. The political anti-slavery movements at the North excite no little discussion and feeling in this quarter of the Union.

THE POTATO ROT.—The Germantown Telegraph says:—"Mr. John Goodfellow, of this borough, has sent to us a potato vine, which prematurely died, and which, upon examination, is found to have been destroyed by a worm, penetrating the heart of the vine, and eating out its vitality for nearly twelve inches, (down nearly to the potato itself,) and one inch beneath the surface of the ground, where the worm died, and now remains. We learn that other vines are affected in the same way; but whether, after all that has been written upon the subject, and after all the philosophical researches made, and opinions expressed, *this should be the cause of the potato rot*, we cannot decide before we have additional proof. Yet it strikes us that this is the grand discovery."

Letter from England.

SHOW OF THE ROYAL AGRICULTURAL SOCIETY.

YORK, England, July 14, 1848.

FRIEND MOORE:—Perhaps your readers would be pleased to hear something about the show of the Royal Agricultural Society, which has been held here during the last three days, and closed last evening. This Society was founded about ten years ago, and this is its tenth Annual Show. It has between six and seven thousand members, embracing most of the nobility and landed aristocracy of the kingdom. Its President is the Earl of Yarborough, and its list of Vice Presidents presents a formidable array of Dukes, Earls, and Marquises. The society has a Royal Charter which provides that the society shall exclude from its discussions all questions of a political tendency, or having reference to any measure pending or to be brought forward in either House of Parliament. Thus the door is effectually closed against any discussions that might lead to applications to Parliament to change the relations of landlord and tenant, provided these relations should be found to prevent advances in agricultural improvement.

The shows this year consisted of about two hundred horned cattle, (or beasts as they are here called,) one hundred and fifty horses, mares and fillies—two hundred and thirty lots of sheep—and one hundred and thirty pigs. The arrangements for exhibiting the stock were admirable. Printed Catalogues were furnished at one shilling (sterling) each; and the pens were in rows with convenient passages between, and under awnings. Each shed was furnished with a sign board, on which was painted in conspicuous letters the class of animals it contained—each animal was numbered, so that by reference to the catalogue you could see the name of the owner and a full description of any animal present.

The cattle were mostly Short Horns, Herefords and Devons; but from the greater number and evident superiority of the Short Horns, they undoubtedly continue the favorites with breeders. Some of these animals were truly magnificent creatures. The horses were excellent, especially those designed for agricultural purposes. The sheep were Leicesters, Southdown, and Cotswold. I did not see a fine-wooled sheep at the show. Some of the sheep were of enormous size, and beautiful specimens of their race. The pigs were by no means extraordinary. But few Berkshires were present—white being now the favorite color.

The implement yard was also conveniently arranged, and contained one hundred and fifty-eight stands, furnished with a great variety of agricultural and household implements. Many of these were exceedingly curious—some quite useless, and but few adapted to American agri-

culture. On Wednesday, the second day of the show, I visited the implement yard, and found the attendance very small. On Thursday, however, several thousand must have thronged the implement and cattle yards, and as the admission fee was half a crown and the visitors were nearly one half finely dressed females, who examined all the animals with a critical eye, I was upon the point of deciding that the British public really took a deep interest in the progress of agriculture—but a furious rush towards the entrance soon explained all. Prince Albert was to visit the yards, and the John Bulls (male and female) had paid their half crowns to get a sight at the wonderful Dutchman, who had consented to officiate as husband to their queen at an annual salary of about \$200,000! Away went the crowd pell-mell, men, and women, pulling, pushing and elbowing to get a sight at the Prince. All the *other animals* were forgotten in a moment, in the anxiety to see the one from Saxe Coburg. It took a dozen police officers to keep this respectable and genteel *mob* of British ladies and gentlemen from running over and trampling upon this soft looking and inoffensive German. It so happened that I was standing where I had a good view of the Queen's husband. He is a very decent looking, blue-eyed German, with a sandy moustache; and has the honor of being father to a numerous progeny, each of whom will saddle the British nation with an annual expense greater than the whole amount paid to advance Agricultural Science in the United Kingdom.

Yours,
G. W. P.

SOMETHING FOR ALL.—So various are the appetites of animals that there is scarcely any plant which is not chosen by some and left untouched by others. The *horse* gives up the *water hemlock* to the *goat*; the *cow* gives up the *long leaved water-hemlock* to the *sheep*; the *goat* gives up the *monk's hood* to the *horse*, etc.; for that which certain animals *grow fat upon*, others *abhor as poison*. Hence no plant is absolutely poisonous, but only respectively. Thus the *spurge*, that is *noxious to man*, is wholesome nourishment to the *caterpillar*. That animals may not destroy themselves for want of knowing this law, each of them is guarded by such a delicacy of taste and smell, that they can easily distinguish what is pernicious from what is wholesome; and when it happens that different animals live on the same plants, still one kind always leaves something for the other, as the mouths of all are not equally adapted to lay hold of the grass—by which means there is sufficient food for all.—*Stillingfleet.*

BLEEDING OF THE VINE.—Dr. Underhill stated before the N. Y. Farmers' Club, that the bleeding of the vine, so far from being injurious, seems to insure a good crop of grapes.

Notes of the Past Month.

BY S. W. OF SENECA COUNTY.

It is generally admitted that this is one of the most fruitful seasons ever known in this section of the country. Such has been the happy union of heat and moisture, that wheat and every summer crop have matured with unusual rapidity; even the lazy man's corn, thanks to the season, has overcome all slovenly, neglected tillage. Such crops of Indian corn and oats were never seen before in Seneca County.

Great improvements in the tillage of corn has taken place within the last three years. The steel cultivator, and the steel edged shovel plow, have contributed much to this result. A farmer told me yesterday that the actual cost of his last year's crop was but 9½ cents the bushel, interest of money on the lots included. The wheat crop is unusually large in the straw, and yields abundantly at the threshing. I know one farmer who has this week sold 600 bushels, the product of a field of 18 acres. Thirty bushels to the acre is a very common yield this season.

Wheat now comes in freely at \$1 per bushel; one storehouse here takes in on the average 1000 bushels a day. New barley has begun to come to market—price 44 cents per bushel of 48 lbs. Old corn is quick at 50 cents. The introduction of Indian corn into England and Ireland during a state of famine, has had the effect to make known there for the first time, the true value of that grain as food for man and beast; hence it is at this time in more demand in the English market than any other imported grain. Under the present low duty, the importation of Indian corn into the United Kingdom must continue to increase, giving great encouragement to the corn grower here.

Wool is now the only staple that does not remunerate the producer. The great advantage of keeping sheep as farm stock, on a wheat growing farm has doubtless added to a surplus production of wool in this region; but previous high prices, has given the main impetus to wool growing. Our woollen manufactures have been in a prosperous condition, until within a year; increased machinery and over-production have reduced prices so ruinously low to the manufacturer, that he is unable to pay any longer even a fair price for wool. The depressed state of the woolen market at home, induced some of our eastern manufacturers this spring to make a shipment of sattinets and coarse woolens to England. The New York Dry Goods Reporter says that the adventure proved to be unprofitable, but that it had the effect to secure to our manufacturers hereafter the uninterrupted supply of our own home market for common woolens.

At the post office here on the 15th of August I noticed a pile of Genesee Farmers, which had lain there from two weeks to a month or more;

looking at the superscriptions, I noticed that they were all former subscribers—thinks I to myself these men must read very little. *Au contraire*, I know a farmer who has paid over \$300 for a private library, and who takes both the Genesee Farmer and Albany Cultivator. In proof that he is something more than a theoretical book farmer, he sold the surplus products of his farm last year for over \$1400, and he paid out of the same but \$90 for hired help—he has no children old enough to work in the field. This man is of Scotch parentage; it is hardly necessary to say that he is fully up to the improvements and intelligence of the age.

The potato rot in this County is quite as fully developed this year as it was last—the vines are dying before the crop is ripe.

The arrival of the Arcadia yesterday at Boston, brings the usual intelligence so rife every year just before the English harvest, to wit, "wet weather," "damaged crops," and an advance in the prices of bread-stuffs. Four times out of five every miller or speculator who has helped advance the price of wheat on this side of the Atlantic, from such advices, has paid dearly for his credulity. S. W.

Waterloo, N. Y., Aug. 1848.

Fat Cattle.—Mr. Ayrault's Twin Steers.

[From Transactions of the N. Y. State Ag. Society.]

THE TWIN STEERS, of which an account is annexed, were fattened by Hon. A. AYRAULT, of Genesee, Livingston County, and exhibited in this city last winter for a few days. When on their way to New York, they were considered by those who saw them here, as the best pair of fat cattle ever shown in this city. One of the animals was pronounced by the butchers, and others, who are good judges, as the most perfect fat animal they had ever seen, and this animal when killed, fully justified we are told, the opinion expressed, in the quality of his meat, which was very superior.

They were slaughtered in New York by Mr. B. LAWRENCE, of the Centre Market. Their live weight was 5,522 lbs.—their dressed weight—quarters 3,450—tallow 512—hides 214—4376 lbs. It will be seen by the description annexed, that they were three fourths Short Horn—and they exhibited most favorably the distinguished characteristics of the improved breed, in laying on flesh rapidly and on the most valuable parts, and satisfied all of the great value of this breed for fattening purposes. The artist has given a very good likeness of the animals as they appeared when in this city.

Congress Hall, Albany, 12th April, 1848.

B. P. JOHNSON, Esq., Sec'y State Ag. Soc.

At the request of the Executive Committee, I transmit to you some particulars in reference to the cattle mentioned by you.



GENESEE VALLEY TWIN STEERS.

Raised by Hon. ALEX. AYRAULT, of Geneseo, Livingston Co. Live weight, 5,522. Dressed weight, 4,370.
 Certified by over 100 Butchers to be the best pair of Fat Cattle ever exhibited in New York City.

The Twin Steers, six years old in the spring of 1847, were from the stock of Samuel H. Fitzhugh, Esq., of Livingston County, who derived his stock from the herd of Thomas Weddle of Ontario County.

They were got by the bull Harry, who was got by *Rover*, dam *Daisy* by *Wades Eber*, grandam *Laura*, by *Marshal Beresford*—great grandam *White Rose* by *Seaton's Favorite*, G. G. D. *Primrose*, by *Colling's North Star*, G. G. D. G. D. by *R. Colling's White Bull*.

The *Mother* was a remarkably fine animal, both as a breeder and a milker. She was a cross of the improved short-horn stock of Philip Church, Esq., of Belvidere, Allegany County, and the native stock of the country.

Judge Church, was among the first who introduced the improved breed of cattle in Western New York. It is difficult for the want of sufficient data, to state the exact proportion of the cross in these cattle, but enough is known

to show that it was as high as $\frac{2}{3}$ or $\frac{3}{4}$ of pure Short-horn blood.

The Steers were purchased by me of Judge Fitzhugh, at two years old. That gentleman in a letter to me of the 3d inst. says: "The Steers while I owned them, received no other care than any other stock. They were, with other calves, taken from the cow at one week old, and received new milk for a week or two, afterwards skimmed milk until 2½ or three months old—then turned to grass, taken up in November or the first of December, and fed with hay alone until the 10th or 15th of February, then about a pint of meal a day, with a pint of oil-cake a week, until about the middle of April, then turned to pasture, and the next winter fed on hay in the field, without shelter."

They did not, at the time of my purchase, present the appearance of being cattle of uncommon excellence, but were considered fair, average steers. They were domesti-

cated, broke to the yoke and worked till near five years old. They were always good workers, but were never put to any very severe labor.

Their keeping while thus at moderate work, was not more than I usually give to my working oxen or other stock. They received hay, with a small quantity of grain, from March till they were put to grass, but the improvement made under this treatment soon evidenced that they were superior animals, and such was their promise, that, in the winter previous to their coming five years of age, they were high fed, and then in the summer afterwards, moderately fed with grain, about 6 to 8 quarts of meal each per day. I or one year after 1st November, 1840, and until the time that I sold them, I gave them the best keeping that could be furnished, making the whole time of feeding about twenty-one months.

The last year of that time, they were kept at the barn on dry feed, averaging about 12 or 14 quarts of meal each, with some carrots, potatoes, pumpkins, &c., and to sustain their appetite in vigor, sometimes ground barley was used, and oats and corn, and sometimes clear corn meal, changing from one to the other. Great care was taken in the quality and preparation of this corn meal, indeed so far as to have some of the corn kiln dried.

The cattle were never stabled, but usually put up to receive their food, and then exposed to the season with more or less of shed protection. To a roomy yard, with the ground to stand or lie upon, instead of confinement upon a stable floor, I attribute the great activity and sprightliness of the cattle when at their perfection. Although remarkable for expanding in size, and taking on fat, they were never what could be called great eaters.

I purchased the steers in the fall of 1843 for \$60 00
I kept them for work 2½ years, but as their work was not severe, and they only received the ordinary keeping of my stock, I estimate the expense of keeping over work, at 4s. per week for 2½ years. . . . 65 00

I then commenced feeding them, and for ¾ of a year, fed but moderately—say, what equals in expense ¾ quarts of corn meal for each per day—being ¼ bushel corn per day for 274 days, making 137 bushels at 4s. per bushel, 68 50

Add hay, grass and attendance 8s. per week, 39 00

For the last year, I fed them in the best manner—say, corn, oats and barley meal about 12 quarts each per day, and some pumpkins, potatoes and carrots, equalling in expense one bushel corn per day—being 365 bushels, at 4s. per bushel, 132 50
Hay and attendance at 8s. per week, 52 00

\$467 00

This at a liberal estimate was the cost of the cattle when sold. I sold them in November, 1847 for \$550 paid down, and a promise from the purchaser Mr. Calkins of \$100 more if the cattle turned out well—which promise he has since agreed to make good.

I annex a copy of a certificate given by over one hundred butchers and cattle dealers and the purchaser, who saw the cattle in New York, and certify as to their fine qualities.

Very respectfully yours,

ALLEN AYRAULT.

Certificate of One Hundred and Six Butchers, Drovers, and persons judges of Cattle.

This is to certify, that the undersigned, butchers, drovers and persons conversant with and judges of the best cattle produced in this market, take pleasure in stating, that the Genesee Valley Twin Steers, raised by the Hon. Allen Ayrault, of Genesee, Livingston County, N. Y., are the best pair ever exhibited in this market. And we further take pleasure in stating, that the price obtained for said steers far exceeds any price ever obtained for a pair of cattle at this market before, by several hundred dollars.

GEO. W. ALLERTON,
JAMES CRAWFORD, and 104 others, and
BRYAN LAWRENCE, Purchaser.

Bull's Head. N. Y., Jan. 8th, 1848.

A NEVER FAILING REMEDY FOR DYSENTERY.—Those afflicted with this disease, by procuring a piece of the root of genuine Turkey Rhubarb, and chewing a piece of the size of a cherry-stone once or twice through the day, will find certain relief. If the rhubarb be the genuine article the remedy is almost sure in whatever stage the disease may be.

Agricultural Education.—A Suggestion.

THE attention devoted to the improvement of the agriculture of our country affords a cheering manifestation of the increasing interest this important subject is receiving from the American Farmer. The cultivation of the soil not only adds to the prosperity of the nation, but multiplies wealth and augments the happiness of individuals. Agriculture is the eldest of the arts, the *alma mater*, giving life and health to trade, commerce and the minor business of life—furnishing healthy employment for a majority of every civilized people. How important to a nation, then, is its agriculture. What a powerful auxiliary in sustaining its prosperity and supplying the wants and comforts of its people. How very desirable, how indispensable, that skill, intelligence and industry should control its operations.

In all the other departments of science and art, a thorough and rigid system of study has ever been deemed necessary to prepare the student for the duties of his profession. Years of laborious toil are devoted to the study of all the branches supposed to have a bearing upon the chosen one. Academies and Colleges have been established at great expense, and liberally endowed by the munificence of the State, to enable the student in what are termed the "learned professions" to acquire the knowledge conceded to be necessary to the course he is to pursue.

This is proper, praiseworthy—perhaps indispensable. Is there no study requisite, no knowledge important, to fit young men to be successful and profitable tillers of the soil? Can there not be a judicious and necessary education which shall eminently prepare the farmer to understandingly and profitably pursue the profession he has chosen, and add materially to his zeal and his happiness while so doing? May not the tilling of the earth be justly considered a profession, an honorable profession, ranking as much higher than others as it is more important? Should it not, then, be studied as a science, while practiced as an art?

The question will be naturally asked—where shall it be studied as a science? The appropriate answer would be, in an Agricultural School. Where, how and by whom shall this School be established? Private individuals have established such schools, and much good it is believed has arisen therefrom. But the enterprise is too vast, too expensive, to succeed by individual exertion. Some few years since the senior editor of the Farmer, by an exertion almost unparalleled, did succeed in nearly getting a School established at Fairfield Academy, to which the state was to appropriate \$5,000 annually; but for reasons unknown to the writer, the enterprise did not succeed.

Has not sufficient time elapsed to have another effort made to establish such an institution, and the effort continued until it is crowned with success? Great good frequently results from the most humble beginnings. The writer of this article believes such an institution must be eventually established, and would propose that active and energetic measures be now taken to secure a department of Agricultural Education in the "State Normal School." The Legislature has appropriated \$15,000 for buildings for the School, and the farmers of the Empire State should bestir themselves and have a Professorship of Agriculture established therein, that such teachers as choose can go out to the public prepared to teach this important branch. The Chemistry and Geology of Agriculture are important branches, and a school for teaching them is of the utmost importance. Let such a branch be added to the State Normal School—Let the ball be set in motion.—Let farmers consult their interest and petition the Legislature for the same.—Let the agricultural and the political press speak out, and something may be done worthy the Agriculture of the Empire State.

Mohawk, N. Y., Aug., 1848. H. C. W.

Gleanings from our Foreign Exchanges.

TO MAKE HENS LAY PERPETUALLY.—Hens will lay eggs perpetually if treated in the following manner. Keep no rooster; give the hens a very small portion of fresh meat chopped up like sausage meat, say half an ounce a day to each hen, during the winter, or from the time insects disappear in the fall, till they appear again in the spring. Never allow any eggs to remain in the nest for what is called nest eggs. When the roosters do not run with the hens, and no nest eggs are left in the nest, the hens will not cease laying after the production of twelve or fifteen eggs, as they always do when roosters and nest eggs are allowed, but continue laying perpetually. My hens lay all winter, and each from seventy to one hundred eggs in succession. If the above plan were generally followed, eggs would be just as plentiful in winter as in summer. The only reason why hens do not lay all winter as freely as in summer, is the want of animal food, which they get in summer in abundance, in the form of insects. I have for several winters reduced my theory to practice, and proved its entire correctness.—*Perth Courier.*

Note.—To adopt this course to our climate, it will be necessary to protect them in winter by an underground room, or a stone or brick structure, well lighted, and an earth floor, with plenty of gravel and lime. Animal food is the greatest secret of causing hens to lay constantly. Any animal food, as boiled scraps, liver, and

offal of any kind will answer, with the exception of salted meats.

RENOVATION OF OLD APPLE-TREES.—The following information received from a gardener who for many years largely supplied the London market with fruit, may probably be new to many of our readers:—It is generally found that after an apple-tree has borne for a certain number of years, it becomes comparatively unproductive. It has been usual in such cases to remove the old tree, and replace it by a younger one. This may be obviated by re-ingrafting the old tree; and according to the testimony of the gardener above mentioned, the older the stock, the better is the quality of the fruit. He had scarcely a tree of any age, among several hundreds that his orchard contained when the writer visited it, that had not undergone this process, and in some cases more than one. There were trees whose trunks were so hollow as in some parts to be little more than a shell, which had been subjected to this operation the season before, and, judging from the vigorous appearance of the grafts, with perfect success. The plan he adopted was the following:—

The ends of the branches were saw nor cut off where they were about the size of a man's wrist, or rather less, and two or more scions inserted in each, according to circumstances.—By this means, in the course of three years he obtained a large full-bearing tree. The principal difficulty was to protect the new grafts from damage in high winds. This was overcome by ingrafting the half of the tree at one time, and leaving the other to form a shelter; and completing the other half when the grafts were sufficiently grown to return the shelter. It is scarcely necessary to add, that this precaution did not supersede the usual appliances for giving the scions support by means of poles attached to the branches. It may also be remarked, that the productive powers of apple-trees are frequently impaired by the want of sufficient attention in gathering the fruit. The greatest care should be observed in removing the apple, that the bearing spur be not broken or injured thereby.—*Chamber's Journal.*

IRELAND.—Almost every account of the potato crop in Ireland is cheering. In reports from several (forty) places in different parts of the kingdom which we have seen, they all concur in stating that "the general crop never looked so healthy and luxuriant;" even where it is "reported" the writers state that "the crops appear good, and are not affected to any such extent as to cause alarm."

A correspondent from Portrane, in the *Irish Farmers' Gazette*, says—"I examined several fields and plots of potatoes in this neighbourhood, and could not discover the slightest vestige of the potato disease.

Rural Taste.—Cottage Residences.

It has been said that "true taste is a good economist." Now taste, when kept within proper bounds, may be economy; but we often see TASTE get the upper hand of REASON, and drive rampant, regardless alike of utility or economy, of means or ends. I was led to these perhaps rather crude reflections on an examination of "Downing's Landscape Gardening," and "Cottage Residences," in which I find the above quotation. The beauty of Mr. DOWNING'S work no one will doubt—the taste and genius displayed by the admired author no one will call in question: yet, how illy are they adapted to the wants of the American people—how poorly calculated to refine the tastes of the masses, or to give a touch of beauty to the thousands of buildings that are "going up" around us. Of how little service to the Farmer and Mechanic—the man of small means and refined taste, who wishes to make his home pleasant and attractive.

From these works the man of wealth may learn how to expend his thousands in building beautiful and costly mansions. They may encourage a taste for display—for princely residences and retinues. They may cause aristocratic "establishments" to spring up over our land. The ghost of some ancient castle, or the effigy of some lordly manor-house, with its "lodges" and "liveried" attendants, may be made to supplant the plain republican "homestead"—European indolence and luxury to encroach upon American industry and simplicity: but, I doubt whether this will improve the taste or the morals, or add much to the peace and happiness of the American people. I doubt whether it will promote that EQUALITY of which we boast, or make us more worthy the respect and imitation of the world.

In this country, thanks to our Republican institutions, and the smiles of a kind Providence, we have but few very rich, and few extremely poor. Here, with slight exceptions, all labor in some sphere, and all alike enjoy the necessities and luxuries of life. And I regret, that under a plea of improving the "TASTE" of our people, Americans should be taught a love of pomp and show, and costly establishments. Taste may be purchased at too great an expense.

That the taste of our people needs improving in respect to building and beautifying their homes, and that such improvement might be made consistent with simplicity and economy, no one can doubt. But a work to aid in its accomplishment, must, as far as possible, be within the means, and meet the wants of all, so that the man with four or five hundred dollars may find assistance in enabling him to make him a home at once convenient and tasteful. I long for the

time when not only the mansions of the rich, but the cottages of the poor, shall have the benefit of that "true taste which is good economy."

The traveller in many parts of Europe, particularly in the Agricultural districts of England, is enchanted with the beauty of its rural residences. And this delight is not caused by the elegance and splendor of the palaces of the "gentry" occasionally met with, but by the beautiful, though humble cottages of the poor, which, with the flowering hedges so common in England, gives to it the appearance of a vast garden, with here and there a summer-house, shaded by a cluster of overspreading trees, and covered with roses and honeysuckles.

We need another work on COTTAGE RESIDENCES—a work for the million. And as the Genesee Farmer circulates among the masses, it is a fit medium through which to present a few thoughts on the subject. RUSTIC.

Rose-Lawn, N. Y., Aug., 1848.

Honey Bees.

Certain persons in this country, are making money by producing artificial swarms of bees at one dollar for each swarm produced. They attempt to veil the subject in mystery.

Was the process a discovery of any of these persons, we would say go ahead gentlemen—do what you can and make what you can by your discovery and genius. But it is a species of "Book Farming," which they have learned from Books, and thereby it is not—should not—and shall not be used as a recent valuable discovery if we can make the matter understood.

Artificial Swarming, consists merely in taking a piece of comb containing young bees *about three days old*—fixing this comb in a clean hive and then collecting by means of a quill or brush and saucer, at least one-half of the bees belonging to the hive from which the comb was taken and placing them in the hive containing the newly cut comb. This is all that is necessary to produce a good active swarm of bees, which will do as well at last as those left behind. Some pretend that a particular kind of comb should and must be taken for this purpose, for instance, comb containing royal cells. It is a mere pretence; any comb containing bees of the age above mentioned will do.

ANOTHER PROCESS.—Take the Queen Bee, and secure her—then drive more than half the Bees in the hive into another hive—remove it some distance and then put the Queen in, or if less than half are taken, remove the old hive to some other place and let the new one occupy the place of the old one, so that the absent workers, as they return from their labors may recognize their old Queen and remain with her.—*Morgan (Ohio) Chronicle*.

Agricultural Products of the U. S. and France.

A writer in the English Agricultural Gazette makes an interesting comparison of the products of the United States compared with those of France. The population of the United States is set down at twenty millions, and that of France at thirty-five millions. The proportion of the agricultural population in America is given as 80.4 per cent.; commercial 2.5; and manufacturing 17.1. The writer observes that the agricultural productions of the United States, compared with its inhabitants, is enormous, viz:

	UNITED STATES.	FRANCE.
Horned Cattle,	14,971,593	9,936,538
Sheep,	19,311,374	32,151,430
Horses and Mules,	4,335,669	3,192,337
Pigs,	26,301,293	4,940,721

He also contrasts the grain crops of the two countries, showing the comparative amounts produced of each kind, in hectolitres, as follows:

	UNITED STATES.	FRANCE.
Wheat,	30,000,000	69,000,000
Barley,	1,500,000	16,000,000
Rye,	6,000,000	27,000,000
Oats,	44,000,000	48,000,000
Indian Corn,	135,000,000	7,000,000
Buckwheat,	2,500,000	8,000,000

"The United States," (says the writer,) "produce annually 70,000 tons of wool, 600 tons of hops, 300 tons of beeswax, 10,000,000 tons of hay, 95,000 tons of hemp and flax, 100,000 tons of tobacco, 40,000 tons of rice, 395,000 tons of cotton, 60,000 pounds of cocoons of silk worms, 77,000 tons of sugar, and 5,000 hectolitres of wine. The produce of the farm yard or cow house, is estimated at £7,000,000 (\$35,000,000;) that of the orchards, £1,560,000; forests, £2,720,000." The total amount of agricultural produce amounts to the enormous sum of £138,730,160 sterling, or \$693,650,800. The manufactures of the United States, though yet in their infancy, are rapidly increasing, and the writer puts down the amount of capital embarked in manufactories of various kinds, at £56,757,912. Considered in all respects, therefore, he concludes: "America may be classed next to Great Britain, as the second agricultural and commercial country in the world."

Origin of Various Plants.

EVERY farmer ought to be so far acquainted with the history of all ordinary plants and trees, as to know their nature, country and condition. Such knowledge, besides being on every account proper and desirable, will sometimes explain phenomena in their habits that would otherwise appear anomalous and inexplicable.

Wheat was brought from the central table land of Thibet, where its original yet exists as a grass, with small mealy seeds.

Rye exists wild in Siberia.

Barley exists wild in the mountains of Himalaya.

Oats, wild in Northern Africa.

Maize, Indian Corn, was brought from America.

Rice, from South Africa, whence it was taken to India, and from thence to Europe and America.

The Garden Bean, from the East Indies.

The Horse Bean, from the Caspian Sea.

Buckwheat came originally from Siberia and Tartary.

Rape Seed and Cabbage grow wild in Sicily and Naples.

The Poppy from the East.

The Sunflower, from Peru.

Flax or Linseed is, in Southern Europe, a weed in the ordinary grain crops.

The Kaddish from China.

The Garden Cress, out of Egypt and the East.

Hemp is a native of Persia and the East Indies.

The Nettle, which sometimes furnishes fibres for spinning, is a native of Europe.

Of Dye Plants the Madder comes from the East.

Dyers weed grows in Southern Germany.

Safflower from Egypt.

Dyers Knotgrass from China.

Hops come to perfection as a wild plant in Germany.

Mustard and Carryway Seed the same.

Anise from Egypt and the Grecian Archipelago.

Koriander grows wild near the Mediterranean.

Saffron from the Levant.

The Onion, out of Egypt.

Horseradish from South Europe.

Tobacco is a native of Virginia, Tobago, and California.

Another species has also been found wild in Asia.

Fuller's Teazel grows wild in Southern Europe.

The Grasses are mostly native plants, and so are the Clovers except Lucerne, which is a native of Sicily.

The Gourd is probably an Eastern plant.

The Potato is a well known native of Peru and Mexico.

Turnip and Mangold Wurzel come from the shores of the Mediterranean.

Moolrabi and White Turnip are natives of Germany.

The Carrot is supposed by some to have been brought from Asia, but others maintain it to be a native of the same place as the White Turnip.

Amongst other kitchen garden plants, the Spinach is attributed to Arabia.

The Cucumber from the East Indies.

The Melon, from Kalmuck.

Parsley grows in Sardinia.

Celery, in Germany.

Of Fruit Trees and Shrubs, the Currant and Gooseberry came from Southern Europe.

Medlar Pear and Apple are likewise European plants; but the Seckle, the best of pears, is traced to near Philadelphia, as its original locality so far as known.

The Cherry, Plum, and Almond came from Asia Minor.

The Walnut and Peach, from the same country.

The Citron from Media.

The Quince from the Island of Crete.

The Chesnut from Italy.

Of Forest Trees, the majority are native plants of England except the Pine and Horse Chesnut, the former of which was brought from America, and the latter from Thibet.

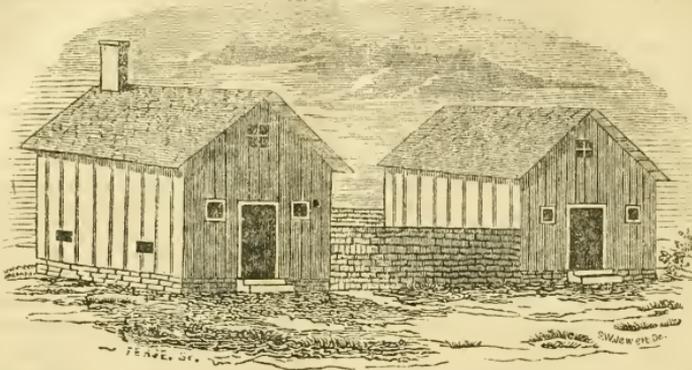
But the greatest variety of Oaks and other fine timber trees, are natives of North and South America.

The Hurtleberry is a native of Asia, Europe, and America.

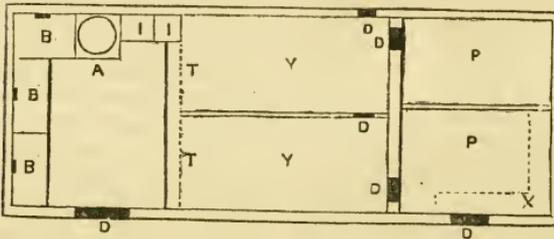
The Cranberry of Europe and America.

FACTS IN REGARD TO CUTTING UNRIPE CORN.

It is stated in the American Farmer, that Indian corn, if cut many days before it is fairly glazed, will ripen, and that, too, in most instances, without any diminution either in quantity or quality of the grain. In several instances, which have fallen under the observation of the editor of that paper, it has, when cut at the roots before the kernels had become fairly "specked," filled even more rapidly than while standing. That the stalks afford nutriment, even for some days after cutting, he says has been fully demonstrated by the fact, that an ear, plucked at the time of cutting, will shrivel and be very imperfect; whereas those that remain, will "fill out" and become sound corn.



PLAN OF A PIGGERRY. — ELEVATION.



GROUND PLAN.

Plan of a Piggery.

I FORWARD you my plan of a piggery and other necessary fixtures, which I have in contemplation, and am preparing to put up, on a tasteful and cheap scale, within the reach of every thriving citizen in our State.

The cost of construction will depend much on the finish. The ground plan of the two buildings, which includes a yard between them, is 40 feet long and 14 feet wide, which may cost from 50 to 90 dollars. A good mechanic has proposed to do all the labor, after the foundation was laid, for \$40, the boards to be planed and matched. Unless the buildings are to be painted, I would recommend that the boards be put on in a rough state, and whitewashed with a composition of stone lime and water lime. To construct a good cellar would cost about \$30 more.

This plan might be enlarged; I have designed it for six fattening hogs, or for one breeding sow and three porkers. "Millionaires" may require something more expensive, but this is sufficiently spacious for the common citizen of Vermont. The two upright buildings represent the swill house and piggery. Both are 14 feet long and 12 feet wide, the posts 10 feet.

The ground plan of the first building contains the arch A, for cooking, where boilers and steamers will be placed sufficiently large to accommodate the number of hogs to be fed. The feeding troughs, also, T, T, are included in the same building, which is made of white oak plank, and extends the whole length of the house, except the space occupied by the tubs or vats, I, I, which are convenient for the cooked food, swill, &c. One of them may contain the warm food, the other in a process of fermentation to be fed at any time. The dots on the yard side of the house and feeding trough, T, T, represents standards of iron or white oak, arranged along and close to the outside of the trough, at suitable distances to allow the heads of the swine to pass through them into the feeding trough. The sill on this side of the house is raised and framed to the posts two feet above the common level of the other sills, and these, standards or pins which prevent hogs from getting into the trough or house, are framed into the sill above, and the feeding trough; the plank which forms the bottom of the trough may project on the outer side for that purpose, or the plank may be of such thickness as to enter the upper edge.

B, B, B, are bins for apples and roots, in each

of which a window opens for the purpose of shoveling them in, two of which are seen in the upright part. The hogs are to lodge in the pen, and can pass from their apartments, P, P, through the yards, Y, Y, to the feeding trough, T, T, a partition divides the sty or open yard, and extends across the piggery, forming two sleeping apartments, P, P, and two yards, Y, Y; six doors and passage ways opposite, D, D, D, D, D, D. The main door in the piggery opens into the passage, X, 2½ feet wide, for the convenience of the attendant to carry in straw, &c. The open yards may be used for litter, and to manufacture manure; these occupy the space enclosed between the two upright buildings, and are 16 feet long.

The floor of each building and the yard should be flagged with stone or brick, secured from frost. The sills of the two main buildings are raised upon a wall 18 inches. A cellar may be constructed under the first building for the storage of roots; if seven feet deep it will hold 600 bushels, allowing 2420 cubic inches to the bushel. A convenient wheel and windlass is arranged in the loft of this house, for handling the hogs at the time of killing, and may be convenient for dressing other animals.

There are many piggeries in this State constructed about 30 feet long, and 20 feet wide, which contain all the cooking apparatus, the hogs, grain in the loft, and sometimes a wool room, which form a complete nuisance. I am opposed to feeding swine in close buildings, where they make their litter, and cooking food under the same roof. The effluvia cannot be very pleasant for man or beast.—*Trans.*

Truly yours, S. W. JEWETT.

Weybridge, Vt., Nov. 15, 1847.

Facts and Inquiries, in a Letter from Tennessee.

MESSRS. EDITORS:—In the "Hints from a Tennessean," (page 133 of the current volume of the Farmer,) while speaking of the quantity of corn raised per acre, you make me say "15 or 20 barrels (of ears) of corn to the acre." Such was not my meaning. I meant *shelled corn*, and five bushels to the barrel. Last year I raised near 15 barrels shelled corn per acre, on six acres of ground, that had been in meadow I suppose eight or ten years, and mowed every year, and no manure applied at any time. I have the same ground in corn this year, and find that it is *too close*; I suppose from an over supply of lime, as it lies just below a limestone hill. There are many clods on it that were torn up in breaking the ground last March, and as I object to burning stalks it could not be harrowed, and they are so hard that it is difficult now to knock them to pieces with a hoe. Please give me a remedy. I suppose that sand or ashes would be good, but neither are in reach in sufficient quantity.

Our average corn crop here I suppose to be about 7 barrels per acre of shelled corn. We would like to double it, but if it has to be done by saving and hauling manure, we don't know but we had better leave for Texas, or some other fresh range. Our manure seems to produce but little benefit, compared with the labor of saving and spreading it on the farm. In the first place we let it remain in our stables until, from the quantity, we are compelled to throw it out to make room for our horses; (we don't house other stock, and not many of our horses.) It then lies by the sides of the stables, exposed to the sun and all the rain that falls for perhaps two or three years before there is a sufficiency to commence hauling. We then take it to our corn fields, and if we are careful enough to put a little in each hill of corn, (which requires more time than most of us have at planting time,) we see considerable advantage; if spread broadcast it does little good.

I would like to know how long a wire fence would be likely to last. If it can be made for 35 cents a rod, and will remain durable, it is cheaper than most of our good fencing; yet I very much doubt its durability.

As I am writing on various matters, without any regularity or system, I will mention one or two others, and quit. I have several agricultural works and journals, and have looked over them in vain for plans of machinery for churning and washing—two of the most laborious processes of household economy. I have noticed a few plans for each process that I considered of little value, and liable to many objections. Perhaps some of your numerous readers can give plans through the Farmer for each process that would be far preferable to the common hand dasher to the churn, and the hand rubbing or paddling for washing clothes. If so, *one, at least*, of your readers would be under obligation to reciprocate the favor when an opportunity served.

Respectfully yours, W. L. W.

Three Forks, Tenn., July, 1848.

EXPOSURE TO THE SUN.—There are few points which seem less generally understood, or more clearly proved, than the fact that exposure to the sun, without exercise sufficient to create free perspiration, will produce illness; and that the same exposure to the sun, with sufficient exercise, will not produce illness. Let any man sleep in the sun, he will wake perspiring and very ill; perhaps he will die. Let the same man dig in the sun for the same length of time, and he will perspire ten times as much, and be quite well. The fact is, that not only the direct rays of the sun, but the heat of the atmosphere, produce abundance of bile, and powerful exercise, alone, will carry off that bile.—*Popular Errors Explained.*

Plowing.

This is the most important of the mechanical operations of the farm. The time, the depth and the manner of plowing must depend on the crops to be raised, the fertility and character of the soil and other circumstances.

Plowing Clay Land.—Whenever practicable these should be plowed in the fall for planting and sowing the ensuing spring. The tenacity of the soil may thus be temporarily broken up by the winter frosts, its particles more thoroughly separated, and the whole mass reduced to a finer tilth than can possibly be effected in any other manner. There is a still further and important advantage from this practice which ensues from the attraction existing between the clay and those gases that are furnished from the atmosphere, snow, rains and dews. In consequence of being thus thrown up and coming in contact with them, it seizes upon the ammonia and carbonic and nitric acids which are in the air, and holds them for the future use of the crops; while their great affinity for manures effectually prevents the waste of such as are in it.

The furrows of clay soils should be turned over so as to lap on the preceding and lie at an angle of 45°; and for this purpose the depth of the furrow slice should be about two thirds its width. Thus a furrow 6 inches deep should be about 9 inches wide, or if 8 inches deep, it should be 12 inches wide. This will allow of the furrows lying regularly and evenly, and in the proper position for the drainage of the soil, the free circulation of air, and the most efficient action of frosts which in this way have access to every side of them. Land thus thrown up is found to be finely pulverized after the frosts leave it, and it is comparatively dry and ready for use some time earlier than such as is not plowed till spring. For sowing, land plowed in this manner requires no additional plowing, but it is better fitted for the reception of seed than it can be by any further operation, unless by a slight harrowing if too rough. The different kinds of grain or peas may be dibbled in or sown directly upon the surface and covered by the harrow; and if sown very early, the grass and clover seeds require no covering, but find their best position in the slight depressions which are every where made by the frost, and which the subsequent rains and winds fill up and cover sufficiently to secure a certain growth. When a field is intended for planting and is thus plowed in the preceding autumn, in some instances, and especially when the soil is full of vegetable manures, as from a rich green sward, a single furrow where the seed is to be dropped, is all that is necessary to be plowed in the spring.

If the land has been previously cultivated, (not in sward,) and is designed for planting, a stiff clay is sometimes ridged up by turning a double

furrow, one on each side and so close as partially to lap upon a narrow and unbroken surface, thus leaving the greatest elevations and depressions which can conveniently be made with the plow. The frost and air by this means, have a greater surface to act upon than is afforded by thorough plowing, unless it be in a firm sod, which maintains its position without crumbling. The advantage of a dry surface and early working are equally secured by this latter method; and to prepare for planting, the furrows need only to be split by running a plow through their centre, when they are ready for the reception of the seed.

Plowing sandy or dry soils.—These require flat plowing, which may be done when they are either quite wet or dry, but never till wanted for use. By exposure to heat, rains and atmospheric influences the light soluble manures are exhaled or washed out, and they receive little compensation for this waste in any corresponding fertility they derive from the atmosphere in return. To insure flat plowing on an old sward, the depth of the furrow should be about one-half its width and the land or ridges as wide as conveniently be made, so as to preserve as much uniformity of surface over the whole field as possible.

Depth of Plowing.—All cultivated plants are benefited by a deep permeable soil, through which their roots can penetrate in search of food; and although depth of soil is not fully equivalent to its superficial extension, it is evident that there must be a great increase of product from this cause. For general tillage crops the depth of soil may be gradually augmented to about 12 inches, with decided advantage. Such as are appropriated to gardens and horticultural purposes may be deepened to 15 and even 18 inches to the manifest profit of their occupants. But whatever is the depth of the soil, the plow ought to turn up the entire mass, if within its reach, and what is beyond it should be thoroughly broken up by the subsoil plow, and some of it occasionally incorporated with that upon the surface.—The subsoil ought not to be brought out of its bed except in small quantities to be exposed to the atmosphere during the fall, winter and spring, or in a summer fallow; nor even then, but with the application of such fertilizers as are necessary to put it at once into a productive condition. The depth of the soil can alone determine the depth of plowing; and when that is too shallow, the gradual deepening of it should be sought by the use of proper materials for improvement till the object is fully attained. Two indifferant soils of opposite characters, as of a stiff clay and sliding sand, sometimes occupy the relation of surface and subsoil towards each other; and when intimately mixed and subjected to the meliorating influence of cultivation, they will frequently produce a soil of great value.

Cross Plowing is seldom necessary except

to break up tough sward or tenacious soils; and the former is more effectually subdued by one thorough plowing in which the sod is so placed that decomposition will rapidly ensue; and the latter is more certainly pulverized by incorporating with it such vegetables, and long or unfermented manures and the like, as will take the place of the decaying sod. The presence of these in the soil, lessens the labor of cultivation and greatly increases the products.

Subsoil Plowing.—This is a practice of comparatively recent introduction, and it has been attended with signal benefit from the increase and certainty of the crop. It is performed by subsoil plows made exclusively for this purpose. The objects to be accomplished are to loosen the hard earth below the reach of the ordinary plow and permit the ready escape of the water which falls upon the surface; the circulation of air; and a more extended range for the roots of the plants, by which they procure additional nourishment, and secure the crop against drought by penetrating into the regions of perpetual moisture. When all the circumstances are favorable to the use of the subsoil plow, an increase in the crop of 20, 30, and sometimes even 50 per cent. has been attributed to its operations. Its maximum influence on stiff soils is reached, only where underdraining has been thoroughly carried out. Its benefits have been more than doubted when used in an impervious clay subsoil, where it makes further room for storing up stagnant water; and it is evident they can only aggravate the faults of such subsoils as are naturally too loose and leachy.—*American Agriculture.*

Draining of Marshes and Wet Arable Lands.

By being drained, marshes which are now unsightly sources of disease, and as unproductive as unhealthy, may be converted into beautiful meadows, at once the fountains of wealth and the guaranties of health. All who have such lands upon their estates, should, at once, set about to transform them into arable soils—the improvement may cost time, labor and money, but it will pay 20 per cent. upon the outlay in products, besides adding largely to the intrinsic value of such estates.

The facts here presented for consideration, are worthy of mature reflection. Mr. F. Pym, of England, a farmer of great practical experience, used the following emphatic language with respect to the value of draining lands:—"Without that necessary operation—draining—the profitable occupation of heavy land cannot be carried on."

F. Falkland, Esq., also of England, the author of several agricultural works of merit, thus sums up his views upon the importance of draining:

"In conclusion it should be observed, that every attention which can be paid to the prepar-

tion and application of manures will be ineffectual in rendering soils fertile unless due regard be given to the removal of excess of moisture by draining, when needful. When a soil is saturated with water, air is excluded from the roots of the plants, and prevented from acting upon the manure; while the low temperature produced, by continued evaporation from the surface, has an additional powerful effect in retarding the progress of vegetation.

"To lay manure upon wet soils, is, in truth, to throw money away; but were draining universally effected, the whole of the now unproductive soil of the country would, to a vast extent, be rendered capable of receiving the benefit of the numerous modes of fertilizing it. Its returns are immediate, as well as compensative; and to hesitate to drain the land, is to hesitate to confer a benefit upon one's self, of which a strong proof has been lately brought forward in a statement of the profit resulting from the drainage of 467 acres, and the employment of the drain water over 89 acres of land, on the estate of Lord Hatherton, in Staffordshire—affording a clear annual interest on the outlay of full thirty-seven per cent."

Remarkable Cows.

The most remarkable cow of which we have any account, for the production of butter, is the "Cramp cow," so called, owned by a man of the name of Cramp, in Lewes, England; she was of the Sussex breed, and was calved in 1799.—For five years, from 1805 to 1810, the butter produced from her milk, was from 450 to 675 pounds per year; the latter quantity was afforded in fifty-one weeks and four days, from April 6th, 1807, to April 4th, 1808. The greatest quantity of butter she afforded in any one week, was 18 pounds; and the greatest quantity of milk given in any one day, was 20 quarts.

The next most remarkable cow in this respect, was the "Oaks cow," of Massachusetts; nothing was known of her blood—she was bought out of a drove when she was young. Caleb Oaks, of Danvers, Mass. owned her while the greatest quantity of butter was made from her. In 1813, she made 180 pounds, in 1814, 300, in 1815, 400, and in 1816, 484 1-4 pounds.—The greatest quantity of butter made in any one week, was 19 1-4 pounds, and the greatest quantity of milk she gave in any one day, was 18 quarts. Mr. Josiah Quincy, sen., bought her after this trial by Mr. Oaks, but she never afforded so large a yield of butter after she passed into Mr. Q's hands, though she gave 16 pounds per week, and her milk was of such extraordinary richness, that five quarts of it frequently afforded a pound of butter.—*Trans.*

KEEP YOUR TOOLS UNDER SHELTER, IF NOT IN USE.

EDITOR'S TABLE.

TO CORRESPONDENTS.—Communications have been received, during the past month, from B. P. J., G. W. P., S. W., H. C. W., Rustic, David Miller, Jr., E. Evringham, An Inquirer, W. L. W., J. Burr, Erie, A. B., E. F. Holbrook, Jas. Eubank, and A Son of Agricola.

WE have received from an esteemed correspondent, a communication entitled "A Review of Mr. Downing's review of the workings of the State Ag. Society." It is in reply to an article published in the August number of the Horticulturist. Its length precludes our inserting it in this number; and, beside, we hardly think the desired object would be attained by its publication at this time. We think the writer too severe upon Mr. D., who, we doubt not, only expressed his honest opinion—however injurious the adoption of his views might be to the interests of the Society. As the subject matter under discussion—the location of the State Fairs—is of considerable importance, we will publish the article next month, should the writer deem it expedient.

A MANUAL OF ROAD MAKING.—We find on our table an admirable work, entitled "A Manual of the principles and practice of Road-Making: comprising the Location, Construction and Improvement of Roads, (common, McAdam, paved, plank, etc.)—by W. M. GILLESPIE, A. M., C. E., Professor of Civil Engineering in Union College." From the examination which we have given this Manual, we unhesitatingly pronounce it a most valuable work, and just such an one as the public (and especially the road making public), have long needed. It contains practical as well as scientific information on every branch of the subject, as indicated in the title, and is illustrated with numerous diagrams, &c. We confidently commend the book to all interested in the subject. Published by A. S. BARNES & Co., New York, and for sale by D. Hoyt, 6 State-street, Rochester. Price \$1.50.

ANNUAL FAIR OF THE AMERICAN INSTITUTE, NEW YORK.—Pamphlets containing premium list, rules and regulations, and programme of the next (21st) Annual Exhibition, have been received from the Secretary, T. B. WAKEMAN, Esq. The list of premiums in the various departments is quite liberal. The Fair will open at Castle garden, in the city of New York, on the 3d of October, and continue three weeks. The time of commencement in each department of the exhibition, is as follows:—

Agricultural and Horticultural Exhibition on Tuesday, the 3d of October, at Castle Garden.

Plowing and Spading Matches on Thursday, the 5th of October, at White Plains, Westchester County, N. Y.

Central Convention of Fruit Growers on Tuesday, the 10th of October, at Judson's Hotel, No. 61 Broadway, New York. [For circular relative to this Convention and its objects, see page 234 of this number.]

Cattle Show on Wednesday and Thursday, the 11th and 12th of October, at the Washington Drive Yard, on Forty-fourth street.

CANADA WEST AG. SOCIETY.—The Exhibition of the Provincial Agricultural Association is to be held at Courbourg, on the 3d, 4th, 5th and 6th days of October next. The Canada Farmer states that the prizes are generally well arranged, and as high as can be expected in the present state of the Society's funds. All prizes are to be paid in money. The first prize in all the classes of cattle, except grade cattle, is £7 10s. First prize for horses £10. All articles must be entered by 10 o'clock, P. M. of Tuesday, the 3d day of October. The payment of \$1 constitutes any person a member, and none but members are allowed to compete for premiums.

We shall endeavor to attend the Exhibition, and compare notes with our Canadian friends—among whom are many excellent cultivators heartily engaged in efforts to "improve the soil and the mind."

MAHONING COUNTY (O.) AG. SOCIETY.—We have received a copy of the Second Annual Report of this Society. It contains an address on the Science of Agriculture, delivered before the Society at its first annual Exhibition, in October, 1847, by the President Hon. EBEN NEWTON. Also a list of the officers and committees of the Society, and the names of its members—together with the list of premiums, &c., for 1848. The Address is one of the best we have perused for a long time. The next exhibition of the Society is to be held at Canfield, the 3d and 4th of Oct.

PURE-BRED MERINO SHEEP.—During the past summer Mr. JOHN A. TAINOR, of Hartford, Conn., imported a superb lot of Merino Sheep from France. The editor of the American Agriculturist, who examined the sheep on their arrival in New York, says:—"The ewes varied in height (measuring with the wool off on the bare skin,) from 25½ to 29 inches over the withers; and in weight in moderate condition, from 124 to 153 lbs. The bucks were proportionally large. They not unfrequently weigh over 200 lbs. The fleeces are enormous, of good quality, and very even. In addition to all of the above named excellencies, these sheep possess fine forms, and have uncommonly good constitutions. Indeed they have wool enough over them, and look sufficiently hardy to withstand the rigors of an arctic winter. Those breeders who desire to obtain a fresh crop in their flocks, increase the size of the sheep, and add to the weight and evenness of the fleece, we can confidently recommend to the produce of Mr. TAINOR's importation."

Mr. JOHN D. PATTERSON, of Westfield, Chautauque county, has just purchased of Mr. T. a couple of sheep of this importation—a buck and ewe. We had the pleasure of examining them as they passed through Rochester, a few days since, and fully concur in the opinion expressed in the above quotation. Though only 7 months old, they were remarkably large, and superior in other respects to any Merino lambs of the same age, which we ever saw. We congratulate Mr. P., upon this valuable accession to his previously large and excellent flock of Merinos—numbering, we believe, about 400, selected with great care and expense from the best sources. Those farmers of Chautauque and surrounding country, who may desire to improve or make accessions to their flocks, should apply to Mr. PATTERSON—or, at least, give his Merinos an examination.

The "Boston Medical and Surgical Journal" has just entered upon its 39th volume. It is one of the best Medical Journals published in this country. We commend it to the profession generally, as a work eminently worthy of patronage. Edited by J. V. C. SMITH, M. D. Published weekly—24 pages, octavo—by DAVID CLAPP, Boston, Mass. Terms, \$3 per annum, in advance.

HOLDEN'S DOLLAR MAGAZINE.—This is probably the cheapest literary Magazine published in this country. The editor is giving an interesting series of "Pulpit Portraits, or sketches of eminent living American Divines." The September number contains a life-like portrait of Rev. HENRY WARD BEECHER, of Brooklyn, N. Y., formerly editor of the Western Farmer and Gardener—together with a sketch of his life. The number is otherwise well filled with excellent articles, and beautiful wood engravings. For terms, &c., see the publisher's prospectus on last page of this number.

THERMOMETER CHURN.—In answer to various inquiries relative to Crowell's Thermometer Churn, we will state that it is for sale by Messrs. NOTT, ELLIOTT & FITCH, 23 Buffalo-street, Rochester. The price is from 4 to \$5, according to size. We notice that this churn is also advertised for sale in various sections of the country. Our Pennsylvania friend is informed that it may be obtained of Wm. A. Crowell & Co., Harrisburgh, Pa. We have heard nothing to lessen the favorable opinion we expressed of this Churn, in the March number of the Farmer.

MANAGEMENT OF POULTRY.—(To J. K., Jr., Hume, N. Y.) The "American Poultryer's Companion," by Beament, will probably furnish you the most reliable information. We refer you to it in preference to answering the inquiries proposed, because we have published articles in our present volume, which would answer a portion of them. The book costs but \$1. It can be obtained at the office of the Farmer, and perhaps of your nearest bookseller.

WHEELER'S THRASHER, &c.—(A. & H., Bowling Green, Ky.) The information you desire relative to Wheeler's Horse Power and Thrasher, and other machines and implements, can be obtained by addressing H. L. EMERY, proprietor of the Ag. Warehouse, Albany, N. Y. They are not manufactured in this vicinity. We send you Mr. E's Catalogue, by mail.

THE greatest competitor with the United States for supplying the world with bread, is Russia. It is estimated on good authority, that the quantity of wheat annually exported from Russian ports, averages 20,000,000 of bushels.

THE STATE FAIR.—Last Call!—As this number of the Farmer will reach most of our Western New York readers several days previous to the commencement of the Grand Show at Buffalo—to be held on the 5th, 6th and 7th of this month—we again call attention to it, and give some additional particulars. We are informed that preparations are being made on the most extensive scale for the accommodation of the Society, exhibitors and visitors. The officers and many active members of the Society, aided by numerous enterprising citizens of Buffalo, are zealously laboring to arrange the Show Ground, buildings, tents, &c., in the best manner. We hope that every Western New York Farmer, who can consistently do so, will attend the Fair. Our friends should remember that they are expected to render *thus the best exhibition ever held in the State.* Thousands of strangers from all sections of the country, will be present, and expect to see a grand exhibition. Let them not be disappointed—but rather surprised at the extent, beauty and variety of the Exhibition, in every department.

The Annual Address is to be delivered by the Hon. JOHN C. SPENCER. It is announced that addresses will also be delivered at the meetings to be held during the Fair, by Prof. NORTON, of Yale College, Dr. LEE, A. H. STEVENS, M. D., of New York, Rev. J. O. CHOULES, of Rhode Island, and other distinguished gentlemen.

Regulations for the Fair.—All members of the Society, and all who may become members at the time of the Fair, by the payment of \$1, will be furnished with *Badges* which will admit the person and his wife and children under 21 years of age, to the exhibition at all times during the Fair. *Tickets to admit a single person 12½ cents.*

All exhibitors at the Fair, must become members of the Society, and have their articles entered at the Business Office, before taking them into the enclosure.

All those who intend to compete for the premiums at the Fair, should have their animals and articles on the grounds *without fail, on Monday, the 1st September*, so that they may be arranged and in readiness for examination by the Judges *on Tuesday morning.* This regulation must be strictly adhered to.

No premiums will be paid on animals or articles taken away before the close of the Fair.

No animals or articles entered for exhibition will be allowed to be removed from the grounds, except by permission of the President, until the close of the Fair.

Meetings during the week of the Show.—Meetings will be held on *Monday, Tuesday, Wednesday, and Thursday* evenings of the Fair, at not less than *four different places* in the city, where Addresses will be delivered, and free conversation on the subject of Agriculture, Pomology, &c. be had.

Address.—The Annual Address will be delivered under the Large Tent, at 3 o'clock on Thursday afternoon.

A PROFITABLE SPEECH.—A correspondent of the *Farmer's Cabinet*, says that after hearing an excellent speech from Dr. DARLINGTON, before the Philadelphia Agricultural Society, on the proper use and care of implements, he was induced to make such useful repairs, provide a tool-house, and keep his implements in so much better order than before, "he calculates his savings in wear of tools, since the delivery of that speech, has not been less than \$50 per annum; while the time gained by having everything in its place, was worth as much more"—adding \$100 a year to his income.

UNBRANNING MACHINE.—Mr. L. A. Spaulding, an extensive miller at Lockport, N. Y. has erected one of Mr. S. Bentz's Unbranning Machines, and it has operated with great satisfaction. There is a gain of twelve and a half per cent of fine flour. It is stated that an apparatus for a mill of eight run of stones will not cost more than 500 dollars, exclusive of the patent right.

IMPORTANT DISCOVERY.—The New Orleans Delta says: Mr. DAVISON, formerly an associate of Dr. Lardner, in scientific research, has made a very valuable discovery. It is a mode or an apparatus by which meat can be cured at all seasons and in all climates. By this process any person can cure meat thoroughly in three hours in the warmest weather. Some three or four hundred barrels of beef thus cured have lately been shipped from Houston, (Texas) for New York, and some specimens of the same are now in the New Orleans market. This will prove a valuable discovery for the South, and will render her entirely independent of the North and West, for her supply of salt meat.

A GOOD SUGGESTION.—We find the following (addressed to the officers of the Livingston County Ag. Society,) in a late number of the Livingston Republican—and copy it for the purpose of calling attention to the subject. We think the suggestion a good one. Could some effectual plan be adopted to furnish accurate data of all the staple productions of the State, for publication in the Transactions of the State Ag. Society, a very desirable object would be accomplished, and a vast amount of important information be placed before the community:—

"The writer would like to see some system adopted by our State Agricultural Society and County Societies, to ascertain what number of acres of land in the State is annually sowed to wheat, and the annual product of the same. The writer is aware that it would be equally desirable to know the quantity of other products within the State, but for the purpose of introducing the system, I now propose only one article, and the way to arrive at it with the least trouble to all farmers, and with as much certainty as the case will admit of without much trouble and expense:—Let the Trustees of each school district ascertain from those growing wheat within the district, the number of acres sown, the quantity of wheat sown to the acre, the number of acres destroyed by frost, or any other cause, and the product in bushels, and report the same to the Agricultural Committee of their towns, who will make their report to the County Society. I believe the farmers generally get their wheat thrashed out before the society meets in February, at which time the County Society can make up the statement of the product for the past year. The usefulness of being able to calculate the probable surplus, will fully justify the labor necessary to produce the result. FARMER S."

PRESERVING INDIAN MEAL DURING SUMMER, AND IN WARM CLIMATES.—A friend who has satisfactorily tested the matter, informs us that the following recommendation is correct. We copy it from the Patent Office Report:

"The following simple expedient has been published as from good authority, and has moreover been attested as likewise applicable to rye. It was communicated to the New York Farmers' Club, by a gentleman who had been for twenty-five years in the ship store business. He says that he formerly found much difficulty in furnishing corn meal that would keep sweet on long voyages, and in warm climates. On mentioning the difficulty to Zenas Coffin, Esq. one of the oldest whalemans of Nantucket, he was informed by him that there was no difficulty in keeping corn meal sweet for a three year voyage, by putting a beach stone, the size of a large paving stone, in the centre of a hogshead of meal and hooped tight, and for a barrel, a stone four or five inches in diameter and made tight. Experiments were then made in regard to meal to Rio Grande and other southern ports, by sending the meal with the stone and also without the stone, and on the return of the ship, it was found that the meal with the stone in the centre of the cask kept sweet, while the meal without it was spoiled—sour. It is necessary to have the cask water-tight. The same gentleman likewise stated that corn meal in tight rum puncheons when sent to the West Indies will keep sweet, while in a common flour barrel it will spoil."

AGRICULTURAL FAIRS TO BE HELD THIS FALL.—We give below the time and place designated for holding Fairs the present fall. Our list is comparatively incomplete, as we have received no definite information from many of the County Societies in this State:—

New York State,	Buffalo,	Sept. 5, 6 and 7.
American Institute,	N. Y. City,	Oct. 3, (3 weeks.)
Fulton County,	Johnstown,	Oct. 4 and 5.
Jefferson "	Watertown,	Sept. 27 and 28.
Orleans "	Albion,	Sept. 28 and 29.
Oneida "	Clinton,	Sept. 27 and 28.
Ontario "	Canandisigua,	Oct. 10 and 11.
Oswego, "	Pulaski,	Sept. 27 and 28.
Otsego "	Cooperstown,	Sept. 28 and 29.
Monroe "	Rochester,	Oct. 4 and 5.
Rensselaer "	Troy,	Sept. 20 and 21.
Saratoga "	Ballston Spa,	Sept. 26 and 27.
Seneca "	Seneca Falls,	Oct. 5 and 6.
Wyoming "	Warsaw,	Sept. 27 and 28.
Yates "	Penn Yan,	Sept. 20 and 30.
Windsor Co., Vt.,	No. Springfield,	Oct. 4 and 5.
Prov. Ass'n, C. W.,	Cobourg,	Oct. 3, 4, 5 and 6.
Mahoning Co., Ohio,	Cambfield,	Oct. 3 and 4.

HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

Deep Tillage.

It may possibly be that some of the readers of this department of the Farmer are so little interested in Agriculture, strictly speaking, that they may not be in the habit of perusing the agricultural pages. If any such there be, we beg of them to turn to the leader of Dr. LEE, in the August number, and read what he says on "deep tillage." That article we consider one of the very best the Doctor ever penned for the Farmer—and that we conceive to be saying a great deal. The most enlightened Agriculturists of the present day, both in Europe and America, regard *deep tillage* as the basis of all good culture. If in farming it be so, and no man denies it, it is not less so in gardening.

No one should, for a moment, think of planting a garden or an orchard until thoroughly trenched or subsoil plowed. In this country, during the growing season, a powerful sun and frequent drouths, during which we see plants growing on a thin surface soil with an unmoved hard pan beneath flag, and actually shrivel up as a thirsty pot plant would. Dr. LEE states the reason forcibly:—"As a tight jug will prevent water from running in as well as running out; so a compact, impervious subsoil will prevent the ascent of moisture in dry weather, to supply the roots of plants with their indispensable water, as well as obstruct the descent of water when in excess on fields." The experience of every cultivator will teach him this. How many thousands of young trees are lost in this country by being planted in a small hole on the surface of an impervious hard-pan! They may start and grow during the showery weather of spring, but when three or four weeks of parching hot weather comes along in June, what becomes of them? The young and feeble roots can find no food, the leaves turn yellow, and the trees die. And then the query is propounded, "What killed my trees?" Even the present season, notwithstanding the great improvement that has been made on former practice, we have seen large quantities of trees dying by inches in this way. We have seen orchards planted on land subsoil plowed to the depth of 18 inches, and well manured, where in three years, the trees had attained the size of 10 year old trees under the usual treatment. The simple satisfaction of seeing trees grow in this way amply pays for the extra labor; but, not only do trees grow faster, but the fruit is double the size, and fairer and finer every way.

It frequently happens that, about the time a tree requires a large quantity of moisture to sustain it under a heavy crop of fruit just swell-

ing out to maturity, a drouth comes—the roots of the tree are confined to a few inches of surface soil, and out of that every particle of moisture has evaporated—what then becomes of the fruit? why it either ripens prematurely, falls off, or shrivels up on the tree. Last summer we saw peach trees under such circumstances with the crop lost—actually dried to a crust on the tree. We see trees dropping their fruit while green, from the same reason, and entire crops become stunted and worthless. We have measured apples this season in the deep trenched gardens of this city, 16 inches in circumference, that, in an ordinary orchard, would have been probably half that. We have also seen apricots 8 inches in circumference, and plums 6—being double the usual dimensions—all owing to the trees having received a liberal supply of food from the soil. How many, every season, lose their crop of strawberries. A drouth comes just as they are ripening, and unless they are deluged with water twice a day, they are dried up, and even the plants burnt off—while, if the ground had been trenched two feet deep, at least, they would have required no watering, and would have ripened off their fruit well.

The great difficulty in raising pear seedlings in this country, is a leaf blight that attacks them in July, and causes the foliage to drop and the growth to cease completely. Now we apprehend that deep tillage will be at least a partial remedy. This season our pear seedlings grow in a plot trenched last autumn more than two feet deep. The surface soil was placed below, and the subsoil above. During the early part of the season, while the young roots were among the subsoil that had been brought to the surface, the growth was moderate; but about the time when the leaf blight was expected, and had actually seized upon others in an untrenched soil, they took a new start—the leaves assumed a deeper green, and the growth was two to one what it had been before. Why?—because the roots had just arrived, in their downward progress, at the fine surface soil that had been buried, and that contained moisture and other fertilizing materials; they revelled in it, and have bade defiance to all kinds of blight, so far.

As to raising fine flowers, it is next to impossible, unless in a deep tilled soil. For proof, witness the innumerable failures in the cultivation of flowers in borders that have been spaded barely 10 inches deep. Unless it be *Portulaccas*, *Mesembry Anthemums*, *Sedums*, *Sempervivums*, and such succulent things that would flourish on a rock, they all dry up in July when three weeks or a month of hot weather comes on.

Lavens you cannot have without *deep tillage*. It is perfect folly to sow grass on ordinary plowed land and hope for a green lawn during summer. The first drouth will scorch it as though fire had passed over it; but deepen your soil

with the plow or the spade, two feet deep, and you will have a lawn.

In vegetable gardening, above all, *deep* tillage is indispensable. If you wish Rhubarb, Asparagus, Sea Kale, &c., worth cutting, or fit to appear on the table, *trench your soil two or three feet deep, and manure liberally.* This is the way all large and astonishing crops are produced—all remarkably large and fine specimens of garden products that attract admiration and surprise. This is the only secret of success. Let us then urge on every man who wishes to succeed well in horticulture—who wishes his labors to result to his own satisfaction and the admiration of his neighbors—to “break the *under-crust*,” as Dr. LEE says, “that the bones, potash, soda, magnesia, chlorine, sulphur, phosphorus, iron, carbon and nitrogen may come up to the thirsty roots of your plants and fully nourish the same.”

Those who intend to plant new orchards, lay out new gardens or grounds, or those who have old ones to renovate should now be at it. Between this and the middle of October, when the planting season begins, much may be done.

Two Fine Late Cherries.

BELLE MAGNIQUE.

This is a large, beautiful and excellent late Cherry, but little disseminated in this country yet. The tree is vigorous and hardy, resembling the May Duke, or rather between May Duke and Belle de Choisy. An admirable variety for cold climates, where the free growing sweet Cherries are too tender. Valuable every where, even in the smallest collection, for its great size, beauty and lateness. We have fruited it for three or four years, and can recommend it without the least hesitation.

Fruit large, round, sometimes slightly heart-shaped, with a slight suture on one side. Color beautiful light red. Stalk an inch to an inch and a half long, inserted in a moderately deep cavity.—Flesh tender, juicy and acid; when fully ripe it becomes so mild as to be relished by many for the dessert. To our taste it is superior to all the late sour cherries. On the Mahaleb stock it makes an excellent bush for a small garden. Ripe last of July and first of August. Mr.

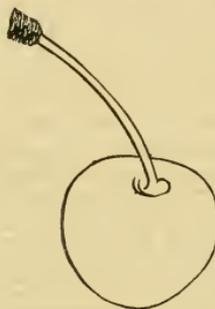
DOWNING says, in the August number of his Journal:

We find on further trial that we have not done justice to this cherry in our work on Fruits. It has borne a good crop with us this season, and we find it one of the most valuable of all the acid cherries. It is in flavor much milder or less

acid than the common Kentish (pie cherry) or Morellos—double the size of the Kentish, of a handsome light red, bears good crops, and ripens among the late sorts—a week after the late Kentish. For cooking or preserving it is one of the very best sorts, and we are inclined to rank it before the Carnation or the Plumstone Morello—two of the most popular of the acid cherries.

CARNATION CHERRY.

This is another beautiful late sour Cherry, highly valued for preserving, and relished by many when fully ripe for the dessert. Its maturity, just after the latest of the sweet cherries are gone, and before the Belle Magnifique or the Morellos come in, renders it valuable; and its beauty, size and pleasant refreshing acidity make it a favorite with many. The tree is hardy, and bears regularly, though not heavily. It makes a fine dwarf, as the tree is naturally of a low growth.



Fruit large, round, light red, mottled with darker spots. Stalk pretty stout, an inch to an inch and a half long, inserted in a slight cavity. Flesh tender, juicy, of a refreshing sub-acid flavor. The fruit hangs long on the tree, unless taken by the birds,—which can be prevented, especially if the trees

be dwarf, by covering with nets or bunting. Ripe middle to end of August, just preceding the Belle Magnifique.

Osband's Summer, or Summer Virgalieu Pear.

This fine Pear was described in Volume 7, page 285 of this paper. Since that time we have paid particular attention to it, and have found it invariably a *first rate early Pear.* This season it began to ripen here about the 8th of August, and continued in use up to the 20th. The supply in the market was exceedingly limited; they were sold by the pedlars at 3 cents each. We have eaten of them this season as good, we thought, as the White Doyenne. It is a fine grower and bearer, and does equally well both on pear and quince stocks. We hope to see such fruit as this in a few years take the place of the immense quantities of trash that now occupy prominent places on the fruit stands here. Fruit growers should never forget that it is just as easy to raise such as these, that will bring them 4, 5, or \$6 per bushel, as it is those that will sell with difficulty for \$1. Public taste is improving rapidly in regard to the quality of fruit. Every year brings a greater demand and greater price for good fruit, and less demand and less price for the inferior.

ATTEND to your strawberry plantations.

Two Early Plums.

A SHORT time ago, we called on our friend L. B. LANGWORTHY, Esq., of Greece, and found among a large collection of fine plums, all laden with fruit, the two varieties noticed below. They were comparatively new to us, and their earliness and exceeding productiveness at once attracted our attention, and we requested Mr. LANGWORTHY to give us some account of them, which he has obligingly done. They command a high price in our markets, coming in as they do when when fruit is scarce :

MR. BARRY :—In compliance with your request that I would give you the history of two new varieties of Early Plums which I have introduced and brought into notice, and which have for two years past fruited on my farm at Hanford's Landing in this County, I proceed to give the following particulars :

The one named *Early Genesee* originated on the premises in Brighton in this County, known as the Blossom Farm, and now owned by Mrs. WILSON. The tree is a good and early bearer—the wood small and delicate, the leaves rather lanceolate in shape—the fruit medium size, quite a long ovate of a golden yellow, and ripens in the country about the 20th of July ; about 30 days earlier than the Green Gage and Bolmar. It is as early as the Jaune Hative, and a much better bearer.

The other I have named the *Henrietta Gage*, in compliment to the place where it originated—the town of Henrietta in this county, on the farm of — BROWN, Esq., two miles east of Henrietta Corners. This tree is a free grower and good bearer. The wood is strong, and has a disposition to make shoulders at the buds, like the English Green Gage. The leaves are ovate and glossy—the fruit of the size of the Green Gage, of a paler color and high flavor. It ripens in the country about the 1st of August, and in the city from 6 to 10 days earlier, owing, I think, to the protection of the buildings and reflection of heat.

Although I did not originate these varieties myself, yet having taken a good deal of pains to trace them out and procure scions, I have taken the privilege of naming them, which I am aware conflicts with the Horticultural Rules laid down in such cases, to which I shall hold myself amenable.

Your o't friend,

L. B. LANGWORTHY.

Greece, Monroe Co., N. Y. August, 1848.

Strawberry Culture.—Burr's New Pine.

THOSE who wish to keep their Strawberries pure will do well now to examine their plantations and remove any seedlings that may have made their appearance. We have just been examining beds where seedlings are growing up thick and strong. This is one fruitful source of the change of character and the "running out," as it is termed, of varieties, and it should be looked to now in time. Those who are curious, or who may have leisure enough, may plant the seedlings in a separate bed and test their qualities. A fine new variety may, in this way, be produced.

Burr's New Pine.—The high opinion we have formed of this strawberry, and which we expressed in noticing it in the July number, is, we are glad to know, confirmed by the experience of others. The editor of the Horticulturist says, in the August number :—"We do not hesitate to pronounce it one of the best, and perhaps the very best American Strawberry yet raised ;

and comparing our own opinion with those of intelligent growers, both at the East and West, we think there is little doubt that *Burr's New Pine* will take its place among the three or four very best sorts yet known for cultivation in this climate." G. W. HUNTSMAN, Esq., of Flushing, L. I., a highly intelligent amateur cultivator, calls it first rate. From all these facts we are at liberty to set it down as an *indisputably fine variety*. We are glad to know it is being rapidly disseminated.

SALT ON PLUM TREES.—I communicate the final result of my foolish experiment on this subject. [See Gen. Farmer, Vol. 8, page 270.]

No. 1. Transferred last fall to a (supposed to be) more favorable situation. Found dead this spring, to the root.

No. 2. Left undisturbed. Found dead also. The currant bush that stood near it, appears sickly. The one marked No. 3, dead. All the others appear to be doing well.

Note.—The above died, I suppose, in consequence of being checked in their new growth, by the approach of winter, before the new sap could be properly prepared, and the new forming wood matured.

STARTING BUDS TOO SOON.—[See Genesee Farmer as above, page 269 ; also page 222.]

1st. Peaches. Grew from 3 to 12 inches. All appear to be doing well, except two or three that were removed last fall.

2d. Nectarines. Grew as above ; results same.

3d. Apricots. Grew from one inch to four inches. Died down to near the base of the young shoot.

4th. Plums. Grew as the Apricots, and all appear to be doing well, except one. Many of those that did not start last year are dead.

5th. Pears. Only one started—grew about an inch—is now doing well.

Note.—Such is the result thus far. Whether, in the end, "the thing" will prove to be of any advantage, remains to seen. H.

Fairport, N. Y., May, 1848.

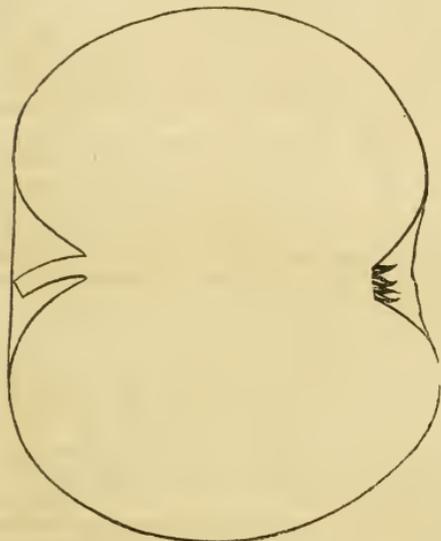
THE BEEHIVE STRAWBERRY.—We apprehend that this noted variety will prove a mere catch-penny. We have already adverted to notices we have found in foreign papers to that effect. We find the following in the London Gardeners' Chronicle of July 22 :—

Influenced by a very flaming advertisement which appeared in your columns, I sent to Mr. Mathewson for some of loudly-praised "Beehive" Strawberry plants, which he has affirmed to be distinguished by a prodigious production of excellent fruit. They have been carefully attended to, and have fruited well. They are identical with the Grove-end Scarlet or Roseberry, an old sort which I have grown for years. Now I wish to ask Mr. Mathewson how he can reconcile his conscience to charging 12l. or 15l. per 100 for Strawberry plants not worth 3s. ? [Of course Mr. M. will return all the money. We have had enough of this novelty for the present.]

The Summer Rose Apple.

SYNONIMS, } Wolman's Early.
 } Lippincot.

AMONG summer apples, the Summer Rose must take a high rank, particularly with the amateur cultivator, on account of its beauty and excellence. It ripens just after the Early Harvest and Red Astracan begin to fall off, and is, to our taste, superior to any of them—not only in beauty of form and coloring, but in the fine texture and delicate mild flavor of its flesh.



Fruit medium size, roundish, very regular; looks as if turned by a lathe. Skin smooth and glossy, of a pale waxen yellow in the shade, and tinged with brownish red in the sun. Stalk short, rather slender, and inserted in a deep, regular cavity. Calyx open usually, in a smooth, regular basin. Flesh white, fine grained, tender and juicy; mild sub-acid flavor. Ripe 1st to 15th of August.

The tree is a slow grower, and is easily distinguished by its peculiar, low, stout, bushy habit, as well as by its bark, which is quite dark, thickly sprinkled with gray specks.

THE FLEUR BLANCHE PERPETUAL ROSE.—

Among the hundreds of Roses we were delighted with during June and July; and among all the fine Bourbon, Tea, and Hybrid Perpetual Roses now in bloom, not one we think so truly charming as this *Fleur Blanche*, in bloom to-day, August 16. It is large and double, of a pure and delicate white, with all the delicious fragrance of the Provence Roses. It blooms or opens better now than in June. The lovers of a lovely pure white and fragrant midsummer rose should by all means get this. It is hardy.

Noxious and Troublesome Insects.

NOTWITHSTANDING all the efforts made by man for the destruction of insects, I should despair of ever seeing them kept within proper bounds, were it not for the fact that they appear to be restrained in their increase, if not in their operations, by a kind of Divine decree. "Thus far shalt thou go, but no farther," seems as appropriately true in this case, as in its application to the waves of the sea. I have noticed this in several instances. A few years ago I saw an orchard covering two or three acres so completely covered with the apple tree worm that scarce a branch of any considerable size, could be found that did not contain one nest, or more; and hundreds might be counted on a single tree. As might be expected, the trees were stripped of their foliage, and in mid-summer appeared as naked as in mid-winter. The worms, when full grown, spread themselves over the country, far and near. Every one supposed that on the next year the whole country would be overrun with them. When the next year came, however, they were less in number, and less troublesome than they had been for several preceding years.

A similar fact I have observed within the last two years, in regard to the two kinds of bugs that are so destructive to cucumbers, squashes, &c. In the summer of '46 these were so numerous, that it was with the greatest difficulty I succeeded in saving my plants. During the following autumn and winter the black bug was found in every crevice, nook and corner, in wood-piles, stone-heaps, fences, &c., and it was feared they would be much more troublesome in '47; and yet in '47 they were comparatively few. I have not had opportunity to notice, whether the same is true of insects generally, though I have little doubt that it would be found to be true.* The curculio was very troublesome last year; this year have heard little said about it. I attribute their destruction, in every case, either to a proportional increase in the number of that class of birds, or insects that prey upon them, or to some peculiar adaptation to that purpose, of the winter following the season in which they abound, or to both of these causes combined. The last winter was peculiarly adapted to the destruction of all kinds of insects that were exposed to its influences.

It must not be inferred from this that it is unnecessary for man to contend against them. His efforts are necessary for present protection. But that these insects if not destroyed by man, would go on increasing in a regular ratio from year to year, is very doubtful.

Fairport, N. Y., July, 1848.

II.

* I have observed a similar fact in regard to the common field- or meadow mouse.

KEEP CLEAN GARDENS.—It is rather too common for people to allow weeds to grow up toward the close of the season, and particularly on plots where early crops have been gathered. This is decidedly bad economy, to say the least. Weeds are at all times unsightly, besides they exhaust the ground of its riches, and sow it with seeds that will require much labor to subdue next season.

CLEAN CULTURE, at all seasons is truly economical. There are few families who have not children who should be taught industry and neatness about the garden, and should be daily engaged more or less, in cleaning off weeds, dead flower stems, decaying vegetables, fallen fruit, and every thing unsightly. Weeds thrown in a heap, mixed with manure and earth, make an excellent compost for the production of future crops.

THE worthiest people are generally the most injured by slander—as we usually find that to be the best fruit which the birds have been pecking.

Mildew on Peaches.

FRIEND BARRY:—*Sir*—I want to know the Cause and the Cure for a kind of mildew that appears on the top and twigs of our Peach trees. I set out one year ago last Spring about thirty peach trees, all young, of one year's previous growth; and about four weeks ago this *Mildew* appeared on the tops of some eight of the trees, and it seems to sear or wither up all the leaves that are on the part that is affected or struck by this mildew. I think it bids fair to overrun every tree I have planted. I have examined the root, and find nothing to injure. I have placed around my trees lime, salt and ashes, but to no purpose as yet. Your remedy will be thankfully received.

ENOCH EVERINGHAM.

Lafayette, N. Y., July, 1848.

We do not profess to be able to state either Cause or Cure. Some varieties of the peach, such as Tillotson, Early Ann, &c., are scarcely ever free from mildew, more or less; other varieties are attacked by it in moist soils and seasons. It is less troublesome on dry elevated soils, well cultivated. You have done right in using ashes and lime as manure. You will probably not be troubled with it next season, unless your varieties be of that class peculiarly susceptible to it.—Ed.

Gathering and Planting Apple Seeds.

SIR:—I would inquire of you through the Genesee Farmer the time and mode of gathering Apple Seeds—how to be kept till planted—when they should be planted—and how to be treated after they are up, &c.

I would also ask if there is no book published that would give the information at large. I should like to know if there is such a book, where it can be had—the price—and how to get it to this remote corner of the globe, &c.

Yours, &c., AN INQUIRER.

Woodbury, Penn., July, 1848.

Go to the cider mill in the autumn (October,) and get the pomace as it comes from the press, and sow immediately in drills a foot wide, and cover two inches deep. If you cannot sow the seed when it comes from the mill, wash it out clean and you can keep it among sand or earth in the cellar till spring, and then sow it. Keep the ground loose and clean around them, and in one or two years they will be fit to graft or bud on. Your nearest bookseller can get you Downing's Fruit and Fruit Trees, price \$1,50, or Thomas' Fruit Culturist, 50 cts. The latter can be sent you from this place, by mail.

GRAFTING THE GOOSEBERRY ON THE YELLOW FLOWERING CURRANT.—*Mr. Editor*: I shall here give you my mode of training the Gooseberry, to avoid the effects of the mildew, about which there is so much written. My mode is to graft them on the Yellow Flowering Currant, which is so plenty in some gardens, and might be put to very profitable use in the line of cultivating this fine fruit, by which means I raise them as perfect as fruit can be, and even in very unfavorable situations. To convince myself of the good effects of this mode of culture, I tried a variety that was altogether abandoned in this section, on account of the

mildew, and can now show a stock of that variety 8 feet in height, which is yearly bending with its large crop of perfect fruit.

Yours, &c., DAVID MILLER, JR.
Carlisle, Pa., July, 1848.

This is quite new to us; we must give it a trial, and we would advise others to do the same.—Ed.

Great National Convention of Fruit Growers.

It is proposed to hold a Central Convention of Fruit Growers and Pomologists in the city of New York, during the great Fair of the American Institute.

The Institute having kindly offered to aid in carrying out said views, the Convention will hold its session at Judson's Hotel, No. 61 Broadway, New York, commencing Tuesday, the 10th day of October, at 10 o'clock, A. M.

Among the objects to be proposed at this Convention are the following:

To compare fruits from various sources and localities, with a view of arriving at correct conclusions as to their merits, and to settle doubtful points respecting them.

To assist in determining the synonyms, by which the same fruit is known in different parts of the country.

To compare opinions respecting the value of the numerous varieties already in cultivation, and to endeavor to abridge by general consent the long catalogue of indifferent or worthless sorts at the present time propagated by nurserymen and fruit growers.

To elicit and disseminate pomological information and to maintain a cordial spirit of intercourse among horticulturists.

In order to increase as much as possible the interest of the Convention, the Delegates are requested to bring with them (carefully packed and labelled, so as to present them in good order,) specimens of all fruits grown in their vicinity that may be worthy of notice, together with a small branch and leaves of each variety if possible.

In localities where any well known old varieties flourish particularly well, specimens are desired, accompanied with memoranda respecting the soil upon which they grew and their culture.

Every contributor is respectfully requested to make a list of his specimens and present the same with his Fruits, in order that a report of all the varieties entered may be submitted to the Convention as soon as possible after its organization.

The undersigned, in behalf of the Societies they represent, respectfully solicit delegations from all Horticultural and Agricultural Societies of our country, and of such number of persons as each society may deem expedient to send.

Societies will please transmit at an early day a list of the delegates they have appointed, to the Corresponding Secretary of the American Institute, T. B. WARTMAN, Esq., New York.

MARSHALL P. WILDER,	} Committee of the Massachusetts Horticultural Society.
SAMUEL WALKER,	
EBENEZER WIGHT,	
THOMAS HANCOCK,	} Committee of the Pennsylvania Horticultural Society.
DR. WM. D. BRINCKLE.	
DR. THOMAS M. EWEN.	
PHILIP SCHEYLER,	} Committee of the Board of Agriculture of the American Institute.
DR. R. T. UNDERHILL,	
CHAS. HENRY HALL,	

INQUIRY—BURR'S STRAWBERRIES.—I notice in the "Horticulturist" that Wm R. Prince advertises and names nine varieties of "Burr's Ohio Seedling Strawberries" for sale. Now I should like to know how he obtained them all, as some of the kinds named were not disposed of by me till last spring, (and then not to him or any of his neighbors.) Perhaps he can explain this, so as to make it satisfactory to the public.

Yours, J. FURR.

Columbus, August 14, 1848.

A remarkable rose, called the 'Maiden Blush,' is growing in St. Louis. Through the centre of each rose upon this tree, a stalk or stem has emanated producing other roses.

Cultivation of Trees.

FEW persons have any correct idea of the rapidity of the growth of well cultivated trees, and many are deterred from planting them, by the consideration, selfish at the best, that they shall not live to reap the fruit of their labors. Such persons may derive encouragement from the statement of a few facts. In the Spring of 1836, I set out in front of my office at Chester, two elm trees. They were then so small that I could easily carry either of them with a full top, upon my shoulder, and were perhaps, two or three inches in diameter. I measured them carefully in the fall of 1847, and found them of equal size, and each measuring forty-five inches in circumference. They stand about eighteen feet apart, and some twelve feet from the building, for which they form a perfect protection from the summer's sun, their branches being already interlaced. The elm is in that neighborhood of more rapid growth than the rockmaple, or indeed more than any other forest tree. An apple orchard may be brought to commence bearing in four years from transplanting from the nursery, which should be the second or third year from the time of budding. By the eighth or tenth year, your orchard, well managed, will pay you annually for all your trouble and expense in planting it and will continue productive, as long as you have any right to expect to live.

Peach trees usually bear the third year from the stone, and the second from the bud.—*Hill's Monthly Visitor.*

LADIES' DEPARTMENT.

Stilton Cheese.

This variety of cheese, proverbial for its richness, was first made near Melton, in Leicestershire, England, by a relation to the land lord of the old Bell Inn, at *Stilton* which gave the name, and its reputation was such that it for a long time sold for half a crown a pound. The following account of its manufacture is from British Husbandry:

"It is made by putting the night's cream, without any portion of the skimmed milk, to the milk of the following morning; but those who wish to make it very fine, add a still greater quantity of cream, and of course the richness of the cheese depends upon the amount which is used. Butter is also said to be sometimes mixed with it. The rennet is then added without any coloring; and when the curd has come, it is taken out without being broken, and put whole into a seive or drainer, where it is pressed with weights until completely cleared of whey; when dry, it is put, with a clean cloth, into a hooped chesart (or mould,) and placed under the press, the outer

coat being first salted; when sufficiently firm to be removed from this mould, the cheese is placed upon a dry board, and tightly bound in a cloth, which is changed daily, in order to avoid all cracks in the skin, until this is found to be tolerably well crusted; after which it is no longer used, and the cheese requires no further care than being frequently turned upside down, and occasionally brushed.

The cheese of this kind although not much larger than the crown of a good sized hat—and not weighing more than about a dozen pounds, yet require nearly two years to bring them to perfect maturity, for they are not generally thought sufficiently mellow for use until considerably decayed; and in order to forward their ripeness, it is said that, besides being placed in damp, but warm cellars, they are sometimes wrapped in strong brown paper, and sunk in a hotbed."

FARMERS' WIVES IN OLDEN TIMES.—The duties of farmers' wives, in England, in olden times, were somewhat different, than is at present the case in this country. In the reign of Henry VIII., Sir A. Fitzherbert wrote a treatise, entitled "A Prologue for the Wyve's Occupation," in which he says,

"It is a wyve's occupation to winnow all maner of cornes, to make malte, to washe and wrynge, to make hey, shere corne, and in time of nede, to help her husbände to fill the mucke wayne, or dounge carte, dryve the ploughe, to lode hey, corne and such other, and to go and ryde to the market to sell butter, chese, mylke, egges, chekyns, capons, hennes, pygges, gese, and all maner of cornes."

ECONOMY IN LINEN WASHING.—A correspondent of a Dundee paper writes as follows:—"After many experiments made by myself and others, I find that a little pipe clay dissolved among the water employed in washing, gives the dirtiest linens the appearance of having been bleached, and cleans them thoroughly with about half the labour, and a saving of full one-fourth the soap. The method adopted was to dissolve a little of the pipe clay in the warm water in the wash tub, or to rub a little of it, together with the soap on the articles to be washed. This process was repeated as often as required, until the articles to be washed were made thoroughly clean. All who have made the experiment have agreed that the saving of soap and labor are great; and that the clothes are improved in colour equally as if they were bleached. The peculiar advantage of employing this article with the soap is, that it gives the hardest water almost the softness of rain water."

MOCK CREAM.—Beat three eggs well; then add to them three heaping teaspoonfuls of fine flour; beat them well together; then stir them into a pint and a half of boiling milk; add to it a saltspoon of salt and loaf sugar to taste; flavor with essence of lemon, stir it while boiling; when it is perfectly smooth it is done.

Line pie or tartlet pans with rich buff paste, and bake them in a quick oven; when done, fill them with mock cream; strew powdered sugar over the brown; when a fine color, they are done. These will be found to be altogether superior to custard pies.—*Anonymous.*

BAKED APPLES are greatly improved by being baked in a bright tin or earthen plates, with a little water in, and a small quantity of sugar sprinkled over them.

WHAT IT IS TO BE POLITE.—Politeness is a trait which every one admires, and which confers upon its possessor a charm that does much to pave the way of life with success. But it is very much misunderstood. Politeness does not consist in wearing a silk glove, and in gracefully lifting your hat when you meet an acquaintance—it does not consist in artificial smiles and flattering speech, but in sincere and honest desires to promote the happiness of those around you ; in the readiness to sacrifice your own ease and comfort to add to the enjoyment of others. The man who lays aside all selfishness in regard to the happiness of others, who is ever ready to confer favors, who speaks in the language of kindness and conciliation, and who studies to manifest those little attentions which gratify the heart, is a polite man, though he may wear a homespun coat, and make a very ungraceful bow. And many a fashionable, who dresses genteely, and enters the most crowded apartments with assurance and ease, is a perfect compound of rudeness and civility. He who has a heart flowing with kindness and good will towards his fellow men, and who is guided in the exercise of these feelings by good common sense, is the truly polite man—and he alone.

THE TRUE LIFE.—The mere lapse of years is not life.—To eat, and drink, and sleep ; to be exposed to darkness and the light ; to pace around in the mill of habit, and to turn the wheel of wealth ; to make reason our bookkeeper, and turn thought into an implement of trade—this is not life. In all this, but a poor fraction of the consciousness of humanity is awakened ; and the sanctities still slumber which make it most worth while to be. Knowledge, truth, love, beauty, goodness, faith, alone can give vitality to the mechanism of existence ; the laugh of mirth which vibrates through the heart, the tears that freshen the dry wastes within, the music that brings childhood back, the prayer that calls the future near, the doubt which makes us meditate, the death which startles us with mystery, the hardship that forces us to struggle, the anxiety that ends in trust—are the true nourishment of our natural being.

MOTHERS.—It is true that the sacrifices you make for the world will be little known by it—men govern and earn the glory ; and the thousand watchful nights and sacrifices, by which a mother purchases a hero or a poet, for the state, are forgotten, not once counted ; for the mothers themselves do not count them ; and so, one century after another, do mothers unnamed and unthanked, send forth the arrows, the suns, the storm-birds, and the nightingales of time.—But seldom does a Cornelia find a Plutarch, who connects her name with the Gracchi. But as those two sons who bore their mother to the temple of Delphi, were rewarded by death, so your guidance of your children will only find its perfect recompense at the termination of life.

HINTS TO YOUNG FARMERS.—Make it a rule to read a little every day, even if it be but a single sentence. A short paragraph will often afford you a profitable source of reflection for a whole day. For this purpose your agricultural paper is admirably adapted. Keep it always within your reach so that you may lay your hand on it at any moment when you are about the house. We know a large family that has made itself intimately acquainted with history, probably more than any other family in the entire United States by the practice of having one of the children, each one taking a week by turns, read every morning, while the rest were at breakfast.—*Iowa Farmer.*

ZINC PANS.—It was recommended by Mr. S. Williams, at the last meeting of the Philadelphia Society for Promoting Agriculture, that zinc pans be used for dairies, possessing as they do the power of preserving the milk in a sweet or pure state, much longer than any pans used.—Dr. Hare remarked that great care would be necessary to keep them perfectly clean, or the milk and butter might be unwholesome. He thought it probable that a small block of zinc, placed in a tin pan, might produce the same effect on the milk by preventing it getting sour too soon.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,.....	\$1 00	1 06	Pork, bbl. mess	10 50	11 00
Corn,.....	44	46	Pork, cwt.,...	4 00	4 50
Barley,.....	50	56	Beef, cwt.,...	3 50	4 50
Oats,.....	22	25	Lard, lb.,.....	7	8
Flour,.....	5 25	5 50	Butter, lb.,.....	12	14
Beans,.....	83	1 00	Cheese, lb.,.....	5	6
Apples, bush.			Eggs, doz.,.....	8	10
Potatoes,.....	20	30	Poultry,.....		
Clover Seed,...			Tallow,.....	6	7
Timothy,....			Maple Sugar,...		—
Hay, ton,....	10 00	12 50	Sheep Skins,...	12	15
Wood, cord,...	2 00	2 50	Green Hides,lb	3	4
Salt, bbl.,....	1 25	1 33	Dry " " " " "	7	8
Hams, lb.,....	6	7	Calf Skins,....	10	

WOOL.—The market is still inactive. The following are present quotations :

Native Blood,.....	18 to 22c
Quarter to half,.....	20 22c
Half to three quarters,.....	22 24c
Three quarters to full,.....	24 26c
Saxon,.....	26 28c

Rochester, August 29, 1848.

New York Market.

NEW-YORK, August 28—7 P. M.

Flour and Meal.—There is a fair demand for flour, but the light supplies in connection with the firmness of the foreign markets, has caused the flour market to be buoyant. Fancy's are 6½ to 12½c. better than on Saturday. Sales 12,000 bbls. at \$5 50 a 62½ for common and good brands the market closing with little to be had below \$5.52½. Included in the sales were 100 bbls round hoop at \$5.50 some unanticipated sold at \$5.37½ ; extra and fancy do not improve like common descriptions. Meal is in fair demand and steady at \$3.12½ a 3.25 for Jersey

GRAIN.—For Wheat there is a fair inquiry and shippers were in the market for good samples. Sales 10,000 bush at 98c. the former if not the latter was for export. Corn has been fluctuating and was better at the close than in the morning. The orders were to a considerable extent and sale 50 or 60,000 bus. at 54 a 50 mixed and nearly yellow ; 57 for white, 64 a 65 for round northern. Some of the sales of mixed show a decline.

BUFFALO, Aug. 28.

There was a good inquiry for flour on Saturday morning, and there were sales of between 2 and 3000 bbls. 1331 bbls two choice brands Ohio were taken at \$5 ; the balances at 4 81½ a 4 87½.—There was also a fair demand for wheat, with sales about 4000 bushels old and new Ohio at \$1.

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GENESEE FARMER.

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THE GENESEE FARMER:

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DANIEL LEE & D. D. T. MOORE, Editors.

P. BARRY, Conductor of Horticultural Department.

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Fair of the State Agricultural Society.

THE exertions of the officers of the Society, of the citizens of Buffalo, and of the farmers, horticulturists and mechanics of the State, to render the late rural Festival the largest of any ever held in America, were eminently successful. Where many thousands have cordially united to achieve a common purpose, it is impossible to particularise without doing apparent injustice to others equally worthy of notice and commendation. We have attended a good many agricultural fairs in our time, and made it a business to be tolerably well informed in regard to the excellencies and defects of domestic animals, farm implements, and other matters pertaining to our chosen and much loved profession. The Show of neat cattle and horses has never been equalled in this country; nor was there ever so large a display of superior labor-saving machines and highly finished implements, admirably adapted to all the various operations of rural industry. Its improvement and progress were stamped on a thousand articles, both animate and inanimate, evincing that the intellects of American farmers and mechanics have been successfully cultivated, as well as the earth, during the last year.

Intellectual activity and improvement must precede all advancement in the arts and sciences which contribute to the elevation of the great agricultural interest of the Union. *Mind* lies at the bottom, and bears upward and onward all meliorations in the form and organic structure of horses, cattle, sheep, swine and poultry, as witnessed at the Show; and of all discoveries and inventions which impart a ten-fold mechanical and productive power to the strong muscles of the husbandman. Conceding, as the intelligent reader will, the truth of these remarks, does the rich State Agricultural Society do all that it reasonably can to aid in cultivating the Intellect devoted to rural affairs? It has ap-

peared to us that it is infinitely more important to produce one "thorough bred" practical and scientific farmer, than one hundred improved bulls, boars or rams. In the hands of ignorant owners, experience demonstrates that these rapidly degenerate. Without a considerable degree of professional skill, applied in propagating and feeding all highly changed conditions of living beings, whether animal or vegetable, they manifest a strong tendency to return, not merely to their primitive or normal state, but they go as far below it, as they have been elevated by artificial means above their natural level. There is no blood in any race of animals from man down to the zoophite, so pure and fixed, as not to be liable to deterioration. The most favored of the nobility of England, families that for centuries have enjoyed every advantage wealth and civilization can bestow, have not only deteriorated, but in many instances run out at the little end of the horn. Whatever the genius, reason and industry of man have changed and improved, may change back again, and will do so, unless sustained by equal genius, reason and industry.

The great subject of human elevation has driven sleep from our pillow for many a night, for our heart is in the cause. The tendency to retrogression is a serious stumbling block. How is this adverse influence to be universally met, and counteracted at every point? How shall the community make sure of the advantages of all changes for the better in all time to come, and prevent all relapses through ignorance, indolence or any other agency? The keen good sense and patient labor which bring both wealth and honor to the father, too often induce mental and moral obtuseness, and downright laziness in the son. The parent toils intensely to remove the seeming necessity for his offspring to make any honorable effort in the world, either with his hands or intellect, so kindly bestowed by the Creator of all.

In the science of improvement we have all much to learn. Our own opinion is that intellectual and social culture can only be enduringly and unceasingly advanced, by uniting them with a reasonable degree of physical labor. The latter is too much despised, and too generally degraded, even in this country. We saw something of the exclusiveness and ill-timed arrogance of a quasi aristocracy, in the getting up of an agricultural dinner at Buffalo. The affair gave great offence, and was any thing but creditable to the high character of the State Society.

Instead of issuing a few tickets at a dollar a piece, to a public dinner eaten at midnight in the dining room of a hotel, tables should have been set under one of the large tents for one or two thousand farmers, with a plain substantial repast, and tickets sold at 25 cents each. This *Lunch* might be called a "breakfast," as in England, or a "barbecue," as at the South. It would have brought an immense number of the yeomanry of the country into pleasant juxtaposition, with comfortable seats, and a good supply of boiled ham, corned beef, tongue, cold roast fresh meats, bread, butter, cheese, pies and pure water—and been participated in by thousands of the bone and sinew of the land, whose feelings we can never see outraged without a word of censure in the *Genesee Farmer*. The editor of this paper was favored with a ticket, and personally has no cause of complaint.

In conducting an independent journal, no one can say that we ever puffed or censured any man or society from *personal* considerations. Last year we thought the annual address written by the lamented SILAS WRIGHT, was wrong in the free trade, political aspect which it bore upon almost every page. That of JOHN C. SPENCER, Esq., delivered at Buffalo, is justly obnoxious to a like censure, for taking the opposite, or Whig side of the tariff question. As a politician we fully concur with the views set forth by the distinguished lawyer from Albany; but they were sadly out of place, in our judgment. As we hope to speak the honest sentiments of the 200,000 farmers in New York, of all parties, are we wrong in pointing to the reflection on the ability of any of these to write and deliver a decent agricultural address before the State Society, implied in ever getting a professional lawyer or politician to do the job? If the professional education of practical agriculturists has been so unwisely and very generally neglected, as the fact alluded to implies, is it not time to make a common effort, and place the *profession of agriculture* in the Empire State on a par with those of law and medicine! God forbid that we should seek to degrade the latter. No, we would elevate the former to a position that will give the men who follow the plow and till their paternal acres, a just claim in point of learning and scientific attainments, to fill the highest offices in the gift of a nation of republican farmers. Do this, and you will have fewer gambling politicians, purer legislation, smaller taxes, and no aggressive wars, nor bitter sectional controversies.

The pride and insatiable selfishness of public men of all parties, need the salutary restraint of a more enlightened and conservative public opinion. This sovereign power is fortunately lodged in the will of a majority of the people, who are cultivators of the earth. You have done much; but far more remains to be accom-

plished before the toiling masses in your ranks will all be able to earn good homes, and know how to keep and enjoy them. To produce wealth like an ox or a machine, and not know how to keep it, is to occupy a low position in human society. To own the truth, we desire that the Legislature of our native State and its most useful agricultural associations, shall do more to elevate the poor laboring families, now so numerous in this great commonwealth. Whilst some six thousand dollars were paid out at the Fair to encourage the improvement of brutes and lifeless tools and implements, we saw many of our own race that needed skilful culture far more than do pigs, calves and colts. There were no premiums offered to encourage the scientific education of poor boys, in the arts of tillage and husbandry. As these boys are little able to speak for themselves, it is not less our duty than our pleasure to speak for them. What the Society has done is well; let it do something more in addition.

It is but simple justice to the citizens of Buffalo to say that, they generously subscribed about \$4000 to fit up in a suitable manner the enclosures and temporary buildings required for the convenience of the show and fair. The ease and facility with which some 50,000 visitors were provided for, speaks volumes for the capacity of that young and most flourishing city. The Gas Works for lighting it, now in process of erection by a company of which SAMUEL PRATT, Esq., is President, excited our especial admiration. Rochester has also improved much during the year that we have spent at the South.

The farmers of Western New York appear to us like men trying to cultivate more land than they have capital to manage well. This defect has impressed us very forcibly in traveling through the State. A small and well improved farm, with neat and comfortable buildings, good fences, choice fruit and fine stock, with a select agricultural library, and out of debt, are objects to be aimed at, rather than seek to own a large share of all creation, and probably fail in the avaricious attempt. If no man was permitted to hold more land than he had cultivated in a skilful and successful manner for the good of the community, as well as for himself and family, the insane craving for large plantations and many farms, would soon be abated. This intense desire for many acres is truly a disease, and exceedingly contagious withal. Give rural science fair play, and it will cure this malady, beside some others that might be named.

Interesting sketches of the proceedings of the Pomological Convention, and of the Horticultural Exhibition at the Fair, will be found in the appropriate department of this number. A list of the principal and most important premiums awarded, is also given in other pages.

The Constituents of Plants.

MESSEES, EDITORS:—From a perusal of the Genesee Farmer for the last six months, I find it is considered important for us, if we would insure good crops, to return a full equivalent to the soil for the elements our crops take therefrom. This, I infer, is not only important, but may be deemed THE great principle, founded upon experience, and firmly established by extensive experiment; in fact, the true basis of a successful rotation of crops.

But the questions arise—1st. How are we to obtain a knowledge of the simple elements which the different crops take from the soil?—and 2d. of the best manner of incorporating these elements with the soil?

It is not probable that the mass of us can consult the scientific works of Liebig, Johnston, &c.; but if we should receive through the Farmer, more analytical and synthetical items on the subject, would they not be conducive of the happiest result, by enabling us intelligently to "PAY OUR DEBTS."

A SUBSCRIBER.

Bloomfield, Ontario Co., Sept., 1848.

REMARKS.—Our correspondent is searching for light in the proper direction. Practical Agriculture is wholly indebted to Science for a knowledge of the "elements" which nature must have to form each plant, seed and fruit grown on the farm or in the garden. We have known a kernel of corn this season, in Georgia, to produce 1000 kernels equal in weight to itself. The matter in the parent seed could form but one kernel, leaving that contained in the other 999, as well as that which exists in the stems, leaves, roots and cobs, to be derived from the substance of the earth, air and water. Now, why should one kernel of seed corn give a harvest of 1000 kernels in one soil; and a harvest of only 100 in another? The same degree of sunshine, dews and rains; the same atmospheric gases and meteoric influences affect both corn plants alike. But if you analyze the soils critically, one will be found to abound in the elements consumed in organizing a large yield of this important grain; and the other will show a lack of some one or more of the things which God has appointed to make corn of. For years have we labored to convince our readers and hearers not only that a good crop of the fruits of the earth can not be formed out of *nothing*; but that each plant must have its appropriate constituent elements within reach of its living germ, in due quantity and in an available form.

A wise farmer husbands all of these raw materials, out of which his grain, grass, roots, apples and other fruit are literally made. He studies to accumulate in his soil the substances known to be indispensable to produce bread, meat, milk, wool and cotton. To render land more and more fertile, is better than to deposit money in increasing sums in any bank in the world. A rich soil has an intrinsic value for hungry human beings that appertains neither to gold nor any other precious metal. The fertilizing of whole farms as a general practice will never obtain in the United States, till our children are taught a knowledge of those Natural Laws, by the operation of which poor soils may

be transformed into fertile ones; and rich soils changed into sterile fields. The growth of plants is governed by laws as fixed and enduring as those which cause day and night, winter and summer, rain and snow. Why will not American farmers believe this simple truth, and permit their sons to study tillage, the formation of crops, and the improvement of cultivated earth as a science? If plants must be well fed to be fat, as well as animals, and their food must come from somewhere, why not learn how to feed the germs of corn, wheat, potatoes, oats and apples with the highest attainable skill and economy? Experience demonstrates that bone earth, or bones themselves, sulphur and lime or gypsum, chlorine and soda or common salt, and other elements of crops, serve to augment the harvest. There are millions of tons of the elements of bones and flesh wasted in this country, before they are organized in any living plant as food for man or beast. This waste accrues from a defective system of husbandry—one that permits no inconsiderable share of the dissolved minerals and organic matter in good soils to run with the water that holds them in solution, into creeks, rivers, lakes and the ocean. This loss, more than the removal of crops, often exhausts plowed and hoed land. The loosened soil is washed and leached till the food of corn and wheat, potatoes and turneps, in an available shape, becomes scarce indeed. The substances in the earth which form crops are lime, potash, iron, soda, magnesia, silica, sulphur, phosphorus, chlorine, carbon, nitrogen, oxygen and hydrogen. Every vegetable that grows takes up from the soil through the pores in its roots most, if not all of these elementary bodies, and fixes them in its organized tissues. Cultivate a field and permit no plant whatever to grow therein, and both its vegetable mould and earthy salts of lime, potash, &c., will be slowly dissolved and washed away. Partial, if not complete sterility can be induced by tillage without cropping at all. Nature renovates poor soils by constantly augmenting the annual yield of vegetation. This she does without the aid of tillage or manure of any kind applied from abroad. The farmer should study nature while at work in drawing the food of plants from the subsoil and the atmosphere to be organized and decay to enrich the surface soil.

This is one way to improve land. Another is to carry on, and spread over it just such things as are known to be indispensable in forming the crop. What are they? They are salts voided in the liquid and solid excretions of all animals, from man down to the bottom of the list. These salts come from our daily food which took them from the soil. In cities and villages these elements of crops accumulate in stables and privies; because all tillers of the earth send something from the soil to market. Go then to the nearest

city or village and take back on to your farm what will pay the debt you owe it. There are many soils in which an ounce of the voided elements of wheat, or corn, perfectly dry, will give a gain of a pound of dry corn at the harvest, if skilfully applied. By greatly extending the roots of a plant at a proper season, it is able to draw a much larger quantity of nourishment from any given soil, in addition to all that the fertilizer yields to it.

An exhausted horse may be within twenty miles of a rich pasture, which one good feed of oats will enable him to reach. So there may be food for the hungry corn plant just beyond where its roots extend; and a little of the matter stored up in the kernels of corn to feed the germs when they begin to grow, if taken from the pig sty or the privy and brought into contact with the roots, will cause them to grow into *fresh* pasture. It is the elements of the plant in this fresh pasture, not really the manure, that double the harvest.

The way that a pound of guano or rich night soil operates to produce sixteen pounds of grain, is what we want all young farmers to study. When they do this experimentally, they will see that all soils possess far more of the things necessary to feed and clothe mankind than is generally supposed. It is not necessary in the economy of a bountiful Providence to give the earth a pound in order to get a like weight back again without detriment to the soil.

Prepare for Winter.

Cold winter is not far off, and prudent men will see to it that their houses, barns, sheds and other buildings, are well prepared for the severity of the season. Economy and comfort alike demand the exclusion of biting frost from the habitation of man, and the due protection of his domestic animals in winter. A warm, comfortable house, a good wood-shed well filled with seasoned fuel, a cellar frost proof, and stored with garden vegetables, choice winter apples, meat, butter and lard, are things to be thought of in October. Take care of corn stalks, straw, pumpkins, potatoes, and every other article of food for man or beast.

In making pork, remember that two bushels of corn well cooked are equal to three fed in the usual way. If you use boiled apples, potatoes, pumpkins or carrots, add peas, oats, barley, rye or corn, at least in small quantity, to the mass, to strengthen and give body to the food.

Be careful to save all the liquid as well as solid manure of your fattening swine. Dry swamp muck is excellent for this purpose; whilst the urine will soon heat and rot the muck, and the whole become good food for any orop.

Turn up a little of the *subsoil* at your fall

plowing, to be disintegrated by the freezing and thawing of winter. Frost is a charming mellow of compact lumps and hard pan.

Take unusual pains to save, during the coming winter, all the fertilizing elements voided by your cattle, sheep, horses and poultry; and see how much first rate manure you can make to feed your crops on next season. To prevent loss by leaching, and evaporation by solar heat and drying winds, it is good economy to have manure under shelter and covered with swamp muck and a little gypsum.

Apples and potatoes headed up in full, air-tight casks, are infinitely less liable to rot than when exposed to the action of the oxygen of the atmosphere. It will pay to build air-tight pits, which will hold 1000 bushels of apples or potatoes, for the purpose of storing these and other perishable commodities. We claim to have made valuable improvements, by our researches down South, in the matter of preserving peaches, grapes and all organized substances from decomposition. This is by a new chemical process, of which our readers will hear more hereafter.—The apple trade of New York is destined to become one of its most important agricultural interests. An acre of land fully and skilfully cultivated in this fruit, will yield a large amount of wholesome food, at a *small expense*. Study the subject closely, and you will see that we are not mistaken in what we say. What an acre of land can be made to produce in apples, and through these in good flesh, makes the crop a valuable one. Dig up the grass, leave the turf to rot, and put lime and leached ashes about your apple trees. Gather both mineral and organic fertilizers from all sources within your reach;—and don't be offended at a word of caution not to run into debt on the uncertainty of next year's harvests and prices.

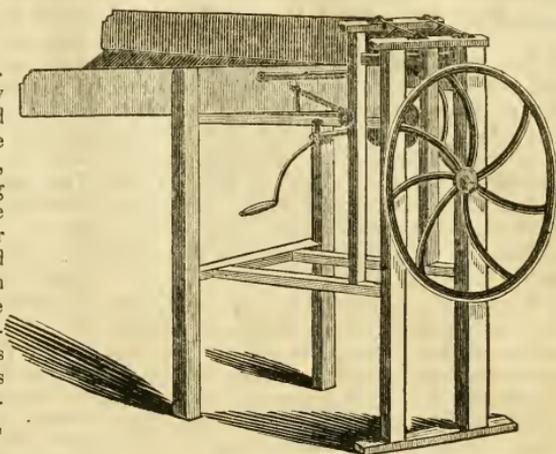
QUANTITY OF MANURE PRODUCED BY DIFFERENT CROPS.—It has been calculated by an eminent Scotch Agriculturist, that the farm-yard manure produced per acre by the several crops, is nearly as follows, from land producing 29 bushels of wheat :

	Tons.
By turneps, cabbages, and fallow crops, when applied to the feeding of cattle,.....	6
Clover, grass, and herbage, &c., the first year,.....	6
Ditto, of mowed, second year,.....	5½
Pulse crops, as beans, &c., part of the seed being used on the farm,.....	5
Pulse crops, when the seed is good,.....	5
White or corn crops—wheat, barley, &c., on the average of the whole,.....	4

It is no wonder, therefore, observes this writer, "that green crops should be recommended as sources of fertility, producing proportionably much more manure, besides the other advantages wherewith they are attended." The quantity might be very much increased by supplying the cattle yard with such rough vegetable substances, as by care and industry can be collected.

Densmore's Straw and Stalk Cutter.

THE accompanying cut represents B. DENSMORE'S 'Improved Premium Straw and Stalk Cutter,' which was patented June 6th, 1848. In its favor we have the testimony of many farmers and others, residing in different counties.—Having used it during the last winter, they state that it is the best machine within their knowledge for cutting hay, straw and corn-stalks. It has but one knife, which is attached to two swinging arms above it in such a manner as to give it an oblique sliding cut. The arrangement is simple and very substantial, operates with rapidity and ease, and is conveniently adjusted to cut different lengths, from three-eighths of an inch to one and a half inches. The machines are manufactured extensively by the patentee, at Brockport, N. Y., where they can be obtained at prices from \$15 to \$16,50. (See advertisement in this paper.)



which they got up this part of the exhibition, and they have set an example for the ladies of other villages where the Fair may be hereafter held, which we hope they will try to imitate.

The second day came up cloudy, and about 10 o'clock it commenced raining, and continued nearly all day. But this did not prevent the plowing match. Owing probably to the state of the weather, but four teams plowed, three of which did up their work in such a manner that the spectators seemed about equally divided as to which was the best. The ground was very hard and full of cobble stone, so that it brought into requisition the greatest skill of the workmen.— We should think some of our farmers, when they go home and contrast their miserable plowing with what they there saw, might learn a beneficial lesson.

The address was delivered in the Baptist Church, by Mr. EVANS, from Yale College.— It was a truly scientific production, and did much credit to its author. The house was very well filled, considering the weather. The number of people at the fair we have heard estimated as high as 5000. We can form but a poor judgment ourselves, but, to say the least, there were a great many out.

S. P. C.

Elockville, N. Y., Sept. 15, 1848.

HORSES.—A writer in the Southern Cultivator says:—"We have been all wrong in breeding at the South—we should have procured trotting stallions, and bred roadsters and farm horses, instead of the light, raw boned racer. We have paid little or no attention to selection, the true secret of success in all things."

It is a singular fact that the use of milk was unknown on this continent at the time of its discovery by Columbus. The cow and horse, which now swarm in countless multitudes on the table lands of North and South America, were introduced by the Spanish conquerors.

Madison County Cattle Show and Fair.

I HAVE just returned from our County Fair, held at the village of Madison, the 13th and 14th inst. It was decidedly the best Fair ever held in the county, and far exceeded the highest expectations of its most ardent friends. The first day was delightful. It had previously rained, so as to entirely lay the dust; yet, on the 13th, there was hardly a cloud to be seen. The weather was cool, and afforded an excellent opportunity for the farmers who wished to exhibit their stock of all kinds. The cattle were uncommonly good. I believe there were over 60 yoke of cattle exhibited, some of which weighed over 4000 lbs. They made a rich display. Cows, bulls and young stock were also quite numerous, and of a quality too that we think would be hard to beat in almost any other part of the State. The cattle exhibited we should think numbered nearly or quite 200.

The horses, especially the matched teams, as to quality, we think we have never seen surpassed at the State Fairs. They were also out in very good number—how many we cannot say. The other horses, owing to engagements, we did not see, but are informed they made a good display. The sheep exhibited were few, but we noticed some that were very nice. The swine exhibited were good, but only shown by one or two persons.

The exhibition of fancy articles, dairy products, &c., in the meeting house, was the richest and best arranged display we ever saw at any fair. It was almost dazzling to the sight to behold the fine display of paintings and fancy articles.— The ladies of Madison village are deserving of much praise for the truly tasteful manner in

What Cows should Farmers Keep?

As regards answering the above inquiry fully and satisfactorily, we confess our inability to do that justice to the subject which its importance demands. And we can assure the numerous readers of the Farmer that it would give us great pleasure to see it answered by some of their abler and more experienced pens. Our mite we know is small, but nevertheless it shall never be withheld so long as improvement is counted among the things that are.

There is too little regard paid by most farmers to the breeding and raising of domestic animals; and in no one instance can we see a greater chance for improvement, and one which would be attended with more pecuniary profit to the farmers themselves, than a wise selection of their cows. Upon these the value and merit of their entire herds, in a great measure, depend—and we have yet to see that farmer who keeps good cows whose other stock does not approach the just standard of perfection, in proportion to their excellence.

But what are the qualities necessary to constitute a good cow? A good milker alone does not, in our judgment, make a good cow; neither does a good breeder nor a good feeder. It is these three qualities combined that make the cow. Give us a cow that is good for milk, quality as well as quantity considered—that, when properly bred to good bulls, will invariably produce good calves, and one that when dried of her milk will, with proper care and attention, take on flesh rapidly and evenly,—and for one we will rest for a while, at least, satisfied. And until we can raise up an entire herd of cows, each one of which shall possess all of these excellencies, our aim shall be to advance in improvement until we accomplish our object.

To possess the first of these qualities a cow should have a fine head, a little wide above the eyes, but quite small below, and appear somewhat long. Her nose should be of a rich yellow color, or at all events not black; (we do not know of any full blooded stock, of any breed, with black noses, but they will frequently appear on stock as high bred as fifteen-sixteenths.) Her neck should be very small where it joins the head, but widening and deepening as it approaches the shoulders and brisket. Her udder should be of good size, well covered with long soft hair, and not inclining to fleshiness; large milk veins, and small delicate horns—they may be long in some breeds, but they should be fine, and she should have a yellow skin.

To be a good breeder she should, in the first place, be descended from good stock, and the farther back you can trace her from good stock the better. She should possess all the before mentioned milking qualities, with a broad straight back, wide loins and hips, long deep quarters,

round ribs, small bones in proportion to her size, deep and full brisket, fore legs wide apart and short; and lastly, she should be a good handler. A cow that is a good handler will also almost invariably produce rich milk; and if a first-rate handler, and possessing the before mentioned points, she will be invariably a good feeder.—This handling quality is, or has been, too much overlooked by breeders and judges at our Cattle Shows. Judges that will give in their decisions for premiums on stock, without even touching an animal, are, in our opinion, unfit for their office. We should not think of purchasing a cow for milk, stock and beef, without knowing her to be a good handler. She may be a good milker without it, a tolerable breeder and feeder,—but we have never yet owned a cow that was a bad handler that possessed the three qualities combined. We term a cow a good handler that possesses a loose mellow skin, rather thin, well covered with fine soft hair—so that the hand, when laid flat upon the ribs and brought together, shall be easily and pleasantly filled. The skin should also be loose and mellow upon the back and hips. We have been thus particular as to the handling quality, as, from our own observation, we do not believe there is one person in five who keeps stock, that knows any thing about it; and we also acknowledge our own ignorance, and hope to get more light from some of the numerous readers of the Farmer.

We never yet owned but one cow that came any where near suiting us, (and we have owned, and still do, some that we consider much above an average.) This is a three year old heifer, a full blooded Durham, purchased of Mr. VAIL, of Troy, last fall. We paid \$150 in cash for her, and believe her to be the cheapest property we ever bought—and now that we know her worth we would not part with her for twice that sum.

In conclusion we would just say to those farmers wishing to procure right stock, go and see Mr. V's herd, which now numbers some 60 head, all full blood Durhams. We thought them about right last fall, and now, with the addition of his young stock, and those purchased of Mr. PRENTICE (which Mr. P. reserved as the best from his entire herd, at the time of his great sale a few years since,) we think they cannot be surpassed if equaled in this country. They are worth a good journey, just to look at. Try it, and see if you are not satisfied.

SANFORD P. CHAPMAN.

Clockville, Madison Co., Sept., 1848.

PROPAGATE only from the best. If you have a poor or mal-formed animal, kill or sell him a once; if you have poor grain, dispose of it at the most advantageous price, and purchase the best you can procure. In this way you will consult your own interests, and gain assuredly far more in the end than you lose.

Lime and Ashes on Corn.

MESSRS. EDITORS:—I am no farmer, but cultivate a pretty large garden, for the purpose of "making," as they say down South, a few potatoes, beets, &c., and a little corn and the like, for family use—as well as to afford that bodily exercise which is necessary to good health and a good appetite.

The part of my garden on which I planted corn had been a "common" for a number of years until this spring, and was covered with a wild grass. This when turned over presented a grayish poverty-looking appearance. Knowing corn to be a luxurious liver, and withal a great eater, and having no manure handy, I was doubtful about the propriety of planting it there; but not liking it among my young fruit trees, and not wishing to go without the Sweet Corn for summer—the Popping Corn for winter evenings—and the Johnny-Cake for all seasons—I had no other resort.

I planted my corn, and when it came up it was sorry looking stuff. I soon hoed it to try to coax it along; but still it looked as though it was starved and had the jaundice to boot. I hoed it a second time, and thinned out the stalks in the hill, but with no improvement to its appearance.

Not knowing much about the analysis of soils, but knowing, from my reading of the Farmer and from other sources, that the existence of lime and potash in the soil was necessary for the production of corn, I rather blindly, I must confess, undertook to test its effects in this case. I procured about two bushels of lime, and robbed my wife's ash-heap of about one bushel of unleached ashes, and going through my corn-patch with an old tin pail and fire-shovel, threw a shovel full or two on each hill. And although my wife declared I was wasting her ashes, I thought I would try whether ashes would not make corn as well as soap. I then hoed it pretty thoroughly, and in a few days I imagined it looked a little better. In about ten or twelve days I repeated the operation, hoeing as before, to mix the lime and ashes with the soil. Soon after this we had a succession of warm showers, and a remarkable change was visible in my crop. The yellow, sickly-looking leaves began to assume a wholesome lively green, and the pipe-like stalks appeared better fed, and became more portly. It now grew as much faster than that of my neighbors, as it had before grown slower. It continued to flourish, and ripened a beautiful and abundant crop. So much for ashes and lime, and my experiment in farming.

Gentlemen, if you consider my "experience" worthy of publication, or of any remarks, it is at your disposal.

Rose-Lawn, N. Y., Sept., 1848.

RUSTIC.

"RUSTIC" fed his feeble corn plants very bountifully with "lime and ashes," and if he

plants the land next season, the crop will be not a little benefited by the application. An acre of forest will yield more potash, lime and other valuable minerals in its annual leaves, which fall to the ground, to say nothing of the organized carbon and nitrogen in the same, than most farmers are aware of. The gathering of these leaves and using them for manure are commended to the attention of our readers. We have seen crops much increased by this practice; and know that it is less resorted to than would be profitable. A pound of dry forest leaves yield from five to fifteen times more ash than a pound of dry wood from the trunks of trees. By rotting leaves in compost heaps, all their minerals are rendered soluble, which is far from being the case with their ash when burnt. Their organic elements are also valuable food for cultivated plants.

Chautauque Co. Agricultural Society.

THE annual Fair of this Society was held at Fredonia, on the 31st of August. The proceedings of the Fair, reports and awards of committees, &c., exhibit a continued and increasing spirit of improvement among the farmers of this noble county. Officers for the ensuing year were elected as follows, viz:—

President—CALEB J. ALLEN, of Charlotte.

Vice Presidents—John M. Edson of Charlotte, A. F. Morrison, Hanover; Harmon Corey, Ellicott; Elisha Norton, Pomfret; Martin Prendergast, Chautauque; Norman Kibbee, Westfield; Jona. S. Pattison, Sheridan; Selden M. Ely, Ripley; Chauncey Warren, Stockton; John Chandley, Charlotte; T. Judson, Portland; Otis Skinner, Sherman; J. E. Budlong, Carroll; Dan'l Williams, Harmony; Austin Pierce, Villenova; Abijah Clark, Ellery; S. E. Palmer, Gerry; D. H. Treadway, Ellington.

Secretary—E. F. Warren.

Treasurer—John Dewey.

THE AMERICAN HARE.—The American hare, usually known in this country under the name of "rabbit," is found pretty generally from Canada to the Gulf of Mexico. In winter and early spring, in the northern parts of the United States, its coat is nearly white, but in summer it is of a yellowish brown, with a whitish tail. This little animal makes a nest, or bed, of moss and leaves, in some old log, or hollow tree, whence it issues chiefly, but not altogether, by night. Though not so much addicted to knowing as squirrels, yet, its teeth being formed in the same manner, it probably resembles them in its food, eating various kinds of nuts and seeds, as well as green herbs and the bark of young trees. The American rabbit, from its shyness and timidity, is somewhat difficult to tame, and still more difficult to breed.

Crops in East Bloomfield, N. Y., in 1848.

MESSRS. EDITORS:—The importance of correct statistical information in regard to the agricultural productions of the country is being more and more appreciated. The only way to have these statistics approximate the truth, is to have practical men give accounts of limited districts with which they are particularly acquainted.—Having heretofore given statements of the crops in this town, in the old Genesee Farmer, I propose resuming the practice and give you an account of the crops for the present year.

Wheat.—This continues to be our great staple production. The present crop is a good one—better I think than for the last ten years. Of the kinds cultivated White Flint and Soules are the principal. The season has been favorable for the Soules, and I think the greatest crops are of this variety. I hear of no complaints of insects or smut. Rust injured some fields that were badly thrown out by the winter.

Spring Wheat.—There has been a great falling off in the growing of this crop for three or four years past, owing to poor crops. Those who have persevered in growing it have this year been rewarded with a fair crop.

Barley—This crop is about an average one. The high price of this grain last fall caused much more than a usual quantity to be sown. The amount of this grain now on hand is large.

Oats—A good crop; better than for the last two years.

Corn.—This season has been the best for corn of any during my remembrance. Such tall corn as we have here would not be thought a small affair, even among the Hoosiers.

Grass.—The crop of hay is lighter than common. The spring months were unfavorable to the growth of grass, especially upon old meadows.

Potatoes.—This has become the most uncertain of all our crops. Seed potatoes were so high last spring, and the crop so uncertain, that comparatively but few were planted. I believe the yield is a fair one, but I have little hopes that we shall escape the rot. Early planting and early digging was cried up as an effectual remedy. But this, like all other remedies of this terrible malady, is found to be no certain preventive.

Buckwheat.—This has been a fine season for it, and the crop is a very good one.

Peas.—The pea bug has rendered this crop a very poor one, and most of our farmers have abandoned it.

Flax did very poorly last year, and this year I don't recollect of seeing any growing.

Root Crops, such as Mangel Wurzel, Ruta Baga, Carrots, &c., seem to have had their day, and are now scarcely cultivated at all. They certainly do not receive that attention their importance demands.

Fruit.—Our orchards are not loaded so heav-

ily as last year, although there is a fair supply of every kind.

Wool is one of our most important productions. The low prices, and unpromising prospect for the next crop, will reduce the number of sheep for the next winter.

In conclusion, I would say that the past season has been one of unusual productiveness. While other parts of the State have suffered severely by drouth, we have had seasonable rains. Prices for all our produce (except wool) have been high. Our farmers show that peculiar air of satisfaction which always accompanies prosperity. And were our hearts filled with gratitude to the Author of all our blessings, as our graneries are with the bounties of his providence, we should indeed be a happy people.

Yours, &c.,

M. ADAMS.

East Bloomfield, Sept., 1848.

Wire Fence.

A CORRESPONDENT of the Louisville Journal, writing from Ghent, Carroll Co., Ky., says:—

There has just been completed on the farm of Mr. WILLIAM HAWKINS of this vicinity, some hundred and fifty or two hundred panels of this fence, which, for durability, neatness, and cheapness, far surpasses anything that I have seen in the fence way.

This fence answers the purpose of the strongest post and rail fence that can possibly be built, with not more than half the expense of the former. Mr. H.'s fence is constructed in the following manner: His posts (black-locust) are first placed in the ground, say eight feet apart, the first one being much larger and set deeper in the ground than the succeeding ones, because of the great resistance it has to make in stretching the wire. After the posts are properly arranged, grooves are sawed into the side of each post for the wires to lay in. The wires are placed one above the other from six to seven inches apart. The fulcrum and lever is then placed at the extremity of the wires to draw and tighten them. When they are sufficiently tight, they are secured firmly into the post by small staples made of wire. This fence sufficiently resists the encroachments of all kinds of stock, and costs only twenty-five cents to the panel.

P. S. The fence is capped with plank, which gives it additional strength and firmness.

IMPROVEMENT IN FILTERING WATER.—A new and original invention has been introduced in England. It is a cylindrical filter, made of stone, so constructed as to supercede all cleansing. The passing of the water through the stone frees it from all impurities in suspension, and, according to the testimony of an eminent analytical chemist, is calculated to benefit the public health materially. The filter is now in active operation in many of the mansions of the principal nobility of the Metropolis. The Lords of the Admiralty, struck with the utility of the invention as a means of preserving the health of officers and seamen, by rendering the water on board ship at all times pure and soft, irrespective of climate or time, have introduced it into the Royal Navy.

Preserving Butter.

It is a valuable art to know how to make good butter, and it is also a valuable art to know how to preserve it when it is made. The last named art must depend first on extracting every thing that will ferment or become rancid by absorption of the oxygen or acidifying principle of the air, and on excluding air as much as possible from it.

We will relate a method which was last year adopted by Col. DANIEL CRAIG of Readfield.

The Colonel's lady makes excellent butter, to begin with, and part of his success must be attributed to that.

The butter was packed down solidly and carefully in firkins, and a clean cloth fitted on the top of each before the covers of the firkins were shut on. He then took a clean hoghead, or large cask, and placed a layer of salt on its bottom.—He then put in one or more firkins, in such a position as not to touch each other, and then poured in salt until the firkins were covered. In this way his butter kept as sweet and as sound as a nut for several months, and when he came to overhaul it for the purpose of selling it, he found every thing as pure and nice as when it was first packed away. This hint is worth following by traders and others who may wish to preserve good butter any length of time. We do not know that poor, half-made butter can be kept from becoming rancid by being managed in this manner, and it is no matter if it cannot, for such butter is not worth the trouble.—*Maine Farmer.*

PRESERVATION OF EGGS.—This, after all the receipts given, is no easy matter. One reason is this: The egg contains, within itself, the elements of decomposition, and if the temperature be not kept pretty uniform and at a low degree—not so low as to freeze, however—these elements are set to work, and the egg becomes changed and injured if not spoiled. Some pack them down in lime water, some in brine, some in pulverized charcoal—all of which articles will preserve them very well if kept cool; but after all, an egg kept this way six months or a year, even if not tainted, will not be equal to a fresh, new laid one.

Some time ago a Mr. JAYNE, of Yorkshire, in England, adopted the following process for preserving eggs, which he says kept them in a good condition two years. He obtained a patent for the mode in England, but that will not prevent any one from using it in this country.

Take one bushel of quick lime, thirty-two ounces of salt, eight ounces of cream of tartar. Mix the salt together with as much water as will reduce the composition to a consistency that an egg when put into it will swim. The eggs may now be put into it, and be kept down by a board with a gentle pressure upon it.—*Id.*

Method of Hunting Wild Bees.

THE Canadians adopt an ingenious plan for discovering the trees that are stored with honey. They collect a number of bees off the flowers in the forest, and confine them in a small box, at the bottom of which is a piece of honeycomb, and on the lid a square of glass large enough to admit the light into every part. When the bees seem satiated with honey, two or three are allowed to escape, and the direction in which they fly is attentively observed until they become lost in the distance. The bee hunter then proceeds towards the spot where they disappeared, and liberating one or two more of the little captives, he also marks their course. This process is repeated, until the other bees, instead of following the same direction of their predecessors, take the direct opposite course, by which the hunter is convinced that he has overshot the object of his pursuit; for it is a well known fact, that if you take a bee from a flower situated at any given distance south of the tree to which the bee belongs, and carry it in the closest confinement to an equal distance on the north side of the tree, he will, when liberated, fly in a circle for a moment, and then make his course direct to his sweet home, without deviating in the least to the right hand or to the left. The hunter is now very soon able to detect the tree which contains the honey, by placing on a heated brick a piece of honeycomb, the odor of which, when melting, is so strong and alluring as to entice the whole colony to come down from their citadel. When the tree is cut down, the quantity of honey found in its excavated trunk seldom fails to compensate the hunter very amply for his perseverance.

KIDNEY WORMS IN SWINE.—A farmer in Delaware co. Pa. lost a hog, after protracted disease; in the following year three died; and in the succeeding year five more—the symptoms in all being the same; and all those which were attacked with the disease or died were barrows, or males. On a careful post mortem examination of those that died the last year, it was found that they were afflicted with gravel, which was discovered in the bladders and in the urethra, obstructing the passage of the urine. In one case, the bladder was found bursted, and its contents discharged into the cavity of the belly or abdomen. The vessels of the kidneys, and those leading to the bladder, were distended by a partially indurated secretion of matter, which, when rubbed between the fingers, discovered particles of a sandy character, presumed to be the same as those obtained from the human subject. It is worthy of remark, that although there was the usual proportion of females in the stock of hogs, none of these were visibly affected by the disease; in that respect following the same general law noticed in the human family.

The Great State Fair at Buffalo.

A DESCRIPTION of this great Festival has been so minutely, and yet graphically given to the public by the Buffalo press, that I shall now only note some of my impressions. In taking a cursory view of the great spectacle—as I cast my eyes upon the splendid equipages, surcharged with the beauty and fashion of this great City of the Lakes, wending their way to the Fair—I could but think that like Marvel had spoken truly when he said that the New York ladies at the Springs, found themselves completely nonplussed by those of Buffalo; the Buffalonians repaying the New Yorkers for their patronizing explanation of the late New York fashions, by a like compassionate detail of the fashions at Niagara.

The first thing striking, on entering the enclosure is the fine semi-military selection of the fair ground, flanked as it is by a beautiful wood of deciduous trees, and the cattle located there; this shows that the Buffalonians have an eye to the *utile* as well as to the *dulci*. Here are more specimens of mechanical ingenuity for the benefit of the farmer alone, than perhaps was ever seen before at a rural fair. Here the great ambulatory tent, of Free Soil notoriety, was turned into the temple of Flora and Pomona, festooned around its entire circle with a wreath composed of the twigs of the White Cedar, (*Thuja Occidentalis*.) As an *imperium in imperio*, there stood up in the middle of this monster tent a little temple, formed by a succession of tiny graceful Gothic arches, trimmed with the same everlasting *arbor vitæ*; the interior was enlivened by a plaster model of Flora herself. Here were flowers of beauty rare; enormous bouquets made up of flowers of endless variety, from the domesticated exotic, to the native wild flower—from the gaudy, unfragrant Dahlia of the garden, to the sweet and delicate Metella of the secluded lake side glen.

Among the fruits and vegetables, I noticed the large thin skinned melons of a more sunny clime, perhaps from Ohio, or Indiana; Egg Plants as big as a medium sized pumpkin, the largest I ever saw; but farther than this, it was the quantity and variety, rather than the size of the vegetable specimens that elicited admiration.

Animated nature was here represented, on a more extensive scale perhaps than it was ever before exhibited at a State Fair. It was pleasant to see the *genus homo*, here in the character of men from every state and kingdom. Here was the respectable Canadian farmer, eulogizing with foreign accent, the modern improvements of brother Jonathan; then you might see the voluble Frenchman, and the quiet German, pipe in mouth, commenting *con amore* in colloquial Dutch, on the superior points of the Springport Norman horse. Here were young, but coarse German *vraulein*, looking at stoves and washing

machines; matronly Yankee women examining churns, baby jumpers, &c., with *au fait* remarks and a practical eye; younger ones listening to the fine variations of a male performer on the piano forte—while still others stood looking with admiring gaze at cages of Parrots and Canary Birds, or the coarser coops which contained the coarser specimens of the genus *aves*. As if to give spice and variety to the living throng, and to make out the panorama, here, too, were pairs of young farmers, leading their fair inamoritas by the hand, looking at each other as though they themselves were the best and happiest of the show; as though they had arrived at that point in the drama of life, which CHAS. LAMB has described as “egotism for two.”

We now come to the Annual Address, delivered by the Hon. J. C. SPENCER. It did me good to see here before this improvised Rostrum, men come to listen and to learn, whose physical bearing proclaimed the respectability of the life they had lived. Men who had grown up practical students of the soil, and its products, in nature's grand and healthful laboratory; men who had, to the full meridian of life, preserved themselves intact, from all the low, factitious tricks of trade, alike from the pretension of the professional man, and from the selfish hypocrisy of the party politician. You felt that these men had come here from from no sinister motive of ambition or selfishness, but from a sincere desire to see, to learn and to reciprocate, knowledge for knowledge; the result of one practical experiment for that of another practical experiment—not to learn the successful tricks by which man circumvents his fellow man in the great drama of artificial life, but only to witness the progress that man has made in farming as an art, and in farming as a science. In other words to see and to learn, how much the art of tillage can be improved by man's industrial ingenuity, and how much his ingenuity can be aided, his labors rewarded and made easy, by a knowledge of the few, very few simple elements, which nature combines to produce organic life in her vegetable and animal kingdoms. The hypercritical may sneer at the idea that a farmer or a farmer's son could learn a lesson in the science of his calling, amidst the hurly burly of this great Festival. But here may he not at least, shake off a part of his egotism, his obsolete prejudices—the loss of which alone is indispensable to that healthy state of mind which leads to study, reflection and investigation. Stolid must be the ignorance and insensibility of that mind which can coolly survey the thousand improvements here, physical and intellectual, vegetable, animal and artificial, without a desire to know something of the *modus operandi* that produced such results.

May we not hope that when the farmer's son returns from this great Festival, the *afflatus* within him, aroused by what he has heard—his cu-

riosity excited by what he has seen—that his future course in farming will be marked by that intelligence which the study of the elementary principles of vegetable growth and structure alone can give to rural labor, making its reward certain, and its burden light; so that, instead of transmitting his freehold to his children as so many worn out acres, he will surrender it intact, used only, not impaired in any of the elements necessary to reproduction.

If conventional rules place the occupation of the farmer in point of respectability below that of some other professions, on the contrary, Nature has placed him at the head of every other class in the social circle, for he is alone dependent on God and Nature. The merchant calls on his government to protect and secure his maritine interests—the fisherman clutches with ill disguised rapacity the bounty awarded him by government, as a sort of double pay for producing from the ocean instead of producing from the soil—and the manufacturer clamors for a bounty on his products, in the shape of a tax on imports, that he, too, may obtain “a morsel of bread.” But the farmer, in the pride of his manhood, asks no other bounty but the protection of Heaven, the health and strength which nature has given him, and which are consequent upon the truth and simplicity of his life and calling. So far from asking protection from the other industrial classes, the American farmer is enabled by his superior industry, economy, self-denial, and simple living, to aid and protect every other class of his fellow men, by cheaply supplying them with the necessaries of life.

But *a propos* of the address. It was an ingenious effort of an astute practiced man and a scholar, to disprove the free trade doctrines of the last year's address, by the lamented SILAS WRIGHT. But, thanks to the good sense and sound philosophy of the honorable gentleman himself, he came to a ripe judgment at last, as the following just and eloquent conclusion of his remarks will show:

“The diversified employments of our people, which have been created, fostered and extended, by this policy of the government, with few exceptions have been pursued. Friendly and just relations have been maintained with foreign nations; treaties have secured us access to their ports and markets upon the most favorable terms; discriminating duties have compelled the abandonment of onerous charges upon our products, or upon the ships that transported them: exchanges of *our* surplusses for *theirs*, have been freely made, and thus a healthful, mutually beneficial foreign market has been opened and preserved for that which we did not consume at home, and for the products of our *manufacturing and mechanical* industry. At the same time the home market has been nursed, established and expanded, by judicious duties upon foreign fabrics, until it has come to consume an amount of our bread stuffs and provisions greater than that exported to the other countries of the world.”

Methinks these historical facts go far to prove that our agriculture has suffered nothing from legislation thus far, and that its future prosperity cannot be promoted by any additional strictures on our foreign trade. S. W.

Salting Stock.

I HAVE read in your Journal of the 16th inst. a communication signed H., from the Genesee Farmer, on the subject of salting swine. H. doubts its utility to that kind of stock—nay his facts seem to indicate its use a decided injury to them. I have witnessed the same results frequently in giving salt to swine, and always decided it to be injurious, although I was probably mistaken as to its injurious tendency.

Whilst on this subject I wish to say a word or two on the subject of salting stock in general.

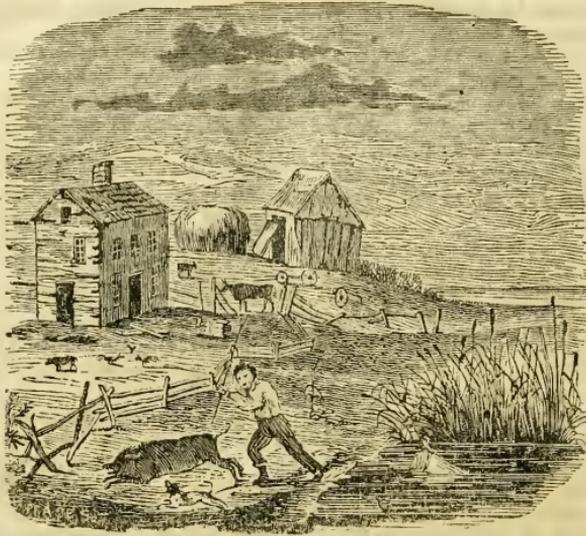
Do any of your readers know that salt is beneficial to any kind of stock? or do they give it because everybody else does? or because stock are fond of it?

I have conversed frequently with stock raisers on this subject, and have yet found none that have made satisfactory experiments. My own experience is, that it is of little or no use. I have salted a part of my stock regularly once a week leaving a portion without it for a period of four or five months during several different years, and was unable to discover any difference in their condition.

Will some of your numerous readers who have made experiments on this subject be good enough to give the public the benefit of them.

It must be admitted by all farmers that this is a subject of some importance; for, if my theory be correct, the State of Kentucky is expending annually many thousands of dollars for no valuable purpose.—*Louisville Journal.* G.

KEEPING FARM ACCOUNTS.—Let any farmer make the experiment, and he will find it interesting as it is useful, and both interesting and useful, to know from year to year the actual produce of his farm. Let everything, therefore, which can be measured and weighed, be measured and weighed; and let that which cannot be brought to an exact standard, be estimated as if he himself were about to sell or purchase it.—Let him likewise, as nearly as possible, measure the ground which he plants, the quantity of seed which he uses, and the manure which he applies. The labor of doing this is nothing compared with the satisfaction of having done it, and the benefits which must arise from it. Conjecture, in these cases, is perfectly wild and uncertain, varying often with different individuals, almost a hundred per cent. Exactness enables a man to form conclusions, which may most essentially, and in innumerable ways, avail to his advantage. It is that alone which can give any value to his experience. It is that which will make his experience the sure basis of improvement; it will put it in his power to give safe counsel to his friends, and it is the only ground on which he can securely place confidence in himself.



PREMISES OF AN UNLUCKY FARMER.

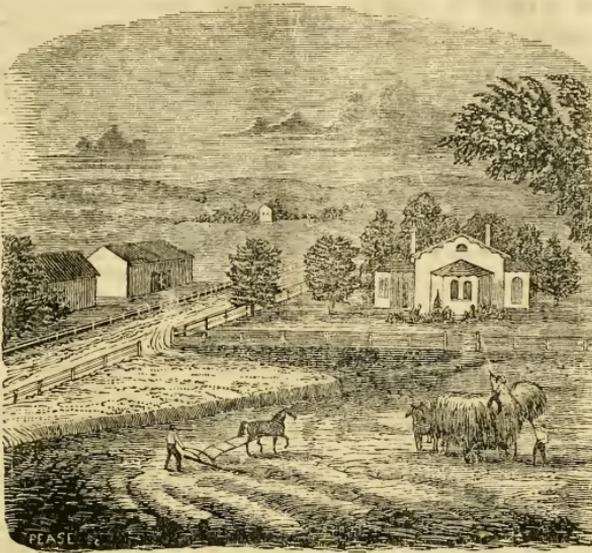
HERE is a very *expressive* and *comprehensive* picture, the counterpart of which we have seen in more States than one; and we fear that many of our readers have observed the same, even among the far-famed agriculturists of Western New York. Perhaps the owner of the *original* premises from which this *graphic view* is taken, may be a kinsman of the Allegany farmer whose manure heap was so spacious that he was compelled to *remove his barn*, in order to give the former "ample room and verge enough." But our distant readers may claim the original as a portion of the fee-simple of some unlucky anti-book farmer in their neighborhoods, and therefore we won't insist upon the location. In fact, as the politicians say, his *fame* does not belong to any district or State, but to the whole country.

The engraving is from BEMENT'S *Journal of Agriculture*—and its most prominent *features* are well 'taken' by our spirited contemporary of the *Prairie Farmer*. He says:—

"The first thing observed in running the eye over the cut, is the general appearance of the whole—the *impression* produced by taking in the picture at a glance. It must be conceded, even from this first impression, that the occupant of this farm is a hard-handed, hard working farmer. How could a man keep such a place in order without hard work? In fact the owner is at this moment hard at work. There may be some difference of opinion, it is true, as to the industry of his habits; but the doubter would do well to consider whether a man so actively engaged does not give indubitable proof of industry. Another idea at once strikes the mind in this

general survey. The occupant is an *unlucky* man. Proof of this is afforded in several circumstances. His stock is evidently unruly, particularly the pigs; and though it would be hard to tell why that hog might not as well be one side of the fence as the other, since no mischief is apparent for him to do, yet the attitude of the man with the pitchfork plainly shows that his swinishness has mistaken his position. Then again, though he must have been living there for a dozen years or so, he has always had so much to do that he has never found any time to "fix" that fence properly. His barn too has been sadly racked by the wind, and now stands "coming" at the rate of some feet out of perpendicular. His ill luck and misfortune are apparent on every hand. Some window glass "never will" stay whole; and our farmer's windows were of this sort, and he has been obliged, as one pane after another has disappeared, to fill their places with the remnants of old clothes.—As to anything like a shrub, tree, or flower growing about his door, there was no such thing to be thought of, because the cows and pigs would destroy them at once; and like a sensible man, our friend has never risked his labor and patience by putting any there. His barn door is always getting off the hinges—or rather it got off once, and has always staid off since. The roof of the barn has the appearance of being leaky, and many of the boards have somehow got loose, and he has never had time to put them on again.

In the way of implements, he has had no better luck than in other matters. Broken plows, carts, and harrows, lie strown about the yard—



PREMISES OF A LUCKY, OR GOOD FARMER.

a proof of the miserable manner in which these things are made, and of our friend's luck in getting bad ones. His cows, though they find little opposition to entire freedom, will never keep fat, although they are only milked three or four months out of the twelve; while his neighbor's are milked eleven months, and are in good condition constantly, notwithstanding they are kept confined to a small lot during the whole summer.

This farmer has a mortal abhorrence of all books and papers which relate to his business. Farming was a trade which he learned of his father and grandfather before him, and it is a pity if they did not understand their business better than these fellows who print agricultural papers. Besides one of his neighbors is a "book farmer," and is always at some new whim which our hero's father never practiced."

As a proper and pleasing contrast to the preceding illustration, we give at the head of this page an engraving representing the "Premises of a Lucky, or Good Farmer." The two sketches present, at a glance, what may be appropriately designated "the *lights and shades*" of Rural Life. The contrast between Good and Bad Farming—industry and indolence, intelligence and ignorance—is most graphically delineated. Indeed, the illustrations hardly require a word of comment, as they speak volumes in condemnation of indolence and carelessness, and in favor of industry, neatness and order. One of our objects in presenting them together is to afford, through the "mind's eye," food for com-

parison and thought on the subject of rural residences and their appurtenances—a matter sadly neglected, even among prosperous farmers. A look at this engraving gives the reader an idea of beauty, comfort and utility—a very desirable combination, and one to which farmers wives and daughters, at least, will offer no objection.

The owner of such a "homestead" as is here represented will not only be a man of enterprise, but possess good taste, and a sound, discriminating judgment. There are many, and we trust thousands, of such men among the readers of the *Genesee Farmer*—men who not only **TILL**, but **STUDY TO IMPROVE THE SOIL**—who **READ** and **THINK**, as well as **WORK** to advantage. And the fact that such men are increasing in numbers and influence, in all sections of the country—while those who adhere to the superstitions of the past, and depend upon the planets for guidance and success, are diminishing in an equal ratio—is a most gratifying and encouraging evidence of the onward progress of intelligence and improvement. The day is not distant when the title of *American Farmer* will be far more honorable, and expressive of more knowledge and independence. As humble but earnest laborers we shall continue to give our best efforts to the achievement of an object fraught with so much importance to our readers and the great mass of community—the **PRODUCERS** of the wealth of the country—and earnestly invite the co-operation of all interested in the elevation of the cultivators of our soil and the advancement of American Agriculture.

Premiums Awarded at the N. Y. State Fair,

HELD AT BUFFALO, SEPT., 1843.

CATTLE.—DURHAMS.

Bulls over 3 years old.—1st premium, Z. B. Wakeman, Herkimer Co., \$25—2. Robert Rome, Mt. Morris, 15—3. Benj. Hewitt, Lewiston, \$5.

Two year old bulls.—1. R. Rome, Mt. Morris, \$20—2. J. M. Sherwood, Auburn, \$10—3. W. R. Porter, Batavia, \$5. *Yearling Bulls.*—1. Z. B. Wakeman, \$15—2. J. M. Sherwood, \$10.

Bull Calves.—1. J. M. Sherwood, \$10—2. Lewis F. Allen, Black Rock, Wash. Letters and \$3.

Cows.—1. J. M. Sherwood, \$25—2. M. Whiteside, Mayville, \$15—3. W. R. Porter, \$5.

Two year old Heifers.—1. Lewis F. Allen, \$20—2. and 3. J. M. Sherwood, \$15 and \$5.

Yearling Heifers.—1. H. Schermerhorn, Schenectady, \$15—2. W. R. Porter, \$10—3. J. M. Sherwood, \$5.

Heifer Calves.—1. Z. B. Wakeman, \$10—2. Lewis F. Allen, Wash. Letters and \$3.

HEREFORDS.

Bulls over 3 years old.—W. H. Sotham, Black Rock, \$25. *Two year old Bulls.*—1. S. W. Holmes, Chautauque, \$20—2. P. Whitney, Niagara Falls, \$10.

Yearling Bulls.—1. W. H. Sotham, \$15—2. Allen Ayrault, Geneseo, \$10—3. W. H. Sotham, \$5.

Bull Calves.—1. W. H. Sotham, \$10—2. Allen Ayrault, Wash. Letters and \$3.

Cows.—1. W. H. Sotham, \$25—2. and 3. Allen Ayrault, \$15 and \$5.

Two year old Heifers.—1. S. W. Holmes, \$20—2. and 3. W. H. Sotham, \$10 and \$5.

Yearling Heifers.—1. and 2. W. H. Sotham, \$15 and \$10—3. John T. Bush, Tonawanda, \$5.

Heifer Calves.—1. W. H. Sotham, \$10—2. Allen Ayrault, Wash. Letters and \$3.

DEVONS.

Bulls over 3 years old.—1. J. W. Hamlin, Aurora, \$25—2. E. P. Beck, Sheldon, \$15—3. E. C. Dibble, Batavia, \$5.

Two year old Bulls.—1. Lewis F. Allen, \$20.

Yearling Bulls.—1. A. Woodruff, Sheldon, \$15—2. M. Vernon, Stafford, \$10—3. L. Hicox, Alexander, \$5.

Bull Calves.—1. H. N. Washburn, Butternuts, \$10—2. E. P. Beck, Wash. Letters and \$3.

Cows.—1. H. N. Washburn, \$25—2. E. C. Dibble, \$15—3. H. N. Washburn, \$5.

Two year old heifers.—1. 2. and 3. to E. P. Beck, Sheldon, 20, 10 and \$5

Yearling Heifers.—1. E. P. Beck, \$15—2. H. N. Washburn, \$10—3. E. P. Beck, \$5.

Heifer Calves.—1. H. N. Washburn, \$10—2. J. W. Hamlin, Wash. Let. and \$3.

AYRESHIRE.

Cows.—1. Robert Rome, Mt. Morris, \$25—2. James S. Wadsworth, Geneseo, \$15.

Yearling Heifers.—1. Robert Rome, \$15.

NATIVE AND CROSS.

Cows over 3 years old.—1. Allen Ayrault, Geneseo, \$20—2. Alfred Gale, Black Rock, \$12—3. A Taylor, Alden, \$4.

Two year old Heifers.—1. E. C. Dibble, \$15—2. Alfred Gale, \$10—3. E. P. Beck, \$3.

Yearling Heifers.—1. Allen Ayrault, \$10—2. and 3. M. C. Remington, Sennett, \$8 and \$3.

Heifer Calves.—1. M. C. Remington, \$3—2. Alf. Gale, Wash. Letters.

WORKING OXEN—best ten yoke.—3d. premium, G. Paxton and others, Eden, \$15. *Single Yoke.*—1. B. Murphy, Le Roy, \$25—2. Henry Dixon, East Bethany, \$15—3. Allen Ayrault, Trans. and \$5.

STEERS—Single yoke.—Allen Ayrault, \$10—2. J. Freeman, Geneseo, \$8—3. R. Humphrey, Victor, \$5.

Two year old Steers.—J. S. Wadsworth, \$10—2. Allen Ayrault, \$8—3. A. Brown, New Bethany, Trans. and \$5.

One year old.—1. B. Benedict, Alexander, \$8—2. Elon Sheldon, Sennett, \$5—3. L. Hecox, Alexander, \$3.

Steers trained by boys under 16.—1. Jervis P. Benedict, Alexander, silver medal—2. Cleveland Allen, Black Rock, Trans. and \$3—3. Abijah McCall, Aurora, Trans.

L. H. Yates, Darien, dist. prem. of \$20 on a very fine yoke of two year old steers.

FAT CATTLE.—Pair fat Oxen over 4.—1. J. & F. A. Alberger, Buffalo, \$30—2. and 3. Lyman Brainard, Attica,

20 and \$12. *Single Ox* over 4.—1. Edward Munson, Sennett, \$15. *Cow* over 4.—1. Robert Hadfield, Sheldon, \$15—2. Robert Fowler, Batavia, \$10—3. Allen Ayrault, \$6. *Pair Fat Steers.*—1. Elon Sheldon, Sennett, \$15—2. B. Humphrey, Victor, \$12—3. John Burns, Penfield, \$8. *Single Steers.*—1. Edward Munson, \$10—2. Henry Dixon, East Bethany, \$6. *Heifer.*—1. Joshua Barnes, Buffalo, \$10. *Cow, (grass fed) over four.*—1. Norman Kibbe, Westfield, \$15—2. Robert Hadfield, \$10.

FAT SHEEP.—Long Wooled.—1. and 2. Wm. Terry, Mt. Morris, 10 and \$7—3. Geo. Swales, Sodus, \$5. *Middle Wooled.*—1. Robert Fowler, \$10—2. F. W. Collins, Bloomfield, \$7—3. Lewis F. Allen, \$5.

Best Milch Cows.—(The cow to be kept on grass only during the experiment, and for 15 days previous to each period of trial.) 1st and only premium to James Brookins, Aurora, \$20.

HORSES.—CLASS I—FOR ALL WORK.

Stallions.—1. Jas. M. Davis, Arcadia, "Sir Archy Duroc" aged 16, \$25—2. N. Bailey, Henrietta, "Magnum Bonum," \$15—3. John Henderson, Mendon, "Morgan Eagle," \$8—4. Geo. Robinson, "North Star," copy of Youatt.

Brood Mares.—4th prem. to Jas. Brookins, Aurora, Youatt. Special premium on Mares—Henry J. Beach, Batavia, \$20—Stephen Powell, Lewis, \$10.

CLASS II—DRAUGHT HORSES.

Stallions.—1. C. Schobey, Springport, "Young Alfred," \$25—2. P. Root, Westfield, "Young Sampson," \$15—3. John Sybrant, Lockport, "Sampson," \$8—4. R. B. Howland, Springport "Louis Phillippe," copy of Youatt.

Brood Mares.—1. T. C. Love, Buffalo, \$25—2. Alexander Hitchcock, Cheektowaga, \$15.

CLASS III—BLOOD HORSES.

Stallions.—1. E. H. Ireland, Watervliet, "Alexander," \$25—2. Wilson Little, Lodi, "Culpepper," \$15—3. E. C. Dibble, Batavia, "Hornblower," \$8—S. W. Holmes, Chautauque, "Bucyrus," Youatt.

Stallions 3 years old.—1. John D. Spinner, Herkimer Co., "Sir Henry Eclipse," \$15—2. H. Whalen, Penfield, "Alfred Matchless," \$10—3. Truman Hungerford, Watertown, Youatt—4. James Brown, Darien, Trans. *Two years old.*—1. S. W. Holmes, \$10—2. S. M. Burrows, Medina, \$5—3. M. L. Hungerford, Watertown, Trans. *One year old.*—1. T. M. Prendergast, Ripley, \$5—2. C. R. Nichols, Darien, Youatt—3. Samuel Cassidy, Royalton, Trans. *One year old Mare.*—1. J. D. Allen, Black Rock, \$5.

Discretionary Premiums.—H. H. Norman, Ferrinton, gelding colt, diploma; John West, Brandt, 1 pair geldings, copy of Youatt; R. L. Van Vliet, Aurora, Trans.; B. W. Pratt, Collins, Trans.

Matched Horses.—1. W. Morgan, Victor, diploma and \$20—2. E. Stage, Wolcott, \$15—3. Chas Axtel, Sodus, 10.

Geldings.—1. Stevenson Brothers, Buffalo, dip, and \$10—2. J. S. Wadsworth, Geneseo, \$8—3. Stevenson Brothers, \$6.

SHEEP—CLASS I—LONG WOOLED.

Bucks over 2 years old.—1. Wm. Terry, Mt. Morris, \$15—2. J. Terry, Mt. Morris, \$10—3. Geo. Swales, Sodus, \$5.

Bucks under two.—1. John Wilkinson, Tonawanda, \$15—2. Lewis F. Allen, \$10—3. J. Bicknell, Aurora, \$5.

Pen of 5 Ewes over two.—1. Henry Lyons, Lewiston, \$15—2. Wm. Robinson, Westmoreland, \$10. *Five ewes under two.*—1. and 2. Thos. Terry, Mt. Morris, \$15 and \$10—3. J. Bicknell, Aurora, \$5.

Five Buck Lambs.—1. J. Bicknell, \$10; 2. Thos. Terry, \$5. *Five Ewe Lambs.*—1. E. P. Beck, Sheldon, \$10—2. Thos. Terry, \$5.

CLASS II—MIDDLE WOOLED.

Bucks over two.—1. Z. B. Wakeman, \$15; 2. Jas. Parsons, Riga, \$10; Z. B. Wakeman, \$5. *Two or under.*—1. 2. and 3. Z. B. Wakeman, 15, 10 and \$5.

Pen Ewes over two.—Z. B. Wakeman, 15; 2. Jas. Parsons, \$10; 3. Z. B. Wakeman, 5. *Under two.*—1. Z. B. Wakeman, \$15; 2. James Parsons, 10; 3. Wm. Hotchkiss, Lewiston, 5.

Five Buck Lambs.—1. Z. B. Wakeman, \$10; 2. Jas. Parsons, \$5.

CLASS III—MERINOS AND THEIR GRADES.

Bucks over two.—1. D. G. Lee, Darien, \$15; 2. E. C. Sherman, Middlebury, \$10; 3. J. M. Sherwood, Auburn, \$5.

Two or under.—1. J. M. Sherwood, \$15; 2. E. C. Sherman, \$10; J. W. Hyde, Darien, \$5.

Five Ewes over two years. E. C. Sherman, \$15; 2. R.

Harmon, Wheatland, \$10; 3. Amos Chilcott, Hamburg, \$5. *Two or under*—1. R Harmon, \$15; 2. Amos Chilcott, \$10; 3. C C Pierson, Avon, \$5.

Five buck Lambs. 1. Dexter Ewell, Alden, \$10; 2. R Harmon, \$5. *Ewe Lambs*—1. Amos Chilcott, \$10; 2. R Harmon, \$5.

CLASS IV—SAXONS AND THEIR GRADES.

Bucks over two. 1. Chas. Colt, Geneseo, \$15; 2. S B Crocker, Vernon, \$10; 3. Erastus Hurd, Royalton, \$5. *Two or under*—1, 2 and 3, S B Crocker, Vernon, \$15, 10 and \$5.

Five buck Lambs. 1, Chas. Colt, \$10.
Five Ewes over two. 1, Chas. Colt, \$15; 2, and 3, S B Crocker, 10 and \$5. *Under two*—1, S B Crocker, \$15; Erastus Hurd, \$10.

Shepherd's Dog. J M Sherwood, Auburn.

SWINE—LARGE BREED.

Boar over two years. 1, R B Howland, Springport, \$10; 2, Augustus Raynor, Clarence, \$5. *One year*—1, C R Nichols, Darien, \$1. *Six months and under 1 year*—1, N W Briggs, Lewiston, \$8; 2, C R Nichols, \$5.

Breeding Sow over two. 1, J. Winspear, Lancaster, \$10; 2, Sam'l Loper, Clarence, \$5. *One Year*—1, J B Stannard, Alexander, \$10.

Lot of pigs under 10 months. O Lathrap, Darien, \$10.
SMALL BREED. Lot pigs under 10 months. 1, E Perkins, Hamburg, \$10.

POULTRY.

Best lot of Dorkins, L. F. Allen, Black Rock, \$3.
do Polands, H A Parsons, Buffalo, 3.
do large fowls (Ostrich) J W Bissell, Rochester, 3.
do Turkeys, Grosvenor Clark, Buffalo, 3.
do Muscovy Ducks, N S Smith, do, 3.
do Small Ducks, do do, 3.
do Guinea Hens, E Bennett, Cheektowaga, 3.
Best pair China Geese, L F Allen, Black Rock, 3.
do large geese, (African) D Redmond, Utica 3.
do Wild Geese, H A Parsons, Buffalo, 3.

Best lot of poultry owned by exhibitor, H A Parsons, do 10.
Best exhibition of Pigeons, George Becker, do, 3.
Pinnated Grouse or Prairie Chickens, G F Morris, do, 2.
Lot of splendid Birds from Van Dieman's land, by George Cuthbertson, Buffalo, Vol. Trans. and Dip.
Splendid lot of lap ear French Rabbits, D Redmond, Utica, Diploma.

PLOWS.

Best plow for general purposes, John Van Brocklin, Middleport, diploma and \$10; best for stiff soils, Homer Scott, Cambria, dip, and \$10; best for light sandy soils, H Starbuck & Son, Troy, dip and \$10. Discretionary premium, N Delano, Motville, diploma.

PLOWING MATCH.

1. David Cossett, Onondaga, \$15; 2. E Davis, Watertown, 12; 3. Walden Eddy, Union Village, 10; 4. N. Sanderlin, Colman's Tour; 5, Homer Scott, Cambria, Transactions.

FARM IMPLEMENTS—No. I.

Best Farm Wagon, R. Dickinson, Fredonia, Dip and \$10; 2, Levi Newton Attica, Colman's Tour.
Best Harrow, H L Emery, Albany, Dip and 3.
Best Corn Cultivator, E J Burrall, Geneva, Dip and 3; 2, Wm Adams, Middleport, Trans.
Best Fanning Mill, Rapalje & Briggs, Rochester, Dip & 5; 2, H L Emery, Albany, Trans.
Best Horse Power, Joseph Hall, Rochester, Dip and 5; 2, H L Emery, Albany, Trans.
Best Cornstalk Cutter, G Catchpole, Geneva, Dip and 5; 2, C Burnett, Lyons, Trans.
Best Threshing Machine, Joseph Hall, Rochester, Dip and 10; 2, H L Emery, Albany, Trans.
Best Straw Cutter, Rapalje & Briggs, Roch'r, Dip and 3.
Best Corn and Cob Grinder and Crusher, J G Case, Utica, Dip and 5; 2, H L Emery, Albany, Col Tour.
Best Mowing Machine, Wm. F Ketchum, Buffalo. This machine having received a diploma at the Fair in 1847, is awarded a certificate.

Hussey's Reaping Machine is also awarded a certificate.
Best Grain Drill, A Palmer, Brockport, Dip.
Pennock's Seed Drill, Rapalje & Briggs, Certificate.
Best Corn Sheller and Cleaner, A H Stevens, Geneva, Dip; 2, E J Burrall, Geneva, Dip.
Best Wheat Cultivator, (Idc's,) L A Morse, Medina; 2, (Hinkston's) D Hinkston, Clarkson.

Best cultivator and drill combined, J W Sherman & Co, Ontario, Wayne co.

Best broadcast sower, do do
Best double gauge clevis, J Van Brocklin, Middleport; 2, Garret Erksom's, Hobart, Delaware co.
Best eave trough, Ira Ewing, Hume, Certificate.
Best buggy with top, P M Crandall, Canandaigua; 2, Mr Williams, Buffalo.

Best farm buggy, Levi Newton, Attica.
Best cultivator for general use, E R Dix, Vernon.
Best grist mill, E T Butler, Norfolk, Conn.
Best refrigerator, Rapalje & Briggs, Rochester.
Judd's improved patent centrifugal windmill, recommended.
Fitzgerald's portable grist mill, manufactured by Charles Ross, 38 Broadway, N. Y.

Improvement on bedstead fastenings, J D Sandford, Bennington.

FARM IMPLEMENTS—No. II.

Best horse rake, J Swift, Clarkson, Dip and 3.
Best ox yoke, Rapalje & Briggs, Rochester, Dip and 2.
Best fancy single harness, J M Deveaux, Syracuse, (a superior article,) Silver Medal.

Best single harness, W C Lockwood, Buffalo, Dip.
do bridle and martingale, A Culver, New Fane, Dip.
do doz axes, Pratt & Co, Buffalo, Dip and 2.
do seven do, L & J J White, do, Dip.
do churn, Peter Fraer, Lewiston, Dip and 2.
do cheese press, W G Brainard, Rome, Dip and 2.
Anti-friction press, (Dix's) Joseph B Holmes, Meadville, Pa., Diploma.

Best grain cradle, H L Emery, Albany, Dip and 2; 2, L D Hathaway, North Boston, Dip.
Best hay forks, (Patridge's,) H L Emery, Albany.
do $\frac{1}{2}$ dozen manure forks, do, do, certificate.
do $\frac{1}{2}$ dozen grass scythes Pratt & Co, Buffalo, Dip and 2.
For the best and most numerous collection of agricultural implements, H L Emery, Albany, Dip, and \$20.
For the same, made in the State of New York, (superior articles,) Rapalje & Briggs, Rochester, Dip and 20.

BUTTER.

Best lot of 25 lbs., made in 30 successive days. 1. E. R. Evans, Marcy, Oneida Co., \$25; 2 John Holbert, Chemung, \$15; 3. A Woodruff, Sheldon, Wyoming Co., \$10.

Best 25 lbs made in June. 1. Wm. Robinson Westmoreland, Oneida Co., \$10; 2. N. Van Ness, Mayville, Chau. Co., Colman's Tour; 3. John Holbert, Trans.

Best 50 lbs. made at any time. 1. John Holbert, Chemung, \$15; 2. A. Woodruff, \$10; 3. N. Van Ness, 5; 4. John Sill, Alden, Col. Tour; 5. F. Williams, Gerry, Chau, Co., Trans.

Best lot 10 lbs. made at any time, by girls under 21 years of age. 1. Miss Lydia A. Van Ness, Mayville, Silver Milk Cup, (value \$10.); 2. Maria Van Ness, Mayville, pair butter knives, (value \$); 3. Martha Holbert, Chemung, tea-spoons, (5.)

CHEESE.

Best 100 lbs. 1 year old and over. 1. D. Newton, Hamburg, \$20; 2. E. H. Colvin, Hamburg, 10; 3. Wm. Oley, Oaks Corners, 5; 4. Clark Avery, Perryville, Col. Tour.

Best 100 lbs. less than 1 year. 1. Silas Wheelock, Hamburg, \$15; 2. E. & H. Colvin, 10; 3. Talcott Francis Colden, 5; 4. Daniel Newell, Wales, Col. Tour; 5. Arnold & Littlefield, Clymer, Trans.

H. Parsons, Esq., of Guelph, C. W. was awarded diploma and silver medal for samples of his celebrated *Stilton* cheese.

SUGAR.

Best 25 lbs. 1. Benj. Gauss, East Bloomfield, 10; 2. Fred. Williams, Gerry, 5; 3. Edward Cheney, Pavillion, Col. Tour; 4. B. Radford, Hanover, Trans.

HONEY.

Best 30 lbs. 1. J. Hoag, Black Rock, \$5; 2. M. McDonal, Aurora, 3; 3. E. & H. Colvin, Trans. Discretionary premium, L. F. Allen, Diploma.

HORTICULTURAL—FLOWERS.

Professional List.

The greatest variety and quantity of flowers. Ellwanger, Barry & Rowe, Rochester, \$5.
Dahlias. Greatest variety, Benj. Hodge, Buffalo, 5.
Best 24 dissimilar blooms, Ellwanger, Barry & Rowe, Roch. 3.
Roses. Greatest variety, Benj. Hodge, Buffalo.
Best 24 dissimilar blooms, Wm. Webb, Florist, Buffalo 3.

Phloxes. The best 10 varieties, Ellwanger, Barry & Rowe, Rochester, 3.

Verbenas. The greatest variety and number, Ellwanger, Barry & Rowe, Rochester, 3.

Best 12 varieties, W. Webb, Florist, Buffalo, 2.

Best seedling, Ellwanger, Barry & Rowe, Rochester, 2.

German Asters. Best collection, Ellwanger, Barry & Rowe, Rochester, 3.

Pansies. Best collection, Ellwanger, Barry & Rowe, Rochester, 3. Also, a discretionary premium of \$2, for a beautiful collection of German Ten Week Stocks, to Ellwanger, Barry & Rowe.

Amateur List.

Greatest variety and quantity of flowers. Miss Laura Jane Whitney, Rochester, silver medal.

Verbenas. Greatest variety, Miss Laura Jane Whitney, \$3.

German Asters. Best collection, Miss Stone, Buffalo, 3.

General List—Open to all Competitors.

Best collection of green house plants, Wm. Webb, Buffalo, silver medal.

Best floral design, Benj. Hodge, Buffalo, silver medal.

2d. do., do., Wm. Webb, Buffalo, 3.

Best floral ornament, Mrs. L. Eaton, do. silver medal; 2d do., Mrs. E. T. Throop Martin, Willow Brook, Cayuga Co., 3.

Best hand bouquet, (flat) Mrs. Coe, Buffalo, \$5; 2d, Ellwanger, Barry & Rowe, Rochester, 2; 3d, Ellwanger, Barry & Rowe, Wash. Letters.

Best hand bouquet, (round) Ellwanger, Barry & Rowe, Rochester, 3; 2d, Mrs. Coe, Buffalo, 2; 3d, Ellwanger, Barry & Rowe, Rochester, Wash. Letters.

Best basket bouqua with handle, Miss Lucy Bryant, Buffalo 3. Discretionary premium of \$2 to Miss Hodge Buffalo, for beautiful grass bouquet.

The gold medal for the best floral exhibition by any Horticultural Society, was awarded to the Buffalo Horticultural Society.

PREMIUMS ON FRUIT.

Apples.—Best variety of table apples, L. Fay, Chau. Co., Dip. and \$10; 2d, Ellwanger, Barry & Rowe, Rochester, 5; 3d, Benj. Hodge, Buffalo, Trans.

Best 12 varieties, Ellwanger, Barry & Rowe, Rochester, 5; 2d, L. Fay, Portland, Trans. and 2.

Best six winter varieties, L. Fay, Chautauque Co., 3; 2d, A. Bryant & Sons, Buffalo, Trans. and 2; discretionary premiums, to H. Hooker, and Ellwanger, Barry & Rowe, Rochester, Trans.; to Benj. Hodge, Buffalo, Trans.; F. W. Lay, Greece, Trans.

Quinces.—Best specimen, L. Fay, Portland, Chau. Co., 3.

Musk Melons.—Best specimen, Lewis Eaton, Buffalo, 3; 2d, divided between W. Hamilton, Hamburg, Erie Co., and John Saunders, Cheektowaga, 2.

Peaches.—Best 12 varieties, J. M. Whitney, Rochester, Dip. & 5; best 6, H. G. Dickinson, Lyons, 3; best 12 peaches, George Hoadly, Cleveland, Ohio, 2.

Best seedling variety, James Dougal, Amherstburgh, C. W. 3.

Plums.—Best specimen, Dr Pratt, Buffalo, 2.

Pears.—Best collection newly introduced, with description, Prof. W. R. Coppock, Buffalo, Dip. and \$10

Best collection of autumn pears, do. dip and 5; do. winter pears, Hubbard & Hastings, Michigan, dip and 5.

Foreign Fruits.—Elliott & Co., Cleveland, Ohio, for a fine display of assorted fruits, Downing and Trans.

E. C. Campbell, Niagara, C. W., variety of peaches, Thomas' Fruit Culturist.

Montreal Horticultural Society, for 100 varieties of apples, Trans. for 3 years.

Cleveland do do various articles, Trans. for 3 years.

Mr. McIntosh, Cleveland, Ohio, fine collection of assorted fruits, Downing and Trans.

John M. Wolsey, Cleveland, Ohio, similar collection, Trans.

George Hoadly, do, do, Thomas' Fruit Culturist and Trans.

Wm. West, Euclid, Ohio, Ohio, do, do, Trans.

H. H. Coit, do, do, various fruits, Trans.

John M. Whitley, Cleveland, Ohio, various fruits, Trans.

Frederick Whittlesey, do, Trans.

Wm. Case, various paintings of seedling cherries, Downing & Transations.

M. H. Hicox, Cleveland, Ohio, specimens of fruit, Trans.; Wm. Smith, do, Thomas' Fruit Culturist; T. P. Handy, do, Trans.; J. Jillett, do, Trans.; M. Lindley, do, Trans.; Morse & Houghton, Downing and Trans.

James Dougal, Amherstburgh, C. W., for best collection of fruits, Downing, Fruit Culturist and Trans.

E. Morse, of Cleveland, Ohio, presented from Prof. Kirtland, of that city, specimens of a seedling pear, which originated from the Seckel. All who have tasted it pronounce it a desirable fruit. It is much larger than the Seckel, and a more thrifty tree. Being a russet it will probably be exempt from the smut as well as the parent. It is earlier than the Seckel, being ripe at this time. The original tree stands on Prof. Kirtland's farm, at Poland, Mahoning county, Ohio.

Of the Committee on Foreign Fruits.

Buffalo, 9th month, 1848.

A case of beautiful grapes, nectarines, peaches, &c., from the conservatory of Col. Thomas H Perkins, of Boston, was presented by that gentleman, for which he will please accept the thanks of the Society.

VEGETABLES.

12 best stalks celery, George Cooper, Irondequoit, \$3.

12 best white table turnips, C F Crossman, Rochester, 3.

12 best carrots, John Saunders, Cheektowaga, Erie Co., 3.

12 best parsnips, John Saunders, do, do, 3.

12 best onions, James Keel, Buffalo, 3.

3 best heads cabbage do, do, 3.

2 best tomatoes, S J Mills, Black Rock, 3.

2 best purple egg plants, Wm T Miller, Black Rock, 3.

Half peck best Lima beans, J P Fogg, Rochester, 3.

do Windsor beans, Wm Webb, Darien, (for T C Peters), 3.

6 best bunches double parsley, H W Rogers, Black Rock, 3.

3 best squashes, James Keel, Buffalo, 3.

3 best bunches parsley, do, do, 3.

12 best ears seed corn, Orlando Allen, Buffalo, (of the Dutton variety, ripened near Buffalo, and is now ready for the mill), 3.

Half peck best table potatoes, H Culver, Arcadia, Wayne co., 3.

2d best, H Culver, do, do, 2.

Best seedling potato, N S Smith, Buffalo, 3.

A superior collection of field root crops, consisting of onions, sugar beet, mangel wurtzel, white carrots, parsnips, and samples of brown and rice corn, were presented by John Townsend, of Grand Island, dip and 2.

GRAIN, FLOUR, &c.

Best sample winter wheat, Timothy Judson, Portland, \$5.

2d do, O H Arnold, Hamburg, Erie co, 3.

Second sample oats, E C Bliss, Westfield, Chau. co, 3.

Best sample barley, E C Bliss, 5.

do flax seed, E C Bliss, 3.

2d do do, S Brownell, Hanover, Chau. co, 2.

Best sample timothy seed, J S Ross, Pontiac, Mich, 3.

L A Spaulding, of Lockport, Niagara co, exhibited half barrel samples unbranched wheat, with the bran. This wheat and bran is the first ever done by machinery so arranged as to make it an object to millers. The machine is perfectly simple and durable, being made of cast iron, and will unbran one hundred bushels per hour. The machinery can be furnished ready to attach to any running power, for \$100. Diploma.

For the best barrel of superfine flour to A & E Harmon, South Chili, Monroe co, N. Y., Dip

2d do Beaumont & Hollingsworth, Zanesville, Ohio. Dip.

3d do C J Hill, Rochester, Trans.

Best apparatus for kiln drying corn, J H Tower, Kirkland, Oneida co, Dip.

Best Burr mill stones and fixtures, from the manufactory of Messrs. Hayward & Noye, Buffalo, dip.

FOREIGN STOCK.

CATTLE.

Best bull over three years (short horn,) Samuel Cloon, Cincinnati, Ohio, dip and \$5.

Best bull calf, short horn, Samuel Cloon, dip and 5.

do heifer calf, S. Cloon, dip and 5.

do bull one year old, do, N Davis, Toronto, dip and 10.

do do two years old, (Ayrshire,) James Dougal, Amherstburgh, C. W. dip and 15.

do heifer, do, do, do, do, dip and 15.

do bull calf, do, do, do, do, dip and 5.

do cow over three years old, Ayrshire, J B Ewart, Dundee, C. W., dip and 25.

2d do, do, do, do, do, do, dip and 15.

Best bull one year old, do, do, dip and 10.

Discretionary Premiums.—Best pair working oxen, R Dorman, Belchertown, Mass, dip and 5.

HORSES.

Best stallion over three years, "Clyde," Jane Ward, Toronto, C. W. dip and \$25. 2d, "Young Clyde," C Harrison, Toronto, C. W. 15; 3d, "Mercer," John Gibson, St. Catharines, C. W.; 4th, "Alfred," N Davis, Toronto, C. W. Youatt.

Best brood mare, "Chesnut Morgan," C H Blodgett, Chelsea, Vt., 15.

Five Shetland ponies exhibited by James Dougal, Amherstburgh, C. W. dip.

One Mexican pony, saddle and bridle, from Mexico, dip.

One pair mules, dip. One single mule, dip.

MERINO SHEEP.

Best merino buck, three years old, John Campbell, Middlebury, Vt. dip and 10; do, one year old, Charles Butten, Portage co, Ohio, dip.

Five merino ewes, T. Humphreys, Elmwood, Ill., dip and 10.

PREMIUMS OPEN TO ALL—CATTLE.

Best bull, over three years old, "Maurius," short horn, T Bell, Morrisiana, Westchester co, dip.

In two and one year old class, only one animal exhibited in each, and no premium is awarded without competition.

Best bull calf, "Rough and Ready," short horn, J M Sherwood, Auburn, dip.

do cow over three years, "Philippina," short horn, J M Sherwood, Auburn, dip.

do heifer, two years old, (Hereford) S W Holmes, Chautauque co, dip.

do do calf, short horn, Samuel Cloon, Cincinnati, dip.

SHEEP—MIDDLE WOOLED.

Best buck, "Diamond," Z B Wakeman, Herkimer co, dip; do, 5 ewes, do, dip; do yearling buck, do, dip.

Best six fat sheep, Samuel Peters, London, C. W. dip.

EDITOR'S TABLE.

TO CORRESPONDENTS.—Communications have been received, during the past month, from S. P. Chapman, M. Adams, S. W., Wm. R. Prince, S. P. C., A. Subscriber, Rustic, B. P. Johnson, Jesse Smith, and W. Halsey.

The publication of a list of the principal premiums awarded at the recent State Fair, and other lengthy notices of the Fair and Pomological Convention, precludes us from giving our usual variety of articles in this number. Want of space compels us to omit a portion of the premiums awarded, but we give the most important to farmers and horticulturists, and may publish the remainder hereafter.

THE POTATO ROT.—A recent letter from M. A. BEECHER of Hennepin, Ill., says: "The potato rot is very prevalent on the prairies this season. This is the first time it has made its appearance in this section. The farmers have generally planted Mercers; they are all diseased. I had about five acres, half Mercers and half Kidneys. I have commenced digging, and they appear to be but little affected, as they cook well and eat well. Some farmers tell me they should lie in the ground as long as possible. Please give us such directions as your experience and knowledge may dictate."

We believe early digging the best, particularly in wet seasons. As we have not space for lengthy remarks on the subject, we will merely repeat what was given in our October number of last year, as follows:—Dig potatoes early. The rot is abroad. The first symptoms are rusty-colored rough spots, which only affect the skin, and soon corrode the pulp, particularly in wet weather. If dug early and kept dry—entirely dry—it will extend no farther.—Moisture and heat are the very elements of *eremacansis*, or vegetable decomposition. Dig in dry weather, and house or bury them in a dry state. If you have a dry sandy knoll, dig a hole 2 or 3 feet deep, run a pole over the center, and cover with boards and straw and a sufficiency of earth to prevent freezing. Cover the ends of the boards to prevent mice getting in.

DEVON CATTLE.—Will you inform me, through the Farmer, who has the pure blood Devon cattle?—and oblige
Yours, &c., O. D. WALDRON.

East Leon, N. Y., 1848.

WM. GARBUIT, Esq., of Wheatland, in this county, and E. P. BECK of Sheldon, Wyoming county, have the pure blood Devons. By reference to the award of premiums on stock at the recent State Fair, published elsewhere in this paper, you will learn who has the same stock in other sections of Western New York.

COOKING FOOD FOR SWINE.—(W. H., Trumansburg.) The information you desire on this subject—embracing description of an apparatus for cooking food for swine—is given in our November number of last year, page 251 of vol. VII. We send you a copy of the paper.

MR. EZRA GORTON, of Parma, has left at our office a clover root four and a half feet in length. It grew on gravelly soil. On the same field he has this year grown a crop of the common white flint corn ten feet high. Mellow and deep soils and lengthened roots give a large crop, even on land of moderate fertility.

LARGE YIELD.—Mr. C. BARDWELL, of Potter, Yates county, states that he raised from one stool or kernel of Soule's wheat, six heads—from which he counted 533 kernels. The largest head yielded 106 kernels.

PALMER'S GRAIN DRILL.—The attention of grain growers is directed to the advertisement of the manufacturers of this Drill, in this number. The machine received the first premium at the recent State Fair, and is highly recommended by a large number of practical farmers who have used it the past season.

HARDY ROSES will give a much better bloom next season if planted in October, than if deferred till next spring. After planting, spread three or four inches of manure around the plants, to keep the frost from drawing them out, and it may be spaded in next spring. The same remarks apply to all hardy shrubs.

THE Rockville (Md.) Journal says that a merchant of that town sold last year \$1500 worth of Sumac. The Journal advises the farmers of the country to gather it.

GENESEE SEED STORE AND AG. WAREHOUSE.—The enterprising proprietors, Messrs. RAPALJE & BRIGGS, are about removing this establishment from Front street to Irving Hall, opposite the Eagle Hotel, Buffalo street. They have recently purchased Messrs. NOTT, ELLIOT, & FITCH's stock of implements, &c., (the latter gentlemen devoting their entire attention to the hardware and stove trade,) which makes a handsome addition to their former large and excellent assortment. Messrs. R. & B. are entering more extensively into each branch of their business, for which their new location affords ample room.

"THE SCIENCE OF AGRICULTURE."—This is the title of a new work now in press and soon to be published by E. DARROW, corner of Main and St. Paul st., Rochester. It treats of Geology, Chemistry, Mineralogy, Botany, &c., as applied to Agriculture. Dr. M. M. RODGERS is the author.

PATENT OFFICE REPORT.—The last Annual Report can be obtained of D. M. DEVEY, Arcade Hall, Rochester. It is handsomely bound in muslin. Price \$1.50.

DEWEY has also the proceedings of the recent State Fair and Pomological Convention, in pamphlet form—embracing the list of premiums awarded at the former, and the discussions, &c., of the latter.

CONVERTING WHEAT FROM AN ANNUAL TO A PERENNIAL PLANT.—The attempt has been made to convert wheat from an annual to a perennial plant, and it is said, with some good degree of success. The account given, is that it was discovered by the steward or director named Kern, of an estate at Constance. After he had plowed and manured the land, he then sowed it with summer or winter wheat. In the spring, before the ear makes its appearance, he mows it. This he does repeatedly several times in the course of the season, using it as a kind of hay. After this he allows the plant to grow, and be harvested as usual.—The next year it ripens earlier and bears a much larger crop than wheat cultivated in the usual manner. In autumn it is manured like the grass of meadows, and in the spring the weeds are removed. The effect is stated to be such that from one field four successive harvests have been gathered. The subject is one of considerable interest, as no doubt, if rendered perennial, it would be useful for the purpose of forage. It might be well for some of our enterprising farmers to test the principle, as it is so easily done, and fuller information relating to it is needed. We have sought for some more satisfactory history of the matter, but as yet have been unable to light upon any thing which will give it. At present it is too vague to entitle it to much reliance, though the particular fact does not appear to be at variance with analogy in regard to improvements quite as great of numerous plants, by particular cultivation.—*Patent Office Report.*

ARKANSAS LANDS.—We sometime since mentioned that the State of Arkansas was giving away lands, to any person who would settle in that State. The State Government have still half a million acres, which it offers on these terms to immigrants:—Any person designating a lot not exceeding 160 acres of the State lands, to the Auditor of the State, and within 13 months thereafter enclosing five acres, prepared for cultivation, is to be entitled to a deed of the lands, at that time. In addition to this, residents and non residents are allowed to purchase these lands, by paying the taxes and costs on the 160 acre lots, which average about \$15 each.

THE PORK TRADE OF THE WEST.—De Bow's Commercial Review for July, contains some interesting tables of the Pork trade of the Western States. The number of hogs slaughtered during the year 1846-'47 was 1,500,000,—an increase of nearly 50 per cent, over previous years. The number slaughtered in Cincinnati alone amounted to 575,000.

Only a small portion of this valuable product is exported: and four-fifths of that sent out of the country is to the British Colonies, South America and West Indies.

AGRICULTURAL FAIRS.—We give below the time and place designated for holding Fairs the present month.

American Institute,	N. Y. City,	Oct. 3, (3 weeks.)
Fulton County,	Johnstown,	Oct. 4 and 5.
Ontario	Canandaigua,	Oct. 10 and 11.
Livingston "	Mt. Morris,	Oct. 3 and 4.
Monroe "	Rochester,	Oct. 4 and 5.
Seneca "	Seneca Falls,	Oct. 5 and 6.
Windsor Co., Vt.,	No. Springfield,	Oct. 4 and 5.
Prov. Ass'n, C. W.,	Cobourg,	Oct. 3, 4, 5 and 6.
Mahoning Co., Ohio,	Cantfield,	Oct. 3 and 4.

HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

Autumn Planting.

EVEN in the same localities there exists the greatest diversity of opinion respecting the propriety and impropriety of autumn planting.—Some say that they have never succeeded in the fall—others, that they have never failed. Our own opinion is that, even as far north as this, (43 north latitude,) all hardy trees are transplanted with the greatest safety in the fall—provided it be done early, say the middle and latter end of October. There may be circumstances, such as damp ground and very exposed situations, that would render spring planting advisable, but these are exceptions.

Mr. E. C. Frost of Catharine, Chemung Co., an experienced grower, says in the September number of the Cultivator, "My experience has confirmed me in the opinion that, in our latitude, fall planting for the peach is better than spring, if set on dry ground, and they should be placed on no other. On the 5th, 6th, 8th, and 9th of November last, I set in the orchard one thousand five hundred worked or budded peach trees; and now, on examining them, find that all are alive but ten, and not only alive but making a good growth, so that the rows can be seen half a mile." He adds:—"I have six hundred peach trees which have been in the orchard from three to five years, the most of which have been transplanted in the fall with success equal to those set last autumn." Our own practice is to transplant all we can in the fall, not because we consider it the only safe season, but because we have more leisure then than we ever have in the spring. We hold that there is no necessity for failure either in spring or fall.

Late last fall, after we had supposed business closed, we set some men, for the sake of employing them, to trench a piece of ground we intended for dwarf pears. The weather kept open till it was completed, and we planted the trees, some 60 or so, quite contrary to our expectations. It was then about the second week in December. The trees were yearling buds, on quince stocks; they were cut back till within a foot to 18 inches of the stock and planted, and not a failure occurred in the 60, and all have grown from two to four feet this season and are now fine bushy plants. Some that we planted last spring have not grown with half the vigor.

On the 25th of April last we transplanted some 12 or 14 cherry trees, after the leaves were an inch long. Not one died; but on the contrary we can measure on every one of them 2 to 3 feet of growth. They were cut back properly, planted well, and kept as they ought all summer. Here are two extreme cases, and both successful.

Now fall planting may be commenced at any moment with trees that have quit growing, and show a good, plump, perfect terminal bud. If the leaves are not removed by frost, they should be cut off the moment the tree is dug, or before it—as, if left on, they will cause the tree to shrivel up ruinously. The best method of supporting fall planted trees is to throw up a cone of earth around them 12 or 18 inches high, according to the size of the tree. This prevents both frosts and winds from acting injuriously on the tree. The earth can be leveled down again as soon as the ground thaws in the spring.

A certain amount of pruning, or shortening back the top and branches of trees, is indispensably necessary in transplanting. In the case of fall planting this pruning may be deferred till spring—particularly with peach trees—but it must not be neglected. We believe that vast numbers of trees are lost for the lack of this shortening of limbs when planted; and particularly peach trees that usually have larger heads than other trees, and therefore require a greater amount of cutting. Every cultivator of any experience knows how much more certainly, quickly, and vigorously a tree will start in the spring, that has been shortened or cut back, than the one that has been planted entire. The balance of a tree is destroyed in digging it, for it is impossible to remove trees without depriving them of some portion of their roots—or, if the roots are not cut off, many will perish in the removal. The balance must be restored before the tree can grow vigorously, and this can best be done by removing a part of the top corresponding with the loss of the root.

The Buffalo Pomological Convention.

THE lively interest felt at the present time in relation to Fruits, will no doubt create a very general desire among cultivators to know what this great Convention has said and done. We cannot here attempt to give but a condensed sketch of the discussions; they have been published verbatim, from Mr. DYER's Phonographic report, and cover nearly as much paper as there is in an entire number of this journal.* All we can do is to state, as briefly as possible, the most important decisions, as regards the merits of varieties and changes or adoption of names.

With regard to the results obtained, we must confess they are much below what we expected; and yet we have never seen an assemblage of men devote themselves to their business with greater earnestness and harmony from first to

* In Mr. Dyer's report we find a great many errors and omissions. This is no fault of Mr. Dyer's, as it frequently happened that several persons spoke at the same time; and Mr. Dyer is moreover unacquainted with the names and technicalities of Pomology. We also find the remarks of some of the members greatly enlarged and improved, as compared with the original, while others are converted into sheer nonsense. We took full notes during all the sitting, except an hour's absence.

last. The great difficulty was the limited time, only three days, for such a Convention to organize, adopt a system of procedure, and take anything like a satisfactory action on the vast number of fruits presented from six or eight States, besides the Canadas! It would have required two full weeks of continued labor to have produced any results fully reliable for their accuracy, or really advantageous to the country. Those who may feel disappointed with the proceedings of the Convention must bear this in mind. The want of experience, too, was an embarrassment of considerable magnitude. Few, if any, of the members had ever participated in the doings of such a body before; and we were at a loss to know the best and most expeditious mode of obtaining a general, and at the same time, a correct expression of opinion as to the merits of fruits.

It was highly desirable that opinions and statements should be heard from all parts of the country; but if this had been fully given, half a day might have been consumed by a single fruit.—This, therefore, was found impracticable; so it was concluded that a committee should be appointed to bring the specimens before the Convention.—That this committee should present the fruits as first, second, or third rate, according to the estimate of a majority of said committee, and if no one objected, it was to be considered passed as such. Disputed points were usually decided by a vote, and not referred to a committee, as was proposed. The Convention adopted for its guidance the *Rules of Pomology* adopted by the N. Y. State Agricultural Society.

We must remark here, in regard to the Convention, that whatever of value may or may not be attached to its decisions, certainly it has accomplished enough otherwise advantageous to Horticulture, and Pomology in particular, to amply compensate for all the cost and trouble it has incurred. The assembling of some 70 or 80 intelligent and devoted Horticulturists, including such men as Gen. DEARBORN of Massachusetts and DAVID THOMAS of New York, representing almost the entire fruit growing region of the United States and Canadas, from Montreal to St. Louis, is certainly a great feature in the progress of American Horticulture, and cannot fail to produce effects the most gratifying, socially and otherwise.

The officers of the Convention were—

President—DAVID THOMAS, New York.

Vice Presidents—Wm. R. Coppock, N. Y.; Henry H. Coit, Ohio; J. W. Hayes, N. J.; J. D. G. Nelson, Ind.; A. T. Prouty, Mich.; Dr. J. A. Kennicot, Ill.; S. P. Beecher, Wis.; Thos. Allen, Missouri; Dr. C. Beadle, C. W.; W. J. Hayes, C. E.

Secretaries—Dr. Herman Wendell, Albany, and Wm. R. Prince, Flushing.

Fruit Committee—Benj. Hodge, Buffalo; F. R. Elliot, Cleveland; Chas. Downing, Newburgh; Thos. Hancock, N. J.; P. Barry, Rochester; J. J. Thomas, Macedon; Chas. Tainter, Buffalo.

The PLUM was first taken up.

Diamond. A large productive variety, third rate in flavor. *Lombard.* Pronounced second rate as to quality. This

is a large, handsome, and excellent variety, and sure bearer. *Lang's Yellow*, from Ohio. Third rate; unworthy of cultivation.

Washington. Pronounced first rate, taking all its qualities, growth, productiveness, size, beauty, &c., into consideration.

Purple Favorite, from Orange co. First rate, and worthy of general culture.

Green Gage. First rate and worthy of general culture; its only drawback being slow growth of the tree.

Red Gage. Passed as first rate.

Imperial Gage. Mr. HANCOCK, of N. J., said that this and the Green Gage, on light sandy soil at his place, were dry, mealy, and insipid; while at Burlington, two miles from his place, they were excellent. Nearly all the other members were unanimous in recommending this plum as one of the best, and particularly worthy of cultivation.

Red Diaper or *Mimms.* Presented in a decayed state. Said to be first rate, but a poor grower. A spurious variety was presented.

Coe's Golden Drop. Considered first rate. Mr. ELLIOT of Cleveland, said it did not ripen there more than 1 year in 5, but that it was first rate at Cincinnati. Mr. HANCOCK said it ripened well at Philadelphia and vicinity, about the 20th of Sept.

Jefferson. Recommended as No. 1 in size and quality, and the trees vigorous and productive. Few members of the Convention seemed to know anything of this fruit by experience. The specimens presented were from A. J. DOWNING.

Bleeker's Gage. Recommended as first rate, in all respects.

La Royai. Few seemed to be acquainted with it. CHAS. DOWNING and J. J. THOMAS called it nearly first rate. Mr. HANCOCK thought it not over second rate.

White Magnum bonum or *Yellow Egg.* The committee recommended it for the kitchen. J. J. THOMAS said it was liable to rot and should be rejected as unworthy of cultivation. Messrs. HODGE of Buffalo, HAYES of N. J., PRUTY of Michigan, and NELSON of Ind., spoke in favor of it as a valuable preserving fruit. Mr. PRINCE said the difference of opinion was caused by there being two or more plums cultivated under this name, one of which was the *White Holland* or *White Imperial*.

Smith's Orleans was presented, but the correctness of the specimens was doubted. No action.

Red Egg. Presented; no action.

PEACHES.

Crawford's Early Melocoton. Passed as a large, beautiful, and valuable market peach, but second rate in flavor. LEWIS F. ALLEN objected to the term *market*, and said that if public taste was wrong it ought to be corrected; but most of the members thought it best not to reject a peach so large, handsome, and productive as this, even if it be inferior in flavor to some of the smaller sorts. Public taste will correct itself.

Yellow Alberge. Mr. PRINCE and others said this was not the true *Alberge jaune*, but a variety of the *Yellow Rare Ripe*; and as it is known to many cultivators as the "Early Barnard," the Convention decided that in future it should be known by that name.

Coble's Melocoton, from Ohio, was presented, and pronounced unworthy of cultivation, being sour and unproductive.

Yellow Melocoton seedling, presented by Mr. BISSELL, of fair quality, but considered unworthy of a name.

Jacques' Peach. Passed as a large, productive peach, not first quality in flavor. Mr. PRINCE here remarked that *white* fleshed peaches were generally more esteemed in peach countries than the yellow; that the yellow fleshed require a warmer sun to perfect than the white, and that is the reason why yellow fleshed succeed better and are more popular in this country than in France, where the climate is more humid and not so warm. He spoke of Bergen's Yellow, Rose Hill Melocoton and Crawford's Late, as the best yellow freestones.

Haines' Early Red. Presented as a first rate variety. Mr. HANCOCK said he had cultivated it for 15 years, and come to the conclusion that it was identical with the *Large Early York* or *Honest John* of New Jersey. JOHN J. THOMAS and others differed from Mr. H., and so it stands.

Large Early York. This variety is frequently confounded with the *Early York* of Downing, which is cultivated in some collections around Rochester as the *Early Purple*. Mr. THOMAS said the *Early York* of Downing has large flowers, serrated, glandless leaves, and oval fruit; the

Large Early York of N. Jersey, crenate leaves, globular glands, and round or slightly oblate fruit, and ripened 10 days later. Mr. PRINCE said this was the original Early York, or Large Red Rare Ripe, raised by his grandfather from the seed of the old Red Rare Ripe, and was frequently sold for Red Rare Ripe and George the Fourth.

Early Malden. A seedling presented and raised by JAS. DOUGALL, of Amherstburgh, C. W., from the seed of an old French variety. It is an early variety, ripening before the Early York of Downing. The specimens had been preserved for two weeks in ice. Leaves serrated, without glands. Unanimously passed as a first rate variety and worthy of extensive cultivation.

Snow Peach. A variety of opinion was expressed, regarding the merits of this peach—some considering it first rate, others only fit for preserving. On motion of J. J. THOMAS, it was finally decided that it be considered by all as excellent for preserving, as a first rate peach by some, and by others unworthy of cultivation.

White Imperial. Originated by DAVID THOMAS, of Cayuga, from seed of the Noblesse, he supposed. He and several others who had fruited it, pronounced it of first rate quality.

Van Zandt's Superb. Specimen presented was spurious. *Old Mixon Free-stone.* Unanimously recommended as first rate, and worthy of general cultivation.

Blood Cling. Unworthy of cultivation.

Royal George. Second rate; liable to mildew and scarcely worthy of cultivation. It was remarked that the true Royal George is white clear through—no red around the stone. The Royal George of many collections is the *Bellegarde*.

Morrisana or Pound. Presented by Mr. ELLIOT of Ohio. He said it was a poor bearer and unworthy of cultivation.

APRICOTS.

The Moorpark was presented by Dr. G. F. PRATT of Buffalo—preserved in ice a month and two days. Unanimously decided to be first rate.

NECTARINES.

Large Early Violet was presented by JAS. DOUGALL of Canada West, and passed unanimously as first rate.

Downton, from A. J. DOWNING, also first rate.

PEARS.

Tyson, from W. R. Smith, of Macedon. Considered by Messrs. HANCOCK and THOMAS as first rate. Mr. HAYES of N. J., thought it ought not to rank as high as Dearborn's Seedling, as it was not so early nor superior in other respects.

Washington. Recommended for large collections, but not first rate.

Julienne. Pronounced unworthy of cultivation.

Golden Beurre of Bilbao. First rate on pear or quince.

Honey Pear, from Mr. ELLIOT. Laid on the table.

Bartlett. Unanimously pronounced excellent in every particular, and well worthy of general cultivation.

Dearborn's Seedling. Unanimously pronounced excellent, and worthy of general cultivation.

Bloodgood. Pronounced excellent, and worthy of general cultivation, although Mr. Elliot said it was poor with him at Cleveland. Mr. Thomas said in heavy soils it was worthless. Mr. Prince said his trees were in a stiff clay soil, and the fruit was fine. How is this to be reconciled?

Orange Bergamot, of Coxé. Voted unworthy of cultivation.

Marye Louise. Some thought it first, and others second rate.

Louise Bonne de Jersey. Unanimously passed as a valuable pear, and worthy of extensive cultivation.

Glout Morceau. Voted first rate, both on pear and quince.

Brown Beurre. Pronounced unworthy of cultivation on account of its frequent worthlessness. (This fine old fruit is yet produced in great perfection, in many parts of Western New York, where it stands first rate.)

Cabot. Pronounced second rate.

Stevens' Genesee. First rate.

Beurre d'Analis. Second rate in quality; but on account of its free growth, fine fair surface, and great productiveness, worthy of cultivation in all large collections.

Beurre Spence. Dr. Wendell of Albany presented a specimen of this fruit—the tree which bore it having been imported from Mr. Rivers since his correction of the errors in relation to this variety. The fruit was too immature to test its quality, but it is a regularly formed and beautiful looking pear.

Andrews. It appears to be variable from the remarks of gentlemen. Most of the members thought it nearly first rate.

White Doyenne. Voted, after a long discussion on its worthlessness in some localities, and excellence in others, to be first rate in Western New York and some other localities.

Cushing. Second rate.

Rostker. Passed as among the best summer pears.

Bezi de la Motte. Mr. Thomas of Macedon said it was fit for eating with him about 1 year in 6. Others pronounced it very

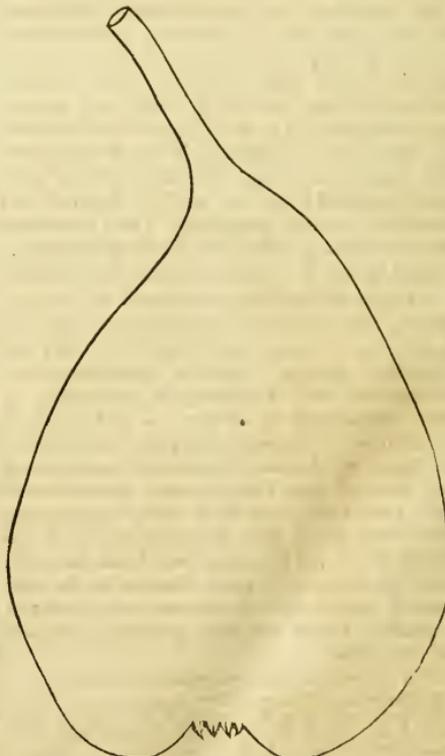
variable, and on that account was voted unworthy of general cultivation.

Foster's St. Michael was presented and laid on the table.

Heathcote. Presented and laid on the table.

The Swan's Orange, or *Onondaga*, was called up for discussion. The name alone was discussed. It is known pretty generally that this pear was named by a Horticultural Society at Rochester more than ten years ago, as "Swan's Orange"—being introduced then by L. B. Swan, from his father's garden in Onondaga. We published in this paper a description and an account of it in 1846, as the *Swan's Orange*, deeming it proper to retain the original, and only name it had. A year afterwards Mr. Downing published a description of it under a new name, *Onondaga*, and thus has arisen the differences existing on this point. The State Agricultural Society adopted this name. Dr. Wendell read from the Transactions a full account of the pear, and stated that he thought the committee had come to a just conclusion in designating it the *Swan's Orange*.

Some members remarked that the pear was not the shape or color of an orange, and the name was not, therefore, appropriate; and this was the only objection. All agreed that *Swan's Orange* was the original name. With regard to the appropriateness we would remark here, that orange can be applied to this pear with vastly more fitness than can a great many other names of fruits supposed to be descriptive—for instance, *Snow Apple*, *Pumpkin Sweet Melon*, *Strawberry*, *Sheep's Nose*. These are names given from some real or supposed resemblance in form, flavor, color, or something else, to a pumpkin, strawberry, melon, sheep's nose, &c. We have not a word to say in defence of these names, any more than that they are universally adopted and recognized, as *Swan's Orange* was, and ought not to be changed to suit any one's whim. The convention voted on the subject, but this vote was so nearly balanced that the President was unable to determine on which side was the most voices. So it stands as it was.



The Louise Bonne of Jersey Pear.

SYNONYMS, { Louise Bonne de Jersey,
{ Louise Bonne d'Avranches.

PERHAPS there is not another variety on our long list of pears, either of native or foreign origin, so universally popular as this *Louise Bonne of Jersey*. Both at home and abroad cultivators

who have tested its merits agree in placing it among the *first rate* pears. It does not seem, as far as we have been able to learn, that it is one of those varieties that succeed only in certain expositions, latitudes, and localities; for we find the same high character given of it on the sea coast and in the interior, on heavy and on light soils, and in various degrees of latitude. For our own part we have had it bear for three years, and have found it invariably of first rate quality, of large size, beautiful in appearance, and exceedingly productive. It does well on both quince and pear stocks—though we have usually found it larger on the quince. The trees make fine pyramids, if pains be taken to produce lateral branches near the ground, by cutting back at the end of the first year's growth.

The habit is upright and vigorous; young wood of a reddish brown; old wood becomes grayish with brown specks. Leaves of medium size, coarsely serrated, with slender footstalks. Fruit large, pyriform, inclining to oblong, a little one sided, which gives it a distinct appearance. Skin smooth and shining, yellowish green—dull brownish red in the sun, covered with russet dots. Stem medium length, slightly curved, and obliquely inserted, without any depression, and usually fleshy and wrinkled at its base. Calyx open, in a shallow furrowed cavity. Flesh white, tinged with a greenish yellow, fine grained, melting, buttery and rich. Ripe in Oct., and will keep in use for a month or six weeks.



The English claim the origin of this pear in the island of Jersey.—According to French authority it is a French variety, originated some 60 years ago at Avranches and generally distributed under the name of Louise Bonne d'Avranches. The London Horticultural Society received it from Jersey some 20 years ago, and gave it its present name, to distinguish it from the old Louise Bonne.

The above is a faithful portrait of a young tree of this variety, 6 years old, now loaded with the fourth crop of fruit, standing in the garden of AARON ERICKSON, Esq., of this city—an excellent example of the growth and bearing of this tree on the quince stock. The tree was imported from France in 1844, and was then

2 years old. It had received no pruning or training to modify its form, nor has it received any since. There should have been another tier of branches nearer the ground.

Mr. RIVERS, of Sawbridgeworth, England, a distinguished nurseryman, and particularly as a pear grower, has planted out 1000 trees of this variety to supply the London market. At the late Convention at Buffalo, Mr. HODGE stated that he had this pear bearing on the quince for four or five years and thought it worth more to cultivate on that stock than any other pear.—LEWIS F. ALLEN said that he had seen a tree not three inches in circumference, and only about 7 feet high, with 60 pears on its branches.

OTIS JOHNSON, Esq., of Lynn, Mass., an excellent cultivator and pear amateur, says, in the Horticulturist, "It is the most productive on young trees of any pear I cultivate, and I think if I could have but three I would be forced to include it."

Bulbous Roots.

It should be borne in mind by our lady readers, who are the especial patrons of flowers, that this month is the time to plant Tulips, Hyacinths, Narcissus, Crocus, Hardy Lilies, &c., in the open ground to get a good bloom next spring. It is also the time for potting bulbs for winter blooming in the parlor.

Any good garden soil will grow bulbs well, if trenched three feet deep, enriched with well rotted cow manure, and mixed liberally with leaf mold, (rotted leaves,) and sand—the manure being placed at the bottom, and the leaf mold and sand well mixed with the surface soil. Tulips should be planted 6 inches apart, and three inches deep. The usual mode is to remove three inches of the soil after the bed is prepared, mark out lines on the bed with a straight rod up and down and across the bed, and at each crossing of the marks plant a bulb by pressing down on the earth; then spread on gently or sift on the covering. The beauty and effect of the bed will be greatly enhanced by a tasteful arrangement of the colors. For Hyacinths the same soil, planting, &c., is applicable. When the planting is done, (or it may be deferred till November,) cover the beds with two or three inches of litter to be removed in March.

For pot culture of Hyacinths, Narcissus, &c., the compost should be about equal parts of good friable loam, leaf mold and sand. In ordinary flower pots the bulbs are placed almost on the surface, and buried in a heap of sand or saw dust in a cool place, until they have shown the leaves and flower buds; they are then taken into a warm room, and must be regularly supplied with water.

The Hyacinth, Tulip, Crocus and Narcissus will all bloom in glasses, and it is one of the easiest modes, but ruinous to the bulbs. The glasses should be filled with rain water and the bulb set so that the bottom will touch the water. Water must be added as fast as the roots absorb it, and it should be renewed once in two or three weeks. For glass and pot culture only strong fine bulbs should be used.

Notes on the Horticultural Department of the State Fair at Buffalo.

THE place set apart for the exhibition of Horticultural products was designated, as usual, "FLORAL HALL"—an immense tent we should think at least 150 feet in diameter. Its interior arrangement was admirably adapted to gratify the spectators, and at the same time show every thing safely and to the best advantage. Around the entire tent, on the outer circumference, was a range of shelves or staging for the fruit; then a walk some 12 feet wide, next a range of tables for vegetables, and in the center a chaste and beautiful temple of evergreens, ornamented with statuary, and surrounded by the flower stands and ornaments. The aspect, on entering, was highly imposing, and elicited from the multitude continual exclamations of surprise and admiration. It wanted but the accompaniment of music to complete its similarity, in a certain degree, to one of the splendid fetes of the London Horticultural Society in the Chiswick Garden; and we would beg to suggest the employment of it on future occasions of this kind.

Dr. THOMPSON, of Aurora, Professor COPPOCK, and the LADIES of the Buffalo Horticultural Society, who superintended the construction, arrangement and embellishment of this splendid "Floral Hall," deserve the highest credit. We cannot refrain from remarking, here, that the ladies of Buffalo never fail to do their duty on such occasions. They manifest a real practical devotion to Flora. Their presence in the Hall during the exhibition, and their kind and courteous attention to strangers, gave additional charms to the beautiful floral scene around them, and conveyed many delightful and lasting impressions.

Among the Floral contributions of Buffalo, that of Mr. WM. WEBB, of Prospect Hill, was prominent. He had two large stands of pot plants, many of them quite rare, and all in fine condition. We noticed some fine orange trees, large specimens of Fuchsias, in bloom, a good plant of *Stephanotus florabundus*, and a fine specimen of *Rondeletia speciosa* in bloom. He had also fine collections of Roses and Dahlias tastefully shown in baskets of moss, and a Floral ornament representing in form a candelabrum. The main stalk (8 or 10 feet high) and branches were covered with green, and on the tops of the stalk and each of the branches was fixed a bouquet. It attracted some attention, but in our opinion was not worth the cost of making.

B. HODGE, Esq., of the Buffalo Nursery, contributed 50 varieties of Roses and 45 of Dahlias in tasteful moss baskets. Also, miscellaneous fruits.

A. Bryant & Sons, of the Erie Co. Nursery, had an elegant stand composed of baskets of Dahlias, Verbenas, Asters, &c., and a pyramid of miscellaneous flowers.

Mr. E. Tyler, a design, a floral tablet, composed of Asters, Verbenas, &c., in moss.

Among the Ladies' contributions we saw beautiful bouquets of various sizes and most elegant forms, from Mrs.

Coe, Miss Stone, Mrs. S. F. Pratt, Mrs. L. Eaton, Miss Bryant and Miss Hodge, of Buffalo; Mrs. Vandeventer, of Cold Spring; Mrs. E. T. T. Martin, of Auburn; and from Miss L. J. Whitney, of Rochester, a fine collection of Verbenas, Dahlias, &c., elegantly arranged.

Ellwanger, Barry & Rowe, of Rochester, presented a large collection of Phloxes, Dahlias, Pansies, Verbenas, Petunias, Koses, Asters, 10 week stocks, and other flowers—shown singly in vials, besides 4 beautiful hand bouquets.

FRUIT DEPARTMENT.

THIS department fell far short of our expectations, both in quantity and quality. The Horticultural Societies of Cleveland, Detroit and Montreal presented large and fine collections, filling up one entire side of the tent; but the New York State collections were far from what they ought to have been. The best fruit growing counties in the State—Monroe, Livingston, Ontario, Wayne, Seneca, &c.—were represented by some half dozen meagre collections. Those who expected to see on that occasion the fine fruits of Western New York, were greatly disappointed. This was owing to the fact that nearly all the early summer fruits were gone, and the winter fruits were too green to show. Those who had a few autumn fruits in season, did not consider them of sufficient importance to show them: two weeks later there would have been an immense display of fruit. As it was, however, we must say that, in point of quality, the exhibition, as a whole, was inferior to the Annual Fall Exhibitions of our Horticultural Society, confined to a narrow circle around the city of Rochester.

Foreign Contributions.—The Cleveland Horticultural Society exhibited 79 varieties of apples, 73 of pears, 22 of peaches, 6 of plums, 3 of grapes, 4 of quinces, 3 of nectarines, 2 of almonds, and 1 of medlars, and paintings of several new varieties of cherries from Mr. Case. The contributors were Messrs. McIntosh & Co., Nurserymen; Messrs. Moree & Houghton, Nurserymen; Messrs. Geo. Hoadley, J. M. Woolsey, T. P. Handy, Sam. Gillet, A. E. Crittenden, Wm. Case, M. Lindley, H. H. Coit, W. West, S. Gallap, M. Hecox, Mrs. W. Smyth, Judge F. Whitteley, J. H. Gorham, and Isaac Brayton. A fine collection of fruits was also exhibited by Messrs. F. R. Elliott & Co., nurserymen of Cleveland.

The Detroit Horticultural Society, represented by J. C. Holmes, of Detroit, and Messrs. Hastings & Hubbard, of Troy, Mich., made a large and beautiful display of fruits.

The Montreal Horticultural Society, represented by Mr. Hays, and Mr. Sheppard, a large collection of fine apples, including several said to be sub varieties of the Fameuse. The specimens were remarkably clear colored and beautiful.

James Dougall, Esq., of Amherstburg, C. W., presented a beautiful collection of fruits consisting in part of 32 varieties of apples, 7 of plums, 3 of nectarines, (including the Large Early Violet,) a rare first rate variety, 5 varieties of grapes, 8 of peaches, including the Early Malden, an excellent new seedling variety produced by Mr. Dougall, pronounced by the Pomological Convention to be first rate.

Col. Thos. H. Perkins, of Boston, a vase of beautiful peaches, nectarines and grapes, from his conservatory.

H. M. Peck, Richland, Kalamazoo Co., Michigan, 7 varieties of large and handsome apples.

New York State Contributions.—L. Fay, Portland, Chautauque County, an extensive orchardist, 66 varieties of apples, including several seedlings, 6 varieties of peaches, 15 of pears, and 3 of quinces. Also, fruit of the Sloe and Shepherdia.

B. Hodge, nurseryman of Buffalo, 67 varieties of apples, 31 of Pears, 4 of grapes, 4 of peaches, and 2 of quinces.

A. Bryant & Sons, nurserymen, Buffalo, 62 varieties of apples, 30 of pears, 4 of grapes and 3 of quinces.

Professor W. R. Coppock, of Buffalo, exhibited a large

collection of pears from Salem, Mass., many quite new and little known; the specimens all inferior in appearance, apparently grown under unfavorable circumstances.

Messrs. Risley & Co., of Fredonia, N. Y., fine specimens of the Lowell Apple, known at Fredonia and through that section as Risley Orange Apple.

Lewis Eaton, Esq., of Buffalo, fine musk melons, 3 varieties of cherry, kept in an ice house, and a basket of miscellaneous fruits.

J. W. P. Allen, of Oswego, 20 varieties of Pears.

H. G. Dickerson, of Lyons, Wayne Co., 3 varieties of Peaches, and splendid specimens of Bartlett Pears, grown on dwarf trees; also 3 varieties of plums.

S. G. Morris, Westchester, 25 varieties of apples, and 3 of peaches.

H. U. Soper, Batavia, 2 fine dishes peaches, one of pears. F. W. Lay, Greece, Monroe Co., 16 varieties of apples.

N. Goudsell, Greece, 42 varieties of apples.

Geo. Cooper, Irondequoit, 3 varieties of apples, 4 of pears, 5 of peaches.

Charles F. Crossman, Brighton, fine white Magnum Bonum Plums.

Zera Burr, Nurseryman, Perrinton, 7 varieties of pears and five of peaches.

James H. Watts, of Rochester, beautiful specimens of Steven's Genesee, and Swan's Orange Pears, and Northern Spy and Roxbury Russet apples, and samples currant vine.

H. Hooker, of Rochester, 12 varieties of apples, 6 of peaches, and 1 of plums.

Aaron Erickson, of Rochester, monstrous specimens of Alexander Apples, grown on a dwarf, three feet high; these specimens surpassed all others in size, measuring 15 inches in circumference; also Crawford's Early Melocoten Peaches, and 2 varieties of pears.

James M. Whitney, of Rochester, a splendid display of peaches, and the only fine one in the tent, 10 fine varieties, a dish of each, and Scarlet Nectarines.

Bissell, Hooker & Sloane, nurserymen, Rochester, 13 varieties of apples, 5 of pears, 3 of grapes, and 12 of peaches.

Ellwanger, Barry & Rowe, 36 varieties of apples, 19 of pears, 9 of peaches.

VEGETABLES.

THE display of vegetables was tolerably good. We noticed large collections from A. Bryant & Sons, of Buffalo, Risley & Co., of Fredonia, Wm. Webb, gardener to T. C. Peters of Darien, E. Tyler, of Buffalo, and others.

C. F. Crossman of Brighton, exhibited a collection of beautiful vegetables.

James P. Fogg, of Rochester, fine Lima Beans.

L. F. Allen, President of the Society, Field Beets of enormous size.

Potatoes were abundant, and particularly seedlings. We noticed one collection of 30 varieties, and another of 21 varieties, besides other smaller collections. We also observed a fine basket of English Kidney Potatoes, from the farm of G. H. Hill, (Yankee Hill,) at Batavia, from a crop of 200 bushels to the acre. Our notes on vegetables are defective on account of numbers instead of names being attached to the articles, and we had no time to refer to the entries.

THE GRAPE IN TEXAS.—The Lavaca Herald mentions that Captain HUTCH engrafted a species of the "English grape" on a vigorous vine of the Mustang kind, and such was the life and vigor infused into the young graft by the parent stem, that in the course of one season it entirely covered a large oak tree, around whose trunk the wild vine had been accustomed to cling for support. The young vine bore the first season, remarks the Herald, at the lowest calculation, 600 bunches of grapes.

Answer to Mr. Burr's "Inquiry."

MR. EDITOR:—I have this moment seen a little squib in the Farmer headed "Inquiry," and signed "J. BURR," and hasten to reply thereto.

In 1846 I ordered from J. BURR five varieties of straw-berries. They were received *totally dead*, FROM BAD PACKING. I renewed the order, and they were received alive. In September, 1847, Mr. S. D. FOOT ordered from J. BURR his four other varieties, and they were sent by Express, with a bill dated in October. All have been greatly increased, and are therefore sold at lower prices than Mr. BURR charges for them, and this may have had some influence in dictating his "Inquiry." But I wish to know how he is "to make it satisfactory to the public" that he did not dispose of the plants "till last spring, and then not to me or any of my neighbors," when I have now before me his bill of October last in his own hand writing?

Are there any more questions to be answered?

N. B. Mr. BURR inserted his squib in three leading Hort'l papers, and for what object I leave others to infer. Flushing, N. Y., Sept., 1848. WM. R. PRINCE.

ACKNOWLEDGMENTS.—We are indebted to HENRY FELLOWS, Esq., of Penfield, for splendid specimens of *Gansell's Berganot Pear*, which he grows in great perfection. Also for specimens of the *Catharine pear*; not the Early Catharine described in pomological works, but a long, pyriform, yellow fruit, resembling the BARTLETT so closely as often to be mistaken for it. It is nearly as good, and is entitled to a place among *first rate* pears. It was brought to Canadaigua in 1806 by the late Judge ATWATER of that place. It usually commands the highest price in our markets.

—To Mr. DIXON, of Bloomfield, for specimens of a seedling apple—decidedly the best we have seen this season. It is above medium size, round or slightly conical, ribbed like the Colvilles, of a greenish yellow color, covered with red specks. Flesh fine, yellowish white, juicy and rich. In our opinion *first rate*.

—To B. P. JOHNSON, Esq., of Albany, for a copy of the Report of the Fruit Committee of the State Fair. We regret we did not receive it sooner, as we had a more imperfect report, taken from our own notes, already in type.—We shall refer to it next month.

—To a Friend, for a report of the annual Fall Exhibition of the Albany and Rensselaer Horticultural Society, held in Albany on the 14th and 15th Sept. The display of Fruits, Flowers, and Vegetables appears to have been excellent and affords gratifying evidence of the prosperity of this Society. We shall refer to the report next month.

—To WM. HOWE, North Almond, Allegany Co., for several specimens of apples, and for seeds of a white variety of Blackberry (*Rubus villorus*), and of Aquilegia alba or White Columbine.

HOVEY'S FRUITS OF AMERICA.—We have received No. 6 of this beautiful work. It contains portraits of the *Early York* peach, the *Le Cure*, (Vicar of Winkfield,) *Rostiezer*, and *Flemish Beauty* pears. The *Early York* described is that of Downing's Fruit and Fruit Trees, and the *Early Purple* of some Rochester and Western collections—not the *Large Early York* of New Jersey. This is the only serial work of the kind in America, and cannot fail to receive adequate support. We are glad to see a respectable list of additional subscribers attached to each number. D. M. DEWEY, Reynold's Arcade, is the Agent at Rochester.

THE Horticultural Society of the Valley of the Genesee held its annual fall Exhibition in Minerva Hall, on Tuesday, Sept. 19. The display of fruits, and more particularly of flowers, was highly creditable. There were beautiful collections of Roses, Dahlias, Annuals, &c.; and numerous and elegant bouquets and floral ornaments, arranged in the most beautiful manner by the ladies, who took the matter in their own hands. We shall, if possible, give the report of committees in our next.

THE GRAPE.—Mr. Editor: If you or any of your correspondents can give any information as to the best manner of manuring, pruning, and cultivating the grape, it will be thankfully received. WM. L. VAN DUSEN.

J. J. MAXWELL, Dansville. Your pear is a noble specimen of the old *Summer Bonchretien*.

LADIES' DEPARTMENT.

A GOOD MOTHER.—She is a good mother who brings up her children to work; to work in the kitchen, if you please. We shall never have good puddings and pies, chowders and frickasees, while the ladies are taught that it is a disgrace to learn to cook. The time may not come when the daughters of wealth shall be obliged to take their stand in the kitchen, but should they not know how to bake and wash? What is a young woman fit for, to a farmer or mechanic especially, whose mother allows her to lie in bed till ten o'clock, and who, when she rises, sings a song or two, and sits down to the last new novel? She may answer for the wife of a wealthy fop; and a miserable life, miserable indeed, will she live. Far better for her, no matter what her condition may be, if she be brought up to work.

THE TOMATO.—Now is the time for gathering this healthy and most desirable vegetable, which is cooked in various ways, according to the peculiar taste of the people. As a salad it is good—as an omelet, with butter, eggs, and crumbs of bread, capital—it is good stifled and baked—good stewed down close with a fat piece of beef and Lima beans—in short, in what position is it not good? Recently the tomato has been successfully used in medical cases. It is good for a cough, and soothing to the lungs.—Use it freely in the hot months to check the accumulation of bile. If you wish to pack them away in bags for winter, gather them when ripe and scald them to get the skin off, then boil them well with a little sugar and salt, but no water, spread them in thin cakes in the sun, and when dry pack them away in a dry room.

TO PRESERVE PEACHES.—Clean your peaches by pouring hot water upon them, and afterwards wiping them with a coarse cloth; put them into glass or earthen jars, cork them up and fasten the corks with wire or strong twine; then place the jars in a kettle of hot water until the atmospheric air is expelled from the jars; after which seal them up tight with wax. Peaches prepared in this way retain their original flavor, and are equally as delicious, when cooked in the ordinary manner, six months or a year after being put up, as if just taken from the trees.

FINE PICKLED CABBAGE.—An exchange paper gives the following directions for making this excellent and wholesome relish:—"Shred red and white cabbage, spread it in layers in a stone jar, with salt over each layer. Put two spoonfuls of whole black pepper, and the same quantity of alspice, cloves, and cinnamon, in a bag, and scald them in two quarts of vinegar; pour the vinegar over the cabbage, and cover it tight. Use it two days after."

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,.....	\$1 00	1 12	Pork, bbl, mess	10 50	11 00
Corn,.....	43	50	Pork, cwt.,...	7	8
Barley,.....	50	56	Beef, cwt.,...	12	14
Oats,.....	22	25	Lard, lb.,...	5	6
Flour,.....	5 25	5 50	Butter, lb.,...	3	10
Beans,.....	33	1 00	Cheese, lb.,...	6	7
Apples, bush.	20	30	Eggs, doz.,...	1	—
Potatoes,.....	4 00	4 75	Poultry,.....	6	7
Clover Seed,...	2 00	2 50	Tallow,.....	12	15
Timothy,....	10 00	12 50	Maple Sugar, ..	3	4
Hay, ton,....	2 00	3 00	Sheep Skins,...	7	8
Wood, cord, ..	1 25	1 33	Green Hides,lb	3	4
Salt, bbl,....	6	7	Dry " " " "	10	10
Hams, lb,....			Calf Skins, ...		

WOOL.—The market is still inactive. The following are present quotations:

Native Blood,	18 to 23c.
Quarter to half,	20 22
Half to three quarters,	22 24
Three quarters to full,	24 26
Saxon,	26 28

Rochester, September 29, 1843.

New York Market.

New-York, Sept. 28—7 P. M.

FLOUR & MEAL.—There has been a large business in Flour to-day, with quite a speculative action. The demand for future delivery being considerable. The market in the morning was steady but improved at the close, when it stood 6d higher than in the morning. The sales add up 13 to 15,000 bbls. including 9 or 10,000 for delivery in October and November, at \$5.62½. The sales on the spot have been 5,500,572½ for common and good brands, closing at \$5.56½,5.62½, firm, with the latter price refused for choice brands—included in the sales were 1000 barrels Brooklyn at \$ 56. There was a good demand for shipment at full prices. Meal is 375 and quiet with sales 500 barrels Jersey. 200 barrels Rye flour at 3,87½.

GRAIN.—Wheat is quiet to-day, with fair demand. For good Genesee \$1.25 was bid. Some descriptions of corn were firmer, but common mixed was dull. The sales add up 30,000 bushels at 61 a 62 for inferior mixed, 67 a 68 for good, 71 a 74 for flat yellow, and 80 for round yellow. A sale of round corn was reported at \$1, but it could be bought for 80 at the close. The demand for Corn was less active than yesterday. Rye is better, with sales 2500 bushels at 71 a 73 cents delivered. A parcel of two of Barley was in market but not sold: held at 85c. Oats 35 a 35½—sales 7 or 800 bushels.

PROVISIONS.—Pork firm—demand for mess fair; sales 1500 bbls. at \$13 for mess, and \$10 a 10,12½ for prime. Lard—sales 4 or 500 bbls at 8¼ a 8½cets. Cheese in good demand for export; sales 2000 boxes at 6½ a 7¼. Butter steady.

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GENESEE FARMER.

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THE GENESEE FARMER:

*Issued on the first of each month, at Rochester, N. Y., by
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DANIEL LEE & D. D. T. MOORE, Editors.

P. BARRY, Conductor of Horticultural Department.

FIFTY CENTS A YEAR:

Five copies for \$2. and any larger number at the same rate, if directed to individuals. Eight copies for \$3, if only directed to one person—and any larger number, addressed in like manner, at the same rate. All subscriptions payable in advance, and to commence with the volume. ☞ Back numbers supplied to new subscribers.

Agricultural Reading.

It is far easier to read good writing on agricultural subjects than to write good reading on the same. We make no pretensions to the latter gift; and generally aim at what we say on paper to awaken thought, research, and a laudable desire to improve. As reasoning, intellectual beings, the four millions of laboring farmers in the United States, have derived very little benefit from the art of printing, and their ability to read the recorded experience, and understand the dearly bought knowledge of the most skillful agriculturists in the world. This neglect to turn the noble art of printing, the power to read, reason and improve, to the most useful account, is at once a serious private loss, and a great public misfortune. The evil is plain, palpable, and confessed by every well informed person. But how is it to be removed? That is the question of questions with those that would banish all prejudice and gross ignorance, all stupid indifference from the popular mind; and substitute in their place cultivated reason, sound morality, and an undying effort to make themselves and the world in which they live, wiser, better and happier than ever before.

Deeply impressed with the belief that Printing and Reading were the most available means to improve both the soil and its cultivators, we early began to use the Press as a medium through which to arouse the farmers of the country to the importance of educating every child, of creating a taste for good books, and of striving themselves to "teach one another," by writing for agricultural journals. The longer we study our system of persuading plain, common sense men to "teach one another," in the pages of an exceedingly cheap periodical, like the Genesee Farmer, the more valuable and feasible does the plan appear for instructing and elevating the thousands and millions who really need the advantage of additional information and of men-

tal culture. Common, practical farmers, best understand the language, difficulties, feelings and interests of their own class—men surrounded by circumstances and influences that bear nearly alike on all American husbandmen. So far this scheme has operated admirably. The Farmer has become one of the most popular journals of the day; and bids fair soon to stand without a rival in the extent of its circulation and usefulness.

In looking over the volumes for 1845, 6 and 7, we find them full of practical information on almost every subject that belongs either to agriculture or horticulture. As not a volume of this work, now twenty years along in its enduring race, will ever be again in type, so soon as young farmers begin to feel a little professional pride in their noble calling, and to collect libraries, these records of the early agricultural literature of the Empire State, will become objects of lively interest. So far as the publisher can supply the back volumes, those who have them not, will do well to secure a set while they can. We have no interest in the matter, other than the good which it is believed the contributions of so many able pens will do if read and heeded. It is compensation enough for us to feel a strong assurance that American agriculture will, at no distant epoch in our national history, stand in advance of that of all other nations on the globe. American Intellect, when once fairly aroused on the subject of rural sciences and practical improvements, will find ways and means to found and maintain all needful agricultural schools, for the gratuitous development of the mind of every child that is expected to cultivate a rood of ground. This result will be achieved.

Reading and reasoning, thinking and acting, are rapidly changing the whole face of the civilized world. Who does not sympathise with the fitful throbs, the mighty heavings of the big heart of Humanity? It is a spark of the Divinity that glows in the human bosom; and no earthly power can extinguish the expanding flame. Let all injustice, all wrong-doers, fear and tremble at the certain triumph of printing, reading and thinking. Such as persist in refusing to read, study, and improve the inner man, will travel in the footsteps of those tribes of untutored savages who have become extinct on this continent because they despised the admonitions of cultivated Reason. However successfully we may keep good books out of our own hands, and useful knowledge out of our own heads, we

are unable to exclude these blessings from the hands and heads of our studious neighbors. At best our opposition to the teachings of periodicals and books can only retard, not stop the progress of human elevation. By falling in with the natural movement of things as we find them, great good may be done in directing aright changes in the condition of society which are inevitable. Standing absolutely still, without advancement or retrogression is out of the question. It is simply whether the community shall improve or deteriorate—go forward and upward, or backward and downward. Now, while the few rise, the many sink. Help us then to bear up the sinking ones.

Men that do all by main strength are capital hands to wear out or impoverish a good soil; but when it comes to a cheap renovation of the same, science shows its vast superiority. We have seen a girl in a cotton mill that tends six power looms, and weaves 1260 yards a week, for which she is paid five dollars. In India, where weaving is done on the main-strength principle, a woman must labor twenty weeks to produce an equal amount of goods, and will receive 4 cents a day, or 24 a week, for her services. It is in this way that power-looms and labor-saving agricultural implements injure working people.

Science adds so immensely to the productive power of human muscles that three hours toil daily will suffice to feed and clothe one comfortably, and thereby leave six or nine hours each day for moral, intellectual and social culture and improvement. Who then will not lend a helping hand to circulate this journal, in which Science and Practice are happily blended in a way well adapted to meet the wants and tastes of all readers? The Farmer should double its present subscription list in 1849. Why not? Not one farmer in ten now takes it, or any other work of the kind. The large extension of this cheap paper will only prepare the popular mind for reading of a heavier and more expensive character. Our's is a pioneer enterprise, designed to blaze forest trees, and mark out a foot path in a wilderness of prejudice, where the locomotive will soon rattle and whistle over its iron track. Recollect that we must all creep before we can walk, and walk before we can run.

Man's education begins at the cradle, and ends only with the extinction of life. Procure then a few more good books, study them closely during the long winter evenings, and see how richly you will be rewarded for your labor.

Peat Charcoal the Best Deodorizer.

THE last London Farmer's Magazine contains an interesting article under the above heading, from the pen of JASPER W. RODGERS, Managing Director of the Irish Amelioration Society. The great hindrance to the saving and use of

night soil which abounds in London and other cities, is the extreme offensiveness of the gases evolved from cesspools, or the *excreta* of the human family. To find some cheap and abundant substance that will effectually *deodorize* this invaluable fertilizer has long been regarded as a desideratum of the highest importance to the health of cities and towns, and the improvement of the farms and gardens in the United Kingdom. The fact has come to be well understood that it is organized animal and vegetable matter, undergoing decomposition, which contaminates the atmosphere and renders it insalubrious for man, in all, or nearly all, unhealthy localities, whether such localities are in cities, on river bottoms, in swamps, or rich upland prairies.

During the 100 years that Augusta, on the Savannah, in Georgia, has been a town and city, the yellow fever has prevailed but once, and that was in 1839. Previous to that year, and at that time, it was the practice of the municipal authorities to have the filth of the city hauled out and cast into the river off from a high projecting, wharf-like structure, made for the purpose. The summer and autumn of 1839 were remarkably dry, and the Savannah so low as not to wash away the decomposing mass that accumulated at the place of public deposit in the bed of the river. The wind blowing over this in the direction of the city, carried with it pestilence and death to hundreds, before any one suspected the *cause* of the yellow fever, in a form so malignant and fatal, where it had never before been known.

To render cities, villages and country residences perfectly healthy, and at the same time increase the productiveness of the earth, are clearly objects of inestimable importance. Ireland abounds in peat bogs, and in laborers starving from a lack of bread and employment. This peat can be easily converted into charcoal; and Dr. ROGERS estimates that two millions of tons of this coal can be profitably consumed annually in London, in deodorizing the contents of privies, sewers, and other sources of pestilence, in that vast metropolis. The Mark Lane Express, and other leading journals enter warmly into the discussion of the subject. Coal is light, and can be easily transported with the absorbed fertilizing elements collected in cities, to all parts of the country, by railways, which radiate from cities as their natural centers.

In corroboration of the soundness of the views of Dr. R., Mr. KIMBERLEY thus writes to the Farmer's Magazine, now before us:—"At present it is quite sufficient to say, so far as your [the editor's] inquiry is concerned, that for fourteen or sixteen years I have been constantly using peat both as a deodorizer and fertilizer too, and for the purpose of making the human *excreta* with all its parts, fit to carry about in

any shape, in sacks or wagons. It gives me much pleasure to be able to corroborate *these truths*, and though so much neglected by all parties, broadly to state the known fact that human excreta, properly managed, can regenerate much of our own country that requires improvement, and that it may be made the regeneration of Ireland entirely also, drive anarchy from its post, and give to Ireland what she has long sought—industry and contentment.”

That the peat, so abundant on that island, grows rapidly, under favorable circumstances, has long been known; nor can we discover any insuperable difficulty in the way of its extensive manufacture into coal, and the employment of the latter for the purpose indicated. Porous coal, swamp muck, vegetable mold and loam, will absorb and *condense* all the volatile matter given off from the decaying carcass of a dead sheep, if well buried therein. The *burial* of all lifeless flesh to escape its offensive effluvia and pestilential gases, rests on this natural law.

Recently heated charcoal will take up 90 times its weight of ammonia in the shape of gas. Many intelligent planters at the south use it freely in their pig-sties and the vaults of privies, with the most satisfactory results. Well dried muck, (so abundant in Western New York) without charring, will answer a good purpose. Where the quantity of manure derived from animals that eat flesh or grain is small, especial pains should be taken to collect *phosphates* in bones, *sulphates* in gypsum, *chlorides* in common salt, and *salt of potash* in wood ashes. These are the things to be added to composts formed mainly of muck, forest leaves, straw or vegetable substances devoid of the seeds of plants and the earthy elements found in the bones, brains and flesh of animals.

It will not do to expect to transform a pound of coal, muck, wood, or straw into a pound of good wheat. Don't deceive yourself in this matter, and then say that the Genesee Farmer was wrong and led you into error. The soil made by an animal that eats wheat will produce wheat again. The bones, brains and flesh of all the descendants of Adam and Eve have been composed of elements similar to those which existed in the bodies of our first parents. Do not be so foolish as to think of making the bones of growing children, colts, calves, lambs and pigs out of charcoal or carbon alone. Look out for lime, phosphorus, sulphur, soda, potash and chlorine, as well as for carbon and available nitrogen. The seeds of plants and the milk and flesh of animals form fertilizers of exceeding value. These agricultural products are sent to cities or villages in one shape or another, and there most insidiously wasted. *Science* points out a cheap remedy for this public evil. Let its suggestions be duly considered.

The Provincial Agricultural Fair of Canada.

This Fair was held at Cobourg on the 5th, 6th, and 7th of October. We had the pleasure of being present, and are happy in being able to report favorably of the progress of agricultural and horticultural matters among our Canadian neighbors. The weather for a week or so previous, was highly unfavorable, and prevented the attendance of a large number of persons who lived at a distance. Many of our own citizens who intended to be present, had to deny themselves the pleasure on account of the stormy weather; and those who did go, we among the rest, paid well for it in the way of sea-sickness, and other discomforts.

The show of animals was excellent. The exhibition of grain was very large, and excited much interest; one building was almost entirely filled with it. Some of the specimens of wheat and corn were very fine.

Our friends, RAPALJE & BRIGGS, of this city, and H. L. EMERY, of Albany, made a great display of implements, which were, to most of those visiting the Fair, not the least attractive and interesting objects on exhibition.

The dairy department was fairly represented. There were large quantities of butter and cheese, some excellent, and some indifferent, or rather, we should say, decidedly poor. The cheese of Mr. Wade, of Port Hope, obtained the premium. The famous Stilton Cheese, of Mr. Parsons, of Guelph, was acknowledged superior, but did not arrive in season for the award. This cheese of Mr. P. is the best we have seen in years—so tempting that we had to bring one home with us.

The display of needle and net work was highly creditable to the ladies. We noticed many beautiful knit quilts, shawls, window-hangings, &c.; fine specimens of embroidery, of various kinds. A flower vase of worsted work, representing lillies, tulips, roses, &c., by Mrs. Munsen, of Cobourg, was much admired.

But what interested us most of all, was the exhibition of Fruits. This was to us, unexpectedly fine. Mr. Jeckell, of Port Hope, presented upwards of 30 varieties of apples and 8 of pears, all remarkably fair and finely colored; Mr. Thomas, of Colborne, 24 fine varieties; Mr. Whitehead, of Port Hope, a large collection; and many others. Some of the finest Flemish Beauty Pears we have seen this season were there, and Mr. Wilmot, of Belmont, presented a very handsome variety, resembling the Golden Beurre of Bilboa, but inferior to it. Mr. John Gray, of Toronto, exhibited from his young graperies magnificent bunches of Black Hamburg, Zinfandel and Syrian Grapes. Mr. Fleming, of Toronto, very fine Black Hamburgs.

The finest collections of Garden Vegetables were presented by Mr. Fleming and Mr. Turner, of Toronto.

The frost had cut off all the out-door flowers, but Mr. Jeckell, of Port Hope, and Mrs. Boulton, of Cobourg, embellished the hall with choice collections of plants.

On the whole, the display was one that Canadians may well be proud of, and they may take encouragement from it to prosecute with increased zeal the great work they have so well commenced. A grand Agricultural Dinner, at which some 5 or 600 persons were present, closed the fete. It was prepared after the most approved democratic style, in a temporary building of rough boards, open to all, at \$1 each, and the visitors from this side were presented with free tickets. This compares well with the contemptible, exclusive affair which was said to have come off at the close of our State Fair at Buffalo, from which the *bona fide* tillers of the soil were almost wholly excluded. Democracy is not confined to the United States. The dinner was excellent in itself, and was enlivened by wit, eloquence and song. There is no danger of any affair becoming very dull where the Hon. ADAM FERGUSON presides. L. F. Allen Esq., of Black Rock, was present, and made a good speech, in reply to the toast of the N. Y. State Agricultural Society. Prof. Coppock, of Buffalo, was also present, and being called upon, made a few pertinent remarks.

We are indebted to Mr. Evans, of Cobourg, Mr. Edmundson, of Toronto, as well as many others, for much kind attention. Sheriff Rattan, of Cobourg, was elected President for the ensuing year, and the next exhibition is to be held at Kingston, on the first Tuesday of September next.

P. B.

Notes for the Month.

THAT part of my last month's comments on the late State Fair, which related to the social and political respectability of the American Farmer, has been demurred to by sundry bipeds professional, &c. "Well, W.," exclaims one, "you have done it now; 'sugar'd o'er the devil himself.' I wish you had to eat some of my pot of frowy butter, rank as Cuffy's ear, bought of farmer A. for best May butter." Anon a miller, or a produce buyer, says that a farmer's "word may always be depended on for the price of his crop, on a falling market," and vice versa "on a rising market." It should be recollected that my eulogy extended only to the farmers congregated to hear J. C. SPENCER'S address at the great Fair at Buffalo, without any reference to that part of our rural population who peddle strong butter and sour peaches. Such men very rarely attend agricultural fairs; they are the hereditary enemies of rural progress—setting down all as empiricism that puts their practice to shame, or casts a doubt upon the infallibility of their forefathers.

The two cuts in the last Farmer, illustrative of the unlucky and the lucky farmer, convey not to the superficial observer the full truth of the representation. How often have I heard the unlucky farmer, mendaciously, if not impiously, excuse his own stupidity and laziness, by pleading the untowardness of the season—too dry, or too wet. I did once, but never but once, hear a farmer, a philosophical man, laugh at his own laziness—averring that he had mowed the weeds which overtopped his potatoes, after they had got too strongly rooted for the hoe or the plow.—But *badinage* apart, there are thousands of farmers who approach both illustrations without properly representing either. Such is the homogeneity of our German population that they are very generally good farmers. If they do not improve much upon their fathers' practice, neither do they deteriorate; as the majority are plodding, economical, and industrious, so are the great aggregate. *Labor omnia vincit*, is the German motto; his equanimity is never disturbed by the labor-saving experiments of his Yankee neighbor; neither can he be induced to follow the peddling practices of the Yankee. If you see a man vending green pumpkins, or bad apples, you may be sure that he is not of pure German blood. Such is the pride, even of the smallest German farmer, that if by chance he has a few apples or cabbages in his wagon, he will tell you to give him what you please for them—that his wife or his daughter "would send them along."

WEEDS.—As much as the presence of weeds is deprecated by gardeners generally, I have only to admire the wise provision of nature in filling the soil with such elements of vegetable life. Those weeds which grow up in a garden after the crop has matured, cover the exposed soil from the exhausting effects of the sun.—When turned under late in the fall, or in early spring, they become the best manure, chemically and mechanically. After the garden is planted in the spring, the first appearance of weeds is the true signal for the first hosing; when weeds again appear, the earth needs another stirring, and so on, the incumbent vegetables receiving more life from the stirring of the soil than from the removal of the weeds, both of which are compassed by the same process.

TURNEPS.—Since the repeated failure of our potato crop, there is an extra demand for the flat Norfolk Turnep to supply its place on the table. Many farmers who have tried the experiment, say that turneps will be destroyed by worms if sown on old land. A compost of ashes, salt, and plaster, liberally applied to a turnep patch will effectually prevent the mischief of the fly or worm. I have twice tried the experiment in a garden with complete success. Turneps may be thus sown as a second crop, but earlier sowing is more certain in our dry climate.

THE FARMER'S CALLING.—As much as many farmers deplore the responsibility, the endless toil of their profession, its uncertainty, its dependence on the season, the markets, &c., &c., &c., with all these drawbacks, if they are such, farming has a thousand advantages over all other callings. The farmer of capital is never ruined by the competition of bankrupts, as men never farm on a credit. The productions of the farm are always cash, rarely or never sold on a credit by an intelligent farmer. How often I have seen a laborer or mechanic loathe the very name of *store pay*, when at the mention of payment in *pork and flour* his eye glistens. The credit system has emphatically glutted and ruined every other business but farming. No farmer ever failed unless he essayed to ornament and support the credit system. I once knew a farmer to have the poor ambition to endorse a bankrupt's bank note, merely to show that he was a man of substance; but such examples are rare indeed.

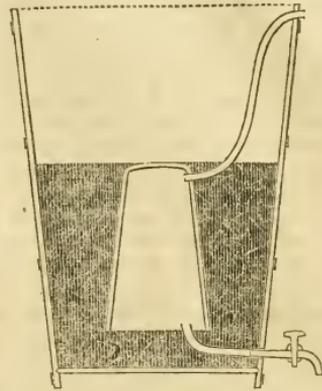
HARD TIMES.—In these United States hard times may be referred to the effects produced by the struggle of pride against poverty. It is far worse in the old world, for there the battle of life is between poverty and starvation. A prohibitory tariff is the panacea proposed for us by some political economists. I would simply ask the dandies of our land if they will wear homespun; and the lady sovereigns, if they will dispense with the Paris fashions. S. W.

Gilbert's Filtering Apparatus.

MR. SIMON PIERSON.—*Dear Sir:* I have not seen that any body has answered your inquiry for a "Filter," made through the Farmer some months since, and therefore take the liberty to send you the accompanying diagram of a filter which has been used in this city for several years, and found to answer the end pretty well.

Lest the thing intended by this diagram should not be obvious to you at sight, I will, by way of explanation, say, that this filter is simply an oaken tub, largest at the top, of any required size—say from three to four feet high and 20 to 24 inches across the bottom. A hole is bored through one of the staves near the bottom, into which is fitted one end of a piece of 1 inch lead pipe, about a foot long, the inner end bent up so as to open about 4 or 5 inches from the bottom. A common beer cock is then screwed into the outer end of the pipe, which had been previously pressed out by means of a mandril, to make it water tight. A layer of a mixture of charcoal and gravel, equal parts, is then put in to the depth of four inches and pounded in. A stoneware crock, some ten inches in diameter and 18 high, is then put bottom upwards in the centre of the tub, resting upon the coal and gravel and enclosing the mouth of the lead pipe. Layers of the coal and gravel, pounded in pretty hard, are then

put around the crock to its top. Two or three inches of coarse gravel, to prevent the displacing of the coal by the pouring in of water, are then



Gilbert's Filtering Apparatus.

laid over the coal and crock; or put on a large flat stone, not a lime-stone. The crock has a hole in its bottom, or rather upper end, for the insertion (through a piece of cork, to make it water tight,) of a piece of one-fourth inch lead pipe for a vent, which reaches to the top of the tub; or it may be conveniently made to go through a hole of the right size within an inch of the top of one of the staves. If it be inconvenient to procure a crock with a vent hole a common one will answer the purpose, by having the vent pipe long enough to reach from the top of the tub down through the coal and gravel, diving under the rim of the crock, and ascending to the highest part of the inside.

The filter being thus completed and placed in the cellar, where it will be kept cool and not freeze, fill the space above the gravel with *rain* water. Lime water will spoil the filtering properties of the coal, I don't know why—Professor DEWEY can tell you—but I have seen that filters into which a pail full or two of well water had been put would never filter rain water afterwards. Don't be alarmed if the first few pailfuls of filtered water should taste a little alkaline, as a small amount of ashes will unavoidably remain with the coal, which the first water will wash out.—The coal is the common blacksmith's coal from hard wood, and is prepared by igniting it—which may be well done by firing a small pile on the ground, and then quenching the coals in water and pounding them in a barrel or kettle about as fine as wheat. The gravel should be of the pea and bean size washed clean. It will supply your family with all you need for drinking and culinary purposes, for three or four years, without renewing the filtering matter.

These filters are made and sold in this city by JOHN KEDZIE, No. 11 State street. It is not a "patent." Yours, &c.,
Rochester, Oct., 1848. G. S. GILBERT.

A Chapter on Wool Growing.

MESSRS. EDITORS:—It is about forty-eight years since the first importation of Merino sheep into the United States, by Chancellor LIVINGSTON and Gen. HUMPHREYS; and as they were not quite as tall as our native sheep, and looked rather dark colored and dirty, they were considered by many a very inferior animal, and a pest to our country. Others seemed to view their good properties, and, on a fair trial, found them very valuable, and much more profitable for the wool grower, especially in our northern States, than any other, as they were more hardy, gave heavier and much finer fleeces. They are also much more tame and docile. A fence three feet high is sufficient to keep them. They are likewise very prolific, kind to their young, and good milkers.

Hon. WM. JARVIS imported several thousand in 1810 and 1811. My first purchase was in 1812. The most of my neighbors considered me unwise, because they were such inferior looking creatures. It was also said that their meat was strong, but they bore acquaintance well. We found that they would keep fat on short feed, where our native sheep would be poor—as I have ever found it to be the case, when I have kept them both in the same flock. When butchered, their quarters were as heavy and their meat as sweet as our native or any other kind of sheep; and I can make a thousand pounds of mutton of Merino sheep as cheap as I can of any other kind of sheep whatever. They were all that the wool grower wanted, especially in the northern States, till the introduction of the Saxones—their wool being finer than the Merinos, and less gummed, it would of course bring more by the lb. Many, therefore, disposed of the Merinos and purchased Saxones, or crossed their flocks with them. After the large importations of Saxones in 1825 and 1826 almost all of the fine wool growers crossed their flocks with them, and very many to their sorrow, and myself among others. We soon found them to be a very tender animal, and light shearers; and although our wool would bring us more by the lb., our fleeces were so light that we only obtained about three-fourths as much for our yearly clip as when we had the Merinos, and we lost twice as many in wintering. And in rearing Saxony lambs we would lose 25 per cent., when we formerly lost only 5 per cent. in raising Merino lambs, and for three years past we have not lost over three per cent.

In 1835 I sold my farm at the east, disposed of my flock, moved to Western New York, where I now reside, and resolved to keep no more Saxony sheep, but have done what I could to establish a flock of Merinos. For the last five years I have spared no pains or expense, as far as my ability would possibly admit, to obtain all

the information possible concerning them. In order to find those flocks that had been kept pure, I have searched out the pedigree of almost every flock that has come before the public, and have become perfectly satisfied that I have not only found, but have obtained, as good as there is. I have purchased, in all, 59 Merinos from the most approved flocks in the Eastern States—47 of which were ewes—and I have paid for the 59 \$1,025, exclusive of charges and expenses. I now think that I have a flock of sheep again.

The summer of 1847 was the driest, in this vicinity, that I ever knew in my life in any place. I never before saw Merino sheep as poor as mine were, and even when the winter commenced their bones could be counted. Yet in June last my breeding ewes, 140 in number, averaged 4 lbs. 3 oz. per head of washed wool, and I sold my entire clip for 34 cents per pound, cash at my door.

One cause, Messrs. Editors, of my sending you this article is the anxiety that some appear to have to return again to the Saxony sheep, to which I have no objections. Let all who wish to keep them do so. Wool dealers and manufacturers like the Saxony wool, because it is finer and less gummed than the Merino; but let them summer and winter the two animals, and shear them, and they will perhaps find themselves mistaken in some things. The Saxony spirit has been quite visible for a year or two past at our State Fairs, and especially at our last at Buffalo, the judges on Merino sheep seemed to possess a good share of it. Some of them, at least, if not all, being wool *dealers* instead of wool *growers*, seemed to favor that class of Merinos which were pretty well tintured with Saxony—Merinos and their grades being all admitted as Merinos, so that the premiums are awarded to Merinos and their grades, which gives the committee all the opportunity that they may desire to give the preference to such as have the finest fleeces and least gum, which leaves the most of the pure bred Merinos in the back ground. We do not say but what some premiums were given to full blood Merinos at the said Fair at Buffalo, but the majority of them were given to those that were crossed with Saxony—while a goodly number of those who exhibited pure bred Merinos, and of the first quality, received nothing, and the only reason no doubt was because they were Merino.

A number of others in this State have been doing what they could for ten years past, to get up a flock of pure Spanish Merinos. Those of us who have for many years been keeping both Saxony and Merino, with their grades, and have sheared them year after year, and now for the last few years have been traversing the country from Dan to Beersheba to find the pure bloods, and of the best kind and quality, have the vanity to believe that we know something about Merino

sheep. And when we go to the fair and see men exhibiting sheep which they call pure bred Merino, we ask them what flock they were from, and when they inform us, we at once know what they are, for there is not a flock of any note in the United States but what we have searched out, and know their pedigree.

If the judges on Merino Sheep were selected from among Merino wool *growers*, instead of wool *dealers* and *manufacturers*, and those on Saxony sheep from among Saxony wool *growers*, there would no doubt be better satisfaction given. There were premiums awarded to Merino bucks at the late Fair at Buffalo, that we would not have with our flock of ewes 24 hours in the month of December for \$50, and that because they were mongrel sheep; yet their wool was soft and nice.

Very respectfully, yours,

REED BURRITT.

Burdett, Tompkins Co., N. Y., Oct., 1848.

Lunar Influence, &c.

MESSRS. EDITORS:—The June number of the Farmer contains a communication signed "H.," referring to my article on lunar influence, published in March, and asks for further information in regard thereto, that he may no longer be one of the "duped." He says, "if he had made himself acquainted with modern philosophy, (which he evidently has not done) he would have ascertained that some of his remarks though applicable once, are inapplicable now, and that some of his questions are very easily answered."

Good and cool. It is a very important part of science, though rather humiliating, to learn the extent of our ignorance upon a question which we design to solve for the benefit of others. I make no pretensions to originality, although I have examined several systems of "modern philosophy." The ignorant pretender believes he understands everything, while the experienced philosopher is constantly affirming he understands nothing. My former communication was written in great haste, and without transcribing. It contained an error or two, and an acknowledgment that I was a farmer, from which, "H.," I suppose, inferred I must be unacquainted with "modern philosophy." I regret he will not argue the question with me, and that he did not attempt to answer one of my former questions. They have never been satisfactorily answered, and probably never will be, until "H." can be induced to undertake the task. It will immortalize you, "H.," even if you do not more than half answer them. Try it.

My remarks in regard to philosophy are "inapplicable now." Why so? Was there ever a time when the masses were more easily "duped" by designing men than the present? Was there ever a time when as many crude

and confident theories upon intricate subjects were adopted as settled truths, as the present? Is not the present age noted as an age of humbug? Was there ever a more successful or general imposition than Davis' Revelations? And yet, my remarks are "inapplicable now." "I still adhere to the Newtonian theory of the tides." Of course you like the good old ways of the fathers, and I have no desire to unhinge your settled impressions. My remarks are designed for those who are not so deeply in love with long established notions as to believe no reasonable arguments can be adduced to show their absurdity, or simplify any new position.

The principal argument in favor of Newton's theory of the tides is their uniform motion in certain latitudes, corresponding with the position of the moon in the heavens. I consider them mere coincidences and nothing more. In what way can the moon possibly affect the waters of the earth? You answer, by the force of attraction. Just tell us "H.," what constitutes attraction. It will afford us a key by which we may unlock the mysteries of nature's works. But I will admit, for the sake of argument, the moon governs the tide by her force of attraction. This power is supposed to exist in all bodies, in the earth as well as the moon. If two bodies are suspended in the air, they attract each other, in exact proportion to the quantity of matter they contain. If one is larger than the other the attraction, considered as a whole, will be unequal. The smaller the one body, when placed in opposition to the other, the swifter will be its motion until they meet. If the moon attracts the earth, it necessarily follows the earth attracts the moon.

I must here repeat a remark made in my former communication because it is the corner stone of my argument. If the above theory of attraction is in accordance with the opinions of "modern philosophers" and in consonance with it the moon causes the water to rise in New York 8 feet, and in the Bay of Fundy 70 feet, what will be the effect of the earth's attraction upon the moon, containing, as it does, 80 times the quantity of matter? Can any thing be imagined more at variance with the general simple laws of nature, or plainly repugnant to the dictates of common sense? According to "modern philosophy," the earth is not round, but flattened at the poles, (a theory I doubt very much.) If this is the case the attractive force of the earth is greater at the poles than at the equator, because they are nearer the center of the earth. Now under the equator there is little or no tide. How will you reconcile this with the laws of attraction?

The surface of the earth under the equator is much nearer the moon than the high latitudes, and it would follow as a fair consequence that there, owing to the absence of attraction on the part of the earth, to a certain degree, and its

convexity, the tide would be much higher than at the polls. On the contrary, the *reverse* is true. Under the equator, where the attractive force of the earth is *less*, and the moon's *greater* than in high latitudes, the tides are very low. Towards the poles, where the earth's attraction increases and the moon's diminishes, thus partially counteracting the effects of each other, the tides run very high.

I did not intimate in my former communication that I had a better theory to offer. At present I have none. The laws of nature are always simple and consistent. Those of our "modern philosophers" often complex and inconsistent.

J. W. DICKINSON.

Avon, N. Y., July, 1848.

How to Dry a Cow.

"A SUBSCRIBER" asks, "How may I run a heifer dry that calved last month, as I propose putting her on grass on the 12th of May for fattening? Also, would you recommend bleeding bullocks that have been stall-fed all winter prior to their being put on grass?"

We recommend bleeding the bullocks previous to putting them out. Various recipes have been given to dry a cow which had recently calved, and various modes adopted, according to the will and caprice of the individual, but we have found the following recipe answer well: Let the animal be milked dry, and about two, and if in good condition, three or four quarts of blood extracted: then procure a fresh rennet bag; pour on it two quarts of rain or river water; bail them down to one quart, and strain.—When sufficiently cool give it as a drench to the cow, and she will be dry in forty-eight hours. She should, of course, be kept on sheaf oats, or chopped straw and oats, with hay or other dry food, for two or three days previously and subsequently.

Another plan is, to milk and bleed her as before, and then give the following:—Roche alum, in powder, 4 oz.; dragon's blood, in powder, half an ounce; Turmeric, in powder, 1 oz., to be given in a quart of cold skimmed milk, as a drench to each cow, allowing a period of at least two hours to elapse before turning her to feed. It is essential not to allow her to be milked or interfered with afterwards.—*Irish Farmer's Gaz.*

INQUIRY.—In the September number of the Farmer I noticed an article from S. W., of Waterloo, in which he stated that a neighbor of his sold from his farm produce to the amount of \$1,400. Now I would ask whether his neighbor raised grain, or cattle, or sheep—and if either, what kinds? By answering the above your correspondent will confer a favor.

S.

Pompey, N. Y., Oct., 1848.

Sweet Potatoes.

If you can spare room in the next number of the Farmer, for an answer to the following inquiries, you will oblige a number of your subscribers: Whereas we hear that sweet potatoes are raised in Michigan, Wisconsin, &c.—If this be true, why can they not be grown here?—and how can they be preserved through the winter from rotting, decay, &c?—and how and when must they be planted, &c., &c.

Le Roy, N. Y., Oct., 1848. S. PIERSON.

Mr. H. N. LANGWORTHY, of Irondequoit, near this city—one of our most intelligent and successful fruit and vegetable growers—informs us that sweet potatoes can not be properly grown in this section of the country. He has tried the experiment repeatedly, and has invariably found the seasons too short for the tubers to mature—although the plants were started early, in a hot bed. The best that he ever raised were small and tasteless, compared with those grown at the South.

We are aware that sweet potatoes are grown in southern Ohio, and in some parts of Michigan, Wisconsin, &c., and as the Farmer circulates extensively in those and other sections where they may be cultivated, we shall be pleased to publish definite information relative to culture, keeping, &c. Will some of our correspondents in the localities mentioned, give us the best mode of culture for such sections?

VALUE OF AGRICULTURAL PERIODICALS.—

The Hon. E. NEWTON, in his address before the Mahoning county (Ohio) Agricultural Society, says:—

Agricultural publications are the best and cheapest mode of obtaining information upon all subjects of husbandry. They cost but little, and are within the power of all. One good day's work will pay for one, and all have an abundance of time to read them. They contain the experience and observations of the most scientific farmers in the country; the prospect of crops in all countries, and the condition of the market; facts all important to be known and understood. I have been surprised to see how few are taken, and have often been told by farmers that they were not able to pay for them. I can hardly appreciate the remark. Every one is able to pay for that which will immediately return them a hundred fold. I believe that a single number of any of the publications, if thoroughly read, would be found to contain some fact, if adopted, that would more than pay for the full year. By raising an extra bushel of wheat, it would pay for the year.

In all occupations, success can be expected only from undivided attention.

Keeping Apples.

MR. PELL, of Ulster County, the celebrated exporter of Apples to Europe, recommends that apples after having been carefully hand picked in baskets, should be laid on a floor, by hand, without pouring from the baskets, until they are 12 or 18 inches deep, and be left to dry and season three weeks; when again equally carefully packed in clean dry barrels, they may be kept without rotting any reasonable length of time, and are safely sent to any part of Europe or the East Indies. The plan of drying and seasoning in the, air before barreling, prevailed generally some years ago, although now-a-days it is mostly discontinued, and thought useless. We are disposed to think well of this process when it becomes important to keep apples safely till the next spring, or to send to foreign countries, for we have always observed that on opening a barrel a few days sfter being put up, in ever so dry weather, that the moisture often stands in drops over the whole surface; and although loose barrels will allow it mostly to evaporate, yet where they come in contact, the two surfaces retain it and causes rot.

The carrying of apples in a common wagon, either before or after barreling is injurious; they should be moved on springs or on sleds. The least abrasion of the skin, or crushing of cells of the pulp containing the juice, allows fermentation and decomposition, and the consequent decay of the whole mass.

Apples will not freeze until at a temperature of from 5 to 10 below the freezing point of water, and it is beneficial to keep them as cool as possible, even down to 30 degrees. Apples inclosed in a water tight cask may be left in a cold loft or garret all winter without further care, and will be sound in the spring, and perfectly fresh.

The Cut-Worm.

ALTHOUGH some of the readers of the Farmer may be well acquainted with the following method of getting rid of this troublesome vermin, as it may benefit others I thought it proper to make it public. Last spring, having planted some things rather early, on account of frosts I was obliged to cover them with straw, &c. Upon uncovering them I allowed the straw to lay in the paths, &c., a day or two, and upon removing it I discovered that the cut-worm and other vermin were gathered beneath the straw and were readily destroyed. I then placed straw among my cabbages with the like effect.

Yours, &c.,
FREDERIC WILLIAMS.
Gerry, N. Y., Oct., 1848.

THERE is no true virtue in that benevolence which can be extinguished by ingratitude.

Progress of Improvement in Kentucky.

A FRIEND residing in Boone County, Ky., who has procured over fifty subscribers to our present volume, among the young farmers of his neighborhood, thus writes us relative to the progress of improvement in that section:—

“The reading of agricultural papers is something new to the most of our old fashioned farmers in this section of our beloved Republic, and many view it as an innovation on their long established customs and right of dictation. But I hail the signs of the times as favorable for a radical, though gradual change, in the feelings and actions of the yeomanry of Old Kentucky. One among many omens that would favor this prediction, is the fact that nearly all the subscribers which I have procured for the Farmer are YOUNG MEN, who look favorably upon the introduction of various improvements in labor-saving machines for the benefit of farmers and mechanics. Many of our aged sires stand aloof from these machines, and wait till some of their more daring neighbors use them until they become quite common and very cheap; and by the time they make the bold step and get in possession of the improvement, they look around and are quite astonished to find their more enterprising friends laying aside that improvement for a still greater one. But in advancing crowds there is always a front and rear.”

Good Feeding.—The Oaks Cow.

IN his address before the Greene County Agricultural Society, Col. Z. PRATT makes the following remarks on a subject of great importance to dairy farmers:—

We read of premiums being given to large imported cows that have yielded some thirty quarts a day; but every dairy woman will tell you that it is not the cow that gives the largest quantity at a milking, that makes the best one in the long run. A better one still, is she that keeps on through the whole year, in winter as well as summer, let the feed be short or long. Run fast, is a good name, but hold fast, is a better one.

In the Agricultural journals, I have read an account of a middle sized country cow; I refer to the celebrated Oaks Cow, bought out of a drove in Massachusetts, for a mere trifle. Her history illustrates two things worthy of note: First, what we can obtain from the best of our old breed; and secondly, how much depends on good feeding; and just as it was with the Oaks Cow, so will every man find it with his farm. If he won't feed his farm, and that often and well, he need not expect it long to feed him. Always taking out of the meal-tub, and never putting in, will soon come to the bottom, as poor Richard says. But to return to the Oaks Cow that did so much honor to the name of Caleb Oakes; it is stated on the most unquestionable authority, such as satisfied the Massachusetts Agricultural Society, that in the first year with ordinary keep, she ate twelve bushels of corn meal, and then gave 300 pounds of Butter; the next, 35 bushels, and she gave more than 400 pounds; the next year she had a bushel of meal a week, and all her own milk skimmed, and then she gave from the 5th of April, to the 25th of September, the day of the show, 484 pounds, besides suckling her calf for five weeks. She was exhibited, and deservedly took the premium on the last mentioned day; and will carry down her owners name, with credit, to posterity, as long as Oaks grow.

Corn and Cob Meal.

Much diversity of opinion seems to prevail as regards the value of cob-meal, for food for cattle, horses and hogs. It has been the opinion of most farmers that the cobs of corn were of little or no value, and they have either been used for fuel, or thrown aside as of but little use except for manure. We have for a long time been much in favor of corn and cob meal, not only from our own experience but that of others. It is a great saving in point of economy; and it is generally asserted that horses, mules and cattle are not near as subject to cholera when fed on this kind of meal: Corn meal in its pure state, is generally considered too heating and too concentrated, particularly for working horses, but when mixed with the cob forms a very superior and nutritious food. It is supposed to act mechanically, too, by distending the stomach, by which digestion is rendered much easier and more perfect. It renders the meal more light and bulky when well mixed with the grain, by which the meal is more thoroughly acted upon by the gastric juice of the stomach, consequently more perfectly digested.

When it is considered how many thousands of bushels of corn cobs are annually thrown away, or wastefully used for fuel, it becomes a matter of deep interest to every farmer to know the value this offal of the farm is entitled to as food for cattle.

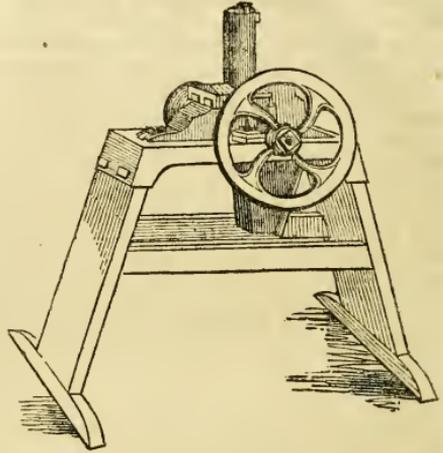
As to the benefit of grinding the corn with the cob—we think it varies with the nature of the corn—being greatest with the hardest and most flinty varieties.

By a nicely conducted experiment made some years since, by P. Minor, of Virginia, it was ascertained that five bushels of cobs yielded four gallons of spirit. But this experiment does not settle the question as to how much nutriment the cobs contain. Besides the principle of *alcohol* to be found in all *grain*, and most vegetables, there are other substances, or principles in all, possessing nutritive qualities, among which may be enumerated the saccharine and oleaginous properties infinitely valuable, as these are known to be active agents in the production of fat, et cetera.

By an analysis, which is now being made in the laboratory of Dr. EMMONS, by Mr. SALISBURY, we are informed that the cob affords two per cent of albumen and casein, besides other nutritive matter.

The opinion expressed of those who have given it a fair trial, is altogether in its favor. "We cannot," says the editor of the American Agriculturist, "too earnestly call the attention of our readers in those portions of the Union where labor is cheap and fuel dear, and mills are found for the purpose, to the importance of grinding or crushing their corn cobs for horses,

cattle and sheep, and when it can be cooked, for swine also. Sufficient experiments have been made to establish the great benefits of them when so used in proportion to their weight. Boiling or fermenting them after crushing adds to their value."



Pitt's Corn and Cob Mill.

We advise therefore, that every farmer that raises ten acres of corn should save his corn-cobs for his cattle, and that to render them available he should provide himself with the means of reducing them to meal, if not that of cooking them also.

Since the introduction of horse-powers, mills for grinding feed for stock have been in request. In 1842, at the Fair of the New York State Agricultural Society, several mills were exhibited for reducing corn and cobs to meal, among which one was exhibited by O. Hussey, of Baltimore, of his own invention, which took the first premium. This mill we have now in our possession, and has been in use for the last six years, without any repair, only renewing the grinders, as they wear out, at the trifling cost of about 80 cents a set. It will grind corn, oats and peas, as well as corn and cob, sufficiently fine for feeding stock. It requires the power of two horses to do good work.

We have also one of PITT'S corn and cob cutters, (a figure of which is given above,) which we have had in use two years, which requires less power, and works equally well, whether the corn be soft or hard. It consists of a cast-iron wheel about 9 inches in diameter, the rim 4 inches wide, armed with a series of small chisel-shaped teeth or knives, set like plane-irons in the face, in a very simple manner; one set of teeth following in the space of the others, alternately, by which the chipping is done. These knives can be taken out, ground and replaced in a few moments; and a new set can be obtained for two dollars and fifty cents. If

care is taken to introduce no hard substances, such as iron and stone, into the mill, one set of knives will last for a long period. It will grind from three to four hundred bushels before the knives require sharpening. When in good order, with a two horse power, it will reduce from three to four bushels of dry hard corn in the hour, and nearly double that quantity when soft.

Mr. PITTS has made an improvement on this machine, by enlarging the diameter and width of the operating wheel and increasing the number of knives, by which means a much larger quantity can be ground in a given time. We have been informed by Mr. P. that it will grind in this form from ten to twelve bushels per hour. The price of the small mill is \$40, and the larger one \$50, and are manufactured by JOHN A. PITTS, Rochester.—*American Journal of Ag.*

Action of Water on Lead Pipes.

SOME few months after the introduction of Croton water into our city, my attention was called to investigate its action upon the lead pipes which were used to carry it into dwelling houses, &c. In several instances I detected lead in the water which had stood in lead pipes over night, in situations where free use was made of the water during the day, and, in some instances, this daily use had continued for several weeks.

I have also found notable quantities of lead in Croton water which I drew from a lead pipe in the third story of a house, at least a year after the pipes had been fitted in the house. The water was but seldom used from this pipe, and that which I drew from it for examination, had probably remained in it more than a week. Subsequent to this I made a series of experiments, with a view to determine the action of Croton water upon pipes made of pure lead, and of alloys of tin and lead, and also of those made of lead coated with pure tin, after the plan of Mr. Ewbank. These pipes, of some thirty or forty feet in length, were filled with water brought in a cask from the Croton River. The water was displaced from the pipes by admitting a fresh supply every day or two, for three weeks; and that which escaped was tested each time. The result proved that the water which passed through the lead pipe always contained lead, while that from the pipe made of the alloy of tin and lead, as also that from the pipe coated with tin, both upon the outside and inside, did not contain a particle of lead, but for the first few days a trace of tin.

It is possible, that the water, in passing rapidly through a lead pipe of moderate length, in constant use, may not become so impregnated with lead as to be injurious to health. But there are hundreds of instances where the pipes are

conveyed to the second and third stories of houses, where the water is seldom used, but from which the servant might find it convenient to fill a pitcher. The internal use of the water from such situations, I have no doubt, is highly injurious, and manifests itself by tremulousness and general debility of the nervous system.—*American Agriculturist.*

JAMES R. CHILTON.

New York, June, 1848.

Potash from the Mountains.

WE see it stated in the Report of the Commissioner of Patents, that an American now in England, had obtained patents for separating the potash that is contained in the felspar which occurs so abundantly in the primitive rocks that compose many of our mountains. There are several varieties of felspar, most of which may be called potash felspar, because it contains that alkali. The proportion of potash varies in the several varieties. The mode which is adopted for extracting the potash is this: the rock is broken up and kept a red heat, lime and plaster of Paris being added. The heat is kept up for some time, after which the materials are put into a leach tub, and leached with water, as you would leach ashes. The liquor being evaporated, the sulphate of potash is obtained. If muriate of soda (common salt) be added before heating, instead of the plaster of Paris, muriate of potash will be the result. Another patent has been taken out for decomposing these or other alkaline salts by steam. For instance—if you have the muriate of potash, and you wish to deprive it of the muriatic acid, and obtain the caustic, or pure potash, you heat the muriate very hot, and then pass over it and through it a current of steam or vapor. The acid combines with the steam, and is driven off with it, and the alkali remains free. If you wish to preserve the acid it may be conveyed off in a tube that will not be corroded by it into a cooler, and condensed, as you would in common distilling.

In this way you can make or obtain the sulphuric acid, (oil of vitrol) from common plaster of Paris. You will need a cylinder to heat the plaster in. The plaster, you know, is made of lime and sulphuric acid. After it is heated you can let in the steam by a tube at the bottom, which will pass through the heated mass, combine with the acid, and can be conveyed away by another tube into a cooler. The acid is thus saved, and the lime remains behind in a caustic state. In the same way other salts may be decomposed; and it affords a very cheap mode of doing it, when it may become an object to do it on an extended scale.—*Me. Farmer.*

GOOD THINGS.—Good fences, good barns, good farm-houses, good stock, and good orchards.



PLAN OF A FARM HOUSE.

THE accompanying plan is designed to front south, with an elevation of thirteen feet from the sills to the roof. It should occupy somewhat elevated ground, sloping a little to the north, and should be raised on an underpinning to suit the ground. To give chambers to the size designated, the apex of the roof should be not less than 22 or 23 feet above the sills. It is highly proper to leave a *space* for air, between the finish of the chambers and the roof, which will prevent the rooms from becoming heated in summer.

The site should be selected with a view to the easy construction of drains from the sinks, bathing house, dairy, &c., directly to the piggery or barn yard.

It is of course expected a good farmer will have a good cellar, and in some situations, the best way of warming a house is by a hot-air furnace in the cellar. The size of the cellar, and its particular divisions, should of course depend on the wants or circumstances of the builder. In some cases it may be expedient to have it extend under the whole of the main body of the house.

It may be observed, however, that it is not advisable to store large quantities of vegetables under dwellings, as the exhalations from them, especially when unsound, are known to be decidedly prejudicial to health. Hence the *barn cellar*, and not that of the dwelling house, should be the repository of such vegetables as are wanted

for the use of domestic animals.

Directions in regard to warming houses by funaces, may be found in works relating to the subject, or may be obtained from persons engaged in their construction. There are various modes, but my own experience does not enable me to decide upon their relative advantages.

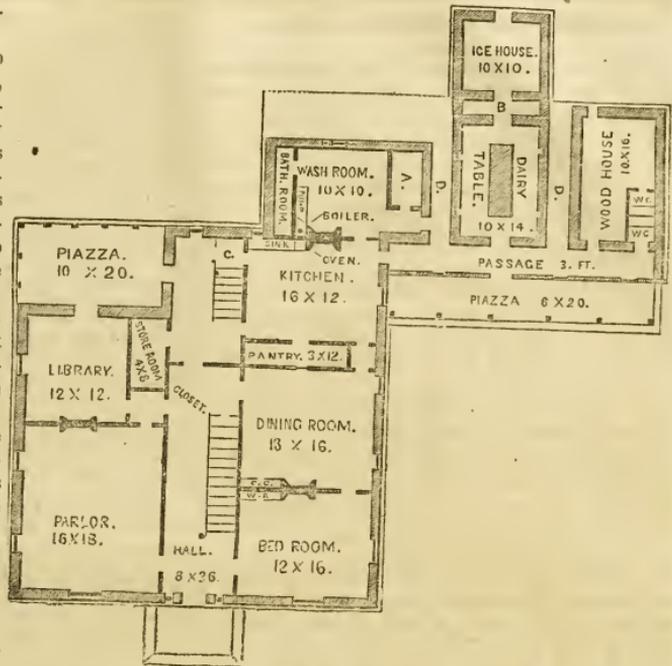
In the construction of this plan, it has been my object to combine utility and beauty, as far as practicable with the *labor-saving* principle. In the arrangement of the kitchen and dairy, particularly, special regard has been had to securing the proper requisites for those important departments with the greatest practicable degree of convenience.

In constructing a dairy, it is proper that such an excavation should be made as will leave the floor, which should be made of stones, two or three feet below the surrounding surface. The sides should be of brick or stone, and plastered; the walls high, and the windows made so as to shut out the light and admit the air. The advantage of *thorough ventilation* and pure air is acknowledged by every one who has ever paid attention to the manufacture of butter, though it is a matter generally too little thought of, in the construction of apartments for this purpose. It will be observed, that in the plan herewith submitted, an open space of 2½ feet has been provided for on three sides of the dairy.

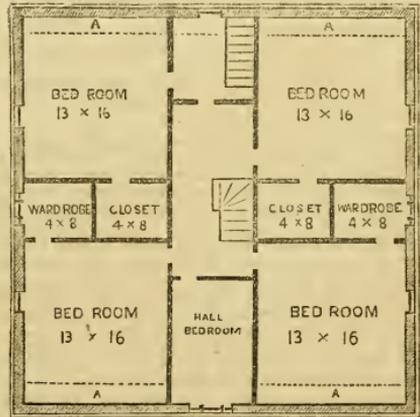
To render the establishment as perfect as possible, the command of a good spring of water, which may be conducted through the dairy room, is necessary; when that cannot be had, an ice-house in *direct contact*, (as in the accompanying plan,) and a good well of water convenient, form the best substitute.

The expense of such a house in this vicinity might be varied from \$1,500 to \$3,000—according to the style of finish, the taste and ability of the owner, &c. The main conveniences may be retained at the lowest estimate, by omitting the ornamental front. M. W. HOWARD.

THE preceding plan, which we copy from the *Transactions*, received the premium of the N. Y. State Ag. Society, at the January meeting, 1843. We think the ground plan a very good one, and a decided improvement upon many which have been presented to the public. The



GROUND PLAN.



SECOND FLOOR.

style of finish represented in the main view is too expensive for the generality of farmers, but that is a matter which can best be decided by the builder—according to his taste and ability.

In their report, the committee on Farm Buildings, say of this design—“The ground plan gives an excellent and convenient arrangement, which could not be better described than in the lady’s own words. The committee would say one word on the mode of warming houses by means of heated air from a furnace, which is adopted in the plan offered. The same correct notions of conveniences and comforts, that suggested in the plan many of its arrangements, also suggests this most effectual, most economical and least dangerous method of throwing a summer heat into all parts of even a large building. This supercedes all fires, excepting that essential bed of living coals in the kitchen.”

Experiments in Fattening Swine.

The last annual Patent Office Report contains the following interesting detail of experiments in feeding swine. It is from the pen of Hon. H. L. ELLSWORTH, formerly Commissioner of Patents, but now an extensive farmer at Lafayette, Indiana. Emanating from a reliable source, and founded upon careful experiments, the facts given must prove very valuable to all interested in the subject:—

On the 24th of May, 1847, I purchased four hogs, of the following weights:

No. 1 weighed 131 lbs. 4 oz.	} both together weighing
" 2 " 150 " 4 "		281 lbs., 8 oz.
" 3 " 157 " 4 "	} both together weighing
" 4 " 120 " 4 "		277 lbs., 8 oz.

I fed to Nos. 1 and 2, each three and a half pounds of Indian meal cooked, making to both seven pounds per day. The food I prepared as follows: I took fourteen pounds of meal, enough for two days, wet this with cold water to prevent lumps; then put it into a five gal iron kettle (full of boiling water, stirring it well,) covered over the kettle with a tight board; let the mush stand till morning; putting up dampers, the heat of the kettle and arches makes the mass boil for a long time without wood.

On the eighth of June, fifteen days,
No. 1 weighed 149 pounds, 13 ounces, a gain of 18 lbs. 9 oz.
" 2 " 165 " 13 " 15 " 9 "
Both together having gained 34 pounds 2 oz. in 15 days, and consumed 105 pounds of meal. If pork is worth 3 cents per pound gross, the gain in the hogs, viz 34 pounds, 2 ounces, is, \$1.02, equal to very nearly 1 cent per pound for the meal, viz. 56 pence per bushel, say 55 cents per bushel.

No. 3, as above on the 24th of May, weighed 157 lbs. 4 oz.
No. 4, " " " " 120 lbs. 4 oz.
Both together weighing ----- 277 lbs. 8 oz.
These I fed, on 14 lbs. corn, 7 lbs to each, per day, with water—on the 8th of June, 15 days,
No. 3 weighed 179 pounds, 13 ounces—gain 22 lbs. 9 oz.
No. 4 weighed 146 pounds—gain 25 lbs, 12 oz.
Together, 48 lbs. 5 oz. in 15 days.

Both together consumed 210 lbs of corn, just double the quantity of meal fed to the other two. The 48 lbs. 5 oz. of pork, at 3 cents per pound gross, amounts to \$1.45, making corn worth 38 2/3 cents per bushel of 56 lbs. The hogs had salt, generally in cakes, composed of ashes, 3 parts clay, one part saturated with salt, a most excellent mode of salting all kinds of stock. Those fed on corn drank freely of water. Those that eat mush would rarely drink any. After fifteen days the food was changed for twenty days; those that previously had corn lived on mush, and vice versa. No. 3 was much affected by the too rapid change from dry corn to mush, the stomach having been contracted by digestion, only required by the concentrated nourishment of dry corn, could not bear the sudden extension which mush gave it, each hog having about eight pounds of mush three times per day, equal to 24 pounds per day. Here I may remark, also, what seems incredible, that fourteen pounds of good corn meal, thoroughly cooked, will make 90 pounds of mush, so thick as not to run when taken out of the kettle. In the further experiment I omit No. 3, from the cause above, as being unwell, he did not gain over five pounds in twenty days. His case is added as a caution against too rapid change of diet. I proceed, therefore, with only the other three hogs, viz: Nos. 1, 2 and 4, and weighing as follows:

No. 1 weighed, on the 8th of June, 149 lbs. 13 oz.; on the 28th June, 179 lbs.—gain 29 lbs., 3 oz.
No. 2 weighed, on the 8th of June, 165 lbs. 13 oz.: on 28th June, 189 lbs.—gain 23 lbs. 3 oz.

Both together, having gained 52 lbs. 6 oz., in twenty days, and consumed, (at the rate of 14 pounds per day,) 280 lbs., equal to 52 lbs. 6 oz of pork, at three cents per pound gross, as before, which gives \$1.57, equal to thirty-one cents per bushel. This gain was less than the other experiment on corn, which is accounted for by the change of diet. No. 4, weighed on the 8th of June, 146 lbs., on the 28th of June, 166 lbs.—gain twenty pounds; just one

pound per day. He consumed just seventy pounds of meal cooked—twenty pounds of pork at three cents per pound gross, amounts to sixty cents; making the corn ground and cooked worth 48 cents per bushel.

Had not No. 4 suffered somewhat by a too rapid change of diet from corn to mush, he would, doubtless, have made the second experiment with the meal equal to the first experiment. Taking both experiments together, which is hardly fair, as the change from highly concentrated food to that far more expansive is disadvantageous—more so than from expansive to concentrated raw food is to the cooked food, as 63 to 103, making the gain by cooking, about 55 per cent. over uncooked food—or, three bushels of meal cooked, is equal to four and a half bushels of dry, hard corn. It is generally estimated, that if corn is cut up and fed to hogs that fifteen bushels will fatten each one—that is, give one hundred pounds of flesh. If hogs, at gross weight should be worth \$3 per hundred, this would make corn worth just twenty cents per bushel. The hogs, in this case were not confined in pens. If confined in pens, dry corn is worth thirty cents, and meal, cooked as above, is worth over fifty cents; so that there is a gain by grinding and cooking, over feeding in the field, of one hundred and fifty per cent. The expenses, however are to be deducted, and these depend on the price of wages, wood and milling. I am about to try Bogardus' mill, which it is said, will, with two horses, grind three hundred bushels of corn and cob in a day.

I further design to fix the mill so that the meal will fall directly into a tub or vat, where the grist, (corn and cob) can be cooked by steam, supplying the boiler and tub with water from a spring, making the mush just thin enough to run from the tub into troughs, thus avoiding all labor in drawing water or carrying the food. If one fifth is deducted for ofal, which is a fair estimate, net pork, at \$3.50 per hundred, is about equal to three cents, gross; or it is, as two hundred and eighty is to three hundred.

I am about making further experiments to test the value of feeding corn on the stalk, after being cut up, and also by turning hogs into the field. My present impression is, that the most profitable way to feed corn, all things considered, is to cut the corn as soon as it begins to turn hard; then hogs will eat corn, cob and stalk; then, too, the weather is mild, and swine will thrive much faster in September, October and November, than in December, January and February.

Where land is cheap and easily tilled, and labor dear, as in the west, it may be best to make hogs their own harvesters. Thus, prepare clover, oats, early corn and buckwheat, and let hogs eat them in succession. Rye, also, may be raised. The advantages of rye for stock have been underrated. It is a better improver of land, if fed off than oats; its roots are thicker and grow deeper; it affords nourishment, (if sown in August,) from November until the autumn of the following year. Young, green rye has one great advantage over green wheat or green oats: the two last are apt to scour stock, while rye is more nourishing without the relaxing qualities. Some highly respectable farmers prefer rye to clover. One thing is certain, rye can be sowed upon new land successfully, when clover would fail—rye can be scattered before the last plowing of corn; in this way calves can be wintered cheaper than in any other manner. Hogs will thrive remarkably well on green rye, and fatten on it when ripe. Taking, therefore, all things into consideration, rye should be placed much higher than it now is, in the comparative scale of valuable fodder plants. But to return to the subject of field feeding of hogs.

I mentioned the preparation of various crops, as clover, oats, early corn and buckwheat, to be fed upon in succession by the swine. These crops will last till the ordinary field corn is ripe enough. If a moveable fence is provided to confine the hogs to a small quantity, little is lost by field feeding, unless the weather is wet, when so much will be trampled in, that it is advisable to feed corn cut up and carried to a dry lot where there is water. There is a general mistake in putting in oats too late. It is well to plow the ground in the fall, when work on the farm does not press, and then seize the first moment to harrow in the oats in the spring. If peas are added to the oats, as was practiced on the North River, N. Y., when pork was the great staple there, it would be an improvement at the west.

A great error likewise has been committed in giving hogs too much age. At the west, hogs average over twenty months, thus subjecting the owner to the expense of win-

tering: at this age their average is net two hundred and fifty pounds. More than one half the fat made is run off by labor and travel; little food is allowed in winter and less in the fall and spring, and the hogs have to work for a living. In many cases they get stunted and never recover. It may here be mentioned that pig pork is worth more for domestic use or for shipment to England and France, than pork from older hogs. Indeed, a pig should be kept constantly growing and ought (and will, if properly attended) to increase one pound a day till killed, at ten or eleven months old, when he will weigh three hundred pounds if the breed is good. The doctrine that the breed is in the trough is not wholly correct—good hogs must also be fed, but there is as much (if not more) difference in hogs as cattle as to taking on fat. I have some so much inclined to fatten that it is difficult to reduce them sufficiently for breeders if they were placed even in common short pasture. Hogs to fatten best should not know what liberty is, they should have a warm dry bed,—their feed at regular hours and in sufficient quantities. As soon as the meal is over they then lie down and rest till the next feeding time comes round. Pushing hogs, however only to those intended for early killing; if extraordinary weight is desired, pigs should not be confined too closely or be too highly-fed for the first year; room and moderate exercise is favorable to the growth of bone and muscle. A pig that has been pampered for one year, will if taken then fall far below one of the same weight that has not been crowded if both are allowed the same diet afterwards.

I cannot omit to notice a fatal error among farmers in hazzarding all by new crosses. Many of the first breeds in this and other sections of the country have been spoiled by mixtures with the Berkshire, for while a cross with the Berkshire and the Wood breed of hogs could not but improve the stock, an equal improvement has not followed in crossing the former with the improved kinds. When a good breed has been obtained it should be kept till there is a certainty of getting a better. Crosses often do not improve stock, the experiment should be first made with a few hogs. There is another important fact to be attended to. It is desirable to breed in and in for one or two litters, until the breed becomes established. One cross may produce an improvement in the appearance of the pigs, but their progeny may partake fully of the male or female, neither of which is wanted. The great deterioration in hogs does not follow so much from breeding in and in as from injury to the male by excessive indulgence. The male should be kept up and not allowed more than one or two connections. If farmers would be particular on this point they will have better hogs and also find that the number of boar pigs will be increased fifty per cent. Such is the result of experiments in Europe as most fully tested.

STOCK RAISING AT THE WEST.

After a full consideration of the subject I am satisfied that stock raising at the west is much more profitable than growing small grain—indeed an examination, in the North-Western States, shows a vast difference in the wealth of the graziers over those who crop with grain. The profits of wheat appears well in expectation on papers, but this prospect is blasted by a severe winter, appearance of insects, a want of harvesting, bad weather in harvesting, in threshing, for there are few barns at the west, or transporting to market, and lastly, a fluctuation of the market itself. Some one of these is likely to happen, for very fortunate is that farmer who escapes them all. There is too another very important fact to be noticed. Constant cropping of corn and small grain carried from the field will of course diminish gradually, at least, the fertility, and the farm is at length worn out. On the contrary, by feeding the crop on the land, the farm every year grows better. I am making several experiments with stock, but shall not be able to complete them in time for your report this year. I have now on my farm one hundred breeding sows, which are expected to produce six hundred pigs in March and April. These I design to fatten by January, 1849, spaying the old sows and killing them at the same time as the pigs, reserving one hundred young sows, (also a few extraordinary old ones) to stock the farm for another year. This mode of farming enables me to gather my rent from distant farms with the least trouble and most profit, as I can notify the tenant when the rent gatherers are coming, and so continuing the collection of rent, leaving the farm nearest market till the last. It may seem to eastern men incredible

that such amounts of corn can be raised or purchased so cheap. It costs 2,50 to \$3 to hire land tilled in corn—the crop averages 50 bushels; thus making the corn in the field six cents per bushel, exclusive of rent of ground, which to a purchaser is very inconsiderable. One young man with two horses will tend easily forty acres, and raise two thousand bushels by three and a half month's labor.

Lafayette, Ind.

H. L. ELLSWORTH.

AMERICAN FARMERS.—Many thousand farmers in New England rear large families, pay all their debts and taxes promptly, live independently, well clothed and comfortably housed and provided for on farms of fifty acres. The idea is that these people labor severely. This is a great mistake. They have much, because they waste no time. With them there is "a place for every thing, and everything in its place." Their horses, cattle, tools and implements, are attended to with clock-like regularity. Nothing is put off till to-morrow that can be done to-day. Economy is wealth, and system affords ease. These men are seldom in a hurry, except in harvest time. And in long winter evenings or severe weather, which forbids employment out doors, one makes corn brooms, another shoes, a third is a carpenter, cooper or tailor; and one woman spins, another weaves, and a third plait "Lephorn bonnets." And the families thus occupied are among the most healthy and cheerful in the world. It is easy with them to reduce their wishes to their means, if convenient, or prudent, and to extend their means to their wishes.

IMPROVEMENT IN HARNESS.—We saw, says the Maine Farmer, not long since, in Alexander's Messenger, a notice of a certain contrivance or invention, patented by Thos. S. Speakman, of Philadelphia, to be applied to carts, drays, &c., for the very purpose above named. In the usual mode of harnessing horses into carts and drays, we have a chain passing from one shaft over the saddle on the horse's back to the other. This brings the weight of the shaft and part of the load on the horse's back, and it falls dead and heavy every time the wheels pass over obstacles, or over rough places and inequalities in the road.

To obviate this, and give the horse relief in this respect, Mr. S. fastens under each shaft a half elliptic spring, the centre of which is connected to the lower ends of the staple, which pass freely through a hole bored in the shaft and connect with the chain that passes over the back of the horse, by letting the load come down gradually and gently at each jolt, and not suddenly and violently, as in the common mode.

AN EXCELLENT PLAN FOR PREPARING GLUE.—To any quantity of glue use common whiskey instead of water. Put both together in a bottle, cork it tight and set it by for three or four days, when it will be fit for use without the application of heat. Glue thus prepared will keep for years, and it is at all times fit for use except in very cold weather, when it should be set in warm water before using.

EXTRACTS FROM OUR EXCHANGES.

"THE BENEFIT OF THE RISE."—Many farmers when selling their grain, sell for a certain sum, and with a stipulation that they shall have the benefit of the rise, for the season of navigation, or up to a certain period. As frequent litigations and much trouble often arise between buyers and sellers from the latter misunderstanding the construction put upon such contracts, we suggest to those who may labor under misapprehensions that in such case the seller must choose his price while current, before the expiration of the period. Should he neglect to do so until after that time, he could recover only the sum certain stipulated for. The case is different, however, where grain is sold, and the buyer agrees that the vender shall have for it the highest market price that grain may sell for during the period agreed upon, in the market where sold. The distinctions are frequently confounded. In the former case the vender runs his own risk with the buyer, while in the latter the buyer runs his own risk for the whole period.

GREAT CORN FIELD, AND GREAT COUNTRY.—A traveller writes to the Toledo Blade from the Wabash Valley: I viewed the 1,000 acre field of corn (on Wea Prairie, of the Hon. H. L. Ellsworth, late Commissioner of Patents, where this year 60,000 bushels will probably be raised without hoeing, simply plowing the corn two or three times. I may say, too, that I saw 5,000 acres, all adjoining.

Corn is raised by contract, for 4 to 6 cents per bushel, taken in the field. Hogs are raised on clover, oats, and corn, and it is not infrequent to find farms with 1,500 of these grunts. On the Grand Prairie, no less than 10,000 cattle, from one to four years old, were feeding in different herds, for the eastern market—one herdsman taking care of two to four hundred, for a compensation of ten cents per head, per month.

SWILL COOKERY.—Every farmer will want some sort of an apparatus to cook the food or swill for his hogs. Some set a kettle in brick, in a corner of the hog-house, which makes a very convenient apparatus. We have tried, in our day, all sorts of contrivances, steamers and boilers, of different patterns, shapes and sizes, but have never found anything so convenient as Mott's Patent Agricultural Furnace. It is a large kettle, fixed on to a stove. The whole is movable, and can be placed where most needed. They are of various sizes, from fifteen gallons to eighty or more. They are useful for a great many purposes. We have used one now for three years, and find it well worth the cost.

We have recommended this article before, to those who are in want of such fixtures, and have found no one as yet who ever procured one that regretted having made the purchase.—*Me. Farmer.*

WOOD ASHES BENEFICIAL TO MEADOWS.—Mr. S. R. Gray, of Salem, N. Y., informs us that, in the fall of 1845, he sowed 25 bushels of unleached ashes on two acres of meadow, situated on a hill side, facing the west, which had been mown annually for thirty years. The last crop of hay from this ground, preceding the application of the ashes, did not exceed half a ton to the acre; but the next year after (1846), it was more than double that quantity. The year following (1847,) the hay crop was mown three weeks earlier than usual, and was more than one fourth heavier than that of 1846.

Mr. G. attributes the increase of the last crop, in part, to the influence of a small stream of water, by which one half of the meadow was overflowed during the early part of the season; yet he concludes that the principal cause of the increase, was the application of the ashes, which he thinks amply repaid the cost.—*American Agriculturist.*

TO WELD IRON, STEEL AND SHEET IRON.—In an earthen vessel melt borax, and add to it 1-10th of sal-ammoniac. When these ingredients are properly fused and mixed, pour them out upon an iron plate and let them cool. There is thus obtained a glassy matter, to which is to be added an equal quantity of quick lime. The iron or steel which are to be soldered are first heated to redness; then this compound, first reduced to powder, is laid upon them—the composition melts and runs like sealing wax; the pieces are then replaced in the fire, taking care to heat them at a temperature far below that usually employed in welding; they are then withdrawn and hammered, and the surfaces will be found to be thus perfectly united. The author who is a Frenchman, asserts that this process, which may be applied to welding sheet iron tubes, never fails.

FARMERS, READ THE AGRICULTURAL PAPERS.—Not the older ones—they have no need of this superfluity of the nineteenth century; but the younger ones can thus learn something which their seniors are too wise to do. Read the best agricultural papers and journals; one, two, or three, if you can get them. Sift the chaff from the wheat, the bran from the flour, and make good digestible bread of the last. The expense of taking these is nothing comparatively. Look at your bills for extra horse trappings, cigars, tobacco, juleps, and nonsense of any kind, which you have both cash and leisure for, and you will find that you can take half a dozen of the best agricultural papers in the Union, with less than half the money you annually throw away in what is worse than useless.—*Amer. Ag.*

DRAIN YOUR LANDS.—Let not a particle of stagnant water lie on the surface, nor under the surface of the lands you cultivate. One of the best of all blessings is pure wholesome running water. But see that it is running, and not stagnant. The latter destroys all useful vegetation, all economy in working the land, all health, and all beauty of landscape. It is the loss of every thing as far as it extends, and breeds malaria and disease for cattle, and all domestic animals, equally with man. Manures are inoperative upon wet or moist lands. Do not content yourself with removing what is on the surface, for stagnant water, just below, is frequently equally prejudicial with that which is visible. This may be removed by under, as the former by surface drains.—*Id.*

A GOOD CROP OF WHEAT.—Mr. N. B. Moore, of this city, has harvested 34 bushels of winter wheat from one of seed. It grew on an acre and quarter of land. He had two-thirds or more of it ground into flour, which is excellent. The whole crop should have been kept for seed. Had the heads of wheat grown as long as they do in the Genesee Valley, he would have had 50 bushels. It tilled remarkably, but the soil was defective, lacking lime, sulphur, and phosphorus to make long ears, well filled with large and plump seeds. Gypsum, bones, and a little lime would remedy the defect. The manure applied to previous crops furnished all the elements for a noble yield of straw, but when the organization of wheat was in progress, the raw materials were not present in a large degree, and precisely adapted to the wants of Nature.—*Southern Cultivator.*

GREAT DAIRY FARM.—One of the greatest dairies, in our country, is that of Col. Meacham, of Pulaski, N. Y. His farm consists of 1000 acres, 300 of which are devoted to grass; and he keeps one hundred head of cattle, and ninety-seven cows. In one year he made 39,000 lbs. of cheese, 20,000 lbs. of which sold at one time, in New York, for 6½ to 7 cents per pound. He feeds his cows mostly on hay and carrots; of the latter, he raises 2000 bushels, and gives each cow half a bushel per day. And besides the benefit derived from his grass for his stock, he gathers not less than 300 bushels of grass seed.—*Patent Office Report.*

POTATOES.—From observation and pretty extensive inquiries, we are convinced that the potato disease has been much less destructive this year than last. In but few localities that we have heard of, has the crop been destroyed, or very seriously injured; while in general little or no harm has been done. The yield is said to be less than in former years, but it is not certain that this fact, if it be one, has any connection with the disease.—*Jour. Com.*

CHLOROFORM GIVEN TO HORSES.—A gentleman at Morristown, N. J., having a valuable but an unmanageable horse, and difficult to shoe, determined last week to try the effect of chloroform. He says: "Having procured about 2 ounces of it, I administered it by putting it in a sponge and letting him inhale it; the animal seemed to like it, and snuffed it up very eagerly; in a short time it had the desired effect, and he laid down quietly, when the smith put on the shoe while he remained as if asleep. In about 20 minutes he entirely recovered from the effects of it, and has since been perfectly well ever since."

CHICKEN WITH A HUMAN FACE.—We have heard, says the New Orleans Delta, a good deal of talk for the last few days, about a chicken with a human face, at the house of Madame Martin in Cole-street, near St. Phillip. We paid no attention to the droll stories which we heard, but at length were so pressed that we determined to see for ourselves. At the place mentioned, we saw a chicken, having, instead of a beak, a nose and mouth exactly conformable to those of a human face; the nostrils, the separating cartilage, the lips, tongue, chin, are all there. It was indeed a most singular *lusus naturæ*.

EDITOR'S TABLE.

TO CORRESPONDENTS.—Communications have been received, during the past month, from C. Thompson, Reed Burritt, S. W., *, E. Dage, J. Storrs, Jr., Fredric Williams, L. G. S. Gilbert, Walter Bowen, C. L. Morgan, W. B. Bowen, S., and a Subscriber and Young Farmer.

THE MONROE COUNTY FAIR, held in this city on the 4th and 5th of October, was numerously attended. The exhibition was much larger than any preceding one for several years—giving evidence of progress, and reflecting credit upon the farmers of the county. The show of Stock was very excellent—superior in some departments to that at the State Fair. The award of premiums, &c. have been published in the weekly papers. B. P. JOHNSON, Esq., of Albany, delivered a truly able and practical address, which was listened to with much attention by a large audience.

It affords us pleasure to state that, so far as we have received information, the Fairs held during the past two months throughout the State, have been better attended than formerly. The zeal manifested in sustaining the various Societies, and contributing to their annual shows, betokens the onward march of improvement among the agricultural population of the Empire State.

STATE AG. SOCIETY.—The next Annual Meeting of this Society is to be held in Albany, on the 17th of January ensuing. See notice, page 234.

We are requested to state that persons in this vicinity, who are entitled to Premiums, &c., from the State Society, can obtain them on application to the assistant Secretary, JOSEPH ALLEYN, Esq., of this city.

VERMONT STATE AGRICULTURIST.—This is the title of a new monthly journal commenced in July, several numbers of which we have just received. The numbers before us are well filled with appropriate matter, and we wish the enterprise abundant success. CASPER T. HOPKINS, Editor. Published by Hopkins & Clarke, Burlington, Vt., 16 quarto pages, at \$1 per annum.

PENNSYLVANIA CULTIVATOR.—We have received one number of a new periodical bearing this title, but as it has been lost or mislaid we cannot notice it particularly. It is the same size as this journal; and, we think, published at Harrisburg, Pa., at \$1 per annum.

S. W. COLE, Esq., has recently retired from the editorial management of the Boston Cultivator. We understand the old *New England Farmer* is to be revived under his auspices. Mr. C. is a good editor, and we are happy to know that his services in that capacity are still to be devoted to the interests of the agricultural community.

FAIR at COBOURG, C. W.—The committee appointed to examine and award premiums to foreign articles exhibited at the Fair at Cobourg, recommended that Diplomas be awarded as follows:

1. To Horace L. Emery, of Albany, N. Y., for Wheeler's Patent Horse Power and Threshing Machine.
2. To the same party, for a very large and superior collection of Agricultural Implements.
3. To Rapalje & Briggs, of Rochester, N. Y., who also exhibited a fine collection of Agricultural Implements.
4. To the same parties, for a Patent Pennock's Seed Drill exhibited by them.
5. To B. F. Smith, of Rochester, N. Y., for a Sash Machine, two Morticing Machines and two Straw Cutters.
6. To Martin Briggs, of Rochester, N. Y., for a Scale Beam and Weights for Wheat, presented by Joseph Alleyn, Esq., of Rochester.
7. To George Lundy, of Rochester, N. Y., for a Force Pump.

WHEELER'S HORSE POWER AND THRASHER.—These machines were exhibited in operation at the State Fair, at Buffalo, and also at the recent Fair in this city, and attracted much attention from the farmers and others present. They work well, and are cheap and durable—just the thing for farmers who do not grow grain extensively, but still have use for a power and thrasher. We are pleased to learn that the manufacturer—Mr. H. L. EMERY, proprietor of the Albany Agricultural Warehouse—is about to open a store in this city for the sale of these machines. It will afford our Western New York farmers an opportunity to examine and obtain them more readily than heretofore.

OUR NEXT VOLUME.—The Publisher is making such arrangements for issuing the ensuing volume of the *Farmer* as cannot fail of enhancing its value, and gratifying its numerous subscribers. It is to be printed upon new and beautiful type, and so improved in other respects as will probably render its typographical appearance unexceptionable. The additional aid promised from contributors, will tend to make its contents equally acceptable and valuable. The advertising cover will probably be omitted, but the volume will contain as much reading matter, and perhaps more, than the present one. The attention of agents, and others who desire to aid us in promoting the good cause by extending the circulation of this journal, is directed to the Publisher's notices on the first and last pages of our advertising department.

ONE of our subscribers who resides in Central N. York—a warm-hearted and influential friend of improvement, and a reader and voluntary agent of many of the best agricultural papers in the country—writes us as follows, in a letter of recent date:—

"I feel that the prosperity of the *GENESEE FARMER* is intimately connected with the future progress of improvements in Agriculture and Horticulture in a large portion of the States, if not essential to success. Its TOO LOW PRICE—its sterling qualities—its able Editors and Correspondents—demand, as they should receive, the aid of every friend of the cause it advocates."

OBITUARY.—We regret to notice, in the *Ohio Cultivator* of Oct. 1, an announcement of the decease of JANE LOVELL, wife of M. B. BATEHAM, Esq., editor of that journal. Mrs. B. died on the 25th of September, at Columbus. She had edited the Ladies' Department of the *Cultivator* for several months past, and many of its readers will sincerely deplore her early decease. Her husband, to whom she had been united less than a year, is bereft of an intelligent and amiable assistant and companion. He has the sympathies of many friends in this city and vicinity.

GODEY'S LADY'S BOOK.—This superb magazine continues its monthly visits with unflinching regularity. We consider it the best periodical of its class published in this country—and that is saying much in its favor. The November number already received, contains 40 engravings and 24 extra pages of reading matter. To those who wish a magazine of literature and fashion, we commend this as one which embodies much valuable reading, and comparatively little trashy nonsense. Published by L. A. GODEY, Philadelphia, Pa., at \$3 per annum, in advance.

AN ITEM IN FAVOR OF SHADE TREES.—The Baltimore Patriot says, the Shade trees which so thickly line the streets of Brooklyn, did much to restrain the progress of the flames at the recent fire. The flames crossed the streets except in the immediate direction of the wind. The protection from sparks and heat afforded by the trees not only to houses near the fire, but to the firemen and others in the streets, was so obvious, that it seems to us a sufficient reason, if there were no other, for recommending their more general cultivation in cities.

The beef packing business of Illinois is just commencing at Chicago. This year contracts have been made for cattle of 600 lbs. at \$3 25 per hundred. Cattle of lighter weight in proportion are lower, and this season it is expected prices will be favorable to the speculator; although as to this there is nothing certain.

MR. EZRA GORTON, of West Greece, in this county, recently presented us six onions of extra size and quality. They weighed nine and one fourth pounds. One of them measured 17 inches in circumference. Large and heavy onions, them.

GREAT OHIO DAIRY.—Father Cist tells the following "big one" in his Advertiser, which we would not believe if told by anybody else. What a host of "Milk-Maids" the 'individual' must employ:

"We have one individual who supplies Cincinnati with cheese, who has a dairy at which he makes cheeses from eleven hundred and fifty cows. As the cheese season lasts seven months, this is a product of four hundred and ninety-seven thousand pounds, which, at six cents per pound, is worth almost thirty thousand dollars."

ATTENTION is directed to an advertisement relative to the Agricultural Department of De Ruyter Institute, published in this number.

HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

November.

This month, though usually cold, bleak, and by no means tempting to garden or orchard labor, is nevertheless of great importance in the gardening year. Its great business is to secure well the crop just gathered, and next, to make all timely preparation for the coming Spring.

Bulbous roots, such as Tulips, Hyacinths, Crocus, Narcissus, &c., may yet be planted; (see remarks in last number.) Trees may be transplanted most of the month, in dry soils. To prevent the frost drawing them out, or mice girdling them, the earth should be banked up a foot and a half around the base; it can be leveled off in the spring. For small trees this is better than staking for a support.

Dahlia roots will require to be taken up, if not already done, and placed where they will be free from frost, and neither too damp nor too dry.

Tree seeds of many kinds may be sown now—such as plum, cherry and peach stones, apple and pear seeds—but only in dry, light, mellow ground.

Tender roses and other shrubs and plants must be protected in due season; the early hard frosts are the most injurious. Tea, Bourbon, and Chinese Roses may be taken up and placed under a common hot-bed frame, covered with boards and mats. They will winter better in this way than in a house. Hardy herbaceous perennial plants may now be taken up, divided and replanted. A little manure may be thrown over them to protect the crown.

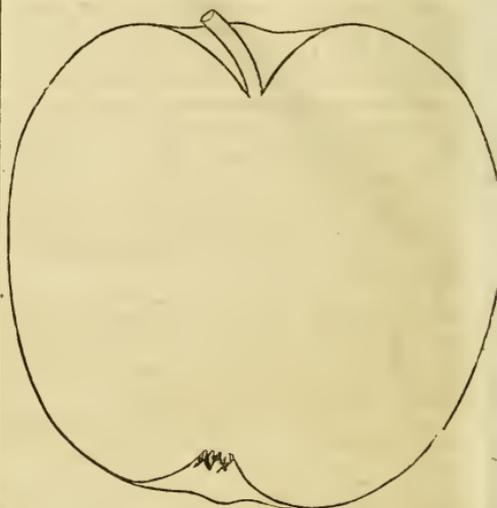
The latter end of the month, when the hurry of fall work subsides, is a good time to dig, trench or subsoil and manure land for next spring planting. Turf may be laid now; it should never be deferred till Spring, as dry hot weather comes too quickly on it. The fallen leaves should be gathered from lawns, and they should be swept and rolled to keep them in fine order.

There are multitudes of other things that will suggest themselves to every one whose mind and heart are really impressed with the care of a garden, and what pertains to it.

The Autumn Strawberry Apple.

This is a beautiful and excellent autumn fruit—rather above medium size, somewhat oblong, and slightly angular. Skin greenish yellow, striped and mottled with light red, and usually covered with a delicate bloom. Flesh white, a little coarse, but very juicy and crisp, with a pleasant, sprightly, sub-acid flavor. The tree is remarkably vigorous and erect in habit, ranking

in this respect with such as the Gravenstein and Northern Spy.



We have a couple of trees budded in 1844, that are now as large as ordinary 7 year planted trees, and each of them bore the past season over a peck of splendid fruit. We do not consider it a great bearer, but it bears fine moderate crops every year; and on the whole it can be recommended as worthy a place among the best orchard varieties. We have not been able to trace its origin or history. We obtained it from the Macedon Nurseries of Smith & Thomas.

The American Congress of Fruit Growers.

THIS body assembled pursuant to notice, in the city of New York, in the Lecture Room of the Mercantile Library, on the 10th day of October, at 11 o'clock, A. M. The Hon. JAS. P. TALLMADGE called the meeting to order, and stated its objects as set forth in the Circular issued by the several Associations with which the matter had originated. On motion of M. P. WILDER, Esq., of Mass., the Hon. JAMES P. TALLMADGE, was appointed President, and S. B. PARSONS, Secretary *pro tem*. The following gentlemen were then, on motion, appointed by the chair a committee to report to the Convention a list of officers for its government—Samuel Walker, of Massachusetts; Thos. Hancock, N. J.; S. B. Parsons, L. I.; J. W. Hayes, N. J.; and Thomas Allen, Missouri.

It was moved and carried that a Vice President be chosen from each state represented in the Convention.

On motion the chair appointed a business committee—J. J. Thomas and A. J. Downing, of New York, and R. S. Field, of N. Jersey.

On motion, the chair also appointed the following gentlemen a committee to receive and

report a list of fruits exhibited, and the names of contributors—Chas. Downing, Jas. Wilson and James Hogg, of New York; Josiah Lovett and R. Manning, of Mass.; Thos. P. James, of Penn.; and H. W. S. Cleveland, of N. Jersey.

The following committee was appointed to receive and report to the convention the names of all who are in attendance either as delegates or otherwise—B. P. Mead, of New York; W. B. Kingsbury, of Massachusetts, and S. B. Parsons, of Long Island.

A committee was then appointed to take charge of the Hall, and arrange the fruits. And on motion, the Convention adjourned till the following day, at 9 o'clock, A. M.

SECOND DAY.

The minutes of the proceedings of yesterday were read and approved. The Committee on the nomination of Officers presented the following report, which was accepted:

For President—MARSHALL P. WILDER, of Massachusetts.

Vice Presidents—W. D. Brinckle, M. D., of Penn.; R. T. Underhill, N. Y.; H. H. Crapo, Mass.; H. W. S. Cleveland, N. Jersey; A. S. Munson, Conn.; Thomas Allen, Missouri; A. McIntosh, Ohio; Russel Mattison, Vermont; Yardly Taylor, Va.; Lawrence Young, Ky.

Secretaries—S. B. Parsons and P. Barry, of New York, and Geo. W. Deacon, of N. Jersey.

Gen. TALLMADGE, with a few remarks, introduced the President to the chair.

Col. WILDER responded in a pertinent and appropriate manner, for the honor conferred in electing him to preside over the deliberations of the Convention. He said, they had assembled for the free interchange of experience and opinions, and for the better diffusion of correct pomological knowledge throughout our country—That it was particularly gratifying, to notice so large an attendance of members, but that amidst such congregated learning and intelligence, he had not the vanity to believe he could offer any remarks which would be of much instruction or interest—That many gentlemen had come from remote sections, and he knew how anxious they were to proceed to business. He should, therefore, not tax their patience with a speech, but at once invite attention to the objects for which the meeting had been convened, viz:

“To compare fruits from various sources and localities, with a view of arriving at correct conclusions as to their merits, and to settle doubtful points respecting them.

“To assist in determining the synonyms, by which the same fruit is known in different parts of the country.

“To compare opinions respecting the value of numerous varieties in cultivation, and to endeavor to abridge by general consent the long catalogue of indifferent or worthless sorts at the present time propagated by nurserymen and fruit growers.

“To elicit and disseminate pomological information and to maintain a cordial spirit of intercourse among horticulturists.”

Pomology, he said, had not until recently received the attention its importance demanded;

but that a new impulse and a general interest was now pervading the community on this subject, and that it was only necessary to give this a right direction, to make it productive of great good to ourselves, and of permanent advantage to those who come after us.

The business committee then reported the following Rules—which were adopted—

1st. During certain hours of the session the Special Fruit Committee shall be in sitting to examine fruits.

2d. All examinations of fruit presented during the present sitting of the Convention shall be made in the committee room, where statements to the committee must also be made.

3d. The result of their labors shall be made known to the Convention in successive reports during its sittings.

4th. In all the discussions which may arise in the Convention, no member shall speak more than five minutes, nor more than twice on the same subject.

On motion of A. J. Downing, the chair appointed a Special Fruit Committee, consisting of the following gentlemen:—A. J. Downing, Thomas Hancock, J. J. Thomas, Robert Buist, Robert Manning, Herman Wendell, Josiah Lovett, L. C. Eaton and George Gabriel.

The committee then reported a list of those who had presented fruits, and the number of varieties contributed by each. We have not room now to publish the list, as it was of great length. There were upwards of 100 collections exhibited, from various States. The display of apples, particularly, was probably the largest and finest ever before seen concentrated in one place in any country.

The largest collections were presented by Samuel Walker, of Massachusetts, 60 varieties of pears; R. Manning of Salem, 110 varieties of pears, 36 of apples and 3 of quinces; B. V. French, Mass., 73 varieties of apples; M. P. Wilder, Mass., 120 varieties of pears, and 4 of apples; F. R. Elliot & Co., Cleveland, Ohio, 31 varieties of apples and 12 of pears; A. McIntosh & Co., Ohio, 53 varieties of apples, 43 pears, 3 of quinces and 1 of medlars; Geo. B. Deacon, Burlington, N. J., 25 varieties of apples; Charles Hamilton, Orange county, 21 varieties of apples, and 3 of plums; Mr. Buell, Richfield, Conn., 32 varieties of apples; A. D. Williams, Roxbury, Mass., 10 varieties of pears; H. Wendell, M. D., 10 varieties of pears; Wilson, Thorburn & Co., Albany, 8 varieties of pears and 2 of apples; Jonathan Batley, Keesville, N. Y., 29 varieties of apples; J. C. Hastings, Clinton, N. Y., 16 varieties of apples; Thos. A. Smith, Syracuse, 5 varieties of pears, including a magnificent dish of Swan's Orange, or Onondoga; Thorp & Smith, Syracuse, 4 varieties Pears, and 27 of apples; Ellwanger, Barry & Rowe, Rochester, N. Y., 44 varieties of apples and 1 of pears; Thos. Hancock, N. J., 18 varieties of apples, 14 of pears, 2 of quinces, and 2 of peaches; B. Hodge, Buffalo, 27 varieties of apples and 19 of pears; C. Downing, Newburg, 21 varieties of apples, 2 of plums and 3 of grapes; W. S. Young, Queens Co., 30 varieties of apples; David Miller, Carlisle, Penn., 22 varieties of apples; J. W. Knevels, of Fishkill Landing, a splendid dish of Health Cling peaches, 6 varieties of pears and 4 of apples; A. Bryant & Sons, Buffalo, 39 varieties of apples and 17 of pears; J. R. Valk, Flushing, 12 varieties of grapes; W. R. Prince, Flushing, 35 varieties of pears, 10 of apples, and 8 of peaches; Jas. Arnold, New Bedford, 9 varieties of grapes; R. Buist, Philadelphia, the genuine Tripoli grape, (beautiful); J. M. Earle, Worcester, 13 varieties of apples and several of pears; J. J. Thomas, Macedon, 31 varieties of apples, and White Doyenne pears from a tree that had stood 20 years in grass, and bore this season 12 bushels of fair fruit; James H. Watts, Rochester, beautiful Northern Spy apples.

These are but a fraction of the contributions.

The Convention then discussed the propriety of preparing a list of rejected as well as good varieties, and various other topics, until the afternoon, when the Special Fruit Committee reported as follows :

REPORT OF THE SPECIAL FRUIT COMMITTEE.

THE Special Fruit Committee to whom has been assigned the duty of presenting select lists of fruits, respectfully report—

That, after consideration, they find it impossible, in the present state of pomological information, to offer to the Convention now assembled any extended list, comprising any considerable number of fruits worthy of general cultivation.

This embarrassment arises from two causes : first, in the fact that many excellent varieties, well known and highly approved in those sections of the Union where certain members of the committee reside, are either partially or wholly unknown in sections where other members reside, and consequently no unanimous action could be had on those varieties. Second, in the fact, that a large number of varieties are only well proved in certain localities, and therefore, from this very fact, cannot be recommended for general cultivation. They, therefore, conceive that the preparation of extended lists of varieties worthy to be recommended to the public generally by this Convention, is a labor which requires more time, research and experience, and can only be satisfactorily performed by a general committee, with sub-committees in various portions of the Union, which shall be in constant activity, for the purpose of acquiring this information in order to lay it in a satisfactory shape, before this Convention, at a future meeting.

It may seem to many members of this body an easy task to designate 50 or even 100 excellent fruits of any class for general cultivation ; but actual comparisons of facts and information on this subject, possessed by the different members of this committee, has convinced them that it is extremely difficult to get an unanimous verdict in favor of even ten varieties of any one class of fruits. There is such a diversity of experience, and consequently of opinion, respecting the merits of even well known varieties, that many fruits that have long enjoyed the most irreproachable character in one part of the country, are found on inquiry, to have the most indifferent reputation in another section. Indeed, so difficult is it from these causes, to do what at first sight seems so easy, that your committee have been reminded of the remark which an inexperienced politician once made to an eminent statesman in the political turmoil which was going forward—"why," said he, "why make all this noise and trouble about President ; why not agree on some good man and elect him at once."

Some other committee, more capable than the present one, might perhaps have been able to agree at once upon lists of 100 varieties of apples and pears ; but we have only, after considerable discussion, been able to resolve to submit the following very small lists—leaving to the future committees, with months instead of hours at their disposal, to arrive at more extended and complete results :—

APPLES. For General Cultivation.—Early Harvest, Large Yellow Bough, American Summer Pearmain, Gravenstein, Summer Rose, Early Strawberry, Fall Pippin, Rhode Island Greening, Baldwin, Roxbury Russet.

For Particular Localities.—Yellow Bellflower, Swaar, Esopus Spitzenburg, and Newtown Pippin.

PEARS. For General Cultivation.—Madeline, Dearborn's Seedling, Bloodgood, Tyson, Bartlett, Louise Bonne de Jersey (on quince) Seckel, Flemish Beauty, Beurre Bosc, Winter Nelis, Beurre d'Arremberg, Golden Beurre of Bilboa

For Certain Localities.—White Doyenne and Gray Doyenne.

PEACHES. For General Cultivation.—Grosse Mignone, Early York (serrated), Old Mixon Free, George the 4th, Coolidge's Favorite, Crawford's Late, Bergen's Yellow, Large Early York, Morris' White.

For Certain Localities.—Heath Cling.

PLUMS. For General Cultivation.—Jefferson, Washington, Green Gage, Purple Favorite, Coe's Golden Drop, Bleeker's Gage, Frost Gage, Purple Gage.

For Certain Localities.—Imperial Gage.

CHERRIES. For General Cultivation.—Black Eagle, May Duke, Graffion or Biggarra, Black Tartarian, Knights' Early Black, Downer's Late Red, Elton, Downton.

The report was taken up, and each variety discussed by the Convention. The discussion was one of great interest, and we shall at a future time refer to it. It will all be embodied in the report of the proceedings.

On the third day the subject of future meetings was brought forward by Dr. Herman Wendell, of Albany. He said it was well known to most of the gentlemen present that a North American Pomological Convention had been recently held at Buffalo, at which 12 States, as well as both the Canadas, were represented by large delegations of enlightened pomologists—and, previous to the adjournment of that Convention, feeling the necessity of continued and united action, a resolution was passed unanimously, "that a North American Pomological Convention for the year 1849 should be held on the day succeeding the close of the Annual Fair of the N. Y. State Ag. Society, at whatever place the Fair should be held ;" and such place was designated because it was generally understood that the Fair would be held somewhere in the vicinity of this city, and at a season of the year when most of the larger fruits are fit for examination. Cincinnati, Philadelphia and Baltimore were suggested, but the Convention unanimously agreed on the above place, and also authorized the Secretary of the N. Y. State Ag. Society to invite Horticultural and Agricultural Societies on this Continent to send delegates to it. He would, therefore, offer the following resolution :

Resolved, That the President of the Convention designate a Committee of one from each State and Territory represented here, whose duty it shall be to report, previous to the adjournment this morning, what action, if any, it is proper to take in regard to holding future pomological conventions.

A. J. Downing, Esq., moved as an amendment, that the same committee nominate a Standing Fruit Committee, to be composed of not more than five of the most skillful pomologists or fruit growers in each State ; whose duty it shall be, to collect all the information in their power on the fruits within their respective districts, and report the same at the next session of the Convention.

The resolution and amendment were adopted, and the chair appointed the following gentlemen such committee :

Herman Wendell, N. Y. ; S. Walker, Mass. ; George Gabriel, Conn. ; Russel Mattison, Vermont ; A. McIntosh, Ohio ; Dr. W. D. Brinkle, Penn. ; Yardly Taylor, Virginia ; L. C. Eaton, R. I. ; Thos. Allen, Missouri ; H. W. S. Cleveland, N. J. ; L. Young, of Kentucky ; and A. J. Downing, N. Y.

While this committee was in session the Convention proceeded with the discussion of fruits. Dr. Wendell presented the following report from the committee on future Conventions :

Resolved, That this Convention be designated the American Congress of Fruit Growers, and that the members or substitutes and officers thereof be regarded as holding their respective appointments for two sessions.

Resolved, That all Pomological, Horticultural and Agri-

cultural Associations of North America be invited to send delegates to this Congress.

Resolved, That at the close of the present session of this Congress it be adjourned to hold its second session in the city of New York, on the first Tuesday of October, 1849, and the following gentlemen to act as the Fruit Committee :

MARSHALL P. WILEER, of Massachusetts, *ex-officio*.

New York—A. J. Downing, Newburgh, chairman; J. J. Thomas, Macedon; H. Wendell, Albany; P. Barry, Rochester; B. Hodge, Buffalo.

Massachusetts—S. Walker, Boston; F. W. Macondry, Dorchester; P. B. Hovey, Cambridgeport; J. Lovett, Beverly; R. Manning, Salem.

Ohio—A. McIntosh, Cleveland; A. H. Ernst, Cincinnati; S. P. Hildreth, Columbus; F. J. Scott, Toledo; T. H. Humrickhouse, Coshocton.

Pennsylvania—Dr. W. D. Brinkle, Philadelphia; Thos. Hancock, Burlington, N. J.; E. W. Keyser, Philadelphia; Thos. P. James, do; Robert Buist, do.

New Jersey—H. W. S. Cleveland, Burlington; R. S. Field, Princeton; J. W. Hayes, Newark; J. S. Chambers, Trenton.

Connecticut—Geo. Gabriel, New Haven; A. S. Munson, do.; H. W. Perry, Hartford; Geo. Olmsted, East Hartford; V. M. Dow, New Haven.

Vermont—Russel Mattison, No. Bennington; Martin Slocum, Manchester; Chas. W. Goodrich, Burlington; B. F. Fay, Bennington.

Rhode Island—L. C. Eaton Providence; S. H. Smith, Smithfield; Alfred Smith, Newport; I. I. Stimpson, Providence; Mr. Comstock, do.

Maryland—Samuel Feart, Baltimore; Wm. Corse, do.; Lloyd N. Rogers, do.

Delaware—Dr. J. W. Thompson, Wilmington; Edward Tutnall, Jr., do; Jas. Canby, do.

District of Columbia—Joshua Pierce; J. F. Callan; Wm. Breckenbridge.

Kentucky—L. Young, Louisville; Ward Brown, Frankfort; H. Duncan, Fayette; Jas. Allen, Nelson; Geo. W. Messenger, Louisville.

Missouri—Thomas Allen, St. Louis; Lewis Bissell, do.; Jas. Sigerson, do.; Nicholas Reihl, do; Emile Mullenchrodt, do.

Illinois—Dr. J. A. Kennicott, Chicago; Jno. Wright, do.; J. Y. Scammon, do.; W. W. Arnold, Alton; Prof. J. W. Turner, Jacksonville.

Maine—Henry Little, Bangor; S. L. Goodale, Saco.

Indiana—J. D. G. Nelson, Fort Wayne; D. Irvinhart, Logansport; Mr. Scott, Madison.

Canada—Jno. Frothingham, Montreal; Dr. C. Beadle, St. Charles; Jas. Dougall, Amherstburg; Geo. Leslie, Toronto.

The Report was unanimously adopted. Some discussion arose in regard to the name, but the title of the report was confirmed by a vote.

A. J. Downing moved that a committee be appointed to draft a constitution for the American Congress of Fruit Growers, and report at the session of the ensuing year. The notice was carried and the chair appointed the following gentlemen such committee:—A. J. Downing, S. B. Parsons, J. W. Knevels.

These are the most important items in the proceedings of this great American Congress of Fruit Growers. We have been compelled to condense them as far as possible, so as to keep within the bounds allotted us. At a future time we shall take up the discussions on fruits, which we consider to be of the highest practical utility.

This Congress may truly be regarded as the most important public movement yet made on this continent, in connection with pomological science. It was not, nor could it have been expected to accomplish much beyond a complete organization. This is now effected. The ap-

pointment of the Standing Fruit Committee, consisting of the most skillful pomologists and fruit growers in the United States and Canada, is a grand movement; and if the Convention had accomplished this alone, it would not have assembled in vain. This committee, after a year of research, cannot fail, on reassembling, to make such a report as will be of infinite service to the country.

The proceedings and discussions throughout, with one trifling exception, were characterized by rare harmony, good feeling, and enjoyment. Indeed, it was not only an important deliberative body, assembled to promote the ends of science, but a delightful re-union of the most tasteful and intelligent cultivators of the soil from all parts of our country. The collection of fruits was imposing and beautiful, and afforded at all intervals of business, pleasant and profitable themes for discussion and remark. Flora was represented by two charming bouquets, that some tasteful hand had placed upon the tables.

Aside from the benefits to be derived from the public discussions and future action of this body, every member of the Convention must have felt himself amply paid for the trouble or expense in attending it, by the rare opportunity it afforded for the private interchange of facts, opinions and specimens of fruits, as well as the forming of new social and business relations. These are all invaluable acquisitions, and could not have been well obtained under other circumstances.

We should be wanting in duty, were we to neglect here, as a delegate, to express our acknowledgments to the American Institute for the liberality and kindness extended to the Convention, in preparing a suitable hall, in paying expenses on all fruits sent to it, and in admitting all the members free to their exhibition in Castle Garden—to the respective committees of arrangements, who discharged their arduous duties in the most satisfactory manner—to the distinguished President, MARSHALL P. WILDER, Esq., of Massachusetts, whose rare ability, forbearance and impartiality in the chair greatly facilitated the transaction of business, and secured that harmony of which it has been our pleasure to speak.

THE SEASON.—Frost has been exceedingly lenient with us, so far, this autumn. At this moment (Oct. 25) our Dahlias, Monthly Roses, Ten week Stocks, Petunias, and many annuals and perennials are in full bloom; indeed, better than at any previous period of the season.

A month ago, we had a frosty night that would have nipped the Dahlias, but we had the finest ones protected with mats, and so prolonged their season. The autumn with us has been highly favorable for transplanting;—the wood has ripened earlier than usual.

Cultivation of the grape.

MR. BARRY—*Sir*: I see in the last number of the *Genesee Farmer*, an inquiry respecting the best mode of manuring, pruning and cultivating the grape. A contribution to that object from practical experience may be useful. I have an Isabella grape which when I entered on my present residence I found spread and tangled to a great extent, having been trained over an arbor—a decidedly bad plan.

That was in June, 1846. I merely tied it up as well as I could, leaving it to fruit. The crop was tolerably large, of small, insipid fruit. The next winter the vine received a general heading and thinning out; the ground was stirred up with a fork, fresh soil was laid on, and a coating of ashes mixed in. The succeeding crop was improved, but still deficient in size and flavor. Last winter I gave the vine a general overhauling. First, I fixed on two string branches starting from the main trunk near the ground, and fastened them to the trellis horizontally. I then took my pruning knife and cut away several branches, some from the trunk, some from the arms which I had fastened along; a few being as thick as two fingers. Next I marked those branches from the horizontal arms which looked most promising for fruit, tied them up, four on each side of the trunk at intervals of 12 or 15 inches, and headed them down to 5 feet in height. I then selected branches between the spaces which I cut down to within two buds, one branch in each interval, and then cut away every thing else clean to the stock. The vine now looked really handsome.

In the Spring I removed superfluous buds, and lateral shoots. The fruit and wood branches grew vigorously this season, spreading all over peach trees that stand near. In September, I headed all down to within 4 or 5 buds of the trunk, and girdled at two buds distance from the trunk, and now need only say that few, if any in this neighborhood could show a finer crop of grapes, large, numerous and delicious. The ground was occasionally stirred and kept clean.

This winter I shall cut the fruit branches away to within two or three buds of the trunk, the intermediate wood branches being left for fruiting next season. In addition to the fresh soil and ashes, I have dug in from the ash hill a quantity of material that was mixed up, bones, old shoes, &c. The grape is a gross feeder.

I have several vines coming on, which I shall train, prune and cultivate in the same way.

It is unquestionably bad practice to allow the vines to fruit amidst such spreading, lengthening and entangling of branches as one sees almost everywhere. A friend showed me a vine that covered a wing and wood-shed, with a large quantity of fruit, *such as it was*.

My vine, I may add, when in fruit a few

weeks ago, was an object of great attention and admiration to all who saw it. Next season it will show still better, from the increased influence of manuring, &c.

Yours, &c., C. THOMPSON.

Rochester, October, 1848.

Mode of Preserving Peach Trees from Mildew.

MILDEW infests many kinds of plants, and assumes many different appearances. It attacks peaches and nectarines, (particularly the Tillotson, Early June, and other serrate varieties,) seizing the tender points of the shoots, which are quickly destroyed.

It has been ascertained by naturalists that the mildew is a species of Fungus, which attaches itself to certain plants when they are in a peculiar state of growth favorable to its nature. If this be so, it cannot with propriety be called a disease, though its effects are equally destructive. Luckily, it is a vegetable of a more delicate constitution than the plant it fixes upon, because it very soon yields to an application of soap-suds, or the following: slack two pounds of roach lime with about six gallons of water; after it stands sixteen or eighteen hours, pour off the pure water and mix it with four gallons of soap-suds. Syringe the trees once or twice with this mixture, at the time the mildew makes its appearance, and in a day or two it will disappear. This mixture appears also to nourish the trees, and give the leaves a verdure and luxury of appearance superior to anything I ever before witnessed. This I have practiced several times with great success.

To prevent the mildew in the month of May, syringe your trees with soap-suds, then dust them well with common sulphur; this prevents any attack of the mildew.

Yours, &c., E. DAGGE.

Mt. Hope Nurseries, Rochester, Oct., 1848.

Horticultural Humbugs.

THERE are a number of these which take periodical journeys in the papers, and are thus "rescued," as the *Prairie Farmer* says, "from drowning." Among them are, that the insertion of apple grafts in a potato before planting in the earth, insures their growth; that covering asparagus stalks with a bottle, the stalk will soon swell prodigiously and fill the bottle; that the exclusion of grubs from cabbage may be effected by a circle of salt; that transplanting evergreens is successful at midsummer; that by grafting or budding the peach on the willow, the fruit, "when" it grows, will have no stones; that plucking potato balls will cause a great increase in the tubers; that peach and apple seeds planted in the fruit, will infallibly re-produce the same variety; that the escape of sap, by pruning the grape in spring, will destroy the vine, &c.

Notices to Correspondents.

M. MACKIE, Clyde, N. Y. Your seedling apple is one of the best we have seen in a long time—combining large size, great beauty and excellent quality. We shall give a description, figure and account of it in a future number of the Farmer. We have no desire to increase the number of apples, still this variety is eminently worthy of culture—superior to many now in catalogue.

White Pearmain.—We know nothing about it. It is a large, fine looking apple, but not yet mature enough to judge of its quality. We shall speak of it more minutely as it ripens.

T. C. PETERS, Darien, N. Y. *Apples.*—No. 1, a rich, yellow fleshed, green apple. Don't know the name. No. 2, Herefordshire Pearmain, or Autumn Pearmain frequently called, a very fine fruit. No. 3, is a handsome, pale yellow sweet apple, of medium quality. No. 4, a green apple, with yellow flesh, exceedingly rich. No. 5 resembles Talmansweeting, but is more crisp and tender; will not keep so long. No. 6, Rambo. No. 7, Baldwin. No. 8, Sweet Russet, rich, but too dry. No. 9, Canada Reinette—a fine fruit. No. 10, cultivated as English and sometimes Poughkeepsie Russet. No. 11, too ripe; some sort of a Codlin. No. 12, don't know; looks well, but not mature enough to judge of it. No. 13, Esopus Spitzenburg. No. 14, don't know. No. 15, very large specimens of No. 7. No. 16, Swaar. No. 17, quite decayed.

HORACE HOLT, Webster, N. Y. Your apple is very large and showy—but coarse, and fit only for kitchen purposes.

CHAS. G. CORWIN, Port Gibson, N. Y. A handsome yellow sweet apple, but spongy and fit only for feeding stock—for which, if very productive, it may be valuable.

Orange Sweet.

TREE strong, vigorous grower; top wide spreading, and in the nursery inclined to throw out lateral branches very early; a regular annual bearer of abundant crops. Fruit of medium size, flattened at each end: of a pale yellow color, with a bright red cheek on the sunny side. Flesh yellowish, melting, full of rich saccharine juice. Ripe from the last of September to mid-winter. From its great productiveness, and the richness of the fruit, this tree is considered one of the most profitable sweet apples where it is known. Cultivated by J. SROOKS, Jr., Marathon, Cortland Co., N. Y.

Mr. SROOKS handed us a specimen of the fruit accompanied with the above note. It is truly one of the most delicious sweet apples we have seen, but is not the Orange Sweet, which is only a synonym of the Golden Sweeting. We have specimens before us of the same apple from J. MILTON EARLE, of Worcester, Mass., under the name of "Monson Sweeting." We shall get some account of it from Mr. EARLE. Meanwhile we can recommend it as an excellent fall and early winter sweet apple. We saw, at the late Convention or Congress, a sweet apple exhibited under the name of Northern Golden Sweeting, which struck us as being remarkably fine. It is cultivated by JONATHAN BATTEY, of Keeseville, N. Y.

GROWING PINE-APPLES BY STEAM.—A useful method of disposing of waste steam has been adopted by a gentleman in Philadelphia. He raises pine-apples with it. The steam is introduced under the roots of the plants, and the combined heat and moisture act so powerfully that the pine-apple is soon ripened, while the body of the plant, being all day exposed to the open air, assumes a healthy and agreeable taste, which renders the fruit far superior to those ripened in the hot house.

LADIES' DEPARTMENT.

Music Among the Milk-Maids.

We have received several communications in reply to the article of S. W., published in our April number—page 115. A lack of space, (as well as sympathy for our correspondent,) has prevented us from inserting them heretofore—and we have only room, now, to give the subjoined:

MESSRS. EDITORS:—The farmers' daughters thank Mr. S. W. for the trouble he has taken to learn them something useful. But we should like to know if he would prefer to have us deaf and blind to all the wonders of the age; and if he thinks we have no taste for the fine arts, as they are called—such as music, painting, dancing, &c., which he advises us to lay aside, and learn something useful in preference. Now I hope he will not think it at all strange if I should ask him the question, is it not advisable for the daughters of residents of cities and villages to learn something useful, in the place of studying music and almost all the branches of art to be accomplished belles, or perhaps reading novels to pass away the time agreeably—while their mothers, who perhaps are farmers' daughters, are at work in the kitchen, which ought to be the daughter's place, instead of making calls and receiving company? But, alas, how true it is that we behold our cities and villages filled with intelligent looking young ladies, who are not capable of superintending the getting of a meal of victuals!

A MILK-MAID.

WOULD our friend S. W. suppose that farmers' daughters are insensible to the thrilling sounds of music, when the carol of a thousand sweet voices call them forth to their tasks at early dawn; that are performed before the smoke of the village chimneys grace the air? The dairy is in order, breakfast over, and the city Miss is still locked in the arms of Morpheus: while we have an hour to devote to music, that calls forth all the finer feelings—all that is good and lovely in nature and mind—and it inspires us with a devotion that points Heavenward, from whence no sound returns. It also lulls the smiling infant to sleep, stills the noisy urchin, and holds the raving maniac spell-bound; even the brute creation are not insensible to its sweet voice.

But perhaps our organs of hearing are not so refined as those of our friend S. W.; but it is an age of progression, as he says, and he must expect all to move on in the progress. And if we touch a jarring note of the sweet-toned piano, it does not create discord within us; and we touch the keys lightly and try it again. But for our part, our own music, like the crows, is sweet to ourselves whether it springs from a well-toned piano or a spinning wheel; and reason teaches us that all cannot be pianists and poets, "no more than a sheep can be a goat," as the printer said.

As friend S. W. has taken the pains to write against milk-maids turning pianists, I shall suppose he is a shrewd, rich old bachelor in quest of a wife (by a glance at your March number,) to hear him talk of Valentines and billetdoux; but he must not come to Wayne county, among the milk-maids, dairy-maid-pianists, and maids-of-all-work, for we should think him officious and that he wanted to manage both in doors and out, and thought more of the contents that filled his pocket than the comfort and happiness of his wife and children. But we hope to be so employed that we may be both useful and respectable, independent and dependent on all.

A DAIRY-MAID.

Wayne County, May, 1848.

POTATO CHEESE.—In some parts of Saxony, potatoes of the best quality are dressed in steam, peeled, and reduced to a pulp. Five pounds of this are mixed with about ten pounds of sweet curd kneaded together, with the addition of some salt; after lying for a few days, the mixture is again kneaded, pressed into little baskets, where the superfluous moisture drains off and the cheese is then formed into balls, and dried in the shade. These cheeses are said to keep well, when dry, and their taste and quality improve with age, with the advantage that they generate no vermin.

Arithmetical Questions for Boys.

Two men having a necessity for 50 dollars each, to make a land payment, agreed to make me 100 rods of ditch for 100 dollars. On examining it for a division, one end was found so much harder of excavation than the other, that it was agreed, that one should have \$1.25 per rod, and the other 75 cents. Now how shall it be divided, and how much must each one do to earn his 50 dollars at that ratio ?

THREE men being obliged to carry a straight stick of timber 20 feet long—two carrying with a handspike, and the other at the extreme end—where shall the two men place their handspike to lift equal weight each, with him at the end ?

THE year A. D. 1764 and 1936 are square years—that is, years which there are two numbers which multiplied by themselves produce the year; and there is an intermediate one only possessing the same peculiarities. Which year is it ?

THE year 1848 possesses this singularity, that it is divisible by no less than 30 different divisors. Name them. L.

USE OF ADVERSITY.—Do not expect nor desire continued prosperity. A good spice of adversity is the very thing you need, to give strength, vigor, and elasticity to the mind, and, in fact, to mature and perfect the whole man, body and soul. Sun and shade, wet and dry, cold and heat, are what is wanted to produce and ripen good fruit. A few storms only serve to make the tree root the deeper and stand the firmer. Hard rubs will polish the diamond and make it shine more brilliantly. Brushing will purify the garment and make it all the better.

ELECTION CAKE.—Old fashioned election cake is made of four pounds of flour; three quarters of a pound of butter; four eggs; one pound of sugar; one pound of currants or raisins if you choose; half a pint of good yeast; wet it with milk as soft as it can be and be moulded on a board. Set to rise over night in winter; in warm weather, three hours is usually enough for it to rise. A loaf, the size of common flour bread, should bake three-quarters of an hour.—*Am. Frug. Housekeeper.*

Annual Meeting of the N. Y. State Ag. Society.

THE Annual Meeting of the Society will be held at Albany, on the 3d Wednesday, (17th) of January, 1849. Premiums will be awarded on Grain and Root crops, Butter, Cheese, Fruits, &c.

Statements should be furnished the Secretary early in January. It is desirable there should be a full representation from the County Societies, as well as of the friends of agriculture generally.

A Pomological Exhibition will be held at the Rooms of Society, and growers of fruit are respectfully requested to forward specimens to the Secretary as early, if practicable, as the 15th of January.

November 1, 1848. B. P. JOHNSON, Secretary.

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MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,.....	\$1 00	1 12	Pork, bbl. mess	14 75	15 00
Corn,.....	48	50	Pork, cwt.,...		
Barley,.....	50	56	Beef, cwt.,...		
Oats,.....	26	28	Lard, lb.,.....	7	8
Flour,.....	5 00	5 25	Butter, lb.,...	12	14
Beans,.....	75		Cheese, lb.,...	5	6
Apples, bush.			Eggs, doz.,...	9	10
Potatoes,.....	20	30	Poultry,.....		
Clover Seed,...	4 00	4 75	Tallow,.....	6	7
Timothy,.....	2 00	2 50	Maple Sugar,...		
Hay, ton,.....	10 00	11 60	Sheep Skins,...	12	15
Wood, cord,...	2 25	3 50	Green Hides,lb	3	4
Salt, bbl,.....	1 25	1 38	Dry ".....	7	8
Hams, lb,.....	3		Calf Skins,...	10	

Rochester, October 25, 1848.

New York Market.

New-York, Oct. 25—7 P. M.

The announcement of the steamer Europa about 3 o'clock affected transactions in breadstuffs, as shippers were unwilling to operate until they had received their letters.

Flour.—Market active. Prices are without important change, but the sales show occasionally a decline of 6d on yesterday's rates. Some mixed lots sold at \$5.31½, but the bulk of the sales were at \$5.37½ for Oswego and other straight brands; Michigan and Ohio sold at \$5.37 a 5.44; pure Genesee \$5.50 a 5.50½. Transactions add up 10,000 bbls, of which 6 or 6000 were for export. MEAL Is \$3.37 for Jersey; Rye Flour \$4.62½.

GRAIN.—The milling demand for Wheat is good, but quotations heavy. Sale 6000 bu. Chicago and other western red at \$1.05; 9000 do Ohio at \$1.11; 5000 Genesee \$1.25 a 1.27.

COYS was inactive and without change; sales 10,000 at 67 a 68 for mixed, and 73 for Pennsylvania yellow.

RYE quiet at 73c delivered; OATS 24 a 24½; nothing doing in Barley.

PROVISIONS.—Pork is \$8.62½ a 12.50; Beef \$5.50 and \$10 a 10.50, and dull; 100 bbls Lard sold at 7½. Butter heavy, Cheese in fair enquiry.

Exports from 1st to 24th of October.

Flour, barrels.....	15,603
Wheat, bushels.....	209,000
Corn,.....	1,428,000

GENESEE FARMER.—We call the attention of the reader to the advertisement of this paper, and cordially recommend it to our readers. It has attained a very extensive circulation, and certainly merits it. One of its editors, Dr. Lee, is the ablest writer on Agricultural Chemistry we know in the country.—*Louisville (Ky.) Journal.*

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THE GENESEE FARMER:

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P. BARRY, Conductor of Horticultural Department.

FIFTY CENTS A YEAR:

Five copies for \$2. and any larger number at the same rate, if directed to individuals. Eight copies for \$3, if only directed to one person—and any larger number, addressed in like manner, at the same rate. All subscriptions payable in advance, and to commence with the volume. ☞ Back numbers supplied to new subscribers.

The present number closes the Ninth Volume of the GENESEE FARMER. Annual custom, and a desire to express appropriate acknowledgments, alike constrain us to solicit the attention of our numerous patrons, while we briefly recapitulate the past and allude to the future. And if our remarks appear ungraceful, or even bear the semblance of egotism, we can only assure the reader that they are the emanation of sincere and grateful emotions. The occasion may also be cited as an apology for alluding to our business affairs.

The writer commenced the publication of the FARMER in January, 1846, with less than three thousand subscribers—and contrary to the advice of many personal friends, who considered the attempt to increase its circulation and business worse than doubtful. But we judged differently, after surveying the whole field thoroughly, and making a careful calculation as to the probabilities of success. We also had the satisfaction of knowing that, whatever might be the result, we were embarking in a good cause. Young and sanguine, and not blessed with a surplus of the current coin of the realm, we expended all we had to start the enterprise properly—confidently believing our efforts would not be in vain, but that the Agriculturists of the Country would second our humble, yet earnest and faithful, endeavors to promote their interests. We did not expect to realize any profit for a year or two—but were hopeful enough to “cast our bread upon the waters,” with a firm reliance upon the future for a proper return. A portion of that future has come, and thus far our anticipations are more than realized. The result proves that our confidence in the READING and THINKING farmers of the land was not misplaced. Instead of the meagre subscription with which we commenced, the Farmer now has a much greater circulation than any other Agricultural Journal published in the United States. But this result has not been accomplished by us, nor by our

associates. For the great success and popularity of the Farmer, we are indebted to numerous generous and influential persons residing in various sections of the Union. They have aided us in every suitable manner—in the capacity of Contributors, Agents, and Subscribers—and it is to them that the thanks of our readers, and our own acknowledgments, are due for whatever benefit has accrued to community through the pages of this publication. We trust that we duly appreciate the many favors bestowed upon the enterprise—and, whether extended to us individually, or, as is most probable, to advance the cause in which we are engaged, we tender grateful acknowledgments. But perhaps the best return we can make, is an assurance of renewed efforts in behalf of the great National Cause of Rural Improvement. This we cheerfully give, for our heart is in the work.

Our tenth volume will commence on the first of January next, and we shall endeavor to make it superior, in every respect, to any preceding one. The pledges made at the commencement of the present year have been, at least, redeemed—for we have given more reading matter, and a larger number of illustrations, than was promised. But we are determined to accomplish still more during the ensuing year. The typographical execution and appearance of the Farmer will be materially improved, while no effort will be spared to make its CONTENTS such as will SUSTAIN and AUGMENT the enviable reputation it has already acquired. We believe that, with a continuance of the kind offices of our friends in its behalf, we can make the Farmer at least equal to any of its cotemporary journals, although we furnish it at half the price of the self-styled leading periodicals devoted to the same subjects. If we can furnish for 50 cents, what many of our readers have been in the habit of paying one or two dollars for, the fact that the CHEAPEST agricultural literature is the MOST PROFITABLE will be fully substantiated.

But in order to attain this object, an extensive and reliable patronage is necessary. And why should not the GENESEE FARMER have a circulation of *one hundred thousand*, instead of twenty thousand, in a Nation of nearly twenty-three millions, a large majority of whom are cultivators of the soil, and would be benefited by its perusal? Thousands would readily subscribe for it, if invited to do so by a friend or neighbor—and we respectfully request each and all who can consistently, to lend their influence toward extending the circulation and augmenting the usefulness of the FARMER and similar Journals.

Dairy Business, Stock Raising and Wool Growing in the Mountains.

THE Highlands of Virginia, North Carolina, Tennessee, Georgia and Alabama, where indigenous and cultivated grasses flourish in great perfection, offer superior advantages for the extensive manufacture of butter and cheese, and the raising of neat cattle, horses, mules, hogs and sheep. These mountains and elevated plains are interspersed with beautiful valleys of surpassing fertility. The healthfulness of this whole region is proverbial, and nothing but the lack of good roads to the Atlantic cities, and the fact of the existence of slavery in those States, have prevented the settlement of the Alleghany Mountains from Virginia to the Mississippi. The want of roads is beginning to disappear. The shrill whistle of the locomotive has already frightened the wild beasts from their dens and haunts in not a few localities, to which they will never return. Seeing a drove of fine hogs in the streets of Augusta a few days since, we asked the drivers where they were raised? The answer was in Tennessee, and that they were brought by railroad from within 46 miles of that State, and of the great river that gives it its name, for about 65 cents a head. Drovers of fat cattle are brought down to tide water at Charleston and Savannah, by a similar conveyance. In Hamilton County, where these swine and cattle mostly start from, corn is now selling at ten cents a bushel, and wheat at fifty cents. These prices do not indicate *poor* land. Rail Roads will soon be extended from Cherokee in Georgia, to Nashville and Knoxville in Tennessee—the whole being, we believe, under contract. Two lines of steamers ply regularly between the cities of Savannah and Charleston and New York; and we get pine apples and other tropical fruits from Havana, in three days by steam. The cotton and sugar productions of the Southern States, and the adjacent West India Islands, furnish the best markets in the world for meat, good butter and cheese.

There are but two cheese dairies in all Georgia, and these belong to New England families. They are making money easier than the thousands that dig for gold and wash it from primitive sands; although the latter in the main is a profitable business. Their new cheese is sold at from 12 to 16 cents a pound. In the grazing districts of the up country, fair cows sell at from \$7 to \$10. Good butter brings at this time, in Augusta, 31 cents at retail.

Our attention has been of late much drawn to stock-growing and the dairy business in the Mountains, by the receipt of letters from gentlemen of wealth in Western Virginia, North Carolina, South Carolina, Tennessee and Georgia, asking us to aid them in procuring from

the North, farmers that understand the care of Cheese Dairies, and the making of choice Butter. Such young men as are not well off where they are, and understand the business indicated, can obtain desirable situations, if honest and industrious. They will have to instruct common laborers of both sexes how to milk, and perform all the work in dairies of one or two hundred cows each. They could readily obtain a share in the profits of raising cattle, making pork, butter and cheese, if preferred.

Mr. WILLIAM SLOAN, of Tranquilla, Macon County, N. C., writes us that he is the owner of a fine valley, under the crest of the Blue Ridge, and makes mining for gold his principal business, which is profitable. But his capital invested in stock raising is not less productive than mining. He wants a competent man to take charge of an extensive dairy establishment which can be started on his land. His place is 46 miles north of the village of Pendleton, South Carolina. His "valley" is about 4000 feet above the level of the ocean. We could name other gentlemen very similarly situated. A man of moderate means can easily start the business on his own account, as both land and cows are cheap. A late emigrant from Holland, who has located in Hamilton county, Tenn., states, in an article published in the October number of the Albany Cultivator, that he bought his land at \$1,25 an acre, for dairy purposes. The writer of this has been offered 50,000 acres on the table lands of that State, since he has been South, at ten cents an acre. These are said to be covered with natural grass and herbage, which render them fine sheep walks. In northern Alabama and Georgia, sheep are kept the year round without feeding any thing beside what they gather for themselves. From Pennsylvania to the "father of waters," the Highlands, in which rise all the large streams that flow into the Atlantic and the Gulf of Mexico, are very sparsely settled, and present peculiar advantages for making beef, pork, butter, wool, &c., and getting them to market. A bag of cotton weighing over 400 lbs. is sent by steam boat from this to Savannah at 50 cents; and to Charleston by rail-way at \$1. The road from the Northwest brings down to this city about 1000 bales a day. A good deal of flour, wheat, corn and bacon is brought here from the Cherokee country. Two large flouring mills are going up in this city, to be driven by water power, which is equal to that at Lowell. There are some thirty-five cotton factories in the State, which are doing well.

Many will be interested to learn that the spirit of improvement is beginning to pervade all classes at the South. Its agricultural and manufacturing capabilities are about to be developed in steady, sober earnest. Industry, Capital and Intellect can work wonders anywhere.

In the excellent grazing zone pointed out by us, so abounding in pure air, pure water, and delicious fruits, and withal so accessible to the seaboard and the markets of the world, common intelligence and industry will be sure to prosper. The people are remarkable for their kindness, hospitality and attachment to reputable neighbors. There are very few slaves in the mountain portions of Virginia, North and South Carolina, Georgia, Tennessee and Alabama. White men labor in all these regions just as they do in New Hampshire and Vermont. White clover, timothy, red top, blue grass, wild pea vines and other herbage for cattle, sheep and horses, abound. The demand for mules in all the planting portions of South Carolina, Georgia, Alabama, Mississippi, Louisiana and Texas, to say nothing of Cuba and other islands, is enormous. Canada and Vermont horses sell at very high prices in this section. A bull raised in Westchester and just brought out, sold at \$500. First rate milkers sell at \$40 to \$100. The annual consumption of blankets and coarse cloth by some 3,000,000 negroes, is obviously very large. Wool for these blankets, and factories for making them, will soon abound in the valleys and on the hills of the great Alleghany range of mountains. Their invaluable minerals, from cheap iron and coal to costly gems and precious gold, are destined to employ millions of laborers, and thus create a home market for all that the farmer produces.

When will civilized man tire of constructing rail-roads, locomotives, cars and steamships? The Coal and Iron which so abound on the Atlantic slope of the Alleghanies, from Pennsylvania to Alabama, inclusive, are soon to be turned to a valuable account. To the agriculturist they are full of promise. Think of a mountain farmer whose corn is now worth only ten cents a bushel; having a good rail-road brought to his door, on which he can send 100 fat hogs to an Atlantic city for \$65! Such of my readers as have seen wheat sold, before the Erie Canal was made, in Western New York at 30 cents a bushel, as the writer has, will appreciate the value of an iron-way with cheap fuel, to drive 1000 tons at a load, over a slightly inclined plane down to Salt Water. No reader of the *Genesee Farmer* will despise the Iron Horse. He is the offspring of cultivated Reason—the diffuser of civilization—the enduring friend of truth, justice, comfort, science and religion. The Press and the Locomotive are elements of moral power, by which kings, emperors, lords, tyrants, ignorance, error and wrong in every form, will be tried as by fire. Had St. Paul seen a dozen power-presses at work, driven by a steam engine, and as many locomotives each hauling a train of cars a third of a mile in length, and with the speed of a race horse, he would have been assured that “all things” were to be “proved,” that what is “good” may be “held fast to” by moral man.

Draining Lands.

AFTER Prof. NORTON, of Yale College, had concluded his able and interesting lecture at the recent Fair in Buffalo, a short discussion was had on the subject of Draining. In the course of this, remarks were made by intelligent gentlemen which convinced us that this important matter is less understood, and less practiced than is desirable. The objects of draining are twofold; First, to get rid of any excess of water on the ground as it falls on the surface of the earth; and secondly, to remove all excess in the subsoil. Surface draining and Subsoil draining are best effected by very unlike operations. Open ditches are the things for the economical removal of surface water; and covered drains for drying soils rendered too wet by springs, or water that rises from below the surface. At the South, open drains are exclusively used for both purposes, and greatly to the benefit of many fields.

Deep tillage doubles the capacity of the soil to hold the water that falls in showers without injury; and to that extent prevents its washing. This often removes the necessity for ditches of any kind to carry it off. It is characteristic of poor, thin hard soils that a large share of the water which falls upon them in the course of a year, runs off immediately. It is indicative of a good soil if it will imbibe and retain much water, diffused so deeply as not to have the surface nor subsoil too wet for cultivated plants. Whatever of the organic and inorganic elements of plants the earth contains in a soluble condition, this water will dissolve. So long as there is no lack of moisture in the ground, its evaporation from the many leaves of plants will be free and constant. The free ascent of water through the roots and stems of vegetables to their leaves, carrying with it much nutriment, (which does not escape with the water in vapor,) will cause these plants to grow rapidly. To supply a crop with all the water it needs in a dry season, the earth to a considerable depth must possess a peculiar mechanical texture, adapted to the holding of this liquid in a harmless diffusion. The aggregate supply must be larger than farmers who have never studied solar evaporation, are apt to believe. Our researches lead to the conviction, that, for the perfection of human culture, very little more water falls in the United States in spring and summer than should be retained where it falls on the bibulous earth, for the full growth and maturity of vegetation.

With deep tilth and suitable underdrains where the soil is compact, very little surface draining will ever be required. Many doubt the effects of drains three feet deep and covered, to carry off the excess of moisture in the subsoil to the distance of 20 or even 10 feet from the line of the drain. We have never seen or heard of

fair trials made in this country; but from the accounts published of draining compact clay soils in England, we see no reason to doubt their efficacy. Have any of our readers had experience in underdraining what would be regarded as impervious clay subsoils? Is it absolutely requisite that all such lands should be thrown up into undulating surfaces, for surface draining? We have long recommended this in our public lectures; but are not satisfied of its being strictly necessary where subsoil plowing and underdraining are practiced. If mellowing land four inches deep will enable it to absorb a third of all the water that falls in ordinary rain, should not its tillage twelve inches in depth, give it power to imbibe three times more, or the whole of the water?

There is a good deal of surface draining at the South. Some plantations on the Savannah bottoms have 20 miles of ditches on a single farm. These fill up rapidly by reason of the flowing of muddy water into them from plowed land. Few are aware of the annual expense of cleaning these open drains. If covered ones would answer as well to remove all excess of moisture in the soil, over which the plow could work, they would be much cheaper in the long run. The earth acting as a filterer, all water that passed into the drain three feet below the surface, would be as clear as that from the purest springs; and of course no sediment would be conveyed into the drains to choke it up. As logs and brush in mill-dams, where constantly wet and partially excluded from the air, last for ages, so brush and poles placed three feet under ground, with the atmosphere excluded in a good degree, and kept wet, will doubtless last a half century or more. We could quote instances in point, as found by experience in England and Scotland, did we regard the fact as a mooted question. Our impression is, that these underdrains will carry off so much water from the subsoil as to render surface draining generally unnecessary. How thick they should be, will depend much on the closeness of the subsoil. If this be not compact, 10 under-drains will be required; for the water will sink deep into the earth, as fast as is desirable on deeply plowed land. How far apart these covered water courses ought to be, is a matter to be judged of and decided in each case by the operation. Abundant experience in England has shown that drains three feet deep are decidedly better than those of a less depth. The economical construction of these will form the subject of another article.

DRINK AND DISEASE.—It is remarkable that all the diseases caused from drinking spirituous liquors are liable to become hereditary, even to the third generation, and gradually increase, if the curse be continued, till the family becomes extinct.—*Dr. Darwin.*

Hessian Fly.

This destroying insect is becoming more and more plenty over the whole wheat district, subject to slight variations through the effect exercised over them by the severe and open winters and frosts. That they are extremely local, and when once colonized do not emigrate far, when they can find the proper pabulum for subsistence near home, we have been a long time satisfied. A respectable and extensive farmer in Pennsylvania, states that he has for ten years past, almost entirely prevented their depredations, by burning over the stubble directly after cutting his wheat, and before they had changed from the *larva* to the winged state; while fields in his immediate neighborhood were destroyed.

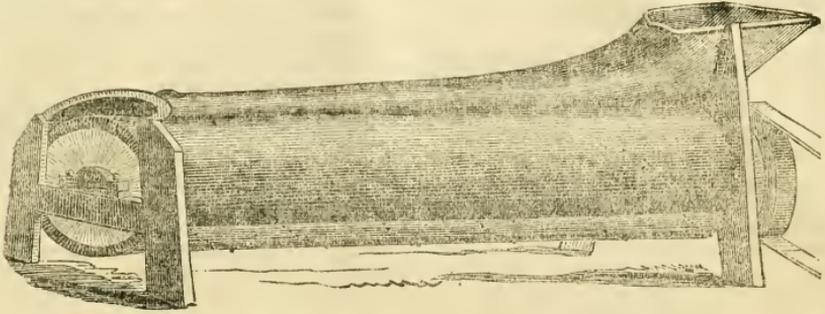
This view of the subject is remarkably confirmed, by a case related to us a few days since by one of our best wheat farmers in this section. His crop was so entirely destroyed that it did not pay for harvesting, and the land being in fine tilth, he resolved to follow it again with wheat, and consequently turned it over pretty soon after. About the first of September he commenced cross plowing, and when about half the field was finished, the other half looked in such good order that he omitted plowing it, and sowed his wheat. The next summer the grain was so destroyed on the part twice plowed that he did not harvest it, while the other was a full average crop.

The *rationale* is plain; the insect when in the worm state, was plowed under with the stubble, and on that part twice plowed was brought up again, hatched out, and attached their eggs to the young wheat—while in that part but once plowed they were buried beyond their power of getting to the surface, and were destroyed.

These facts are worth looking at, and support each other remarkably. *

LUCERNE.—From what we have seen of this plant, often called "French Clover," we think its culture for soiling can be made profitable. Its seeds should be planted in drills by a machine. We have traced its roots 38 inches into the ground. In permeable soils of fair strength, it grows luxuriantly. Deep culture, gypsum, lime and leached ashes, well mixed and drilled in with the seed, are recommended by us. If the soil is thin or poor, stable manure should not be omitted. Seed should be sown or planted early in the Spring. Having deep roots, Lucerne stands dry weather better than almost any other plant.

VENTILATION.—In airing a room, both the upper and the lower parts of the window should be opened, as the bad and heated air, from its lightness, will pass out at the top, and the fresh, cool air come in at the bottom.



SMITH'S CORN-SHELLER AND SEPARATOR.

Corn Shellers.

AMONG the many machines for shelling and separating corn, the one figured above is highly recommended. In a recent conversation with an intelligent agriculturist who has spent several years in one of the principal corn growing sections of the South, he informed us that he had known two of Smith's Shellers (driven by steam power) to shell 3,000 bushels of ears per day, and perform the work well. The machine is thus described in the catalogue of Messrs. RUGGLES, NOURSE, & MASON, of Boston, Mass. :—

“It consists of a horizontal toothed cylinder 6 feet long, and one foot two inches in diameter. The ears of corn in the operation, are confined to a part of the upper and rising side of this cylinder, by means of a cast iron concave extending the whole length of the machine, and being shovelled or let in the machine at one end, they are driven through, and the cobs discharged at the opposite end, while the grain falls below, being admitted on either side of the cylinder. The operation is governed by elevating or depressing the discharge end, which causes the machine to discharge the cobs fast or slow, and of course operates more or less upon them; thus securing to the operator the power of finishing his work.

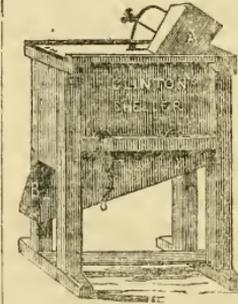
This machine is capable of shelling two hundred bushels of ears per hour. Upwards of one hundred of them have been already sold, and they may be seen at work in New York, New Orleans, and other Northern and Southern cities and towns, where they have given great satisfaction. They are very simple and strong in their construction. Price, \$50.”

This machine may be obtained of the above named manufacturers; also of H. L. EMERY, Albany, N. Y., and A. B. ALLEN & Co., New York City.

CLINTON CORN SHELLER.—This is believed to be one of the most efficient and durable hand shellers now in use. The accompanying cut gives a good representation of the single hopper and single balance wheel machine. It is said that, with two men, two hundred bushels of ears are easily shelled per day—or, with two hoppers

and large balance wheels, double that amount of labor can be performed by three men. The manufacturer states that the machine is equally well adapted for the large ears at the south and west as for the small ones of the north. Some have a balance wheel on each side, which balances the machine better, and the wear of the

shafts is more equal and durable. It is about 1½ by 2½ feet on the floor, and 3½ feet high; with the single hopper it weighs about 100 lbs., and with double hopper and balance wheel about 150 lbs. For sale (and warranted satisfactory) by H. L. EMERY, Albany, N. Y.; and we presume it can also be obtained at the other principal Agricultural Warehouses throughout the country. Price, with single hopper, \$10—double hopper, \$13.



For figure and description of Burrall's Sheller and Separator, (manufactured by the inventor at Geneva, N. Y.,) see Vol. VII, page 115, of this journal; and for Taylor's Improved Sheller (manufactured in this city,) see same volume, page 255.

We may be permitted to remark in this connection, that we have no pecuniary interest in any Implement Store or Manufactory—and that our only aim, in noticing various implements and machines, is to furnish proper information to those of our readers who desire, or would be benefited by the use of, such articles. We commend only such machines, &c., as we know or fully believe to be of intrinsic value—and neither “love nor money,” to use a homely phrase, can induce us to recommend what we consider tinctured with humbug, or calculated to deceive or mislead the agricultural community. This is our platform; and, although too limited to benefit speculators, we think it broad enough to suit the views of the great mass of our readers—those who are entitled to correct and impartial testimony.

Notes for the Month.

It is a conceded point in both Christian and Moral Philosophy, that man's mind is never stationary—it must either progress or retrograde in knowledge and intelligence. That our rural population are now in a state of intellectual progress, the signs of the times sufficiently manifest. 'Tis true there is no class so respectable as that of the farmer—no class that contains more individual specimens of wilful ignorance, unrelenting prejudice, and hearty combativeness to all that belongs to agriculture as an art dependent on chemical science, than may be found among farmers themselves. But if habitual prejudice and unbelief will not yield to well established theory, it cannot always resist the goodly fruits of practical example. GEO. FOX said that "one true Quaker could shake the country for fifty miles around." So can one true farmer who has the root of the matter in him—who has the science to know, the ability to practice and give evidence of the truth he has, by a masterly, practical, improved system of manuring and tillage. As the plant growing in the soil has a chemical power of dissolving that inorganic matter, which resists the elements of fire and water,—so can a practical, well read, scientific farmer, by the force of his own practice and example, dissolve the most determined unbelief in his brother farmer.

It is to such men that modern agriculture is indebted for its advancement from an art to a science; and it is to books, and to the agricultural papers of the day, that such men are indebted for that theory which enables them to practice, and keep pace with the scientific improvements of the age, in relation to their great calling. Let no man then, who rejoices in the name of Farmer, omit to begin the year by subscribing for at least one agricultural paper. 'Tis true, and pity 'tis, it is true, that not one farmer in forty reads an agricultural journal; yet there is not one in forty who is not benefitted by the improved theory of farming, as set forth in all our agricultural papers. Like the infidel, who scoffs at Christianity, he is very willing to avail himself of all the benefits of the christian morality, and so are farmers of the benefits of science. It is however pleasant to see of late the number of farmer subscribers to those blanket sheet weeklies, which, to the news of the week, add the accidents by flood and field, filling up with a long story, which if it does hold up the "mirror to Nature," Nature is rarely made vain by looking into it. But far be it from me to condemn the cheap newspaper literature of the day, for it leads to reading, a requisite to be acquired, before practical or scientific truths can be relished, or even tolerated in print—on the principle that men "must be poets before they are philosophers."

Blessed is the end of our presidential election. Perhaps the greatest burlesque upon our democratic rule, is the farcical manner in which most of our newspaper literature, and the colloquial energies of the people, is employed in the presidential contest, one year in every four. Truly the war of political parties in these United States, is only the less notorious as it is less bloody than the wars of olden time, which were carried on by the people for the sole benefit of a family, or a man, a tulip, or a rose! But the contest over, our democratic circle will progress and extend as usual; a sovereign people will carry out their dignity, the wealthy by external show, the poor by aping that show to the best of their pecuniary credit and ability, as though show was all, and substance nothing! The result is certain—hard times, bankruptcy, ruin—then a reorganization of the wrecked materials; then the cry America is a great country—and she is great. S. W.

Gleanings from our Foreign Exchanges.

TWELVE-ROWED BLOOD RED WHEAT.—A new variety of wheat with this appellation has lately been introduced in England. It produces a head 6 inches long and 1 inch broad, and has 12 rows of kernels. It is very productive, 10 quarters, (80 bushels) all but one peck, have been produced per acre. We shall probably be able to learn whether it will suit our climate, as 80 sacks have come to this country, or is on its way here.

THE CHELTENHAM BLACK-SKINNED BARLEY.—It is sown from October to February in England, stands the winter well, is very productive, and makes superior malt. It weighs 55 lbs. to the bushel. When mixed with wheat flour it makes a good and sweet bread. It sells in that country for \$5.25 per bushel for seed.

A friend, in this vicinity, has a small quantity sown, who in proper time will report progress.

AN extensive farmer in England, from the wetness of his land in the spring, had fears that he should not be able to get his *Ruta Bagas* in early enough; he therefore sowed his seed in beds, and at a proper time transplanted them in drills in his fields. A little after midsummer they showed a disposition to go to seed, and three quarters of them threw up seed stems. He was advised to cut them off, which he did with a scythe, mowing the whole close to the turnep. In a short time they sent out new leaves around the old stem in great profusion, and the roots increased astonishingly. Indeed, so great was the increase in size, that the owner had fears that the extra bulk was water, and not nutritive matter, and he had an analysis made by one of the first chymists, which showed the merest trifle difference in their constituents.

This was a single trial and it was recommended to be repeated.

Remarks on the Season,

EMBRACING METEOROLOGICAL OBSERVATIONS MADE IN ENGLAND AND THE UNITED STATES.

THE fruits of the labor of the husbandman are immediately dependent on the favorableness of the season. With seasonable rains, and otherwise suitable temperatures of climate, the industrious and careful farmer is sure to reap a plentiful harvest. From the fact that climate exerts a greater influence upon plants than the mechanical labors of the cultivator, it becomes a subject of the deepest interest connected with agricultural and horticultural pursuits. The parts of this subject which particularly interest and concern the tillers of the earth are those relating to the quantity of rain, the number of days on which it falls, and the temperature of the atmosphere during the period of the growth and maturity of the plants. Mr. LAWES, an able contributor to the agricultural journals of England, gives the results of his observations on these points for three years. These are subjoined. The period embraced in the table begins with April and ends with October. He considers the climate so far as it affects the growth of grass in April and May; the wheat climate commences with May and ends with August; the turnep season to begin with June and end with October.

	1844	1845	1846
No. of days rain fell during April and May, (grass season.)	14	36	28
No. do. from May 1st to end of August, 17 weeks, (grass season.)	43	71	45
No. from June to end of October, 21 weeks, (turnep season)	67	74	65
Inches of rain during April and May, (grass season.)	0.59	3.87	5.19
Do. from May 1st to the end of August, 17 weeks (grass season.)	5.17	9.34	8.41
Do. from June to the end of October, 21 weeks, (turnep season.)	10.37	9.62	13.95
Mean temperature during April and May, (grass season.)	52.6	48.9	50.5
Do. from May 1st to end of August, 17 weeks, (grass season.)	60.3	58.2	63.1
Do. from June to end of October, 21 weeks, (turnep season.)	59.4	57.8	62.2
Temperature: (over or below average from May to end of August, (grass season.)	Above.	Below.	Ab'v.
	0.9	2.1	3.2

He remarks, that the two spring months of 1844 were unusually dry; the quantity of rain and the number of days on which it fell being small. The summer was warm, and the quantity of rain moderate. The climate being unadapted to an increased accumulative and circulating condition of the plants, the favorable growth of the spring plants was prevented; but a warm dry summer favored the depositing and elaborative condition, and hence a good quality of grain.

In 1845, the great number of rainy days and the low temperature were highly favorable to the circulatory condition of the plants, and therefore green crops of all descriptions and straw were unusually abundant, and the grain of a bad quality.

In 1846 the spring favored the circulatory condition, and the crops of grass and clover were luxuriant. In the month of June, when the grain was forming the temperature was 6° above the average, and there were only two days on which rain fell; the quality of grain produced was very fine.

On the contrary, the crops of turneps were inferior, owing to there being 31 successive days without rain, twice during the season. From May 21st to June 21st, no rain fell, and from August 23d to Sept. 21st rain fell on 3 days only—the quantity being less than one tenth of an inch.

In another table Mr. L. gives the effect of climate on the quantity and quality of produce of the unmanured plots of the experimental wheat field, carried through three years as

before: also the average results of variously manured plots.

	1844.	1845	1846.
Corn. (i. e. wheat) per acre in bushels,	16	23	17
Straw per acre, in lbs.,	1120	2712	1513
Weight of wheat per bushel in lbs.,	58½	56½	68½
Per centage of wheat to straw, (straw 1000.)	821	534	797
MEAN OF ALL THE PLOTS.			
Weight of wheat per bushel in lbs.,	60½	56½	63
Per centage of wheat to straw, (straw 1000.)	868	499	765

In his remarks on this table he says, that, the effects of climate, as indicated by the other table is in accordance with the general character of the seasons. The lowest weight of the bushel and the greatest amount of straw were obtained in that season which had the greatest number of rainy days and the lowest temperature; the least amount of straw with the driest season, and the first quality of grain in the warmest summer.

Will not some of the farmers who read this paper try similar experiments, and publish the results in the *Genesee Farmer*? All the apparatus necessary to try the experiment is a thermometer, a rain gauge, and a machine for weighing.

I here add the results of my observations for the corresponding seasons given in Mr. Lawes' table:

Number of days rain fell during April and May, (grass season.)	27	20	21
Do. from May 1st to end of August.	63	45	42
Do. from June 1st to end of October,	65	65	54
Inches of rain during April and May,	4.90	5.14	3.52
Do. from May 1st to end of August.	12.41	12.65	13.64
Do. from June 1st to end of October.	13.92	17.16	20.85
Mean temperature during April and May,	55.6	50.1	53.3
Do. from May 1st to end of August,	64.2	64.3	66.1
Do. from June 1st to end of October,	61.2	62.1	63.4

I have presented this table to show by direct comparison the difference in climate between this place and England.

Our grass season and the grass season in England very nearly correspond; not so, however, with the grain season. Wheat matures and is harvested from six weeks to two months earlier here than in our father-land.

The season, just closed, was unusually favorable for the interests of the farmer—not very rainy, and not very dry—not very cold and not very warm—but was furnished with just about that quantity of moisture and degree of temperature which best promote the growth and maturity of vegetation. Consequently the labors and cares of the husbandman were crowned with a bountiful harvest, both the earlier and later. September was cool and rainy, October was exceedingly fine—the splendor and beauty of the hues of the decaying leaves of the trees unsurpassed; and the month of November thus far has been exceedingly unpleasant—snow and rain, or rain or snow, almost every day.

Rochester, Nov. 13th, 1848.

L. WETHERELL.

GOOD AND USEFUL BOOKS.—What a world of trash now-a-days issues from the press, in the shape of cheap publications, stitched in nice pink and blue covers! Have you read the last novels? No—and you never will, they fall so rapidly from the binder's hands. But you may have read much of the stuff with which our country is flooded. What benefit have you derived from these works? Are you wiser or better?

Our object at this time is, to recommend good and useful books. What is more valuable, that costs so little, than a library of good books?—Every young man, and old one too, should have a few select works, to which he could resort at his leisure moments, to improve his understanding and mend his heart. With a small library, no one can be at a loss how to spend his time. There are biographies and histories; works on mind and matter—which can be bought low, but which are exceedingly instructive and valuable. One page of a good book, well studied, would give you more information than fifty volumes of nonsensical trash.—*Portland Umpire*.

Geology.—The Glaciers of Switzerland.

[From the N. Y. Farmer and Mechanic.]

ON Thursday evening, the 25th ult., the winter course of lectures at the Brooklyn Institute was opened by Professor AGASSIZ, whose talents and scientific acquirements have so justly conferred upon him a wide spread and enviable reputation. He commenced by briefly describing the geological formation of Long Island, its loose, irregular and unstratified sand beds, and particularly its numerous *boulders*, which are found in great abundance and variety all over the island and its surrounding shores.

He stated that they were of all sizes, and in geological formation entirely different from that of the general character of the natural deposits of this region, or that farther South, being composed of granite, gneiss, &c., &c., which exactly resemble the formations found in the northern part of this continent, from whence they were evidently at some very remote period introduced. This fact, he stated, had been admitted, but the question has been asked, By what means these immense masses of rock had been transported so great a distance, and what power was put in requisition to effect it?

This, he said, had been sometimes answered by supposing these vast bodies of rock to have been forced onward by the power of the current at a period when the great Northern Ocean swept over the whole continent, and with its mighty deluge produced this singular arrangement—This the learned lecturer proved to be incorrect, from the fact that all these formations occur with great irregularity,—that they are unstratified, and marked in straight and nearly parallel lines and furrows, showing conclusively that they were never deposited by, or smoothed and rounded in a body of moving water and sand, as in that case the largest and more ponderous masses would be found at the North and the smaller at the South; and also that the heavier and less easily moved portions would find their place at the *bottom* and the smaller and lighter at the *top*, the contrary of which is, however, the case. Another theory that they were transported on *icebergs* across the Northern Seas he considered equally fallacious.

In order, however, to account for this singular phenomenon, the Professor introduced the subject of the *glacial* theory and endeavored to account for their presence here, by supposing that they had been brought hither at some remote period by glaciers which may have formed in the northern portion of this continent, where exist, as before mentioned, rocks precisely of similar formation to those which are here seen. In support of this theory he adduced the well known fact that stones of immense size are seen in the *moraines* (or accumulations of earth that line the edges of the glaciers of Switzerland,) of an entirely different formation from those of the valley, where these stupendous fields of ice exist—and which are conclusively proved to have been pushed along by the slow but steady propulsion of the glaciers.

The lecturer described in detail the topographical features of that country, the climate, the mode in which the glaciers are formed by the freezing of partially melted snow, the deep fissures or crevices, &c., which, as a ten year's resident and constant investigator of the glacial phenomena he was enabled to do with great accuracy and minuteness.

Professor A. here described the two principal mountain ranges of the country, the *Jura* and the *Alps*; the former elevated about 4,000 and the latter towering to the height of 11,000 to 13,000 feet above the waters of Lake Neuchâtel, leaving an intermediate valley of about 60 miles in extent, a section of which is given in the annexed diagram.



Jura 4,000 feet high. | Valley of Switzerland about 60 miles in extent. | Alps 13,000 feet high.

The Professor here desired to correct a very common error into which travellers were frequently betrayed, viz: that of confounding the *snow mountains* with the *glaciers*; the former being merely immense masses of loosely formed snow, while the latter, the glaciers proper, consisted of ice fields of immense size and depth formed in the valleys, sometimes to the thickness of 500 to 600 feet. The following diagram illustrates, sectionally, one of the glaciers between the lofty peaks of the Alpine range.



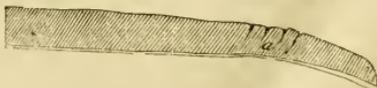
1,100 feet high. | Ice 500 feet thick | 1,500 feet high.

The glaciers as they are formed and forced onward down the mountain declivities and through the valleys, are covered with immense masses of boulders, some of which are of astonishing magnitude, and which have been detached and carried down the precipitous sides of the mountains with the snow as it melted, and which during the day time in the summer are constantly moving over the inclined surface of these glaciers, rendering it exceedingly dangerous to attempt their exploration, except early in the morning before they become loosened by the warmth of the sun.

These ice fields or glaciers generally terminate abruptly as in the following diagram, which represents a small portion of the glacier with its terminal slope, *a* representing the mountain declivity, *b* the glacier 600 feet in thickness



at the foot of the rocky declivity and 300 at *c* where it terminates. This was demonstrated by actual measurement and careful observation, and will give a general idea of the glacial formation existing in the valleys. The ice forming these glaciers has not the appearance of common ice,—is not stratified, but being the filtration of water through the snow masses of the mountains during the summer, intermingled with the snow itself, it forms a granulated mass of frozen water and snow, and by the continued repetition of this process the valleys are covered with a solid mass of ice, while the snow remains loose on the mountains. These immense bodies, or ice lakes, are forced forward by the accumulated force from the slope of the mountains over the face of the valley, until a slight descent occurs and then the inequality of surface from the more sudden depression causes fissures or crevices in the mass, as seen in the following sketch at *a*.



Surface of the Valley.

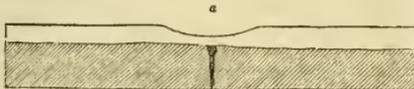
During the summer the action of the sun on the surface of these vast ice plains melts the parts most exposed to its rays, and forms rivulets of several hundred yards in extent; these rivulets on meeting one of these fissures, the water is precipitated over their crystal brink, forming the most beautiful cascades. Of these the Professor gave a glowing and animated description, in a style simple, impressive, and peculiarly happy.



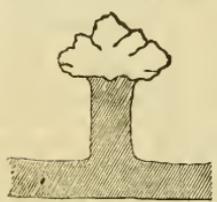
In the above diagram *a* represents one of the above described rivulets as it passes over the surface of the glacier and falls into the fissure *b*, some 300 feet in depth.

The Professor here remarked that these fissures so frequent and beautiful in the summer, are exceedingly dangerous in the winter, being frequently covered by a few feet

thickness of loose snow, which completely hides them from observation, exposing the traveller to the risk of certain destruction should he inadvertently happen to cross their track. To this, however, the native guides have become accustomed, and their ready and practical eye detects at once a slight depression on the smooth and unbroken surface of the snow, as sketched below, *a* showing the depression of surface indicating the fissure beneath.



Over these extensive glaciers we discover some of the wildest and most fantastic natural formations imaginable.



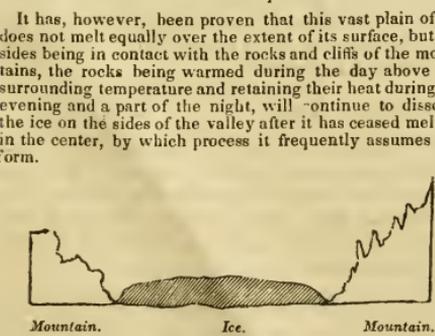
Frequently we find an immense boulder resting on the top of a pillar of ice, and the beholder is astonished at the singular sight of an immense rock at a considerable elevation above the surface of the glacial formation supported by a single slender shaft of ice some ten or fifteen feet in height.

This is easily explained by simply observing that as the ice melts above or around one of these isolated boulders lying originally on or beneath the surface, the rock itself protects the ice underneath it from melting, until in a process of years the surrounding ice becomes gradually melted away, leaving the boulder in its former position until the gradually diminishing support fails, and it falls with a tremendous crash again to the surface.

Another feature of the glaciers is this, the rivulets before mentioned carry with them large masses of loam and sand, with which the snow and ice from the mountain sides frequently abounds, and by their constant accumulation and deposit in the fissures fill the opening with the earthy matter, after which, in the same manner as before described, the ice dissolves gradually around it and leaves it in the form as represented below, the dotted line representing the original surface of the ice, *a* the mass of accumulated sand above the surface partly imbedded in the crevice of ice, and *b*, the ice that remains still undissolved; this, however, in the course of years also becomes melted and leaves the hillock or mound of sand thus, which is of a geological character entirely different from the soil of the valley where it is deposited.



It has, however, been proven that this vast plain of ice does not melt equally over the extent of its surface, but the sides being in contact with the rocks and cliffs of the mountains, the rocks being warmed during the day above the surrounding temperature and retaining their heat during the evening and a part of the night, will continue to dissolve the ice on the sides of the valley after it has ceased melting in the center, by which process it frequently assumes this form.



This, the Professor said, had been fully demonstrated where the sides of the valley were equally exposed to the rays of the sun, and in other cases where the valleys were so situated as to receive the sun on *one side* only, while the other was shadowed by mountains, he had always observed that the surface of the ice in the valley presented the following form; *a* representing the peak shadowing the valley, *b* the ice as the surface was acted upon by the sun's rays, and *c* the sunny side of the valley showing the glacier nearly dissolved on that side.

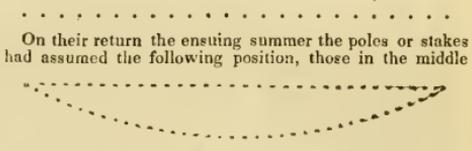


The waste of ice in the summer is very considerable, varying from 5 to 10 feet, according to the exposure of its surface to the sun's rays.

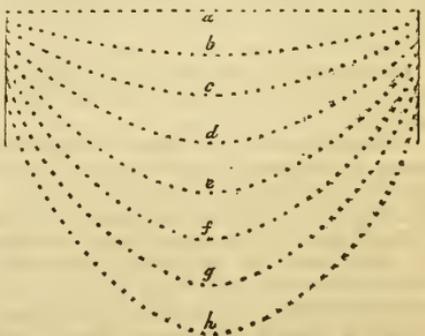
One of the striking and wonderful phenomena of the glaciers is their constantly progressive movement, which is annually from 180 to 250 feet.

Although it has been a well known fact that these immense beds of ice were not stationary, it had never been known at what rate this movement was going forward, until the lecturer, assisted by some of the best topographical engineers and most scientific men of Switzerland proved by their experiments and discoveries during ten years of careful investigation the facts as before related, viz. that the average progress is about 250 feet per annum in the middle of the valley, while at the sides the progress was comparatively slow.

Their method of ascertaining these facts was as follows, viz: they commenced their survey of one of the glaciers extending over a valley of about 5,000 feet in width. The first operation was to plant in the ice a straight line of poles directly across this ice covered valley thus:



On their return the ensuing summer the poles or stakes had assumed the following position, those in the middle having advanced 250 feet, while those on the borders had progressed on one side only seventeen feet and on the other twenty. On each successive year the measurement was accurately taken and the progress of the glaciers was as follows: the curved line marking the position of the sticks or poles originally placed in a direct line, as at *a*, and *b* the



position the second year, *c* the third, *d* the fourth year, and so on through eight or ten year's observation.

These glaciers are generally, as before stated, covered and intermingled with immense quantities of loose rocks and boulders, detached originally from the rocky cliffs and sides of the mountains, which are forced onward with these vast bodies of ice over the frequently irregular surface of the valleys containing more or less of similar rocks from the mountains, which may be illustrated by the following diagram of a section of one of these valleys with the glacial formation entirely covering its surface. This immense body



of frozen snow and ice, sometimes to the depth of a thousand feet, moves forward in the manner described, from 100

to 250 feet per annum, pushing down with them from the mountains immense masses of rock to the distance of many miles into the valley. Several ages are of course required to accomplish this transit, but these rocks on the passage have been triturated or polished to a comparative smoothness, presenting the phenomena of boulder stones, which are entirely different from the geological formations of the valleys where they have been found.

Professor A. stated that the whole valley of Switzerland from the Alps to the Jura and even the highest portions of the latter are covered with these immense boulders and rocks of all sizes, consisting of granites, gneiss, limestone, &c., whose geological character resembles precisely that of the rocky peaks of the Alps, and no where else to be found in that portion of the country. From this he inferred that at some remote period the glaciers covered this entire valley to the depth of 4,000 feet and all these boulders were by this means deposited by the process described. This may be illustrated by the following diagram, *a* representing the Alps from 11,000 to 13,000 feet in height, *b* the glacial formation, and *c* the Jura range about 4,000 feet high, to



which these boulders might easily have passed on the surface of this immense ice field and also be deposited by the melting of the ice over the entire surface of the now fertile valley of Switzerland.—That the same causes do not now exist he attributed to the fact that the climate has materially changed, and also that of the whole north of Europe;—that the change is still progressing, and the entire northern portion of the continents both of Europe and America are participating in it.

He concluded by saying that if time permitted he could amply demonstrate that an analogous process to the above had deposited masses of the rocky formation of the north in this region, and that the whole surface of the western continent presents the same arrangement of boulders, sand, &c., both in the nature and formation of the Alpine valleys, and must have been deposited during some remote period of past ages, in the same manner as those that cover the valleys of Switzerland.

HORTICULTURE.—Mr. WINTHROP, Speaker of the House of Representatives, said, on a late occasion:

“Horticulture in its most comprehensive sense, is emphatically the fine art of common life. It is eminently a republican fine art. It distributes its productions with equal hand to the rich and poor. Its implements may be wielded by every arm, and its results appreciated by every eye. It decorates the dwelling of the humblest laborer with undoubted originals, by the oldest masters, and places within his daily view fruit pieces such as Van Huysen never painted, and landscapes such as Poussin could only copy.”

FAULTS AND VIRTUES.—The good man looks with forbearance, the bad man with severity, on the faults of others. The virtues of others always excite envy in the heart of the vicious man; and the respect which he sees paid to virtue, is a thorn which rankles in his breast.

A good book and a good woman are excellent things for those who know how to appreciate their value. There are men, however, who judge both from the beauty of the cover.

Wire-Worms.

MESSRS. EDITORS:—Are you aware of any effectual means of getting rid of these destructive pests? The range of their operations year after year is considerably on the increase, as the dismal appearance of many of the wheat fields in this vicinity bears ample evidence. We find them in land which has been under the plow for three or four years consecutively—where the wheat will not be exceedingly injured it is true, but the fact demonstrates how very difficult these worms are to eradicate.

Some months since, one of your correspondents stated that two successive crops of buckwheat has generally proved an efficient means of destroying the wire-worm on lands previously overrun with them. As fall plowing would doubtless prove of great benefit in the premises, would not land thus plowed, sown with buckwheat the middle of May and plowed under when in full bloom, and again plowed before sowing, be quite as efficacious a method as the one first alluded to? The latter course, combining as it does the advantages of a thorough summer fallow with keeping the ground covered with a crop, growing so densely as to smother almost entirely all grass and weeds, would probably starve the worms out. Whether this process will really have the desired effect, is the object of the present inquiry. I would farther remark in this connection, that in a field treated on the buckwheat plan, but *not* plowed the fall previous, the wheat is injured to some extent, showing that the buckwheat, of itself, is no protection, or but a partial one.

A reply in the January number of your valuable paper, from yourselves or some of your readers who have had some experience in the plans mentioned, or some other more successful ones, for the extermination of one of the vilest pests which afflicts the farming community, will be of service in this vicinity, where the matter is but little understood.

Yours very respectfully,
November, 1848. NIAGARA, JR.

WE have an article in preparation for our next number, on the above subject. Meantime we shall be happy to receive the results of experiments, &c., as the subject is becoming very important to wheat growers in various sections of the country.

SHELTER DOMESTIC ANIMALS.—Warm sheds and stables are to a certain degree substitutes for food in maintaining animal heat. A man or beast out in the cold air all winter, will consume to make him comfortable more food than he will if in a well tempered atmosphere. Guard, then, against cold for the benefit of all that have warm blood. Of course you may run into the opposite extreme.



The Turkey.

THIS bird was unknown to the civilized world till the discovery of this Continent. It was found here both in its wild and domesticated state; and still occupies the whole range of the western hemisphere, though the wild turkey disappears as the country becomes settled. The wild is larger than the domesticated bird, sometimes weighing over 30 lbs. dressed. The color of the male is generally a greenish brown, approaching to black, and of a rich, changeable, metallic lustre. The hen is marked somewhat like the cock, but with duller hues. Domestication through successive generations dims the brilliancy of their plumage, and lessens their size and hardness. It also produces a variety of colors, though they are mostly of a black, buff, pure white, or speckled.

They give evidence of the comparative recency of their domestication, in the instinct which frequently impels the cock to brood and take care of the young. Nothing is more common than for the male bird to supply the place of the hen, when any accident befalls her, and to bring up a family of young chicks with an equally instinctive regard for their helplessness and safety.

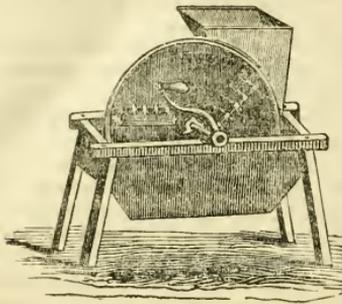
The flesh of this bird, both wild and tame, is exceedingly delicate and palatable; and though not possessing the high game flavor of some of the smaller wild-fowl, and especially of the aquatic, as the canvass-back duck, &c., it exceeds them in its digestibility and healthfulness. The turkey is useful principally for its flesh, as it seldom lays over a nest-full of eggs in one season, when they brood on these and bring up their young. If full-fed, and their first eggs are withdrawn from them, they frequently lay a second time.—*Allen's Domestic Animals.*

The true Principles of Farming.

IF persons engaged in this pursuit would only use that sense which God has provided them with, and which is generally styled *common*, the business would be divested of a great deal of its mystery. Some people will say that it is much easier to find out what is wrong than to say what is right; and this is true to a certain degree; but regarding the cultivation of the land, there are certain inviolable principles which should always be kept in view; and these I will endeavor to enumerate. The first that strikes me is the clearing of the ground; it is absurd to think of trying to grow grain under trees in a wood, nor is it sufficient to take away a part of them—I mean, of course, with the idea of perfection. For instance, suppose you have 50 trees on an acre; that is, about one to every three square rods; the soil capable of bearing 50 bushels of wheat, or 1 bushel to each tree; and suppose that you cut down 49 of them, you will only be able to grow 49 bushels, instead of 50—the annual waste or cost of that tree being the value of one bushel of wheat, or whatever crop might have been on the 3 rods of ground which that tree monopolized. Therefore, if it is necessary to clear the land before you can grow grain, it is reasonable and self-evident that it should be entirely cleared, every fractional part you leave doing injury in its degree.

The next point to notice is the dryness or wetness of the soil; see if the stagnant water is sufficiently near the surface to do injury to the crops, even by capillary attraction, which, science tells us, will raise water 4 feet—and practice has shown that it must not be nearer; therefore, if the stagnant water be nearer than 4 feet, drain it to that depth. It is absurd to attempt to cultivate land against so powerful an enemy as water. Thirdly, we consider “the pulverization of the soil.” Ought it to be pulverized at all? To this question I think our common sense will give an answer in the affirmative, so that the plant may more easily expand its roots to seek for nourishment in the soil, which soil and which pulverization should extend as far as the roots of the plant; but is it common sense to think that 5 or 6 inches only is the distance that the roots of plants extend. I will not take advantage of a few facts that have been noticed of the immense depths that roots descend, but merely appeal to common sense, and ask whether it is not reasonable to suppose that the roots beneath extend as far as the plants above the soil, and if so, ought not the soil to be pulverized to that extent, about 4 feet?

The first expense of this, I am aware, renders it almost impracticable; but this I cannot help. I cannot alter the true principles of nature. I must assert with common sense that the deeper you pulverize, the more you move in the right direction.—*W. G. Grossmith, in Gard. Chron.*



Vegetable Cutter.

THE above figure gives a front view of RUGLES, NOURSE, & MASON'S *Vegetable Cutter*. This is the best machine for the purpose manufactured in this country, and is sold at a less price than those of the same quality made in England. "The cutting wheel is made of cast iron, faced on one side, through which are inserted three knives like plane-irons. These cut the vegetables into thin slices with great rapidity, and then by cross-knives they are cut into slips of convenient form and size for cattle or sheep to eat, without danger of choking. The pieces after cutting lie loosely and angingly together, and can easily be taken up by the animal. This machine will cut 60 bushels per hour." For sale by the manufacturers; also at the principal Implement Stores in New York, Albany, Rochester, Buffalo, &c.

SHEEP RACKS.—Now is the season to repair old and make new racks, to hold forage for sheep and cattle. Every farmer knows how to construct these; but many neglect so to do till their stock has wasted a good deal of hay, straw, or corn fodder. Neglect this matter of economy no longer.

CHEAP ROOT-CELLAR.—Dig the cellar three feet deep, wall the sides, and cover with coarse timber and slabs, and then with earth, and a window at one end, a door at the other, will admit free ventilation except in freezing weather.

DRAINING BY STEAM.—The stone of the building for a new steam engine of 50 horse power for the draining of the fen lands of the Stow Bardolph, (England,) was lately laid, in the presence of several of the commissioners, which afforded a gratifying sign of improvement in the county.

A PIPE of cast iron 14 inches in diameter and three-fourths of an inch thick, will sustain a head of water of 600 feet. One of oak, 2 inches thick and of the same diameter, will sustain a head of 180 feet.

Politics and Party Feeling.

MESSES. EDITORS:—Your remarks in the October number of the *Farmer*, relative to the impropriety of the Hon. J. C. SPENCER'S address at the State Fair, were perhaps correct, considering the present vindictive feelings of parties; but it is much to be regretted that a subject of such immense importance to the whole of community, and especially the cultivators of the soil, as the procuring of a market, cannot be freely investigated without arousing the vulture of party. Any subject of importance which political humbuggers and party fugitives wish to keep in obscurity, they twist into the trammels of party, and the door is closed against investigation, candor, and truth.

Protective industry, internal improvement, and a national currency, should never be interfered with by party faction; and it is a disgrace on the intelligence and candor of community, that they are thus trammelled. Those subjects are complicated, and very materially affect all the business transactions of society, and many of the comforts of social life, and it is very essential that they should be clearly comprehended and correctly understood by all; but that never can be, if the door is closed against candid investigation and free discussion. And it is most sincerely to be hoped that the day will soon come, when all subjects of importance and general interest can be honestly and freely investigated without the interference of party feelings, sectarian discord, or sectional feuds.

WILLIAM GARBUETT.

Wheatland, N. Y., Nov., 1848.

Agricultural Periodicals.

In this age of progress no farmer can afford to do without an agricultural paper. It is too late to sneer at and dispute the benefit of books and periodicals devoted to Agriculture—and an intelligent man would about as soon deny the advantage of rail-roads, or the possibility of communicating information by Telegraph. Farmers were created to read and think, as well as Divines, Doctors, and Lawyers, and should thoroughly understand their profession. The ensuing year will be the last of the first half of the nineteenth century, and the Farmers of America should see to it that they advance in an equal ratio with men of other professions—and that the duties which they owe to themselves and their children are properly performed. And if, in doing this, any of them are disposed to make the year 1849 a semi-centennial jubilee to Agricultural Editors and Publishers, we presume there will be no objection, as all parties may thus be benefitted. The Political Press has had a "good time" during the Presidential Campaign—and now that the smoke and excitement of the battle have evaporated, we respectfully present the Agricultural Press as a proper recipient of public (not official) patronage. It affords quite as valuable a return as the former, to say the least—treating upon matters as necessary to community, and perhaps not less important than President making. Grain must be grown, houses built, and animals bred, whatever party is in power, or whoever is President.

While on this subject we will remark that, as all subscriptions to this journal expire with the present number, unless paid in advance for a longer period, we hope all of our present subscribers will renew their subscriptions, and obtain as many new ones as convenient. Whatever "noise and confusion" may prevail, we shall "never surrender" while our friends continue to extend "aid and comfort" in the shape of subscriptions and communications. The attention of our regular agents, and all others disposed to aid in extending the circulation of the *Farmer*—and we invite the co-operation of all—is directed to our Prospectus on first page, and Premium List on page 303 of this number.

THE failings of good men are commonly more published in the world than their good deeds; and one fault of a deserving man shall meet with more reproaches than all his virtues praise.

A GOOD conscience is to the soul what health is to the body. It preserves a constant ease and serenity within us, and more than countervails all the calamities and afflictions that can befall us.

CHEERFULNESS is as essential to the health of man, as light is to that of vegetables.

EDITOR'S TABLE.

TO CORRESPONDENTS.—Communications have been received, during the past month, from H. P. Norton, S. W., L. Wetherell, * David Thomas, Niagara, jr., Wm. Garbutt, Judson, D. H. Manchester, G. C., S. A. Cudaback, S. Barrett, Cadmus, John Thompson, and A Reader.

AGENTS FOR THE FARMER.—In connection with the Index, we publish a list of Agents in the present number.—We have room only for the names of those residing in sections where the Farmer has the largest circulation; but we solicit all the friends of the paper and the cause it advocates, to lend us their influence, whether their names are published in our list or otherwise.

WE are happy to observe that some of our cotemporaries have adopted our plan of giving premiums for subscribers, and we trust that they will receive proper benefit therefrom. It may be interesting to our readers to learn, also, that several of the leading agricultural journals have copied our arrangement of inserting a Horticultural Department. We merely mention this fact to show that, although ours is the cheapest journal of its class in the country, we are not behind the times, and hope to introduce other features, in our ensuing volume, equally worthy of imitation.

VALUABLE BOOKS.—The Publisher of the Farmer has a variety of standard works on Agriculture, Horticulture, &c, which he will supply to his distant patrons, by mail, at the regular New York cash prices. Money may be sent for books at his risk, if enclosed and mailed in the presence of the Post-master of the office from which it is sent. Those who cannot obtain such works at home, are requested to favor him with their orders, as it will make good, in part, the very small profit derived from the Farmer. It is also safest to transmit orders to a well known publisher, who will be prompt in his attention. Books can be forwarded with perfect safety to any section of the country. See advertisement, page 302.

REAPING MACHINES AT THE WEST.—We frequently hear favorable accounts of the benefit of reaping machines among the extensive grain growing farmers of the west. Mr. W. S. MURRAY, of Clinton, Rock county, Wis., gives us some very reliable testimony in favor of Mr. McCormick's Reaper. He purchased one of the Chicago manufacturer, but sold it to a neighbor, (who had a larger crop,) on condition that the latter cut for him 60 acres of wheat, for the bargain. His friend fulfilled the contract, and harvested, in all, about four hundred acres during the season; and made more than enough, the first year, to pay for the Reaper!

ALBANY AGRICULTURAL WAREHOUSE.—We are pleased to learn that the proprietor of this establishment did not sustain a serious loss in the recent destruction of his store by fire. He is again located, and prepared to attend to the wants of the agricultural public, as will be seen by reference to his advertisement in this paper. We admire the enterprise and integrity of friend EMERY, and commend him *businessically* (that's a fresh word, reader,) to those who appreciate those virtues.

HOVEY'S MAGAZINE OF HORTICULTURE continues its monthly visits to our table with unflinching regularity. The November number is an excellent one, and fully sustains the high reputation of the work. The first article, by the Editor, contains "Notes of a Visit to several Gardens and Nurseries in Western New York," commencing with those of Buffalo and Rochester. Edited by C. M. HOVEY. Published by HOVEY & Co., Boston, Mass., at \$3 per annum. D. M. DEWEY is the agent in this city.

THE HORTICULTURIST we do not receive in exchange, although we have published the Prospectus as requested. However, we can afford to purchase so good a work, and are not very particular about paying twice for "that same." Edited by A. J. DOWNING. D. M. DEWEY, agent.

THE AMERICAN FARMER, the oldest Agricultural journal in the United States, appears, like some other good things, to improve with age. It is ably conducted, and should continue to receive, as we believe it does, a liberal support from the farmers of Maryland, Virginia, and other States. As the pioneer journal of America, as well as for its intrinsic merit, it is deserving of high regard, and we trust it may long continue to spread the light of science throughout the land. Published monthly, 32 pages octavo, at \$1 per annum. Address SAMUEL SANDS, Baltimore, Md.

SCIENTIFIC AGRICULTURE, or the Elements of Chemistry, Geology, Botany, and Mineralogy, applied to Practical Agriculture. By M. M. RODGERS, M. D., author of "Agricultural Chemistry," &c. Illustrated by numerous Engravings, and a copious Glossary. Published by ERASTUS DARROW, Rochester, N. Y. 1848.

This is the title of a new work of 279 pages, a copy of which we have received from the author. We have been unable to give the volume a careful perusal, but from a cursory examination of its contents and arrangement, we are of opinion that it will prove a valuable accession to the agricultural literature of the country. The book is handsomely printed and bound; and its illustrations reflect credit upon our clever artist friend, Mr. J. MILLER of this city. It is the best executed Rochester book which we have seen; and the printers, Messrs. BENTON & FISHER, are entitled to the thanks of our citizens for their efforts toward demonstrating the feasibility of book-making in Rochester. We shall refer to the volume again, and perhaps give extracts from its pages. For sale by the Publisher and booksellers generally. Price, 75 cents.

"HONOR TO WHOM HONOR" &c.—The figures of the Lucky and Unlucky Farmer, copied into our October number, were from a Diploma, designed some four years ago for the N. Y. State Ag. Society, by J. J. THOMAS. We cheerfully and voluntarily make this statement, in justice to Mr. THOMAS, who has an excellent talent for designing, as well as an enviable reputation as an author.

WONDER if the *Southern Planter* has a patent right for copying from the northern agricultural papers without giving credit? From the numerous articles copied from the Genesee Farmer and other journals, and published in the *Planter* as original, we suspect the editor's pen is not only made of iron, but formed very like unto a pair of scissors!

CORRECTION.—In the last number of the Farmer, page 263, it is stated that "Recently heated charcoal will take up 90 times its weight of ammonia in the shape of gas." Instead of "weight," read *bulk*.

SCYTHES FOR THE MILLION.—A correspondent of the *Eastern (Portland) Argus* says the scythe manufacturing establishment of R. B. DUNN, Esq., in North Wayne, Maine, is the largest of the kind in the world. One hundred men are employed in the works. Improvements are in progress by which it is expected that the proprietor will be enabled to manufacture annually 17,000 dozen scythes. The present number turned out annually is 12,000 dozen: to produce which are required 450,000 lbs. of iron, 75,000 lbs. of steel, 1200 tons of hard coal, 10,000 bushels of charcoal, 100 tons of grindstones, and half a ton of borax.

Mr. H. C. WHITE, of Mohawk, N. Y., is agent for the above establishment, and will attend to orders from any section of this or adjoining States.

CEMENT TO MEND EARTHEN AND GLASS.—The cement sold about the country, as a great secret, is nothing more than *Shellac* melted and drawn out into sticks. Heat the article a little above boiling water heat, and apply a thin coating on both surfaces of the broken vessel, and when cold it will be as strong as it was originally.

TO KILL RATS.—Heat Plaster of Paris in an iron vessel till it has done boiling and mix half and half with Indian meal. Rats eat it freely, and it sets in their stomachs and kills them, without the danger of giving them poison.

MAMMOTH POTATO.—We were shown yesterday, says the St. Louis Republican, a sweet potato, grown on the farm of B. A. ALDERSON, of St. Charles county, measuring four feet and four inches in length, and five inches in circumference. This may appear incredible, but we've got the papers for it.

PROFITS OF FARMING.—It is stated in the Germantown Telegraph, that a farmer of Montgomery county, Pa., having a farm of eighty acres, has laid by, according to his own statement, one thousand dollars a year for the last 30 years, after paying his family expenses. Industrious application to the duties of life, as a Christian and a citizen, is the distinguishing trait of his character.

WOOL growers are referred to the advertisement offering for sale, at auction, the superior flock of sheep owned by the late Dr. L. JARVIS, of Claremont, N. H. So favorable an opportunity to obtain imported stock does not often occur.

SEE notice of farm for sale by J. PENDILL, of Batavia.

HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

WE WISH TO SAY A FEW WORDS CONCERNING the duties of the standing Fruit Committee appointed at the recent Convention of Fruit Growers in New York. And in doing so, we do not wish to be understood as presuming to dictate to that intelligent body, with a distinguished pomologist at its head, for we are perfectly satisfied that every member of it understands his duty, and will perform it well. Our wish simply is, to direct public attention more fully and minutely to the duties of this committee, and what results may be expected from their labors.

The great objects to be attained, are—*First*, to detect synonyms, (the various erroneous names under which fruits are cultivated in different parts of the country,) by which purchasers are deceived and disappointed, getting the same variety under different names from different sources. *Second*, to ascertain by actual experience what are the best varieties for the various latitudes, soils, situations, and modes of culture. No considerable amount of reliable information, on this head, has yet been collected; hence every inexperienced planter is compelled to be an experimenter—for this, at least, is well ascertained, that varieties that flourish in some sections, and are there the *very best*, are in others inferior, if not worthless. This was felt in its full force by the committee who sat down to report to the New York Convention a list of fruits worthy of general cultivation. An unanimous vote could be scarcely obtained for even one variety of any of the fruits. Here, it must be obvious, is a vast amount of labor to be performed to obtain anything like profitable results. Every member of that committee who wishes to contribute his full quota to the report, must at once enter upon his investigations. There is not a moment to be lost. During the ensuing winter the fruits in season should be examined, and all the facts required concerning them carefully noted down.

The sphere of each member will not be confined to his own immediate neighborhood. It may, and in many cases must extend far beyond it; and hence he must open a correspondence with the best cultivators and the most skilful pomologists of the district or state to which he belongs. Specimens may be collected and compared—as well as all the facts regarding soil, manure, culture, the various kinds of stocks, pruning, planting, training, and in short, every thing that makes the sum total of cultivation. If this system of research is faithfully pursued by each member of the committee, (and we trust it will, although involving much labor and care,) from this time steadily until next October, there will be such a mass of facts and statistics collected

as will render practicable to a considerable extent, that which is now impossible, viz: the recommendation of a list of fruits adapted to the varied circumstances of the fruit growing regions of this extended country. The names of this committee have been published, and we would suggest to the friends of this great and much needed investigation to furnish, without solicitation, to any member, such facts as may be in their possession calculated to aid in accomplishing the ends in view.

The Apple on Paradise Stocks.

A STANDARD apple tree requires at least 25 or 30 feet of ground. It is therefore obvious that in a small garden of say 100 feet square, or even in a garden of half an acre, such an object must be entirely inadmissible, either on the score of profit or beauty. Hence, if no other form were adopted for the apple than the standard, the thousands of proprietors of small gardens in the neighborhood of all our cities and villages, and throughout the entire country, would be compelled to exclude the apple from their list of garden fruits. This would be a great sacrifice, for although apples may be purchased in most parts of the country at low rates, yet there are choice kinds that cannot easily be obtained, and there are no fruits so precious as those of our own gardens, produced by the labor of our own hands.

THE DWARF APPLE, produced by grafting or inoculating on the *Paradise stock*, is therefore a great desideratum for small gardens, and for all gardens. It requires not much more space than a currant or gooseberry bush. It bears early and abundantly, and the fruit is uniformly larger and finer than standard trees. The fruit is never blown off prematurely by high winds, and is easily gathered. The trees are within reach of the cultivator, without the use of ladders, easily pruned, manured and otherwise tended, and if necessary may at any time be removed from one place to another, at any age, without interrupting seriously their productiveness. Besides, these miniature apple trees are among the chief beauties of the fruit garden. They strike us at once as being adapted to the place, and in adaptation alone there is a great deal of beauty.

The cultivation of the apple in this form has, up to the present time, received little attention in this country. Indeed such a thing was entirely unknown until within a year or two, except to nurserymen and a few amateur cultivators around some of the older cities. Public attention seems now, however, to be turning to the subject, and we have no doubt but that, as fast as they can] be propagated, every little garden in the country will be enriched with them. The Paradise stocks used in this country are usually imported from France, and consequently

dwarf trees are more costly than standards grown on free stocks, raised from seeds obtained at little or no cost, at the cider mills; but by and by our nurserymen will no doubt propagate their own stocks, and the trees will consequently become cheaper.



Dwarf Apple Tree, on Paradise Stock.

The Paradise is a species of apple that reproduces itself from seed, but is usually propagated for stocks by layers. Seedlings, however, are preferable as they have a tap root that holds them firmly in the soil, while those raised from layers have but fibrous roots that remain near the surface. There is another stock used for working on where trees are intended for pyramids; this is called by the French the *Doucain*, and is confounded by some authors with the Paradise.—Trees grown on this attain a considerable size, while those on the Paradise seldom reach over 4 feet in height. The culture is the same as on free stocks as regards budding.

When plants are removed from the nursery, one year's growth from the bud, they should be invariably cut back till within 3 or 4 buds of the stock; and they should never be planted so deep as to place the bud or graft in the ground, as in that case it will emit roots, and the effect of the Paradise stock will be lost. We have heard people complain of their dwarf apples not bearing, but growing up vigorously like those on free stocks, and this was the cause. The soil should possess considerable firmness for dwarf apples as the roots remain so near the surface. Annual pruning is necessary to give the trees a good shape as well as to keep up their vigor, and they should also receive an annual dressing with compost. With this attention every one may succeed in raising crops of large and beautiful apples on their dwarf trees. Indeed the same care that a good cultivator would give a gooseberry or currant bush will suffice for these little trees.

The above figure is the portrait of a tree in the garden of AARON ERICKSON, Esq., of this city, some 6 years old, and has borne large crops

of immense fruit, measuring 10 to 15 inches in circumference, for the last three years. The variety is the Alexander. Large apples, such as the Alexander, Twenty ounce, St. Lawrence, Gravenstein, Hawley, &c., will give the most effect on dwarf trees.

The Stevens' Pear.

THIS PEAR was raised from the seed by FRANCIS STEVENS, Esq., of Charleston, now Lima, in the County of Livingston. The late Mr. GUERNSEY, of Pittsford, in this county, becoming acquainted with and admiring the fruit, procured scions and propagated it, bestowing upon it the name of "The Stevens' Pear," and through him it was first introduced to notice. This history of this excellent variety, which may be relied upon as correct, was received from GUSTAVUS CLARK, Esq., of Clarkson, who knew the original tree as long ago 1810, and who in 1815 transplanted trees obtained from Mr. Guernsey in his own garden, and has ever since cultivated the fruit. The account of this pear given by Mr. Downing, in his "Fruits and Fruit Trees," is incorrect. There is no propriety in appending "Genesee" to the name. The only objection to the variety is its liability to the *fire blight*, being more subject to that disease, Mr. Clark states, than any other within his knowledge. H. P. NORTON.

Brockport, Nov. 3, 1848.

REMARKS.—We are much obliged to our correspondent for the above facts. With regard to the liability of the trees of this variety to the "fire blight," we have to remark, that as far as we are able to judge from our own experience and observation, it is an erroneous conclusion. It may have happened with some, or with many, that this tree has suffered from this blight more than others. The same objection was raised to it at the Buffalo Pomological Convention, but after discussion was shown to be in general unfounded. In our own and neighbor's grounds we have not been able to discover in any variety a peculiar liability to blight. In one season, and in some localities, we see varieties seriously and sometimes very generally affected, that in other seasons and localities escape altogether. In the New York Pomological Convention one gentleman said the only objection he had to the Glout Morceau was its liability to this blight; nearly every other member who had experience with its culture agreed that it was peculiarly unsusceptible to it.

Facts like these, which we have collected all over the country, warrant us in expressing the opinion that no particular variety is, more than another, susceptible to the blight. Certain conditions of growth or vigor may tend to induce this liability. The Seckel has been very generally considered as least liable to it; but in a

neighbor's garden several fine trees of Seckel have been lost by it within the two last years. The blight seems to affect it just as fatally as any other, and isolated cases might induce those of limited observation to say more so. We deem all such conclusions as this unsafe in the present state of knowledge respecting this malady.

The "Congress of Fruit Growers," recently held at New York has appointed a committee, at the head of which is Professor HARRIS, to investigate this and other maladies of trees and plants. We hope that this committee, with the aid of the standing Fruit Committee, appointed by the same body, and comprising some of the most intelligent cultivators of America, will be able to throw some light on this dark subject.

With regard to the name, we think that whatever may have been its original title, it is now so well, and we might say so exclusively known as "Stevens' Genesee," that it would not be well to alter it. Genesee was at first added, and we think with some propriety, to characterize it as originating in the Genesee country, at that time not so famous for its fruits as at present. Mr. PRINCE described it in his Pomological Manual as the Guernsey Pear, because he received it from Mr. Guernsey; but his new name was never adopted, as no new names ought to be.—Ed.

DURING the next three months we shall be absent on a journey to Europe. Our purpose is to visit the principal Horticultural Establishments of France, Belgium, and Great Britain, to collect information not to be obtained in this country, and only by personal research. We shall also purchase large quantities of such articles as are wanted here at the present time, and such new and rare trees and plants as are worthy of introduction and dissemination in this country.

In regard to the Farmer, we have made such preparations, and secured services in our absence, that this Department will not suffer, to say the least. All communications and letters of inquiry should be addressed to the Publisher, and will receive the same attention as heretofore. We may find some useful facts to communicate, while absent, if we find leisure enough to write them out; but at least, on our return, we hope to be able to furnish such useful and interesting items as will fully make up for any possible deficiency in the interim.

We are happy now, at the close of another volume, to say that the success of the Farmer, and the interest taken in this Department, of which alone we are expected to speak, not only affords us ample satisfaction for what labor we have given it, but has far exceeded the expectations we were indulging a year ago. We expect no abatement of that interest or success during the coming year, as there will be no abatement of efforts on the part of ourselves or associates to earn it.

Quality of Apples,

AS DECIDED AT THE BUFFALO POMOLOGICAL CONVENTION.

In the October number of the Farmer we gave the decisions of the Convention relative to pears, plums, peaches, apricots, and nectarines, and intended to follow it up last month with the apples; but absence from home, and a desire to advise our readers of the doings, in part, of the New York Convention, prevented us.

The St. Lawrence Apple.—Several gentlemen from Canada, Western New York, and elsewhere, regarded this fruit as being nearly first rate, and some even quite first rate, in quality. The tree is a vigorous grower and a good bearer, and the fruit always large, fair and fine. Mr. THOMAS of Macedon objected to it on account of its coarseness, and said he regarded it as not more than second or third rate. After considerable discussion it was voted, though not unanimously, to be first rate.

Pomme Royal or Dyers.—Mr. ELLIOT said this apple was cultivated in Ohio, in some collections, as *Cole's Spice* and *Golden Spice*. Mr. THOMAS said it was cultivated in Western New York, in some collections, as *Hollow Crown*.—Unanimously passed as first rate.

Early Joe.—All who knew this fruit concurred in its being one of the very best apples of its season, but that it should be eaten soon after being picked from the tree.—[We have had this fruit in fine condition 6 weeks after being gathered.]

Early Strawberry.—First rate for its season.

Sweet Bough.—First rate for its season.

Sine qua non.—First rate for its season.

Minister.—A famous New England apple. Passed as second rate.

Sumner Rose.—Unanimously passed as first rate. Mr. ELLIOT of Ohio remarked that if he should cultivate but one early apple it would be this.

Sumner Queen.—A sweet variety was presented under this name, but was decided to be the *Augustine*. The true variety, being that described by DOWNING, passed as first rate for cooking, and second for the table.

Augustine.—Third rate.

Dutchees of Otseburg.—First rate for cooking, and second for the table.

Waggever Apple.—A new variety from CHAS. LEE, Penn Yan, passed by, being unknown to most members of the Convention. J. J. THOMAS considered it as comparing favorably with the *Spitzenburg* and superior to the *Melon*; defective only in being a little too compact, but first rate. P. BARRY considered it as nearly if not quite first rate.

Faneuse or *Pomme de Neige.*—Considered by many as first rate, especially in the more northern localities.

Red Astracan.—Passed as first rate for cooking and second for the table. This is a beautiful and very popular summer fruit, always commanding a high price in market. Mr. THOMAS remarked that it was regarded as good for market on account of its beautiful skin, but beyond the skin it had little merit. He says, however, in the Cultivator of last month, that "it ought to have been stated to the Convention, that this variety, though not a good table fruit, possesses great excellence as a very early cooking apple, being far superior, in this respect, to the *Yellow Harvest*."

Rhode Island Greening.—Passed as a first rate standard fruit, both for table and cooking. Mr. ALLEN, of Mo., said there it was an autumn fruit and grew much larger than here.

Newtown Pippin (Yellow).—This apple elicited much discussion—western cultivators generally agreeing that, with them, it was not worthy of cultivation. Laid on the table.

Newtown Pippin (Green).—Gentlemen from Western New York, Canada, Ohio, and Illinois, stated that their experience with this apple was unsatisfactory. Mr. DOUGALL and Mr. BEADLE of Canada, stated that they had succeeded in raising a good crop by the application of manure and ashes. All agreed that it required good soil and good culture. Mr. THOMAS remarked that even with Mr. PELL, under his high culture, a large portion of the crop was knarly and unmarketable. Mr. PRINCE thought that in a good soil, and with manuring and good culture, it would be good every where.

Roxbury Russet.—Passed as first rate.

English Russet.—Half a bushel of this variety, of last year's growth, was presented by D. N. ROBINSON of Buffalo, quite fresh and sound. Members of the Convention agreed that this was a valuable variety, being a great keeper, and the tree a fine grower and bearer. Much discussion was elicited regarding the name. Mr. PRINCE contended that it was not the apple described by DOWNING as the English Russet—that English Russet was too vague a name and meant nothing, as there are many English Russets. Mr. CHAS. DOWNING and Mr. THOMAS agreed that it was the apple described by DOWNING as English Russet—same as Poughkeepsie Russet. The Convention voted that it was a first rate keeper, and second rate in quality, and that it should be called the "Poughkeepsie Russet."

Lowell Apple.—(Cultivated in Ohio and other places as the *Queen Anne*, *Pound Royal*, and *Tallow Apple*, or *Tallow Pippin*; in Western New York as *Risley Apple*, *Greasy Pippin*, &c.) It was considered by all to be a valuable variety, on account of the vigorous growth and productiveness of the trees, and large size and fairness of the fruit. Passed as first rate.

Westfield Seek-no-farther.—Passed as first rate.

Ribston Pippin.—Objections were raised against this variety on account of its dropping its fruit in September, in many localities. It was said to do well in Canada, Maine, and other northern localities. Passed as third rate in this State, and second in northern sections.

Northern Spy.—This apple was discussed at great length. It was admitted by all to be one of the best of apples, but required more careful culture than some other varieties, to produce it in the highest perfection. Mr. BISSELL stated that there were trees in Rochester that had not been matured in fifteen years nor pruned for several years; yet the fruit, except in the shade, was fine and high flavored.—Passed as first rate with proper pruning. [We objected to this qualification as being entirely superfluous. Common sense teaches that every variety is the better for "proper pruning." If there be any propriety in affixing such a clause to any variety, there would be an equal propriety in affixing it to all. This must be clear enough. No apple whatever, nor indeed any other fruit, can be produced in perfection without pruning, or with *im-proper* pruning.]

Vanderere. Passed as first rate.

Yellow Belleflower. Mr. COIT, of Ohio, said this was the most popular apple in the Cincinnati market. Mr. ELLIOT did not agree with Mr. COIT in this. P. BARRY remarked that in Western New York it was a popular and excellent variety. Mr. PRINCE said there were several apples cultivated under this name, and suggested that it be passed by.

Twenty Ounce Apple. First in size, beauty and productiveness, but second in quality.

Twenty ounce Pippin. Third rate.

Gravenstein. First rate in its season.

Fall Pippin. First rate.

Autumn or Late Strawberry. First rate.

Red and Green Sweeting. Unworthy of cultivation, although some valued it for baking.

Sugar. First rate in all respects.

Belmont. First rate, though said by Mr. ELLIOT to be rejected in southern Ohio.

Hæthornstæni. Voted unworthy of cultivation.

Mother Apple. First rate. Has the highest character wherever known.

Baldwin. Mr. ELLIOT and others said it was subject to the bitter rot, and valueless in Ohio. Voted first rate in Massachusetts and New York, but unsuccessful in Ohio.

Jonathan. First rate.

Porter. First rate.

Rambo. First rate wherever cultivated.

Bourassa. Passed by.

Hubbardson Nonsuch. First rate.

Pomme gris. First rate in the north and in Canada.

Gloria Mundi. Unworthy of cultivation.

Bullock's Pippin (Coxe,) or *American Golden Russet*, (Downing). Worthy of general cultivation.

Jersey Sweeting. First rate; worthy of general cultivation.

Cornish Gilliflower. Unworthy of general cultivation.

American Summer Pearmain. First rate in all respects.

King of Pippins. Second rate.

Summer Hogloe. Different from *Hogloe crab* with which some have confounded it. Considered by many as first rate.

Answers to Correspondents, Acknowledgments, &c.

BENNET BASSET, Seneca Co. We are much obliged for your box of apples. Your Seedling is very fair in appearance, and may be called a good and handsome apple; but it lacks a degree of juiciness and crispness, as well as flavor, such as we find in the Melon, Northern Spy, Esopus Spitzensburg, and other first rate winter fruits. It is now fully mature, and cannot be kept much longer in perfection. Early picking, and being kept too warm, may have ripened them prematurely. The specimens of "King" are very fine. We will be glad to hear from you further in relation to the fruits of your region.

FREEMAN WILLIAMS, Perry. Apples.—No. 1, we don't know; very large, but worthless we should think. No. 2, Twenty Ounce. No. 3, we suppose to be the Rambour Franc. No. 4, Red Gilliflower. Nos. 5 and 6, Black Detroit. No. 7, Vandevere.

D. H. MANCHESTER. No. 1, "Manchester Greening," is a large specimen of *Rhode Island Greening*. No. 2 "Cayuga Greening," a very fair looking apple, of large size and good quality. No. 3, "Prince's Pound," a large showy apple, ripe now, and of medium quality. No. 4 is quite hard and immature; we should say that at best it is coarse and poor.

We are indebted to JAMES H. WATTS, Esq., for several fine specimens of apples—among them the "Chillicothe Sweet," a very large, oblong, deep red, beautiful sweet apple, of good quality. In season, apparently, in October and November. Cultivated by Mr. EDWARD SWAIN, of Nunda. We have seen this apple in Rush, and other parts of this section of the State, and think it well worthy of culture.

We have also to acknowledge the receipt of "Two Pound Sweet" and "Lot" Apples, from Mr. THOMAS S. MYERS, of Penfield. The "Two Pound" is a large and beautiful sweet apple, grown in Steuben county.

To SAMUEL A. CUDABACK, of Niagara Co., for many fine varieties of apples.

To W. B. BOWERMAN, Wheatland, for a Treatise on the cultivation of the Grape, originally published in the "Friend," in 1844 and 5.

THE LATE STRAWBERRY APPLE.—From an Address delivered before the Aurora Horticultural Society, 9 mo. 23, 1845, by DAVID THOMAS:

"Thirty years ago, when JONATHAN SWAN bought the place in this village where he long resided, he discovered the *Strawberry* apple, on what appeared to be a grafted tree; but from whence it came, has never been ascertained to my knowledge. Until very lately, it was unknown to pomologists: yet as a table fruit, it has scarcely a superior. It was probably grafted or planted by SETH PHELPS, formerly First Judge of this county." D. THOMAS.

11th month, 11, 1843.

A NEW WORK ON COUNTRY HOUSES.—We understand that Mr. DOWNING has a new work in press on this subject. His previous volume on Cottage Residences, was more particularly adapted to the wants of those who could afford to build costly houses. The forthcoming one will be a work for the many—treating not only of the architecture, but of the furnishing and building of the various grades of dwellings demanded by the country people of America. The work will undoubtedly be one of great national utility, and in the present advancing state of public taste will meet with a hearty reception.

COTTAGE RESIDENCES.—A work on Cottage Residences, not for the wealthy, and farmers in good circumstances, such as has already been published by DOWNING; but for the millions, the comparatively poor, is demanded by a correspondent of the Genesee Farmer. Our land is now filled with humble dwellings, constructed without taste or beauty; only in the New England States, do we find many exceptions to this statement. But a neat, tasteful, and convenient little house can be constructed at about the same cost, as one of the same size, entirely destitute of beauty and convenience. Who will get up the work in question, and who will start a society—for every thing is done by societies now-a-days—for the improvement of the tastes of the wealthy, who build small houses, and of the millions of comparatively poor, who also build and live in them, in these United States?—*N. Y. Post*.

LADIES' DEPARTMENT.

S. W.'s Reply to Milk-Maid and Dairy-Maid.

THE Editor of the Farmer is at fault for thus keeping back so long from the Ladies' Department, two strictures on my article in the April number of this journal. Who'd 'a thought that such an admirer of the life-like poetry of the Ayrshire Plowman as myself, could be thus accused of denying to the rural fair ones of our land, either the genius or the privileges of music and poetry. When I sketched the superior attractions of the girl as milk-maid, compared with the milk-maid as pianiste, I only related an historical fact, for the truth of which (and it is true) your fair correspondents ought not to make me accountable. When I said that among the number of those girls who essayed on the piano, very few attained to respectability in execution, upon my word it was only town and village girls, not farmers' daughters, that I had in my eye. I meant nothing more than to prevent the rural fair one from falling into a like mistaken accomplishment. But it is the misfortune of my character, if not its curse, to be forever misunderstood by my rural friends, both male and female. 'Tis true I did venture to warn the farmer's daughter against the danger of fashionable pretension—its awkward mistakes, its deformities, its discord, its miserable caricature of the beautiful and true—and to hold up to her view the respectability and beauty of a domestic life which unites physical ability with intelligence in that harmonious combination, without which there is no true respectability nor true life.

"The head and front of my offending
Hath this extent, no more."

But methinks my fair critics have, as the French say, *grand tort*, when they shew so much ill will towards the village belle; just as though her poor superficial accomplishments were worth a single jealous or envious impulse—as though her practiced self-possession, her knowledge of the latest fashions, of the last novel, or her capacity of "sleeping in the morning," was a matter for envy, even to the most crude of the rural fair ones.

To the "Milk-Maid's" wrongs I reply, if the struggle between fashionable show and poverty is stronger in the village than in the country, she ought to bless her stars that she is of the country. If she can "cook a better meal" than the village belle, she is so far the more respectable for this positive accomplishment. If she knows nothing about music, she is in no danger of being called a pretender or a caricaturist of sweet sounds; and she is the more respectable in her entire ignorance than she would be in a mere superficial training and practice.

But as the "Wayne County Dairy-Maid" is

a clever, spirited girl, let me also say, for her benefit, that she will have a happier life by just as many hours as she rises earlier than the "city miss;" and that the hour she snatches for music will be sweeter in proportion to the labor that precedes it. S. W.

BUCKWHEAT CAKES.—The griddle on which cakes are baked should *never be touched with grease*. Firstly, because it imparts a rancid taste to the cakes. Secondly, if a cooking stove be used, it fills the kitchen, if not the whole house, with the smell of burnt grease—to say nothing of the parade, and boasting to one's neighbor's, by betraying what we ate to have for breakfast. Wash the griddle with hot soap suds; scour with dry sand, and when heated for use, rub it well with a spoonful of fine salt and a coarse cloth. It will then be ready to receive the cakes. After each cake is removed, the salt rubbing must be repeated. If the first does not succeed, try it again, and you will ever after follow this advice of an

OLD HOUSEKEEPER.

Books on Agriculture, &c., &c.,

For sale at the Office of the Genesee Farmer, Rochester.

THE Publisher of the Farmer has just received a large assortment of works pertaining to Agriculture, Horticulture, and Rural and Domestic Economy, which will be sold at the lowest prices.—The names and prices of a portion of the books are annexed:—

- American Farmer's Encyclopedia. \$3 50 in leather,—cloth \$3
- American Shepherd, by Morrell. \$1.
- American Agriculture, by Allen. \$1.
- American Poultryer's Companion, by Bement. \$1.
- American Veterinarian, by Cole. 50 cents
- Buist's Kitchen Gardener. 75 cents.
- Buel's Farmer's Companion. 75 cents.
- Chapman's Agricultural Chemistry. 50 cents.
- Downing's Fruits and Fruit Trees of America. \$1 50.
- Domestic Animals, by R. L. Allen. Cloth, 75 cents; paper, 50 cts
- Domestic Economy, by Miss Beecher. 75 cents.
- Farmer's and Emigrant's Hand-book. \$1.
- Fruit Culturist, by J. J. Thomas. 50 cents.
- Gardener's Farmer's Dictionary. \$1 50—leather, \$1 75.
- Farmer's Manual. 50 cents.
- Horse's Foot—and how to keep it sound. 25 cents.
- Johnston's Agricultural Chemistry. \$1 25.
- London's Ladies' Flower Garden. \$1 25.
- Liebig's Agricultural Chemistry, (new edition.) \$1—paper 75 cts.
- Agricultural and Animal Chemistry, (pamphlet editions.) 25 cents each.
- Parsons on the Rose. \$1 50.
- Prince on the Rose. 75 cents.
- Rural Economy, by Boussingault. \$1 50.
- Stable Economy, by Stewart. \$1.
- Scientific Agriculture, by Rodgers. 75 cents.
- Smith's Productive Farming. 50 cents.
- Treatise on Milch Cows. 38 cents.
- Treatise on Guano. 25 cents.
- Yount on the Horse, (new edition.) \$1 75.
- Yount on the Pig. 75 cents.

☞ All orders by mail will receive prompt attention, and the books forwarded as desired. Address D. D. T. MOORE,
May 1, 1848. Rochester, N. Y.

To Agents and New Subscribers.

Persons ordering the Farmer will bear in mind that we supply back numbers of the volume, in ALL CASES. We are occasionally desired to send from the middle of the volume, but cannot consistently deviate from our published terms. As a title page and index are given at the close of each year, all should preserve the entire numbers for binding and future reference.

THE NINTH VOLUME of the Farmer, (for 1848,) just completed, and for sale bound. Price, 50 cents in marble paper and cloth backs—or 62½ cts., in boards and leather.—A very liberal discount to Agents, Booksellers, &c.

Splendid Premiums!

WORTH CONTENDING FOR BY ALL!

OVER \$200

In Agricultural Books, Implements, &c.

In order to extend the circulation and usefulness of the GENESEE FARMER, and reward its friends for their exertions in its behalf by distributing among them valuable Books, &c., the Publisher offers (in addition to the per centage allowed to agents and clubs,) the following very liberal

Premiums for Subscribers to Vol. X, for 1849:

1st. To the person who shall send us the greatest number of subscribers to Volume X of the Farmer, previous to the 20th of April next, forwarding the pay, at the club price, (40 cents per copy, if the papers are directed to individual subscribers, and 37½ cents per copy if sent to one address,) free of expense to us—we will give a premium of TWENTY DOLLARS in Agricultural Books—to be selected by the person entitled, from our list of books on preceding page—or, if preferred to the above, a copy of *Harper's Illuminated Bible*, splendidly bound in morocco and gilt, the retail cash price of which is \$22. [If preferred we will give the person entitled to this premium any ag. implements which are for sale in Rochester, to the amount of \$20.]

2d. To the person obtaining the next (second) greatest number of subscribers, on conditions above specified, a premium of FIFTEEN DOLLARS in Agricultural Books—the selection to be made, by the person entitled; or, if preferred to the books, a MASS. EAGLE 25 PLOW, full rigged, with draft rod, &c., (for four horses,) the price of which is \$15—or other plows, &c., worth the same.

3d. To the person obtaining the next (third) greatest number, TEN DOLLARS in similar books, on like conditions as above specified, or a MASS. EAGLE C PLOW, full rigged, worth \$11.

4th. To the person obtaining the next (fourth) greatest number, SIX DOLLARS, in Agricultural Books, on like conditions.

5th. To the person obtaining the next (fifth) greatest number, THREE DOLLARS, in Agricultural Books, on like conditions.

To EACH of the FIVE persons sending the next [6th, 7th, 8th, 9th and 10th] greatest number, we will give volumes 6, 7, 8 and 9 of the Farmer, bound together in boards with leather backs, or separate in marble paper, as may be preferred, worth \$2.

To each of the FIVE persons sending the next [11th, 12th, 13th, 14th and 15th] greatest number, volumes 7, 8 and 9 of the Farmer, bound together or separate as above mentioned, worth \$1.50.

To each of the TEN persons sending the next [16th, 17th, 18th, 19th, 20th, 21st, 22d, 23d, 24th, 25th] greatest number, volumes 8 and 9 of the Farmer, bound together or separate, worth \$1.

In addition to the above we will give premiums of EIGHTEEN DOLLARS IN AG. BOOKS for subscribers forwarded between this and the 1st day of January next—as follows:

1. TEN DOLLARS in Ag'l Books to the person sending the greatest number of subscribers, on like conditions as to terms, &c. as above specified.
2. FIVE DOLLARS in books to the person sending the next [second] greatest number, on like terms, &c.
3. THREE DOLLARS in books to the person sending the next [third] greatest number, on like terms, &c.

Competitors for the above three premiums must mail their remittances on or before the 31st of December. [These premiums are open to all competitors, so that one person may obtain two prizes—and if the two first, \$30!]

BACK VOLUMES of the Farmer will be furnished, if desired, and counted the same as new subscribers. Volumes 6, 7, 8 and 9 (bound separate in marble paper, or two volumes in one, in boards and leather backs,) will be supplied at 50 cents each. Either of the volumes will be sent, unbound, for 40 cents. The renewal of an old subscription will also be counted the same as new.

That all Post-Masters, Local Agents and Subscribers, wherever the Farmer circulates, may have a fair and equal chance to obtain the Premiums, *traveling agents, post riders, residents of Rochester and all city booksellers* are not included in our offer.

We shall keep a CORRECT account of the subscribers sent by each person. In the February, March, April and May numbers of the Farmer we will publish a list giving the names of thirty or forty (and perhaps fifty) of the most successful competitors, so that each may know his prospect of success, and act accordingly.

All Competitors and Agents will oblige us by making as many remittances as convenient previous to the 1st of January, in order that we may be enabled to judge how large an edition will be necessary.

Specimen numbers, show bills, &c., sent to all post-paid applicants. All letters must be paid or free. Subscription money, if properly enclosed, may be mailed at the risk of the Publisher.

Address to **D. D. T. MOORE,**
ROCHESTER, NEW YORK.
Nov. 1, 1848.

POSTSCRIPT!

The Publisher of the Farmer has concluded to give DOUBLE the amounts specified in the preceding Premium List—making the first Premium FORTY DOLLARS, the Second THIRTY, and increasing all others in the same proportion. The additional amount will be paid on like conditions, and in like manner as above specified—in Agricultural Books and Implements at CASH PRICES.

With this addition the prizes offered amount to OVER TWO HUNDRED DOLLARS!

D. D. T. MOORE.
Rochester, N. Y., Dec. 1, 1848.

Opinions of the Press.

THE Farmer, since it passed into the hands of this present industrious and energetic proprietor, has more than doubled its circulation; and now takes rank, deservedly, among the first agricultural periodicals of the day. Its ample pages are filled with matter of great interest to the farmer. Almost every question appertaining to practical agriculture is discussed with ability. The proprietor devotes his whole time to the work, and employs the best talent. Dr. LEE still contributes to its columns. P. BARRY, Esq., conducts the Horticultural Department, while a host of contributors employ their pens to enrich its pages.—*Rochester Democrat.*

It is valuable paper, which can well be called the "Farmer's Companion," has nearly completed its ninth volume. We, without hesitation, pronounce it invaluable to the tiller of the soil, and worth double the amount asked for it. Its articles are of great practical utility; and as the matter contained in each number is almost exclusively for the farmer, it commends itself especially to agriculturists.—*Holden's Dollar Magazine.*

Arithmetical Answers, Questions, &c.

Messrs. Editors—Having noticed a few "Arithmetical Questions for Boys," in your last number, I thought I would send you my solutions of the questions:

Answer 1st. The first man digs 37½ rods; the second 62½ rods. [Wrong. Try again—Ed.]

Answer 2d. The handspike is placed 3 feet 4 inches from the end of the stick. [Wrong.]

Answer 3d. Year 1849. [Right.]

Answer 4th. 2, 3, 4, 6, 7, 8, 11, 12, 14, 21, 22, 24, 28, 33, 42, 44, 56, 66, 77, 84, 88, 132, 156, 168, 237, 264, 308, 462, 616, 924. [Right.]

I take the liberty of sending you a few questions for solution—as follows:

1. There are two wheels; the larger one is 10 feet 4 inches in diameter—the smaller one is 2 feet 4 inches in diameter, and 15 feet from center to center. Required the length of strap to encircle the wheels.

2. If 20 pears can be bought for 16 lemons, and 30 lemons for 25 oranges, and 12 oranges for 6 pomegranates, and 10 pomegranates for 96 almonds, and 70 almonds for 84 chestnuts, and 125 chestnuts for 4 cents, how many pears can I buy for \$2.35.

3. A father dying left £500 in cash, with 5 bills, each £48 10s 6d. He ordered £20 to be laid out on his funeral, and his debts to be paid, amounting to £164. The residue he bequeathed to his 5 sons, as follows: to the eldest 2 2-5 shares, and to each of the other four an equal portion of what remained. How much ought each son to receive?

4. What number is that, to which if 9 be added, and then be multiplied by that number, the product will be 900? *Example*.—Suppose the number 10+9X10=190.

5. There are 30 men on allowance of provision on board of a ship and 15 of them are negroes; every 10th man is to be thrown overboard until 15 are gone. The officers wishing to save the white men endeavored to arrange them in such a manner that every tenth man should be a negro so that all the negroes were thrown overboard and the white men left. How was it done? **JUDSON.**

Ovid Center, N. Y., Nov., 1848.

If the men who are to earn their money by digging those 100 rods of ditch, wait till the division is made by which they shall fulfil all the conditions of the problem, it is to be feared that the laborers' land may fall under foreclosure of mortgage, and the farmer's land suffer for want of ditching.

The only way to divide the 100 rods, so that the two men shall receive equal amounts of money is, 37½ rods at 10 shillings, making 375 shillings, and 62½ rods at 6 shillings, making 375 shillings—amounting to 750 shillings, which is 50 shillings short of 100 dollars; and the only way to make the work of the two amount to \$100, is, 50 rods at 10s, making 500s, and 50 rods at 6s, making 300s, which gives unequal amounts to the two laborers. **G. C.**

Annual Meeting of the Monroe Co. Ag. Society.

The Annual Meeting of the Monroe County Agricultural Society will be held at the Office of the GENESEE FARMER, in Rochester, on the SECOND TUESDAY (the 13th) of December inst., at 10 o'clock, A. M.

Premiums will be awarded on Root Crops, and Officers elected for the year 1849. As the meeting is an important one, it is hoped all the Members of the Society who can conveniently do so, will attend and participate in the proceedings. **D. D. T. MOORE, Cor. Sec'y.**

Rochester, Dec. 1, 1848.

Annual Meeting of the N. Y. State Ag. Society.

The Annual Meeting of the Society will be held at Albany, on the 3d Wednesday, (17th) of January, 1849. Premiums will be awarded on Grain and Root crops, Butter, Cheese, Fruits, &c.

Statements should be furnished the Secretary early in January. It is desirable there should be a full representation from the County Societies, as well as of the friends of agriculture generally.

A Pomological Exhibition will be held at the Rooms of Society, and growers of fruit are respectfully requested to forward specimens to the Secretary as early, if practicable, as the 15th of January.

B. P. JOHNSON,
November 1, 1848. [31] Secretary.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,.....	\$1 00	1 12	Pork, bbl. mess	13 00	14 00
Corn,.....	50		Pork, cwt.,...	4 00	4 50
Barley,.....	50	56	Beef, cwt.,...	3 50	4 00
Oats,.....	26	28	Lard, lb.,...	7	8
Flour,.....	5 00	5 25	Butter, lb.,...	14	15
Beans,.....	75		Cheese, lb.,...	5	6
Apples, bush.			Eggs, doz.,...	13	14
Potatoes,.....	38		Poultry,.....		
Clover Seed,...	4 00	4 50	Tallow,.....	6	7
Timothy,.....	2 00	2 50	Maple Sugar, ..		
Hay, ton,.....	8 00	11 00	Sheep Skins,...	20	25
Wood, cord,...	2 25	3 50	Green Hides,lb	3	4
Salt, bbl.,.....	1 25	1 38	Dry " " " "	7	8
Hams, lb.,.....	8		Calf Skins, ...	10	

Wool.—The following are present quotations:
 Native Blood,..... 18 to 23c
 Quarter to half,..... 22 28
 Half to three quarters,..... 24 26
 Three quarters to full,..... 24 26
 Saxon,..... 24 28
 Rochester, November 29, 1848.

New York Market.

New-York, Nov. 28—7 P. M.

Flour is in moderate demand for trade purposes, and transactions add up to fair extent in common and straight brands. Pure Genesee appears easier. No change in price—\$5 50 is the general price—fancy \$5 62. Jersey Corn Meal \$3 12½.

Markets for Wheat rather heavy and a decline anticipated.—Corn is unsettled, and difficult to give strict quotations, owing to the large lot of corn in market. Small parcels round yellow taken at 72½, flat do held at 68, with no sales.

Rye is 62c delivered; Oats 35.
 Pork quiet—country mess \$12 50; prime \$6; mess beef in tierces \$18 25; \$5 75 is asked for prime beef.
 Lard active at 7¼ for prime; dressed hogs \$5 50.
 Rough Flax \$1 30; old Hops, 6c—new 10 cts; Linseed Oil firm at 52c54; Ashes, pots \$5 7-8; pearl \$6 12½ and quiet.

NEW YORK WOOL MARKET—Nov. 24.

As the stock in market lessens, the inquiry increases, and sales have reached about 80,000 lbs. of all grades at a decided advance on our quotations of last week. Manufacturers have been in with much better feeling, and taken such lots as were offered, within our range of prices.

Saxony Fleece,.....	35 a 38
Merino,.....	30 a 35
“ 3/4th to full blood, ..	28 a 32
Common,.....	24 a 26
“ pulled No. 1,.....	21 a 24
“ pulled super,.....	25 a 28
Lanbs,.....	24 a 26
“ country pulled,.....	24 a 26
“ “ “ super,.....	28 a 30
“ “ “ No. 2, &c.,.....	12 a 15

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